
NMCB-1
ROTA, SPAIN 90-91
RETURN PROMPTLY TO N3 DEPT

DEPARTMENT OF THE NAVY
U.S. NAVAL MOBILE CONSTRUCTION BATTALION ONE
UNIT 60251
FPO AA 34099-4900

IN REPLY REFER TO:
3500
Ser S3/

From: Commanding Officer, U.S. Naval Mobile Construction Battalion ONE
To: Distribution

Subj: SUBMISSION OF DEPLOYMENT COMPLETION REPORT

Ref: (a) COMCBPAC/COMCBLANTINST 3121.1B
(b) COMCBLANT OPORDER 11-90

Encl: (1) Executive Summary
(2) Administration/Special Staffs
(3) Training
(4) Operations
(5) Supply and Logistics
(6) Equipment
(7) Camp Maintenance
(8) Contingency Operations/Other

1. Per reference (a), enclosures (1) through (8) are forwarded.

2. Per reference (b), U.S. Naval Mobile Construction Battalion ONE deployed to Camp Mitchell, Rota, Spain, 15 August 1990 with details deployed to Edzell and Holy Loch, Scotland, Naples, Italy, Sigonella, Italy and Souda Bay, Greece. A Seabee detail was also deployed aboard the USS Barnstable County in conjunction with the West African Training Cruise 90. The deployment ended on 15 March 1991.

3. During the deployment, we participated in two major contingency operations. The first was Operation Sharp Edge which provided support to the 26th Marine Expeditionary Unit in Liberia during the non-combatant evacuation operation (NEO). The second was support of Operation Desert Shield. Initially during this operation, we expanded our detail at Souda Bay, Crete. Later when our efforts were required in Southwest Asia, Details Edzell, Scotland and Naples, Italy were closed while detail Sigonella, Italy was substantially reduced along with the mainbody. These assets then formed two, one hundred man companies which deployed to Southwest Asia to support NMCB FIVE and NMCB FORTY during the period of December 1990 and March 1991. Finally, in support of Operation Desert Shield and during February 1991, a detail comprised of NMCB ONE, NMCB ONE THREE THREE and Air Force personnel was established under my OPCON to support war efforts at Moron, Spain.

4. Due to the reporting of significant operational requirements of this past deployment this report does not comply with length limitations of reference (a).

D. L. HAMEROCK

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EXECUTIVE SUMMARY

U.S. Naval Mobile Construction Battalion ONE deployed to Camp Mitchell, Rota, Spain from 03 August to 15 March 1991. Detail sites included Edzell and Holy Loch, Scotland; Souda Bay, Greece; Sigonella and Naples, Italy. A 31-man detail was deployed aboard the USS Barnstable County in conjunction with the West African Training Cruise 90. The detail provided construction support for civic action projects in Praia, Cape Verde; Dakar, Senegal; Banjul, The Gambia and Bissau, Guinea Bissau. Additionally, a 20-man Detail for Training (DFT) deployed to Lajes Field, Azores from 29 August to 30 September 1990 and a 20-man well drilling team was deployed to Sidi Slimane, Morocco, from 2 September to 3 October 1990 for participation in the Commander, SIXTH Fleet, sponsored Exercise African Oasis. A 6-man detail provided support to the 26th Marine Expeditionary Unit in Liberia during Operation Sharp Edge.

Subsequent redeployments of personnel in response to Operation Desert Shield/Storm included deployment of a 47-man augment to Souda Bay, Greece, 15 November 1990 to provide construction support for an Air Force reconnaissance mission. At that time the battalion was directed to recall personnel from Details Edzell, Scotland and Naples, Italy; reduce manning at Detail Sigonella, Italy and redeploy personnel to Southwest Asia. NMCB ONE provided two 100-man augment companies to NMCB FIVE and FORTY to perform construction support. On 9 February 1991, a detail was deployed to Moron Air Base in Spain to construct an ammunition storage faciltiy in support of Operation Desert Storm. The Detail consisted of 23 NMCB ONE personnel, 45 NMCB 133 personnel and 17 Air Force Prime Beef personnel.

Administration: The command emphasis on taking care of people resulted in outstanding retention statistics enabling NMCB ONE to win the Golden Anchor Award for FY90.

Training: Throughout the Rota deployment Military readiness training was emphasized. Participation in Spanish PHIBLEX 90-2 provided outstanding training in defensive operations with Marine units. During the redeployment of personnel to Southwest Asia an intensive one-week refresher training was conducted in areas such as combat skills, CBR personal protection and decontamination and desert survival. The battalion dedicated 3,061 mandays to training during deployment which focused on military readiness training, general military training and technical training.

Operations: Safety, quality, and timely construction were the major areas of emphasis throughout the deployment. A proactive safety program emphasizing each individual's responsibility to work safely resulted in substantial reduction in lost work days and light duty days over the prior deployment. The Hazardous Material Information System was fully implemented at Camp Mitchell and detail sites. Commendatory comments were received during the Operations Department Management Inspection for the quality of work at the mainbody and detail sites. The Battalion accomplished 13724 mandays of work on tasked projects, and CO discretionary projects. Camp Maintenance completed over 50 projects significantly improving the material condition of Camp Mitchell facilities.

Supply: The Supply (S4) Department was responsible for all receipts and issues of material, the management of the battalion TOA, camp collateral equipage, stores, funds, project material, disbursing, BEQ/BOQ, galley, barber, and retail store operations at Camp Mitchell. During the embark exercise, the department provided all portions of the TA-01 (air det, air echelon, sea echelon). S4 also provided logistical support for all the detail sites. Construction and non-construction material support at mainbody was accomplished in the MLO division, processing more than 6500 line items valued in excess of $1,600,000. BEQ personnel support equipment at Rota was, for the first time, completely inventoried. Substantial efforts were successfully made to reduce excess inventories in the 6101, Greens Issue, and Camp Maintenance outlets, with assets returned to the NCF stock system.

Camp Maintenance: Despite manpower shortages due to redeployments of personnel to support Operation Desert Shield/Storm, Bravo Company completed more than 2500 mandays of direct labor. Over 200 mandays were devoted to camp improvement projects which significantly enhanced the quality of life, appearance and operation of Camp Mitchell. Standing job orders and equipment inspection procedures were revised which resulted in reducing emergency service work by 75%. The first annual inspection summary and controlled inspection of the camp in the last two years was conducted.

Equipment: A professional program insured NMCB ONE's success in equipment management during a very taxing deployment, including support of Operations Desert Shield/Storm. The CBLANT Equipment Office completed their CESE DMI with commendatory items on licencing, accident investigation programs, Alfa Company administration, and Direct Turnover (DTO) Parts at the main body site. Using the three shop concept (heavy, light, and support shops), the battalion conducted all equipment maintenance and repairs to achieve a low cost BEEP at turnover.

ADMINISTRATIVE SUMMARY

Lessons Learned

(a) Problem: Personnel using FPO Miami mailing address experienced delays and sporadic mail services. Mail took 7-9 days to be received.

Discussion: FPO Miami had to be contacted on numerous occasions by message to expedite mail delivery.

Recommendation: Permission was requested via, Military Postal Service Agency (MPSA), to use the local FPO New York zip code 09540. By using this address, mail delivery time was shortened to 4-5 days.

(b) Problem/Item: DET visit by Command Chaplain

Discussion: The Chaplain visited details deployed to Sigonella in October and February, and Souda Bay in December and February. These visits were extremely successful and demonstrated the need for the Battalion Chaplain to visit the troops in the field. The Souda Bay visits were noted as being beneficial to the morale and welfare of the entire Naval Station (as there is no assigned Chaplain at Souda Bay) by the CINCUSNAVEUR Chaplain.

Recommendation: Continue this essential and effective ministry.

Narrative Summary

Legal

The Battalion Legal Office worked closely with the Naval Legal Services Office, Rota. They provided assistance with NJP's, JAG Investigations, claims, and Administrative Discharge Boards. Commander, U.S. Naval Station, Rota, Spain was the general court-martial convening authority and also received non-judicial punishment appeals. The brig was operated by Naval Station, Rota, Spain, and was extremely cooperative in providing service to the resident battalion. COMNAVACTS requires each battalion to have 3 officers assigned for potential court-martial duty.

Post Office

NMCB ONE has a permanently assigned postage meter machine. Postage meter sales exceeded $5,000.00 in just five months of usage. It is highly recommended that other battalion post offices look into the feasibility of obtaining a postage meter machine.

Career Counselor

The Command Career Counselor concentrated on the Command Retention Program and Sponsor Program. The Command Career Counselor visited each Detail site to provide needed counseling support, and at the end of the deployment visited the NMPC detailers at Washington, DC, to discuss orders for battalion personnel and battalion personnel manning deficiencies.

Education Services Officer

There was an excellent off-duty educational program offered by the City College of Chicago and the University of Maryland through Navy Campus for Achievement. The Education Services Petty Officer was the liaison for the members desiring tuition assistance and arranging transportation for members attending night school.

SAFETY SUMMARY*

Month	AUG	SEP	OCT	NOV	DEC	JAN	FEB	Total
Fatalities	0	0	0	0	0	0	0	0
Day LWD	4	11	9	10	17	0	7	5
Cases LWD	2	3	2	2	2	0	1	12
Day LDD	118	117	34	88	208	27	65	717
Cases LDD	11	16	9	16	4	5	6	67
First Aid Mishaps	14	15	21	19	20	14	18	121
Gov Veh Mishaps	4	4	4	6	5	3	6	32
Gov Veh Repair Cost	$316	$150	$2100	$600	$800	$11,100	$1250	$16,216
Gov Veh Miles Driven	12669	77244	47463	60099	38801	31432	37617	305325

**(LWD) Lost Work Days
(LDD) Light Duty Days

*Combined Main Body & Detail Site Data
** No LWD were due to on-the-job accidents but were primarily sports related.

NARRATIVE

A safety standdown was conducted on 31 December 1990 and all hands participated in safety training classes, inspections of all work sites including warehouses, offices, shops and projects and open discussions with supervisors. No operations were conducted during the day. Each company and department conducted in-house training in addition to attending formal classes scheduled by the training department. The inspections of work sites identified hazards which were catalogued and then tracked to ensure that the deficiencies were corrected.

TRAINING DEPARTMENT

1. LESSONS LEARNED:

(a) Problem: Ammunition Transaction Reports (ATR) reporting procedures and formats were not well understood by personnel responsible for the submission of ATR's.

Discussion: Ammunition inventories and supporting documentation were not available at the turnover and efforts to reconstruct ammunition accounts met with less than satisfactory results.

Action taken/Recommendation: Personnel responsible for the ammunition account should be identified and appointed well in advance of deployment. These personnel should be formally trained in ammunition transaction reporting procedures with emphasis on any problem areas identified at the deployment site. The latest most accurate report of ammunition status should be provided by cognizant regiment or Fleet Construction Battalions Commander to the battalion prior to deployment and the predeployment site visit team should obtain a copy of the ammunition account.

(b) Problem: Armory Watch Standing

Dicussion: Personnel standing watch inside the Rota armory are unable to see who is seeking access to the interior of the armory without opening the armory vault type door.

Recommendation: A work request was submitted to Bravo Company to install a view window to allow the armory watch to view personnel upon entry to the armory compound to the entry door.

(c) Problem: High Frequency (HF) Communication

Discussion: High Frequency (HF) communication between the main body and the detachment sites in Spain and Morroco was marginal.

Recommendation: Greater emphasis should be placed on PRC-104 training and use of field expedient antennas. Also the use of amplifiers or Military Affiliated Radio System equipment should be considered for distant sites.

(d) Problem: Insufficient radio/antenna mounting kits for all vehicles.

Discussion: The TOA contains twelve kits for the CUCV (BLAZER) but does not have kits specific to the ambulance or the 2.5 ton truck. Mounting brackets and cables must be fabricated for these vehicles.

Recommendation: Include two kits for 2.5 ton truck and one for the ambulance in the TOA.

2. NARRATIVE: During the 1990-1991 Rota, Spain, deployment the Training Department conducted a full range of training in support of Battalion operations and the current NMCB ONE Training Instruction. Particular emphasis was focused on training to fill existing NEC/PRCP skill deficiencies and training aimed at upgrading the battalion's weapons, CBR and embark capabilities in order to meet operational commitments and battalion goals. Mandays expended on training are as follows:

MANDAYS OF DEPLOYED TRAINING BY MONTH/TYPE

TYPE	AUG.	SEP.	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	TOTAL
Technical	0	142	211	24	11	2	0	0	390
Military	302	327	18	39	113	110	0	0	1677
Leadership	0	2	52	0	0	0	0	0	60
Safety	29	45	33	7	221	7	0	0	342
GMT/Other	350	146	91	191	10	34	20	100	942
Total	681	662	405	254	355	153	20	100	3411

(a). Combat Skills/Military Training

The battalion Military Advisor coordinated with the on site Marine and security personnel to provide additional training utilizing facilities and assets available in the Rota area. The specific training provided the Battalion on site was invaluable in providing the enhanced combat/military skills that allowed the battalion details to be highly effective in Saudi Arabia. 558 mandays taught by the Marine Advisor were expended on combat and military skills training. Training was provided for M16A1, M203 and .45 pistol familiarization fire, machine gun qualification, fire control (ADDRAC) and mortar training, SUIT training using paint guns and close combat training with bayonets.

(b). Other Training Functions

(1) Physical fitness training was held on training Saturdays; this training consisted of a 1.5 mile run in addition to other exercises. The battalion also conducted four 3 mile marches in 782 gear to enhance physical stamina and familiarize personnel with 782 gear.

(2) Military Affilated Radio System (MARS). Upon arrival at Rota, the MARS was not in operation. During the turnover between NMCB THREE and NMCB ONE a linear amplifier was replaced and the antenna was repaired. The station operated throughout the deployment providing support to NMCB ONE, Naval Station, Rota and transient personnel. The MARS Station established the capability to act as a relay station between U.S. Forces in Operation Desert Shield/Storm and stateside locations. The MARS station was largely unsuccessful in attempts to provide communications between the Main Body and detachment sites in the field (Sierra De Retin, Morocco, Moron). Sierra De Retin and Moron, Spain, were obtainable during early morning and early evening hours.

(3) The weapons cleaning area was upgraded with the installation of an eye-wash station and new cleaning tanks. The interior of the armory was repainted by the armory crew and a project for installation of an alarm system was initiated. This project will bring the armory into compliance with applicable security regulations.

Lessons Learned

(a) Problem: Crews were not familiar with or trained in European construction methods and materials.

Discussion: Specialized skills such as plastering and masonry did not exist among battalion personnel resulting in production delays and poor quality workmanship. Training in European construction methods was obtained from the Naval Station, Rota, Public Works Department by obtaining the services of Spanish journeymen who provided hands on instruction to Seabees. Production efficiency and quality of workmanship was greatly improved.

Recommendation/Action: If possible, obtain training in European construction methods prior to deployment or provide the training during turnover for the relieving battalion.

(b) Problem: Delays in delivering CONUS procured material.

Discussion: Under normal conditions, the average delivery time for CONUS procured materials is two months. As a result of Operation Desert Shield/Storm, transportation assets were diverted to higher priority cargo supporting the war effort. Deliveries of CONUS material were delayed as long as 5 months during this deployment.

Recommendation/Action: Although the delivery delays were unique due to Operation Desert Shield/Storm, the importance of identifying long lead time materials during the project planning stage should be emphasized. A proactive tracking and expediting system should be initiated prior to deployment.

(c) Problem: Construction materials considered to be hazardous must be procured in CONUS.

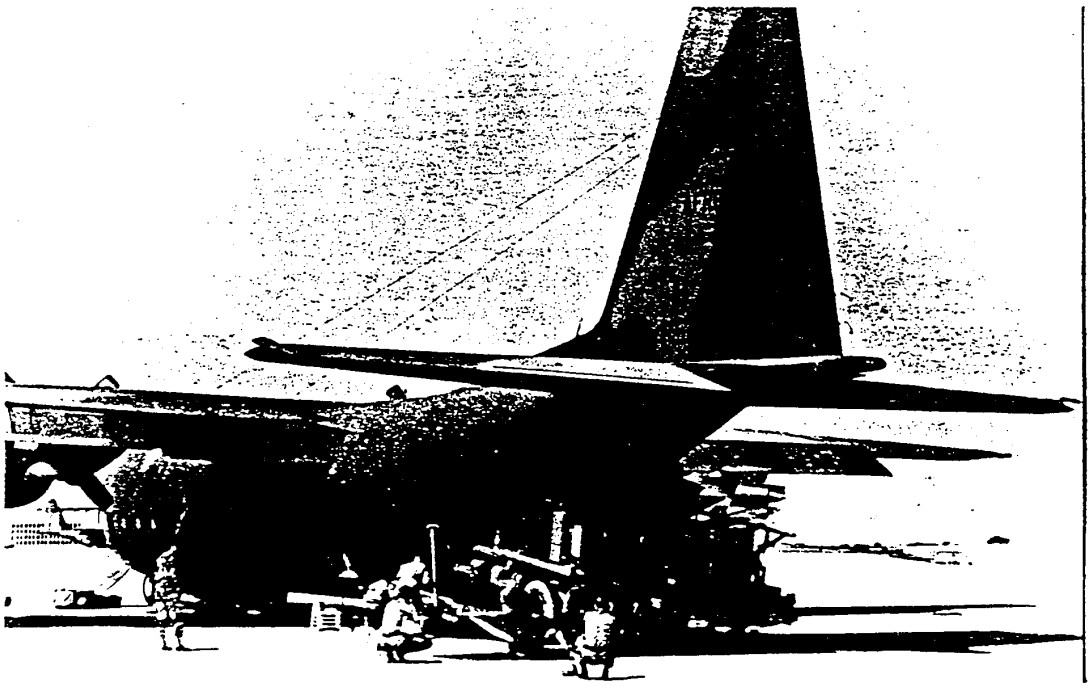
Discussion: Per COMCBLANT message 241414Z October 1990, all hazardous construction materials must be procured in CONUS. The implementation of this policy caused unacceptable project delays for materials required to complete punchlist and also customer-requested changes.

Recommendation/Action: Emphasis must be placed on identifying hazardous materials during the project planning stage to allow early procurement before deploying. Considerations should also be given to obtaining one-time authority from COMCBLANT to procure hazardous materials when unforseen changes would cause unacceptable delays provided that safety requirements are met and all MSDS information can be obtained from local European suppliers.

9 OCT
THERE IS NO PROBLEM OBTAINING LOCAL PURCHASE MATERIALS THAT HAVE A MANUFACTURER MSDS AT THE TIME OF PURCHASE AND AVAILABLE PRIOR TO STORAGE OR USE. THE PROBLEM IS MSDS FROM MANUFACTURER IN EUROPE IS NOT AVAILABLE. 02

Narrative Summary

The deployment to Rota was characterized by numerous embark operations (air, sea and land) and countless hours spent planning contingency operations. Commanding Officer's discretionary project mandays were entirely committed to stevedore operations at Naval Station, Rota in support of Operation Desert Shield/Storm. Contingency planning covered operations addressed elsewhere in this report and also included planning to redeploy 200 personnel to the Caribbean to man Seabee sites in Puerto Rico and Bermuda. This particular scenario did not occur, the 200 personnel were instead deployed to Saudi Arabia. The operations department emphasized safety, quality and timely construction throughout the deployment. The challenge was rebuilding project crews after redeployment of personnel to detail sites during Operation Desert Shield/Storm. This was done successfully without sacrificing quality and a proactive safety program, emphasizing each individual's responsibility to work safely, resulted in a substantial reduction in lost work days and light duty days over the previous deployment. Commendatory comments were received from the CBLANT Operations Department Management Inspection for the quality of work at the mainbody and detail sites. The Battalion accomplished a total of 13,724 mandays of effort on tasked projects and camp maintenance.



SP8-801 CONSTRUCT ARFCOSTA FACILITY

1. General. Construct a 1500sf reinforced concrete storage facility including installation of intrusion detection equipment, HVAC system, fire protection system, rough and finish plumbing and electrical, CMU walls, vault door, and extensive overhead concrete with built up roofing. NMCB ONE completed footers, beams, colums, and rough plumbing.

2. Direct Labor Expended.

NMCB THREE	0 MD
NMCB One	504 MD
Cumulative to Date	504 MD

3. Composition of Work Force.

CE : 3 UT : 3 BU : 6 SW : 3 EO : 2

4. Status of Project.

Start Date	Nov 90
Percent at Takeover	0
Percent at turnover	20
Completion date	Oct 91

5. Materials. No major material problems were encountered.

6. Engineering. Inconsistency of dimensions in blue prints caused some irregularities during initial building layout. ROICC has been advised of situation and concurs on dimensions used.

7. Problem Areas. There were no major problem areas encountered.

SP8-804 AIRFIELD PROTECTION

1. General. This project involved the removal of 1" rubber matting and replacement with 1/2" rubber matting under the metal plates for arresting gear.

2. Direct Labor Expender: NMCB ONE: 8

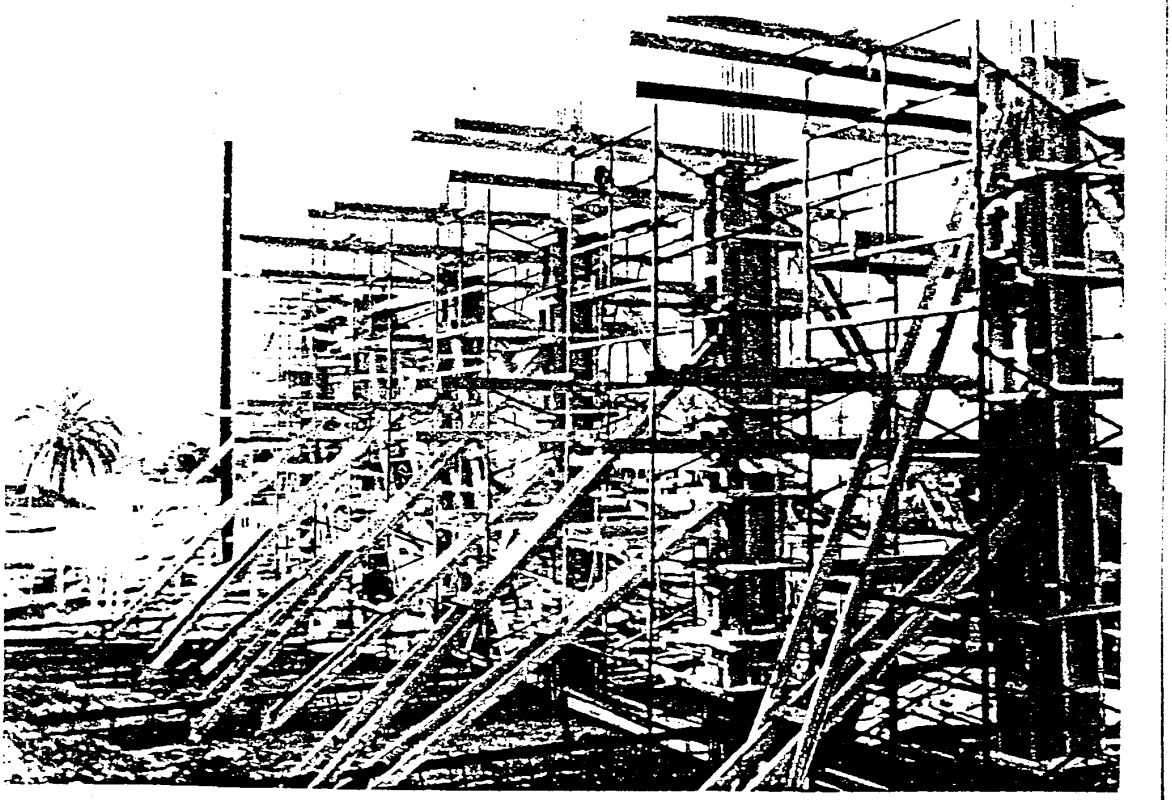
3. Composition of Work. BU: 4, EO:2, SW:2

4. Status of Project. Start Date: N/A

Percent at takeover: Punchlist

Percent at turnover: 100

Completed: SEP 91



SP8-801 CONSTRUCT ARFCOSTA FACILITY

5. Materials. No materials problems encountered.

6. Engineering. The plates were lifted by tackwelding hookeyes to the top surface and using shackles and a crane. After they were reinstalled the hooks were broken loose with hammers and remaining welds ground smooth.

7. Problem Areas. No problems encountered.

SP8-806 NAVY LODGE REPAIRS

1. General. This project involved the renovation of the interior of 22 Navy Lodge apartment units. This included completely demolishing the bathroom/kitchen area for replacement of the plumbing system, installing new bathroom fixtures, drop ceilings and light fixtures, floor and wall tile, kitchen cabinets, smoke detectors and repainting. Exterior repairs included installing expansion joints aloog existing fascia, replastering, and painting.

2. Direct Labor Expended:

NMCB THREE	950 MD
NMCB ONE	640 MD
Cumulative to Date	1590 MD

3. Composition of Work Force:

CE: 4 UT: 4 BU: 5

4. Status of Project:

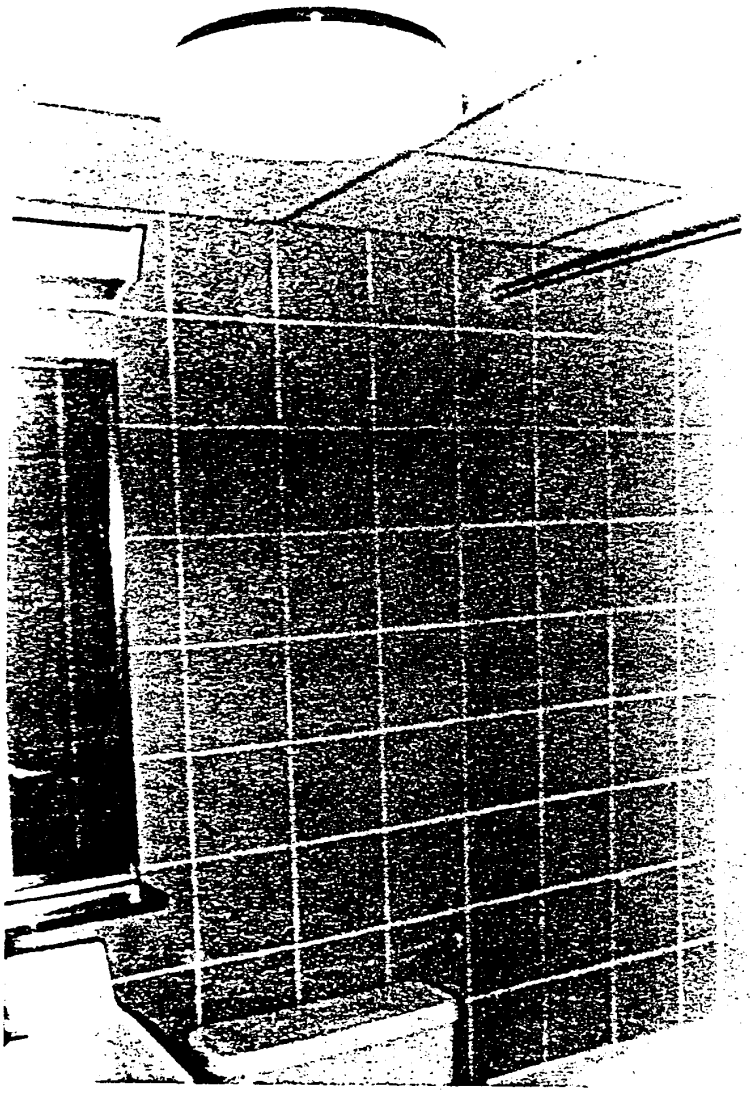
Start Date	90 JAN
Percent at Takeover	18
Percent at Turnover	31

5. Materials: No major material problems were encountered.

6. Engineering: No major engineering problems were encountered.

7. Problem Areas: The plumbing system was to be replaced with 6" PVC, to the be attached to a 4" PVC, which then tied into a 6" PVC main. A modification was approved by the ROICC to replace the 4" sections of line to prevent blockages.

8. The Spanish wall tile was extremely hard to drill and used up a lot of drill bits to install the fixtures.



SP8-806 NAVY L . DGE REPARIS

SP8-807 PHOTOLAB REPAIRS

1. General. This project renovates the interior and exterior of the Photolab. Asbestos insulation in the walls and within the mechanical room required removal by a qualified contractor. Upon successful removal of asbestos the tasks performed included removal and replacement of interior lights, drop ceiling, duct work, plumbing, electrical panels and wiring, heating piping, doors, floor tile, wall tile, installation of partition walls, plaster and paint interior, install fence around transformer, and land scaping.

2. Direct Labor Expended:

NMCB THREE	300 MD
NMCB ONE	575 MD
Cumulative to Date	575 MD

3. Composition of Work Force:

CE: 4 UT: 4 BU: 6

4. Status of Project:

Start Date	90 Aug
Percent at Takeover	18
Percent at Turnover	58

5. Materials: Exterior doors were deleted from project previously. These are required to be replaced for security reasons and will be installed by contract through ROICC.

6. Engineering: No major engineering problems were encountered.

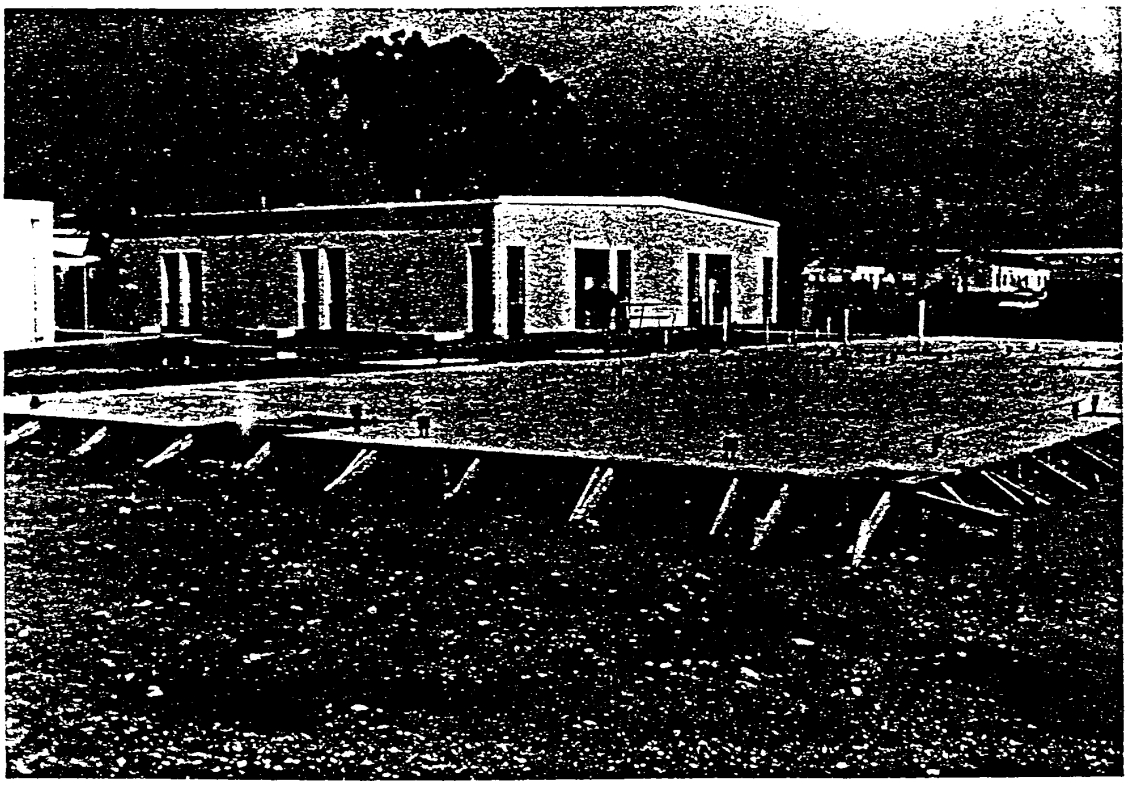
7. Problem Areas: The crew's unfamiliarty with the application of gypsum plaster caused delays until hands-on training was obtained from skilled Spanish journeymen.

SP8-811 HOUSING OFFICE

1. GENERAL: Construct 4000sf of insulated PEB, install rough and finish plumbing and electrical, place RST for footers and slab, place concrete in footers and slab, install partition walls, and various wall and floor coverings.

2. DIRECT LABOR EXPENDED:

NMCB THREE	0 MD
NMCB ONE	337 MD
Cumulative to date	337 MD



SP8-811 HOU: NG OFFICE

3. COMPOSITION OF WORK FORCE:

BU: 5 SW: 2 EO: 2 UT: 3 CE: 3

4. STATUS OF PROJECT:

Start Date	Oct 90
Percent at Takeover	0
Percent at Turnover	25
Completed	Dec 91

5. MATERIALS: No major material problem were encountered.

6. ENGINEERING: The building location was changed just prior to starting construction. As a result, water and sewer connections were relocated and additional pipe was needed. The connection to existing sewer lines were identified by the battalion as a problem area due to low flow capacity; However, ROICC directed the battalion to make the connection as specified. Expect further flow problems in the future.

7. PROBLEM AREAS: There were no major problem areas encountered.

SP8-814 SECURITY FENCE INPROVEMENT

1. General. Project replaced chain link fence at 12 locations on Naval Station, Rota. Work included demolishing existing fence, preparing the area for new fence, installing posts, fabric, barbed wire, associated hardware, and new gates. Two areas included the installation of privacy slats.

2. Direct Labor Expended:

NMCB THREE	523 MD
NMCB ONE	659 MD
CUMMULATIVE	1182 MD

3. Composition of Work Force:

SW: 10 EO:3 BU: 2

4. Status of Project:

Start Date	90 Jan
Completion Date	90 Dec

5. Materials: No material problems encountered.

6. Engineering: No engineering problems encountered.

7. Problem Areas: None.

SP8-817 LADDERS AND RAILS VARIOUS LOCATIONS

1. General. Project was to replace railing and ladders, catwalks and safety cages throughout the Naval Station. Catwalks were installed on various valve pits, racks were installed on tanks in pumping stations at the fuel farm.

2. Direct Labor Expended.

NMCB THREE	0 MD
NMCB One	310 MD
Cumulative to Date	310 MD

3. Composition of Work Force.

CE : 0 UT : 0 BU : 3 SW : 2 EO : 0

4. Status of Project.

Start Date	Sep 90
Percent at Takeover	0
Percent at turnover	70
Completion date	Oct 91

5. Materials. CONUS fabricated materials did not fit properly requiring field modifications. Three safety cages were not made by contractor and follow up order has been initiated by MLO through R70. Slow shipment of materials caused major delays.

6. Engineering. Due to dimensional errors on prints, parts were fabricated improperly by the contractor causing modifications and delays.

7. Problem Areas. There were no major problems areas encountered. Some rails were not completed by NMCB ONE on pumping stations due to site specific modifications. Required modifications were turned over to NMCB 133.

SP8-819 WEAPONS AREA PAVING

1. GENERAL: The project consisted of building a new perimeter security road for the weapons area.

2. DIRECT LABOR EXPANDED:

NMCB THREE	542
NMCB ONE	280
Cumulative	822

3. COMPOSITION OF WORK FORCE:

EO: 13 BU: 2

4. STATUS OF PROJECT:

State Date	SEP 90
% at Takeover	43%
% at Turnover	57%

5. MATERIALS: The sub-base material was 4" minus-San Cristobal/Fino and the base course was 2" minus-Todo Uno.

6. ENGINEERING: Scope was changed from our original tasking of Stations 15+00 - 25+00 to 10+00 - 25+00, due to design changes incorporated by the previous battalion

7. PROBLEM AREAS: Erroneous material quanities were not checked upon delivery, resulting with material add-on's. Elevation of the road surface was raised at Sta. 20+00 by an average of 6" because planned elevation was to close to existing culvert. Redeployment of personnel to other detail sites resulted in manpower shortages for the last three months of the deployment. Additionaly, the rainy season in Rota (Jan-Mar) delayed progress on this project.

SP8-826 RSSPS SECURITY IMPROVEMENTS

1. General. The project was for the construction of a two story, 1,000 sf, reinforced concrete building addition. Tasking consisted of placing quarry floor tile in vestibule, placing vinyl tile in second deck room, stairs, and two (2) passage ways on first deck, interior and exterior plaster application, painting interior and exterior, demolition and replacement of door and frame in second deck room, install cove base and wood trim, install threshold in four (4) doors, install AHU unit, and fire alarm system,install drop ceiling install interior light fixtures, and install flashing on roof. Subcontracts were awarded for the installation of a store front window system, built up roof system, and sealing of vinyl floor tile.

2. Direct Labor Expended:

NMCB THREE	2022	MD
NMCB ONE	470	MD
Cumulative to Date	2492	MD

3. Composition of Work Force:

CE: 3 UT: 2 BU: 5 SW: 1

4. Status of Project:

Start Date:	Dec 89
% at takeover	94
% at turnover	100
Completed	Feb 91

5. Materials: The local procurement of self leveling concrete proved to be a major delay due to unfamiliarity with the local products. This required the need for english translations of directions and MSDS sheet. This also added many safety and equipment requirements not planned. Due to the lack of promptness and quality of work performed by the contractors on, the window wall, floor joints, and roof the project was further delayed.

6. Engineering: The fire sprinkler system was in place as designed, but the heads were too high, requiring a DCD to raise the drop ceiling height. This system could not be flow tested.

7. Problem Areas: Due to poor quality of workmanship of previous battalions, NMCB ONE had to remove the floor tile and level the deck in the second floor room with sika band leveling compound. We also removed and replaced an interior wall which had bowed, removed and replaced one (1) door and jamb that did not meet specs, removed and replace vinyl tile in stair well and repainted areas around door and new wall.

SP8-861 INSTALL COMMUNICATION CONDUIT

1. General. Project involved the excavation of 5000 LF of trench, construction and placement of 14 manholes, and installation of 12,000 LF of 4" PVC and 1,250 LF of 3" rigids conduit for computer and telephone cables in the Public Works compound.

2. Direct Labor Expended:

Previous battalions:	700 MD
NMCB ONE	110 MD
Cumulative to Date	810 MD

3. Composition of Work Force:

CE: 2

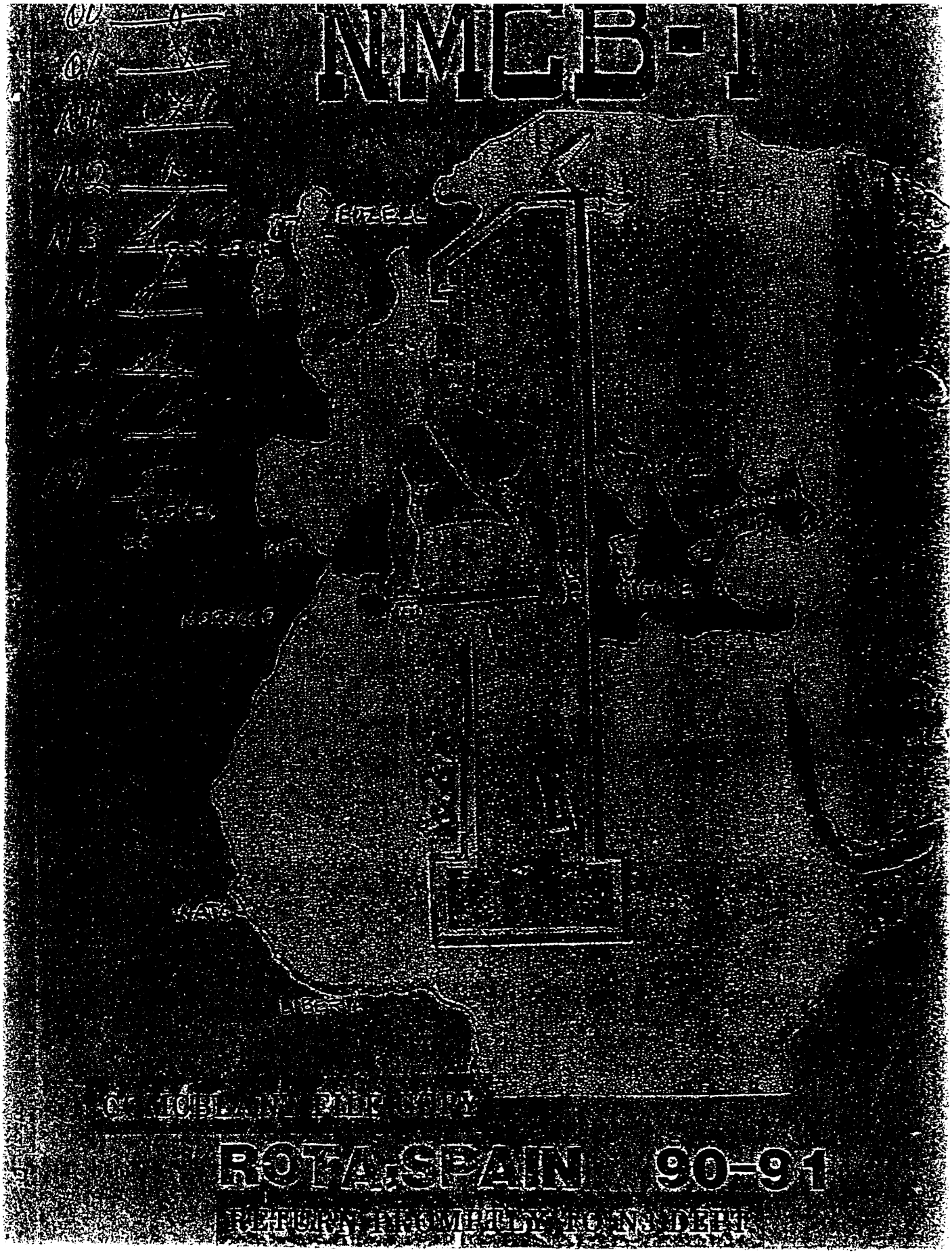
4. Status of Project:

Start Date	Apr 90
Percent at Takeover	99
Percent at Turnover	100
Completed:	Nov 90

5. Materials: No major problems were encountered by NMCB ONE.

6. Engineering: None.

7. Problem Areas: No major problems were encountered by NMCB ONE.


NMCB-1
ROTA, SPAIN 90-91
RETURN PROMPTLY TO NMCB 1

Recommendation: Provide battalions with hand-held radios for the purpose of conducting stevedore operations. The radios must be equipped with programmable frequencies in order to provide built-in compatibility with a wide range of radios used by military and civilian cargo vessels.

6. ITEM/ISSUE: Shortage of Critical Items

Goggles, longjohns, jungle boots, cot mattresses and water pouches are important for the troops health, safety, and morale in the field, yet were in short supply. The desert conditions are harsh; these items make life in the Desert easier and safer.

Recommendation: Add these items to Battalion TOA.

7. ITEM/ISSUE: K-Span building erection

In Saudi Arabia, the K-Span building erection system was a quick way to to produce structures for storage, shops, and galleys. Training on the K-Span machine had to come from on-the-job training provided by the Air Force. This hindered the timely completion of the jobs. Also, obtaining the K-Span machine was difficult and time consuming.

Recommendation: Consider adding a K-Span machine to the battalion TOA and training cycle.

8. ITEM/ISSUE: Equipment Lifting

Several difficulties in lifting equipment aboard ship were encountered. The Fiat Allison Dozer does not have marked lifting points. There was also uncertainty of the load rating for lifting points on almost all equipment, especially for equipment that was mobile loaded or equipped with heavy attachments.

Recommendation: Attach lifting points or modify tie down points on the Fiat Allison Dozer. Stencil load ratings by the lifting points or add the ratings to the information plates on all vehicles.

9. ITEMS/ISSUE: Augmentation of Battalion Personnel Strength

NMCB ONE provided two 100 man details to augment two battalions in Saudi Arabia that included 16 construction mechanics and 43 equipment operators. This left the main body with an Alfa Company personnel shortage. When NMCB ONE was tasked with horizontal work at Moron Air Base, Spain, they had to be augmented with equipment operators and construction mechanics from NMCB 133 in order to accomplish the tasking. Greater control and efficiency would have resulted if NMCB ONE had retained the capability to meet that mission without an augment.

Recommendation: Augmentation of battalion personnel strength to wartime or near wartime end strength should come from the Reserves, Construction Battalion Units (CBU) or special augment units established for that purpose and not from another battalion. Maintaining unit integrity provides the flexibility to respond to a variety of contingency situations and simplifies the unit's command and control.

10. ITEMS/ISSUE: Condition of Tents

Many of the General Purpose Medium tents in Rota, Spain were found to be dry rotted or missing parts.

Recommendation: Task a Navy/Army laboratory to review canvas tent deterioration to develop solution to dry rot problem which is cost effective or procure new tents which are dry rot resistant.

11. ITEM/ISSUE: Quantity of Tentage

As a Battalion deploys details away from the Main Body the demand for tents increases due to the dispersal of administrative, command and control, storage and maintenance functions which are normally consolidated when an entire battalion is deployed to a single site. Each detail has a need for tents to house these functions which leads to an inefficient, but necessary, utilization of available tent space.

Recommendation: Review the need to increase the quantity of tents in the Battalion TOA to satisfy the increased need for tent space associated with the deployment of multiple details away from the Main Body site and the provision of office space for functions such as Administrative, Personnel, Disbursing, Post Office, etc.

12. ITEMS/ISSUE: Earth Moving Equipment Capabilities

The eight scrapers stationed at Camp Mitchell, Rota, Spain, were of the single engine type and three of these units were a lightweight design intended to be air transportable. When these scrapers encountered wet, slippery conditions and heavy clay soil, they lacked power and traction. The use of push bulldozers was necessary to maintain earth moving production thereby limiting the flexibility for using the bulldozers for other essential grading operations.

Recommendation: Equip the Rota deployment site with twin-engine (front and rear) scrapers which provide improved traction and power with higher production rates. Since all Seabee equipment was deployed to South West Asia by ship, the need for air-transportable scrapers should be re-examined.

13. ITEM/ISSUE: Airlift Requirements

NCF units typically have different Airlift requirements than the standard infantry unit. During contingency situations the airlift coordinators use standard load estimates to make up flight requests. The standards are made for infantry troop loads that are typically heavier in passenger weight and lighter in cargo weight.

Recommendation: Embark requirements, especially weight and cube of unit cargo (tool kits, special equipment, Detail cargo) or personal gear(seabag and alice pack) need to be specifically identified to the Airlift Coordinators.

14. ITEM/ISSUE: Embarkation Planning and Execution

In order to support current OPLANs Seabee units will be moved in accordance with the Time-Phased Force Deployment List (TPFDL) and Time Phased Force Deployment Data (TPFDD). The success of any embarkation is dependent upon close coordination between a unit and the organization providing the lift. Early communication is extremely important. Although the supporting Regiment or Type commander plans and validates the mission to move a battalion, the embarkation execution phase is coordinated at the battalion level with the lifting organization where direct liaison is necessary. Typically, the battalion embarkation staff is not aware of nor provided familiarization training to understand the embarkation planning and execution process carried out at the type commander/CINC level where the TPFDL and TPFDD is used to manage the operation. This could result in a Battalion being unaware of its deployment readiness status on the TPFDL/TPFDD and forced to execute its embarkation with little or no advance notice.

Recommendation: Type Commanders/Regiments should provide training to battalion embark staffs to provide them with an understanding of the TPFDL/TPFDD process. Authorize direct liaison early in the embarkation planning process so that battalion embark staffs can track status of TPFDL/TPFDD.

NOTE: Lessons learned were combined for both Details 15 and 16 deployed to Saudi Arabia.

Narrative: On 7 December 1991, Detail 15, consisting of 100 men, deployed to Saudi Arabia to augment NMCB FIVE. Prior to deploying these personnel completed an intense one-week refresher training on weapons safety, CBR personal protection, close combat skills and indoctrination to desert environment and Arab customs. Upon arrival at NMCB FIVE's camp the NMCB ONE personnel were assigned to companies according to their ratings except for the builders and steelworkers who formed a separate vertical construction company. The NMCB ONE well-drilling personnel were also utilized and drilled two water wells for Marine units near the Kuwaiti border.

On 7 December 1991, Detail 16, deployed with 100 men to Saudi Arabia assigned as an augment to NMCB FORTY located at Camp 13 in Al Jubial, Saudi Arabia. This detail, which became NMCB FORTY's OSCAR Company, completed or assisted in the completion of several construction projects in support of the 1st Marine Expeditionary Force during the Gulf War. In addition camp maintenance, camp security, communications and administrative functions were also carried out by OSCAR Company. The Detail consisted of two officers, three CPO's and 95 enlisted men.

CAMP MAINTENANCE

1. GENERAL: The detail occupied a converted oil workers camp in Jubail along with two other battalions. The camp has several buildings with utilities and a good deal of camp maintenance was required.

2. DIRECT LABOR EXPENDED: NMCB ONE : 238
CUMULATIVE : 238

3. COMPOSITION OF WORKFORCE:

BU: 5 UT: 5 CE: 2

4. STATUS OF PROJECT: Start date: DEC 1990
Percent at Turnover: N/A
Percent at Turnover: N/A

5. MATERIAL: No material problems.

BUNKER CONSTRUCTION

1. General. Employing the very same procedure taught in CCCT schools, this project consisted of the prefabrication and installation of bunkers in camp. Equipment operators did excavation work, builders did the prefab work and all rates assisted in filling and placing sandbags for over 30 bunkers in the camp.

2. Direct Labor Expended:

NMCB ONE 308 MD

3. Composition of Work Force:

BU: 4 CE: 6 UT: 10

4. Status of Project:

Start Date DEC 1990

5. Materials: No major material problems.

JP1-945 AIR RAID SIRENS

1. General. Project consisted of erecting 16 air raid sirens in the eastern Saudi Arabia area. Execution included construction of 7x7x5 concrete pads for the towers, excavating to place the pads, placing the pads, hoisting the tower onto the pads, and installing power panels. A definite urgency to get most of the sirens installed before the 15 Jan United Nations deadline.

2. Direct Labor Expended:

NMCB ONE	534 MD

3. Composition of Work Force:

CE: 6 UT: 1 BU: 14 SW: 7 EO: 6

4. Status of Project:

Start Date	DEC 1990
Percent at Takeover	N/A
Percent at Turnover	N/A
Completed:	N/A

5. Materials: Missing pole panels caused some delays in completing some tower erections.

OV1-901 TANK BARRIERS

1. General. The project consisted of constructing 35 steel tetrahedrons to be used as tank barriers by welding steel channels together.

2. Direct Labor Expended:

NMCB ONE 14 MD

3. Composition of Work Force:

SW: 7

4. Status of Project:

Start Date	DEC 1990
Percent at Takeover	N/A
Percent at Turnover	N/A
Completed:	N/A

5. Materials: No major problems with materials.

JW1-939 3RD MARINE AIR WING RELOCATION

1. GENERAL: Project located at Jubail Naval Air Station, Jubail, Saudi Arabia. Scope of work included clearing, grubbing and leveling of twenty eight acres of virgin desert; placement grading and compaction of 26,000 cubic meters of quarried fill and 22,000 cubic meters of contracted fill material. Placement of 1650 cubic meters of concrete, erection of 77 wood frame strongback tent structures. Installation of 3500 linear feet of 6", 4" and 2'6 PVC water line and installation 3 - 200' x 200' leach fields of field shower. Installation of 2000 linear feet of 250 mem electrical cable, 2 - 400 amp cuts outs, 6 200 amp electrical panels and 6 440/220 transformers, and 2 steel fence gates. Construction also included a 7000 linear foot earth berm 30 feet wide and eight feet high, and 3000 gallon sewage holding tank.

2. DIRECT LABOR EXPENDED:

NMCB ONE: 2400

3. COMPOSITION OF WORKFORCE:

5 - SW's
28 - BU's
5 - CE'S
10 -EO's

4. STATUS OF PROJECT:

Start date:	DEC 90
Percent at turnover:	0
Percent at turnover:	100
Completed:	JAN 91

5. MATERIALS: No material problems.

6. ENGINEERING: Plans prepared by NMCB-FIVE per 3rd Marine Air Wing requirements.

7. PROBLEM AREAS: None.

K-SPAN

1. GENERAL: This project located at Jubail, Naval Air Station, Jubail, Saudi Arabia. Scope of work included fabrication and erection of six - 60' x 80' x 26' steel structures, forming and placing of six 4' x 4' x 80' concrete stem walls, 6" floor slabs and wall and interior lighting.

2. DIRECT LABOR EXPENDED: NMCB ONE - 358

3. COMPOSITION OF WORK FORCE: 4 - BU's, 3 - SW's

4. STATUS OF PROJECT:

Start date:	DEC 90
Percent at turnover:	0
Percent at turnover:	100 w/Punch list
Completed:	FEB 91

5. MATERIAL: No material problems.

6. ENGINEERING: Plans and specs prepared by K-Span manufacturer. Stem wall design by NMCB-FIVE, to raise height of structure by 4 feet.

7. PROBLEM AREAS: None.

IMEF TROOP BEDDOWN PROJECT

1. General. The project consisted of construction of a 15,000 Marine Camp, complete with galley's, sculleries, showers, berthing and office spaces. Most of the detail's contribution to this project was the placing of forms for concrete pads for tents. Other responsibilities for this project were placing concrete pads, placing sewerlines, electical prefab, installation of panel boxes and installation of electrical cable. Placed 2675 m of concrete and constructed 800 forms.

2. Direct Labor Expended:

NMCB ONE: 575 MD

3. Composition of Work Force:

CE: 10 UT: 9 BU: 16 SW: 3 EO: 2

4. Status of Project:

Start Date	Dec 90
% at takeover	N/A
% at turnover	N/A

5. Materials: An extremely large quantity of concrete has to be delivered daily to the job site. This requirement was fulfilled by local vendors, mostly Third World Nationals working for Saudi Arabian companies.

JWO-910 AMMUNITION SUPPLY POINT ONE ROAD WORK/TOWERS/CONCRETE PADS

1. General. Project combined three different aspects of construction for an ammo supply point. Equipment operators did road work by leveling and compacting roads at the site. Eight 40' lookout towers were fabricated and installed on the perimeter of the site. Also, concrete pad for a helicopter landing zone, and ordnance cells were built.

2. Direct Labor Expended:

   NMCB ONE : 798 Mandays

3. Composition of Work Force:

   BU: 12 SW: 4 EO: 12 EA: 1

4. Status of Project:

   Start Date DEC 1990

5. Materials: No material problems.

6. Engineering: No engineering problems.

7. Problem Areas: None.

JPO-90A CESE PAINTING

1. General. This project consisted of repainting all CESE in Camp from green to desert sand color.

2. Direct Labor Expended:

NMCB ONE 152 MD

3. Composition of Work Force:

BU: 4

4. Status of Project:

Start Date	JAN 1990
Percent at Takeover	N/A
Percent at Turnover	N/A

5. Materials: Initially the project was delayed because of lack of paint. However, supply quickly rectified the problem.

TELEPHONE CENTER

1. General: This project located at Jabail Naval Station, Jubail, Saudi Arabia. Scope of work included fabrication and erection of 32' x 40' wood frame structure on 4" concrete slab, corrugated metal roof, interior finish carpentry, and interior lighting.

2. Direct Labor Expended:

NMCB ONE 285 MD

3. Composition of Work Force:

BU: 24 SW: 1 CE: 1

4. Status of Project:__

Start Date	DEC 90
Precent at takeover	0
Precent at turnover	100
Completed:	JAN 91

5. Materials: No material problems.

6. Engineering: Designed by NMCB FIVE

7. Problem areas: None.

LESSONS LEARNED

Problem/Item: Procurement of readily available material.

Discussion: The early procurement of items such as clay brick, block, and cement was a major cause of excessive damage and deterioration of such material while stored in MLO. Long term storage of these types of materials increased the potential for costly inventories, turn-in, and reorders.

Action taken/Recommendation: The battalion identified all unfit-for-issue brick, block, and cement, and coordinated the proper disposal of the material with DRMO. Project materials for the relieving battalion that were ordered since the SMI were carefully selected to prevent long-term storage and repeated handling. The relieving battalion was thoroughly briefed on the project. Commonly available, shelf-life sensitive materials should only be procured at the appropriate time. The limited storage areas that are available in the camp should also be considered.

Problem/Item: Invalid manipulation of SAMMS MLO data records.

Dicussion: As a result of invalid manipulation of select SAMMS MLO data records in the past, numerous borrow/payback, loss by inventory/gain by inventory, and other transactions are now "locked in" to the system. The SAMMS computer operator has been unable to correct these transactions through normal SAMMS operations. This situation has prevented proper borrow/payback and LIB/GBI management in the computer system.

Action taken/Recommendation: CBLANT has indicated that a solution to the problem will be provided. MLO has forwarded a message requesting authority to have ADP security personnel enter the data records and correct the manipulations. Also, MLO has initiated a manual Borrow Tickler File utilizing 1114 Stock Record Cards. To avoid such problems in the future, an in-depth SAMMS training program should be developed and maintained. Knowledge of correct procedures will prevent such difficulties.

Problem/Item: Hazardous Material in MLO inventory/Material Safety Data Sheets (MSDS).

Discussion: A large variety of hazardous materials have existed in the MLO inventory with no MSDS sheets being on file for them. Without the MSDS, the material is not supposed to be issued. This situation can create project delays and the potential for costly reorders. Also, the material involved occupies valuable storage space.

Action taken/Recommendation: All hazardous material in the MLO inventory that does not have an MSDS sheet has been identified and labeled "do not issue." A list of those items that were procured from CONUS has been forwarded to the 20th NCR for assistance in obtaining the MSDS sheets. A list of such locally procured items has bee: sent to the 20th NCR and CBLANT, recommending transfer to DRMO and CONUS reorder of the material. In the future, it is recommended the CONUS bills of Materials be generated for hazardous materials with notes to "hold procurement for on-site battalion to initiate, allow 150 days." To ensure that MSDS sheets are prvided, the items should be procured via CBC Gulfport.

Problem/Item: Expired inspection dates on provisions.

Discussion: Many of the dry provisions that are received from NAVSTA. Rota, Supply Department have short or expired dates on them. The Army Veterinarian Service, Rota inspects all subsistence items at the NAVSTA warehouse. Due to heavy work load, however, they usually only stamp one case per pallet. Therefore, many items do not appear to be confirmed fit for issue.

Action taken/Recommendation: The galley staff has worked with the Navy Food Service Systems Office and CBLANT N4 to reconcile problems and receive guidance in the operation of the system. In the future, it is recommended that as much FSM training be received as possible, and that an assist visit from an expert be requested if necessary.

Problem/Item: Availability of cash for disbursing operation.

Discussion: The supply of cash for PSD Rota is quite limited. Cash can be ordered from the U.S., but generally takes at least four weeks to arrive.

Action taken/Recommendation: Cash should always be ordered early, and at least two paydays worth of money should be on hand at all times.

Problem/Item: Availability of computer for disbursing.

Discussion: Three computers are needed for the disbursing operation. Two units are needed for the Uniform Mini Input Data System (UMIDS) and one unit is needed for the Micro Computer Processing System (MCPS). In the past only one unit has been available.

Action taken/Recommendation: The matter was discussed with the CBLANT SMI inspection team, and two additional units have been requested. One unit will be used for processing pay records on UMIDS and the other will be used for the automated processing of travel claims on MCPS. Regular follow-up inquiries should be made on the status of the project.

Problem/Item: Pay records for personnel at Souda Bay.

Discussion: Pay records for personnel assigned to Souda Bay must be maintained at the main body. Pay information has been transmitted between Rota and Souda Bay via telephone or fax. The one DK that is stationed at Souda Bay has been quite helpful in taking care of battalion personnel.

Action taken/Recommendation: PSD Souda Bay is willing to continue to cooperate in paying battalion personnel who are assigned there. Continued close communication is strongly recommended.

Problem/Item: Status of Table of Allowance (TOA) material at Camp Mitchell.

Discussion: Air Echelon TOA material is currently at 82/85 levels. The main body Air Det is at 89 standards.

Action taken/Recommendation: Because of the different levels of TOA readiness, difficulties can be created when preparing material for use and shipment. It is recommended that a plan be developed for implementation of 89 TOA, under guidance of the CBLANT DET Europe logistics rep.

NARRATIVE:

At the main body site in Rota, Spain, the Supply Department operated seven outlets plus MLO, Disbursing Officer, Barber Shop, and Galley (w/Wardroom and CPO MESS). Support was provided to details in Naples, Edzell, Holy Loch, Souda Bay, and Moron. At Sigonella, the Supply Department operated five (5) outlets, and supply office personnel managed their own OPTAR.

STATISTICS:

	Actual	Goal
SMI Effectiveness	94.5%	90%
NON-SMI Effectiveness	98.0%	85%
NON-SMI Gross Effectiveness	67.0%	65%

EQUIPMENT

1. LESSONS LEARNED:

(a) Problem/Item: Cretemobile Training

Discussion: Lack of training in working with quickset cement.

Recommendation: Training needs to be provided to the battalions for all rates involved with RRR. On proper machine operations and care; and proper concrete mixes, applications, and placement of quickset concrete.

(b) Problem/Item: 5000 Shop space heating.

Discussion: The 5000 Shop currently has no built-in heating system. An open flame heater was used but should not be used near flammables.

Recommendation: COMCBLANT DET Europe should install adequate heating system, either by civilian contract or a Seabee project.

(c) Problem/Item: POL waste site is not in compliance with current OSHA and EPA regulations.

Discussion: The continued storage of the waste oil drums on the asphalt has started to deteriorate the asphalt and the continued disposal of the oil soaked sand is an expensive problem. The local DRMO has started to impose more stringent requirements on the disposal of all hazardus waste and waste oils.

Recommendation: An OSHA and EPA approved hazardous waste storage site should be constructed as soon as possible.

(d) Problem/Item: Lack of an OSHA approved Battery Shop.

Discussion: The battery shop lacks proper floor drainage and facilities for draining and neutralizing battery acid prior to disposal.

Recommendation: Construct an OSHA approved battery shop with facilities for neutralizing old acid and storage area for old batteries until they are turned-in to DRMO as hazardous waste.

CBLANT BUDGETED FOR SECONDARY CONTAINMENT PALLETS TO MEET OSHA + EPA REQUIREMENTS

(d) Problem/Item: Seabee Automated Mobile Management Computer System (SAMMS).

Discussion: The Equipment Maintenance DTO Management System had a breakdown at approximently mid deployment. Lack of a replacement computer required the development of a complete manual file system to finish the deployment.

Recommendation: Additional computers need to be kept at the mainbody site to replace ones that break down.

(e) Problem/Item: Lead in Paint

Discussion: During the safety inspection conducted by COMCBLANT it was identified that there is the possibiliy that the O.D. Green paint currently used could have lead in it. There is no written documentation that states the paint used on the vehicles contained less than the allowable .06%; this has resulted in the curtailing of the CESE painting program until it can be tested by a certified laboratory to determine lead content.

Recommendation: All CESE should be tested to determine the actual lead content of paint, and any paint used to repaint a vehicle must be certified as to its lead content. All CESE procured and shipped to deployment sites should contain, in the history jackets, documentation of lead content.

Problem/Item: Yard Security.

Discussion: Transportation Yard and Live Storage yard has no security fence. Securing vehicles from theft and/or vandalism is a problem.

Recommendation: Entire Transportation Yard and Live Storage Yards should have a security fence.

Problem/Item: CUCV Keys

Discussion: Many CUCV vehicles have generic key cylinders resulting in a "one key fits all" situation. Consequently, many CUCV's were being utilized without the assigned operator's knowledge.

Recommendation: Order and install factory key cylinder with duplicates remaining in the history jackets.

Narrative:

While deployed to Camp Mitchell, Rota, Spain, Alfa Company was involved in numerous mount-outs and exercises. In spite of short term notifaction, planning and lack of personnel, the battalion was highly successful in completing mount-outs to Souda Bay, Details Alfa and Bravo to Saudi Arabia, Phiblex 90 to Sierra De Retin and Detail Moron, Spain.

With two-thirds of Alfa company personnel on details, key company positions, especially on the operations (EO)) side were manned by very junior personnel. This afforded them the opportunity to perform in positions of higher responsibility. Their performance was outstanding and the knowledge and training they received was invaluable.

An active and highly effective company safety program as well as daily standup safety lectures kept Alfa Company mishaps down to a minimum. A highly effective licensing program and Road Master program resulted in only 21 accidents with a total estimate of damage totaling $1,811, during the deployment. The crane crew and numerous personnel from Alfa Company gained valuable experience during numerous ship off-load operations. Alfa Company crane operators accumulated 1900 accident-free shipboard lifts.

EQUIPMENT POPULATION

	AUG	SEP	OCT	NOV	DEC	JAN	FEB
ACTIVE:	142	165	153	127	114	113	139
STORED:	129	113	118	100	113	116	86
TOTAL:	271	278	271	227	227	229	225

PM AND INTERIM ERP SUMMARY

01	02	04	TOTAL	PM:INTERIM
350	253	273	875	2.85:1

NON-AVAILABILITY STATUS

	AUG	SEP	OCT	NOV	DEC	JAN	FEB
AUTO:	4	4	0	5	3	2	4
CONST:	4	3	6	3	3	2	4
MHE:	2	1	1	0	1	1	1
TOTAL:	10	8	7	8	7	5	9

CAMP MAINTENANCE

Lessons Learned:

(a) Problem: PM/DEIS and SJO's were poorly written. Often they did not specify types of lubricant and in some cases (such as belt driven fans) frequency of inspections were not adequate and PM techniques were not described.

Discussion: The lack of quality of equipment maintenance at Camp Mitchell was directly related to the quality of the DEIS cards and SJO's.

Action taken: All SJO's and PM/DEIS cards were rewritten and an effective maintenance program was put in place with a quality assurance program to check PM's as they were performed.

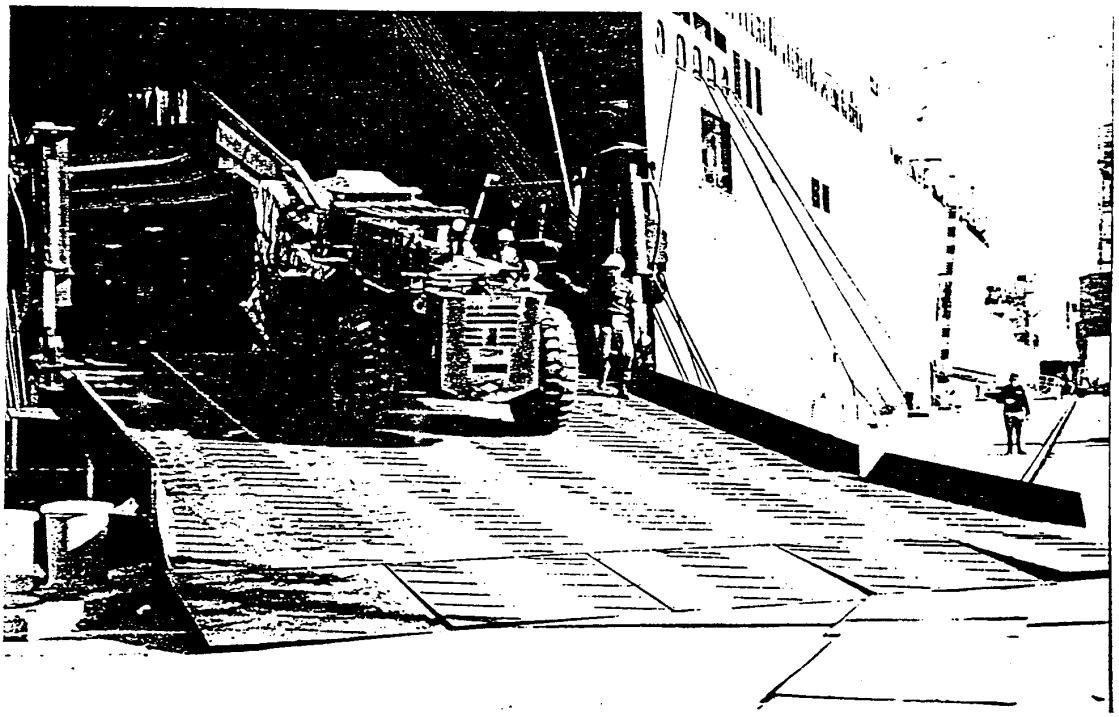
(b) Problem: Spanish ceiling tile is expensive and the ceramic tile used in BEQ's is no longer available from the manufacturer.

Discussion: A less expensive and higher quality replacement ceiling tile was needed. American made ceiling tile was identified as being economical and also easily trimmed to fit. Compatible replacements for ceramic tile installed in the BEQ's were no longer available from the manufacturer. Substitutes did not match the original colors and the fit and finish was poor.

Action taken: An MCD was initiated to replace all ceramic tiles in the BEQ's with STUCCO. American made ceiling tiles were procured to replace existing Spanish ceiling tiles.

Narrative: The maintenance platoon had an average of 30 men of which 22 were direct labor. Due to redeployment of personnel to support Operation Desert Shield/Storm camp maintenance operations were reduced by one-half during the period of 01 December through 9 February 1991. In spite of reduced manpower the original tasking of 2500 mandays was met. Over 200 mandays were devoted to camp improvement projects which included pavement striping, planting trees, patching and painting interior of BEQ's painting the Galley and constructing walking ramps over steam lines. These and other improvement projects significantly enhanced the quality of life, appearance and operation of Camp Mitchell. Standing job orders and equipment inspection procedures were revised which resulted in reducing emergency service work by 75%. The first annual inspection summary and controlled inspection of the camp in the last two years was conducted.

5. West African Training Cruise (WATC)-90: NMBC ONE deployed a 31 man detail to Praia, Cape Verde; Dakar, Sengal; Banjul, The Gambia; and Bissau, Guinea Bissau, in West Africa to provide construction support to local communities during the period 3 July to 5 September 1990. The detail was embarked aboard the USS Barnstable County (LST-1197). An after action report was forwarded under separate cover 11 January 1991.



MAIN BODY AVERAGE MANPOWER DISTRIBUTION BY FUNCTION

Unit Location	E1 - E-3	E4 - E5	E6 + UP	NON OF 13	TOTAL
Direct Labor	59	71	16	0	146
Const Equip M + R	2	23	7	3	53
OPS/ENG	2	4	12	4	22
Safety	0	0	2	0	2
Project Supervisor	0	4	11	0	15
Project Expeditor	0	6	0	0	6
CTR/CSR/MLO	4	7	3	6	20
Repair Parts	2	2	0	2	6
Embarkation	0	0	2	1	3
Ordnance	0	0	0	4	4
Comm/Mars	0	2	0	0	2
Training	0	2	2	7	11
I Division	0	0	0	0	0
Drug Alcohol	0	0	1	0	1
Admin/Pers/Legal	4	6	4	26	40
Medical/Dental	0	0	0	9	9
Special Services	2	1	2	0	5
Career Counselor	0	1	1	0	2
Master at Arms	2	5	1	5	11
ESO	0	1	0	0	1
Photo Lab/PAO	0	0	0	2	2
Supply Disbursing	0	0	0	23	23
Mess Cooks	4	2	0	13	19
Laundry	0	0	0	0	0
Barber Shop	0	0	0	2	2
Camp Maintenance	8	18	4	1	31
Others	0	5	0	0	5
Total	107	160	68	106	441

LABOR DISTRIBUTION FOR MAIN BODY

	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total Labor	%Total
Direct	1200	2237	2443	2180	1393	1800	1460	510	13723	19.53%
Indirect	1771	2842	3871	3714	2092	2147	2493	2067	20997	29.85%
Mil OPS	0	2573	1951	1428	1058	1036	600	188	8834	12.55%
Disaster Recovery	0	0	0	0	0	0	0	0	0	0%
Training	681	1562	405	254	355	153	20	100	3530	5.02%
Overhead	1838	3828	4034	3166	2940	2708	3060	1668	23242	33.05%
Totals	5490	13042	12704	10742	7838	7344	7360	4533	70326	100%
% Direct Labor	21.86	17.15	19.23	20.29	17.77	24.51	19.84	11.25		19.53
Actual Workdays	12	21	24	20	19	18	15	5	134	
Number of Personnel (OFF/ENL)	20/409	18/425	20/418	19/396	16/278	16/272	15/326	22/630		

DETAIL SIGONELLA

1. LESSONS LEARNED

(a) Problem: Rapid Runway Repair Readiness

Discussion: Rapid recovery of Station runways and facilities from acts of battle or sabotage requires a coordinated effort between NMCB, Station and EOD personnel. These three organizations possess widely divergent levels of experience, training, and standard operating procedures. Combined training and exercises are essential to maintain station readiness and survivability.

Recommendation/Action Taken: Several coordinated exercises encompassing damage assessment, ordanance removal, communications, and cretemobile operatins were conducted during the first week of deployment. Training continued through the first several months of deployment to improve the level of readiness and ensure compatibility of all organizations. Recommend a siilar pattern of training continue with future battalions.

(b) Problem: Limited Healthcare Services

Discussion: Naval Hospital Sigonella provided limited healthcare sevices. Many test, minor surgical procedures, and therapy services required medical evacuation (MEDEVAC) to Naples, Italy, Rota, Spain or Wesibaden, Germany. A simple one-hour appointment requires the patient to be away from Sigonella for one to three days. More complicated procedures lead to greater personnel losses.

Recommendation: Carefully screen all personnel assigned to Detail Sigonella for potentially serious medical problems. Be prepared to replace lost personnel with augments from other sites if key individuals are returned to Rota for treatment of a long term medical problem. Ensure that a hospital corpsman is assigned to Detail Sigonella (per ISSA's) to coordinate medical services.

(c) Problem: Weapons Training

Discussion: There is no rifle or pistol range at NAS Sigonella. The Marine Corps Security Force Company, Sigonella, utilized an Italian army range four days per month. This range is 2 1/2 hours from Sigonella, has no target system for weapons qualifications, and is shared during those four days by the MCSFC, EOD Detachment and the Security Department. Therefore, weapons training is limited in Sigonella.

Recommendation/Action Taken: By establishing a positive relationship with the MCSFC (through a CO Discretionary project), we were able to use the range to battle zero our M-16's. Recommend future details attempt to gain similar training opportunities to ensure each man has his own weapon sighted. Recommend all qualification firing be completed in homeport.

(d) Problem: Poor quality of local concrete

Discussion: Concrete supplied by local vendors often fails to meet required strength.

Recommendation/Action Taken: To ensure that 3500 psi design strength was achieved, 5000 psi concrete was ordered (although this action still did not produce 3500 psi concrete in several cases). All concrete breaking strength results were supplied to the Resident Officer in Charge of Construction, Sicily, who in conjunction with the station Supply Department is pursuing action against the principal local concrete vendor. Recommend future details continue to order 5000 psi concrete and continue to closely monitor break results.

2. General: Because of Operation Desert Shield/Storm the operational tempo of NAS Sigonella was more than doubled during NMCB ONE's deployment. The strain to station personnel support facilities such as the galley, barracks, gymnasium (which was closed so it could be used as transient berthing), and clubs negatively impacted on the quality of life of NMCB ONE personnel. The detail was reduced from 119 to 70 as a result of redeployment of personnel to Saudi Arabia to support Operation Desert Shield/Storm. Overhead functions were combined to the greatest extent possible to compensate for the loss of direct labor.

PROJECTS

SI7-854 EXPAND JP-5 TANKER TRUCK PARKING AREA

1. General: This project consisted of construction of a 74 x 46 m concrete parking area, including all associated driveways, curbing, drainage ditched, fencing and landscaping. Incident to the construction was the relocatio of the NMCB MLO yard. NMCB ONE tasking included two 20cm lifts to compact select fill, 24 3 m X 46 m concrete slabs, 300m curbing, painting of curbs and parking spaces, 260m concrete encased underground electrical conduit, security lighting, 100m fencing with concertina wire, and landscaping.

2. Direct Labor Expended:

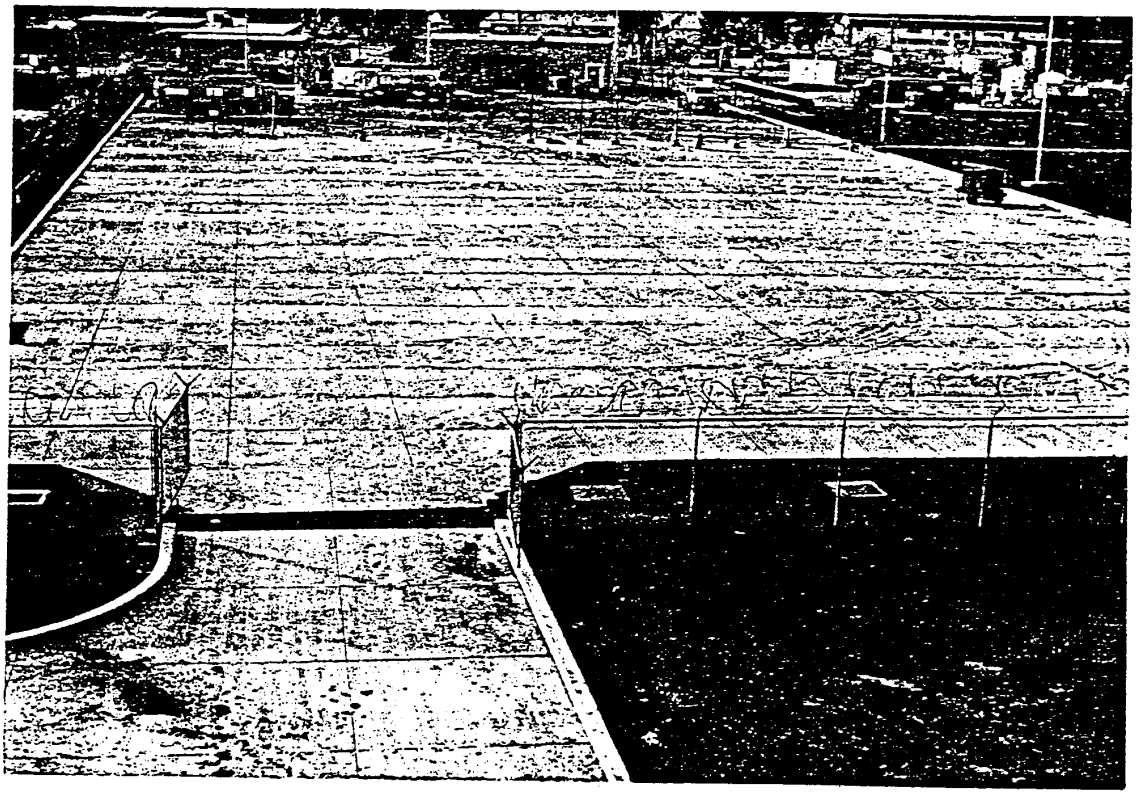
NMCB THREE	600
NMCB ONE	1909
Cumlative to date	2509

3. Compostition of Work Force:

BU: 13 EA: 1 EO: 5 SW: 4 UT: 2

4. Project Status:

Start Date	Jan 90
% at takeover	24%
% at turnover	100%
Completion Date	Feb 91



SI7-854 EXPAND JP-5 TA ER TRUCK PARKING AREA

5. Materials: Concrete quality variance as discussed in lessons learned.

6. Engineering: Project plans called for the concrete slabs to be placed in a checkerboard pattern. The ROICC approved an alternate method of construction which allowed us to place the concrete in strips across the width of the parking area. This change led to better control of elevations and excellent drainage, thus providing a higher quality product to the customer.

7. Problem Areas: Construction joints were required to be saw cut rather than formed into the surface at the time of placement. ROICC did not approve our proposed alternate method of construction. Straight cuts were extremely difficult to maintain over such a large area.

SI7-865 ADDITION TO HAZARDOUS MATERIAL WAREHOUSE

1. General: This project consisted of several small tasks which combined into a single project: Relocation of 100 sm pre-engineered building and construction of an asphalt parking area at the new site; at the former PED site, construction of a 420 sm concrete and CMU addition to the protection systems; construction of a 20 sm office and associated asphalt parking area; construction of a 16 sm forklift charging shed; enclosing a portion of the existing hazardous material warehouse by erection of a full-height CMU wall, thus making a new acid room; construction of an underground purge pit for the acid room; and installation of over 100 m of chainlink fencing. NMCB ONE work included all stucco and plaster in the new acid room siding, flashing and gutters on the forklift shed; installation of electrical circuits at the relocated PEB; erection of aproximately 80 m of fencing; rerouting of over 60 m of 600 m diameter undergound storm drain including four manholes; rerouting 65 m of 200 mm diameter PVC sewer pipe, including one manhole; excavation for all placement of 12 footers and 4 subgrade beams for the main addition; placement of three concrete columns for the main addition; and backfill and compaction for the slab at the main addition.

2. Direct Labor Expended:

NMCB THREE	1172
NMCB ONE	1212
Cumlative to date	2384

3. Compostition of Work Force:

BU: 9 EA: 1 EO: 4 SW: 3 UT: 2 CE: 2

4. Project Status:

Start Date	Jan 90
% at takeover	31%
% at turnover	58%

5. Materials: Italian-style hollow clay tile roof system, which has been on order since March 1989, has to be reordered because of confusion between station supply and the vendor. Over $1500 of on-hand paints and sealers were unusable because they were Italian products and no local vendor could provide an MSDS. Metal doors for the new acid room have been reordered three times because the vendors have not provided proper doors.

6. Engineering: All rebar and formwork for structural items has to be inspected by an Italian structural engineer prior to placement of concrete. The ROICC provided the sevice through an engineering services contract with the local engineer.

7. Problem Areas: Underground utilities which were not shown on prints were encountered, requiring relocation of a 600 mm storm drain and an 200 mm sewer line. Soil conditions were poor, requiring excavation and replacement with select fill in order to achieve required compaction.

SI7-868 CONSTRUCT NAS II CHAPEL

1. General. This project consisted of construction of a 200 sm European style concrete and block building, including all structural, electrical and mechanical systems. NMCB ONE tasking included rough electrical, two HVAC units and associated ductwork, fire alarm system, interior plastering and painting, exterior stucco finish, asoustical drop ceining, cermaic tile, and finish plumbing. Several difficult phases were performed by local subcontractors, notably the membrane roof and interior cabinetry.

2. Direct Labor Expended:

NMCB THREE	1399 MD
NMCB ONE	2387 MD
Cumulative to Date	4706 MD

3. Composition of Work Force:

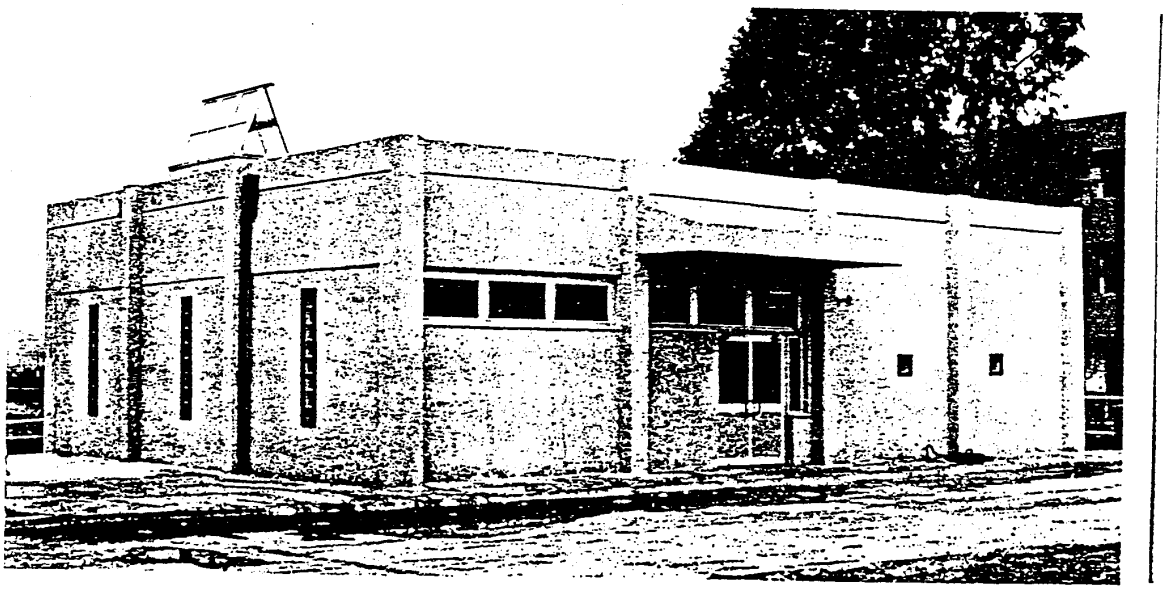
CE: 2 UT: 1 BU: 6 SW: 1

4. Status of Project:

Start Date	89 MAY
Percent at Takeover	82
Percent at Turnover	100
Completion Date	91 Feb

5. Materials: Incompatible U.S. and European materials lead to several reorders that could have been avoided.

6. Engineering: No major engineering problems were encountered.



SI7-868 CONSTUCT NAS II CHAPEL

7. Problem Areas: Finish quality stucco and plastering was extremely slow because the crew was not trained in European construction techniques. Significant rework was required at the beginning of the deployment to correct rough electrical problems and poor plastering. Installation of window and door glass by local vendor was over six weeks late, impacting the constructin schedule. The actual HVAC units received could not be installed as shown on prints, requiring several significant field changes.

SI9-801 MAUW FENCE

1. General. This project consisted of the installation of approximately 850m of chainlink fence, priming and painting of the fence, demolition of the old fence, demolition of four guard towers, and placement of gravel. NMCB ONE tasking was to prime and paint the new fence and demolish the four guard towers.

2. Direct Labor Expended:

NMCB THREE	1088 MD
NMCB ONE	556 MD
Cumulative to Date	1644 MD

3. Composition of Work Force:

BU: 4 SW: 1 EO: 1

4. Status of Project:

Start Date	90 May
Percent at Takeover	51
Percent at Turnover	68

5. Materials: The initial spray painting guns did not last, so industrial quality guns were purchased and performed well.

6. Engineering: No major engineering problems were encountered.

7. Problem Areas: Despite properly completing the required access list each month, we continually had problems working at the MAUW compound. Access to the area was often denied or work was halted without warning.

SIO-814 UPGRADE ROAD TO RRR WAREHOUSE

1. GENERAL: This project consisted of rerouting a temporary gravel road to allow access by large vehicles under all weather conditions. Work included excavation of 200 cm of earth, placement and compaction of over 1100cm of select fill, install a 4 foot diameter culvert pipe, and clearing of drainage ditches.

2. DIRECT LABOR EXPENDED:

NMCB ONE	169 MD
Cumulative to date	169 MD

3. COMPOSITION OF WORK FORCE:

BU: 2 EA: 2 EO: 2

4. STATUS OF PROJECT:

Start Date	Oct 90
Percent at Takeover	0
Percent at Turnover	100
Completed	Dec 90

5. MATERIALS: No major material problem were encountered.

6. ENGINEERING: No major material problem were encountered.

7. PROBLEM AREAS: There were no major problem areas encountered.

SIO-814 UPGRADE ROAD TO RRR WAREHOUSE

LABOR DISTRIBUTION FOR DETAIL SIGONELLA

	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total Labor	%Total
Direct	508	1102	1175	1036	656	723	607	0	5807	42%
Indirect	365	757	838	802	553	605	587	0	4507	32%
Mil OPS	224	56	129	117	69	78	72	0	745	5%
Disaster Recovery	0	0	0	0	0	0	0	0	0	0%
Training	129	114	109	0	87	0	0	0	439	3%
Overhead	182	383	418	399	202	221	214	428	2446	18%
Totals	1408	2411	2669	2354	1567	1627	1480	428	13944	100%
% Direct Labor	36.1	45.7	44.0	44.0	41.9	44.4	41.0	0.0	42.0	
Actual Workdays	10	21	23	22	21	23	20	0		
Number of Personnel	117	117	115	111	77	77	77	77		

CRO-834 AIRFIELD REPAIRS

1. GNERAL: This project consisted of ship offload of 50 pieces of CESE upon arrival from Rota, Spain; construction of strongback tents, shower, head, laundry and vehicle maintenance tent for 59-man detail; preparation and asphalt paving of 250,000 square feet of taxiway shoulder, three vehicle parking pads, four radius extensions, and a 20' X 20' section of reserve runway; installation of 11,000 linear feet of power cable for four 80 foot light poles and forty taxiway edge lights; and excavation and a placement of 15,000 cubic feet of concrete for four light pole footers, two blast fence footers, four radius extensions, sidecurbs, eight full size and four partial taxiway concrete, pavement slabs.

2. DIRECT LABOR EXPANDED:

Previous Battalions: 0
NMCB ONE: 1792
PWD: 0
Cumulative: 1792

3. COMPOSITION OF WORK FORCE:

DET: EO - 10
BU - 10
CE - 3
SW - 1
EA - 1

4. STATUS OF PROJECT:

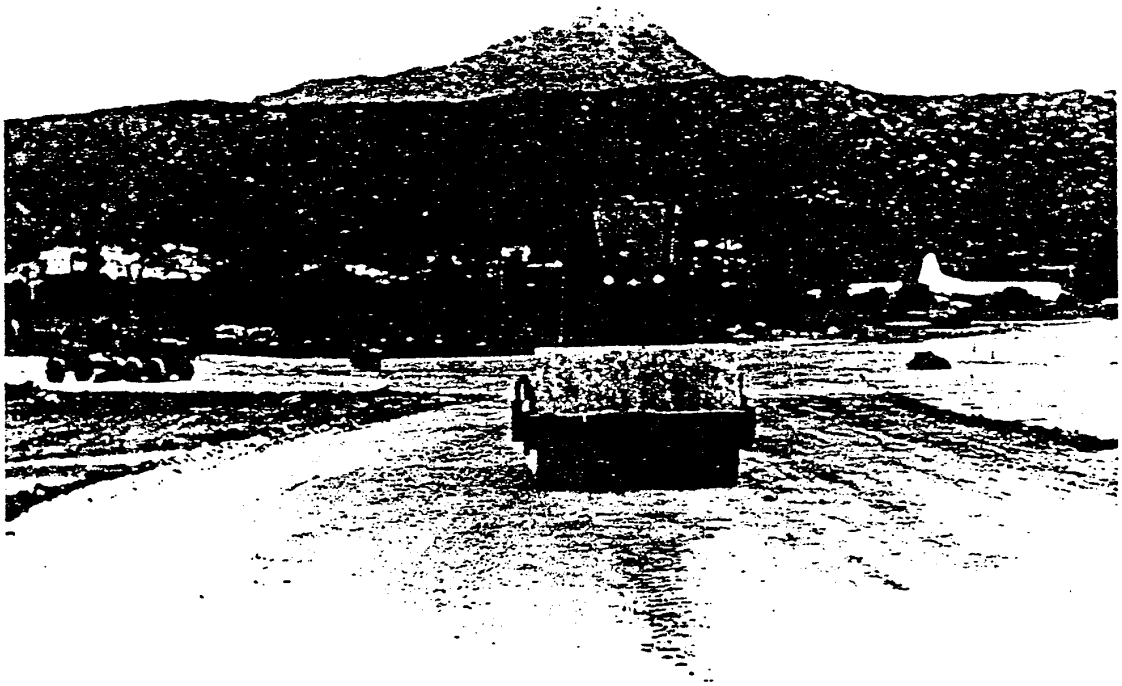
Start Date: 3 DEC 90
% at Takeover: 0
% at Turnover: 55
BOD: JUN 91

5. ENGINEERING: A & E Firm Athens, Greece

7. PROBLEM AREAS: Existing shoulder subbase material contained a high clay content which retained water after rain making compaction impossible. Solution required replacement of existing subbase in some areas with select fill adding to the cost to the project. Initial funding for the project was based on a previous scope-of-work and not supplemented when scope increased. Problem was not discovered early because cost estimates were in Greek drachma and funding was in U.S. dollars. Trucks de
paver. Problem was resol
paver and crew. Testing
was 2 1/2 hour drive req
cylinders. Concrete qual
specified strength concr
more expensive.

DRACHMA VS DOLLAR:
THIS SHOULD NOT BE A PROBLEM.
THE REAL PROBLEM WAS THE LACK
OF A RELIABLE COST ESTIMATE AT THE
BEGINNING OF THE PROJ & THE MULTITUDE
OF CHANGES INITIATED THEREAFTER.

R/04 10/9/91



CRO-834 AIRFIELD REPAIRS

TEMPORARY SCIF POWER AND FENCING

1. GENERAL DESCRIPTION: This project consisted of a 300 ft of chainlink fence with 900 ft of barbed security wire, one double wide gate, one 22' X 26' X 6' concrete pad and 300 ft of concrete encased conduit from substation to newly installed buildings.

2. DIRECT LABOR EXPANDED:

Previous Battalions: 0
NMCB ONE: 28 mds
PWD: 0
Cumulative: 28 mds

3. COMPOSITION OF WORK FORCE:

DET: BU - 2
SW - 1
CE - 1

4. STATUS OF PROJECT:

Start Date: JAN 91
% at Takeover: 0%
% at Turnover: 100%
BOD: UNK

5. MATERIAL: Fencing and concrete material provided by Public Works Department. Air Force procured all material required for electrical hook up.

6. ENGINEERING: NMCB ONE Det 11 with sketches from Basil Engineering, Athens.

7. PROBLEM AREAS: Project was high priority yet the actual required scope of work was unknown initially. Discussions with Air Force consultants and Architect Engineering firm solidified the scope of work as work progressed.

CONTINGENCY OPERATIONS/OTHER

1. Shiploading Operations: NMCB ONE was called upon to provide stevedore services to transfer Operation Desert Shield mission essential cargo between commercial vessels at Naval Station, Rota, Spain. NMCB ONE provided crane operators and cargo hatch teams and drivers to transfer almost 400 vehicles and helicopters between the disabled USNS Antares and the USNS Altares. The battalion embark organization was also a key player in embarking essential communications equipment from the disabled ship to Saudi Arabia by aircraft. NMCB ONE personnel remained on the scene even after the arrival of Cargo Handling Battalion FOUR to maintain continuity and keep up the pace of the cargo transfer.

The battalion was again involved in the transfer of cargo for two ships, SS Cape Mendocino and SS Equality State, to the SS Cape Douglas. The NMCB ONE cargo hatch team unloaded over 170 vehicles from the SS Cape Mendocino, then offloaded the final 90 vehicles from SS Equality State. The NMCB ONE drivers moved 607 jeeps, trucks, tractor trailers and tanks between the ships. NMCB ONE maintenance crews worked constantly on vehicles to get them started and moving.

NMCB ONE personnel were involved in subsequent shiploading operations in Rota including the following ships: SS Cornhusker State, SS Washington and SS Ashley Lykes. Shiploading operations culminated with the loading of NMCB ONE CESE equipment and cargo aboard the USNS 1st LT Baldomero Lopez for transit to Souda Bay, Crete, to provide construction support in support of Operation Desert Shield/Storm.

2. Operation Sharp Edge, Liberia: NMCB ONE deployed a detail of 6 men to Monrovia, Liberia, to provide construction support to the 26th Marine Expeditionary Unit during the non-combatant evacuation operation (NEO) known as Operation Sharp Edge. The detail installed a pipeline over the shore under arduous conditions to provide seawater to a reverse osmosis water purification unit (ROWPU) which was providing fresh water to the American Embassy. The detail also surveyed the local area around the Embassy compound for potential sites to drill water wells. An after action report was forwarded under separate cover 30 September 1990.

3. Exercise African Oasis, Morocco: NMCB ONE deployed a detail of 20 men to Sidi Slimane Air Base, Morocco, to participate in the Commander, SIXTH Fleet, sponsered Exercise African Oasis during the period 29 Aug 90 through 30 Sep 90. The detail drilled and developed two freshwater wells on the base to supply the water distribution system. The detail also installed light fixtures in the children's school and resurfaced 186 desks in classrooms. The mount-out of the detail was marked by the first operatioal lift of a Failing well-drilling rig aboard a C-130 aircraft. An after action report was forwarded under separate cover 14 December 1990.

4. Deployment for Training (DFT), Azores: NMCB ONE deployed a detail of 28 men to Lajes Field, Azores, Portugal, during the period 29 Aug 90 through 30 Sep 90. The detail removed two (2) inoperable 100' rotating log-periodic (RLP) high frequency antennas, erected two (2) new 120 high frequency antennas, erected two (2) new 120' high frequency Spira-Cone antennas and installed over 1500 linear feet of direct burial communication cable in support of the Anti-submarine Warfare Operations Center (ASWOC), Lajes, Azores. A deployment completion report was forwarded under separate cover 19 December 1990.

DETAIL EDZELL

1. LESSONS LEARNED: None

Narrative Summary

NMCB ONE Detail Echo Sierra deployed to Royal Air Force Base, Edzell, Scotland from 07 August to 02 December 1990. The deployment was shortened by the temporary closing of the detail for assignment to Saudi Arabia in support of Operation Desert Shield/Storm.

Administration:

The detail personnel and disbursing records were maintained by the station's personnel support detachment who provided excellent service concerning all personnel matters. Medical and dental records were also maintained by the station. the station admin department allowed the detail to utilize their computers to prepare naval messages for transmisson. Legal services were provided by the station's legal office.

LABOR DISTRIBUTION FOR DETAIL ECHO SIERRA

	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total	%Total
Direct	180	304	330	194	0	0	0	0	1008	52.6%
Indirect	25	40	66	30	0	0	0	0	0	8.4%
Mil OPS	0	0	0	0	0	0	0	0	0	0%
Disaster Recovery	0	0	0	0	0	0	0	0	0	0%
Training	25	25	25	0	0	0	0	0	75	4.9%
Overhead	91	152	175	255	0	0	0	0	0	35.1%
Totals	321	521	596	479	0	0	0	0	1917	100%
% Direct Labor	56.1	58.3	55.4	40.5	0	0	0	0	52.6	19.53
Actual Workdays	0	12	20	23	13	0	0	0	68	

CRO-843 AIRCRAFT MAINTENANCE OFFICES

1. GENERAL DESCRIPTION: This project consisted of construction of three concrete slabs, disassembly of (2) 16'X 32' and (1) 16' X 20' two story prefabricated office buildings from Hellenikon Air Force Base, Athens, Greece and reassembly at NSA, Souda Bay, Crete in Hangar #5.

2. DIRECT LABOR EXPANDED:

Previous Battalions: 0
NMCB ONE: 176
PWD: 5
Cumulative: 181

3. COMPOSITION OF WORK FORCE:

DET: UT - 1 (disassembly)
BU - 3
CE - 1

DET: UT - 1 (reassembly)
CE - 5
BU - 5

4. STATUS OF PROJECT:

Start Date: 9 NOV 90
% at Takeover: 0
% at Turnover: 100
BOD: 11 MAR 91

5. MATERIAL: All building material was disassembled at Hellenikon Air Force Base and shipped to NSA, Souda Bay, Crete. Material for concrete pads was funded by NSA, Public Works Department.

6. ENGINEERING: Frank E. Basil, Inc., Consulting Engineers Athens, Greece provided sketches for pad and utilities.

7. PROBLEM AREAS: Some material was damaged in shipment. Consequently additional prefab panels were sent from Hellenikon. PWD provided replacements for some missing electrical material.

CR7-811·REPAIR/ALTER GSE HANGAR

1. GENERAL DESCRIPTION: This project consisted of construction of a 1200 SF officer and shop space which included laying approximately 2400 CMU block, placing a 10" thick concrete roof slab, and installing steel stairs and handrails to the mezzanine area. The interior finish of the 3 offices consisted of sheetrock walls, suspended ceiling, and vinyl tile floor. The interior finish of shop will be painted. The exterior finish is stucco. Utilities included installation of heat pump with duct system and all electrical distribution. A fire alarm and sprinkler system will also be installed.

2. DIRECT LABOR EXPENDED:

Previous Battalions: 66 mds
NMCB ONE: 645 mds
PWD: 0
Cumulative: 711 mds

3. COMPOSITION OF WORK FORCE:

DET: BU - 2
SW - 1
CE - 1
UT - 1

4. STATUS OF PROJECT:

Start Date: 23 APR 90
% at Takeover: 6%
% at Turnover: 71%
BOD: MAY 91

5. MATERIAL: All project material turned over to NMCB 133 for completion of project. 60% received for Conus; 40% locally purchased include: doors, windows, insulation, stairs, paint, heat pump, and duct system.

6. ENGINEERING: DACP International, Athens, Greece.

7. PROBLEM AREAS:

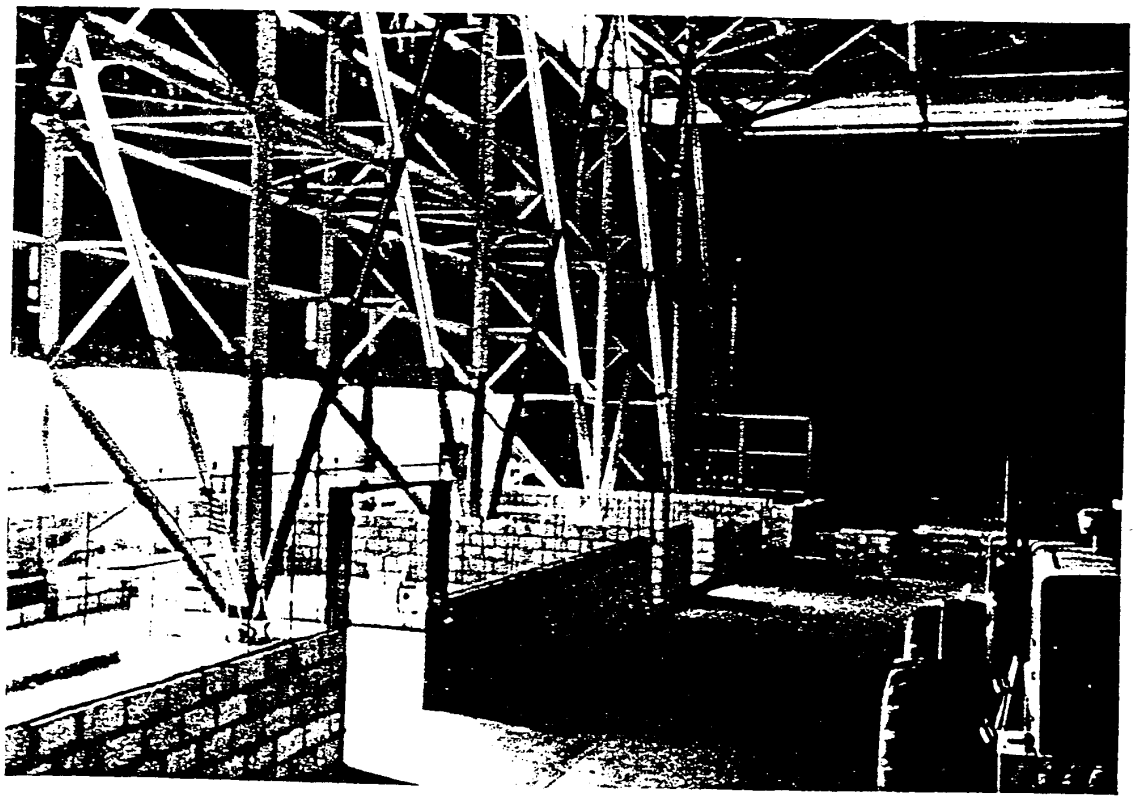
A. Discrepancies in existing work completed upon turnover required NMCB ONE to demolish all existing block walls and reconstruct them in accordance with specifications.

B. Local material procurement was very difficult due to language barrier and compatibility of metric and English measurements, sizes, diameters, quantity etc.

C. Quality of concrete - quality was consistently below criteria specified when purchased.

D. Initial funds provided were insufficient due to inflation of locally procured items relative to price of items when cost estimate was made.

E. Subcontract quality (Doors, handrails, stairs) was substandard.



CR7-811 REPAIRS/ALTERATIONS GSE HANGER

CRO-400 CAMP MAINTENANCE

1. GENERAL DESCRIPTION: Camp maintenance consisted of continuous maintenance and general repairs of the tent camp, daily cycling of reserve generators, scheduled maintenance of all tent heaters, and maintenance to camp boiler. It was also the task of the maintenance crew to replenish the fuel cans for the tent heaters during the work week. On non-workdays occupants where required to fill cans from reserve fuel drums located just outside camp. The maintenance electrician also performed weekly electrical checks to the camp's power distribution system.

2. DIRECT LABOR EXPANDED:

Previous Battalions: 0
NMCB ONE: 320 mds
PWD: 0
Cumulative: 320 mds

3. COMPOSITION OF WORK FORCE:

DET: CE - 2
UT - 2

4. STATUS OF PROJECT:

Start Date: 10 DEC 90
% at Takeover: 0
% at Turnover: on going
Completed: N/A

5. MATERIAL: Camp construction and maintenance materials were shipped from Rota, Spain. A small number of valves, piping, and fittings were purchased locally for initial tent camp construction. Public Works Department Souda Bay was a tremendous help in locating and supplying items upon request.

6. ENGINEERING: Det 11 NMCB-ONE

7. PROBLEM AREAS: NONE

CRO-837 DISASSEMBLY OF BUILDING #155

1. GENERAL DESCRIPTION: This project consisted of the disassembly of a 150' by 60' located at Hellenikon, Air Force Base, Athens, Greece. NMCB ONE tasking required salvaging of all structural steel, HVAC system, and roof/side panels. All savaged material was containerized or palletized for shipment to NSA Souda Bay, Crete. Three interior walls constructed of hollow clay tile were demolished and removed from site. Follow-on battalion to perform reassembly of building at Souda Bay.

2. DIRECT LABOR EXPANDED:

Previous Battalions: 0
NMCB ONE: 88 mds
PWD: 0
Cumulative: 88 mds

3. COMPOSITION OF WORK FORCE:

DET: UT - 2
BU - 4
CE - 1
SW - 1

4. STATUS OF PROJECT:

Start Date: 23 JAN 91
% at Takeover: 0
% at Turnover: 50%
BOD: N/A

5. MATERIAL: All required tools were available from the detail at Souda Bay or the Air Force at Hellenikon. As previously arranged, construction and transportation equipment was provided by the Base Civil Engineering Department and Air Force Motor Pool.

6. ENGINEERING: Frank E. Basil, Inc, Athens, Greece.

7. PROBLEM AREA: Removal of debris from the site was a problem. No large dumpster was available and trash collection service was untimely causing significant delay.

RELOCATION OF VARIOUS BUILDINGS FROM
HELLENIKON AIR FORCE BASE, ATHENS, GREECE

1. GENERAL DESCRIPTION: This project consisted of the disassembly and preparation for shipment of 15 portable buildings for relocations to Souda Bay, Crete. All work was performed in support of the relocation to the 922nd Squadron of the 16th Air Force to Souda Bay in direct support of Operation Desert Storm.

2. DIRECT LABOR EXPANDED:

Previous Battalions: 0
NMCB ONE: 112 mds
Cumulative: 112 mds

3. COMPOSITION OF WORK FORCE:

DET: UT - 2
BU - 4
CE - 1
SW - 1

4. STATUS OF PROJECT:

Start Date: 3 FEB 91
% at Takeover: 0
% at Turnover: 100%
Completed 24 FEB 91

5. MATERIAL: All required tools were available from the detail at Souda Bay or the Air Force at Hellenikon. As previously arranged, construction and transportation equipment was provided by the Base Civil Engineering Department and Air Force Motor Pool.

6. ENGINEERING: N/A

7. PROBLEM AREA: Availability of crane support was limited due to the base closure of Hellenikon Air Force Base.

LABOR DISTRIBUTION FOR SOUDA BAY

	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total Labor
Direct	110	187	196	491	622	646	748	168	3168
Indirect	20	33	41	97	321	320	330	48	1210
Mil OPS	0	0	0	0	0	0	0	0	0
Disaster Recovery	0	0	0	0	0	0	0	0	0
Training	0	0	11	0	82	60	0	0	153
Overhead	13	22	27	37	193	192	198	29	711
Totals	143	242	253	625	1218	1218	1276	245	5220
% Direct Labor	76.9	77.3	77.5	78.6	51.1	53.0	58.6	68.6	60.7
Actual Workdays	13	22	23	25	21	21	22	8	154

DETAIL MORON

1. LESSONS LEARNED:

(a) Item: CONVOY PROCEDURES.

Dicussion: The convoying of military and oversized construction equipment between Rota and Moron Spain requires extensive coordination between "La Guardia Civil" and base security. For oversized vehicles the outsized dimensions plus axle loads must be passed to La Guardia Civil for review by Province Department of Transportation representatives.

Action taken/Recommendation: A minimum of two (2) weeks before the scheduled convoy date prepare and submit a convoy plan to La Guardia Civil via base security. Include in the plan the vehicle nomenclature, license plate number, dimensions, axle loads and axle spacing. Also, provide a single point of contact to base security for further coordination and follow up.

(b) Item: PRECAST PORTLAND CEMENT PIPE (PCP) Vs CORRUGATED METAL PIPE (CMP).

Discussion: Some NCF designs call for corrugated metal pipe to be used for culverts and small diameter storm drainage lines. In Spain CMP is not readily available and PCP pipe will normally be ordered unless specifically requested otherwise. Small diameter PCP, 40 cm or less, usually has no reinforcing steel and therefore has a lower than expected load bearing capacity. Large diameter PCP normally complies with U.S. specifications.

Action Taken/Recommendation: When project urgency does not allow for the ordering and delivery of CMP, the use of PCP should be anticipated. If there is insufficient earth cover to spread the load the use of a concrete cover or crossing plate should be considered.

2. PROJECT SUMMARIES. NMCB ONE was assigned an urgent contingency construction project at Moron Air Base as part of Operation Desert Storm. Detail Moron was established on 9 Feb 91 and work began on 11 Feb 91. The detail consisted of 23 NMCB ONE personnel, 45 NMCB-133 personnel, and 17 Air Force Prime Beef personnel. The detail was berthed in a tent camp consisting of ten (10) tents pulled from the NMCB ONE TOA and erected at Moron AB by the 842nd Civil Engineering Squadron. Nine of the tents were used for berthing and the tenth tent was erected as a hard back tent and used as a MWR faciltiy by the detail. Shower and head facilities were provided by the Air Foce in the base gymnasium and pool. The detail worked double shifts, with approximately 60 personnel working the day shift and the remainder on night shift. NMCB ONE was tasked with completing the project within 38 calendar days. However, due to frequent heavy rains, the projects were not completed in the timeframe projected and were turned over to NMCB-133 for completion on 13 March 1991.

SI7-856 ADDITION TO HAZARDOUS MATERIAL WAREHOUSE

DETAIL NAPLES, ITALY

1. Lessons Learned

(a) Problem: Communications with the mainbody at Rota.

Discussion: Documents requested by the Det from the main body were routinely delayed in arriving. Relying on the postal system for timely delivery of required documents (i.e. EDVR, per diem orders) frequently led to excessive delays.

Recommendation/Action: The Det often utilized FAX equipment at the NSA Supply Dept for urgent items. Purchase of a fax machine for Det use would improve timely receipt of documents by both the main body and the Det. All urgently required material mailed to the Det from Europe should be sent to the MPS/intertheater address with backup via USPS.

(b) Problem: Availability of computer programs.

Discussion: SAMM's, MICROTRACS, and Enable (version 2.15) computer programs were used in homeport to develop administrative records and projects schedules. These programs were not available at the det site.

Recommendation/Action: A computer program library including SAMM's, word processing (with message formatting and OCR font), and MICROTRACS programs should be available at every det site with a computer.

Narrative All personnel functions, records and pay records were handled by PSD Capodichino. Detail Naples was closed 30 November 1991 and the personnel redeployed to Saudi Arabia in support of Operation Desert Shield/Storm. The importance of an accurate and feasible rollback plan cannot be over emphasized. The rollback was accomplished with a minimum of confusion due to prior planning and preparation.

PROJECTS

NA6-803 FIRE DOORS

1. General: This project consisted of placing 22 new doors in existing stairwells at bldg 70, NSA, Naples, It. Work included gypsum board partitions, steel fire doors and frames, electrical and fire alarm wiring connections.

2. Direct Labor Expended:

NMCB ONE	350 MD
Cumulative to Date	350 MD

3. Composition of Work Force:

BU: 5 CE: 1 SW: 1

4. Status of Project:

Start Date	Aug 90
% at takeover	N/A
% at turnover	59%

5. Material: All CONUS procured material on site. All local materials have been ordered.

6. Engineering: Designed by private A/E firm: INTERPLAN s.r.l., Naples, It.

7. Problem Areas: This design called for installation for 42 fire doors. Some of the doors have been blocked up subsequent to the design, many doors accessed restricted areas and had cypher locks which were not compatable with the new fire doors, and the customer wanted to leave one opening without a door. This resulted in deleting 20 of the doors.

NA8-844 REPAIR HANGER

1. General: This project consisted of rehabilitation of the entire building including, demolition, construction of new mansory walls, masonry and gypsum wallboard partitions, steel structure and preinsulated metal sheet panels for the "T-line". Finish work included carpet, vinyl, ceramic and terrazzo tile floors; wainscoating, ceramic ceilings; epoxy floor finish, curtain tracks, draperies and vertical blinds; steel stair and handrail. Replace plumbing and sanitary fixtures in two heads. New electrical lighting and power system. Modification of air conditioning and ventilating system.

2. Direct Labor Expended:

NMCB ONE	482 MD
Cumulative to Date	482 MD

3. Composition of Work Force:

BU: 4 CE: 2 SW: 2 UT: 1

4. Status of Project:

Start Date	Aug 90
% at takeover	N/A
% at turnover	31%

Beneficial Occupancy Date Nov 90 (Phase 1, Wing A)

5. Materials: All CONUS procured material on site. All local procured material on site or under procurement.

6. Engineering: Designed by Private Engineers, International Consulting Services s.r.l., Rome, It.

7. Problem Areas: Arrival of the detail in mid-august during the Italian vacation period, followed by the end of the fiscal year in mid-September delayed procurement of steel member for the first phase of this project.

LABOR DISTRIBUTION FOR DETAIL NAPLES

	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total
Direct	71	191	320	266	0	0	0	0	848
Indirect	80	132	63	76	0	0	0	0	351
Mil OPS	4	39	46	29	0	0	0	0	118
Disaster Recovery	0	0	0	0	0	0	0	0	0
Training	17	40	30	9	0	0	0	0	96
Overhead	179	212	231	163	0	0	0	0	785
Totals	351	614	690	543	0	0	0	0	2198
% Direct Labor	20	31	46	49	0	0	0	0	38
Actual Workdays	12	21	24	22	0	0	0	0	79

DETAIL HOLY LOCH

1. LESSONS LEARNED

(a) Problem: Shortage of preparation and storage area space.

Discussion: The galley as designed does not provide adequate space for storage of dry goods, cookware, serving utensils, and food preparations counter space.

Recommendation/Action: Additional wall mounted stroage cabinets and food preparation table should be designed by detail personnel and submitted to CBLANT for approval. All material should be purchased locally.

NARRATIVE

OPERATIONS NMCB ONE Detail Holy Loch was deployed from 8 Aug 1990 - 10 Mar 191. Preliminary tasking for the detail included 1241 direct mandays. The tasking was revised at the 45 day review to include 900 mandays. A total of 981 mandays were accomplished. Tasking was again revised near the end of deployment due to the announcement of the closure of NSA Holy Loch. Construction tasking was shifted to preparing the leased facilities for turnover to the original landlords.

PROJECTS

UK7-812 RANKIN SECURITY FENCE

1. General: This project consisted of replacing 466 meters of PVC coated chain link fence, installation of 3 vehicle gates, placement of 120 tons subbase material for driveway entrance to the Seabee camp, a 120 meter sidewalk, and a 12 inch concrete pipe culvert with headwalls.

2. Direct Labor Expended

NMCB ONE	263
Cumulative to Date	263

3. Compostition of Work Force

BU: 2 EO: 1 SW: 2

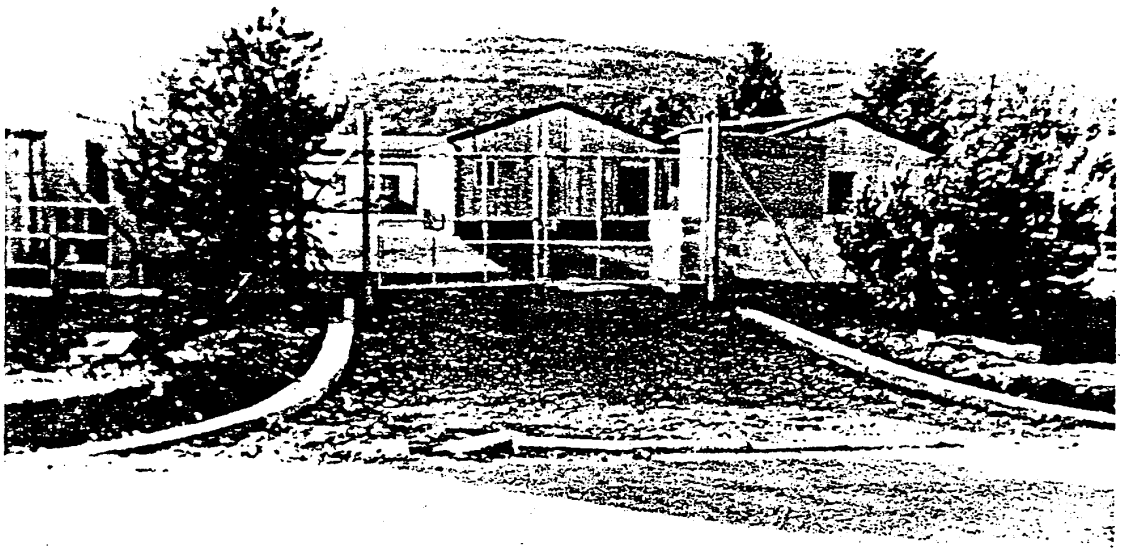
4. Project Status

Start Date	Aug 90
% at takeover	12%
% at turnover	65%

5. Material: All material on site at takeover.

6. Engineering: Designed by PWD engineering staff, Holy Loch, Scotland

7. Problem Areas: No problems encountered.



UK7-812 RANKIN SECURITY FENCE

5. Material: Material for this project was placed on order 01 Oct 90; the same day project was schedule to begin causing numerous delays in Phase One. The detail requested that all material for Phase Two and three be placed on order at the same time as Phase One material was ordered and delivered as required by the schedule. All meterial problems were resolved.

6. Engineering: Designed by PWD engineering staff, Holy Loch, Scotland

7. Problem Areas: The prints for this project were very vague and lacked sufficient details. Dimensions provided on the prints differed in many cases from actual. Public Works engineers were continuously tasked to provide additional design details, hindering the construction progress.

LABOR DISTRIBUTION FOR DET HOTEL LIMA

	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Total	%Total
Direct	94	168	187	168	118	122	112	12	981	55%
Indirect	42	84	92	84	41	41	38	4	426	23%
Mil OPS	0	0	0	0	0	0	0	0	0	0%
Disaster Recovery	0	0	0	0	0	0	0	9	9	1%
Training	0	0	0	0	0	12	0	0	12	1%
Overhead	35	69	72	69	48	36	39	2	370	20%
Totals	171	321	351	321	207	220	189	18	1798	100%
% Direct Labor	55	52	53	52	57	55	59	67	55	
Actual Workdays	12	22	24	22	23	23	21	2	149	

ES9-802 FENCES AND PATIOS

1. GENERAL: This project consisted of the removing of paving stone sidewalks across back of housing units. Install approx. 9m square paving stone patios on top of approx. 16cm of compacted fill. Install 1m high fence w/ gate in back of each unit making approx. 1-X8m backyards.

2 DIRECT LABOR EXPENDED:

NMCB ONE	:	350
CUMULATIVE	:	350

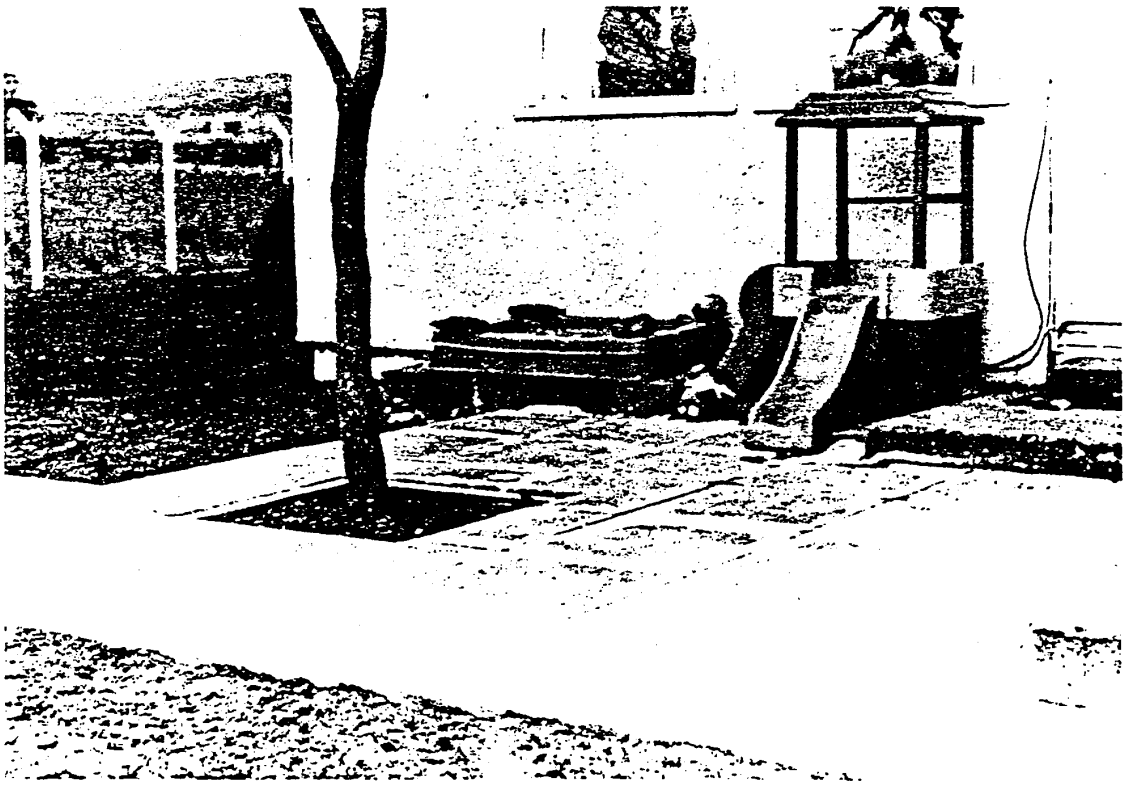
3. COMPOSITION OF WORKFORCE: 3 - BU'S, 1 - CE'S, 2 - SW

4. STATUS OF PROJECT:

Start date:	OCT 90
Percent at turnover:	4
Percent at turnover:	30

5. MATERIALS: Paving stones were difficult to set even and level. Fence material did not look as nice as it was thought it would and a design change is pending.

6. ENGINEERING: No engineering problems encountered.



ES7-834 CONSOL. STORAGE BLDG. 81

1. GENERAL: This project included demolition of approx. 30m of fence and a 1X3X3m concrete water tank. Enclose a floor level storage room w/ approx 2000 CMU block. Install exterior roll-up and fire doors thin concrete and CMU walls. Erect steel mezzanine deck w/ two stair cases. Build an approx. 800m square framework and sheet rock insulated storage rom on top of the mezzanine deck. Install approx 100m of 3m chainlink fencing and const. storage racks for both storage rooms.

2. DIRECT LABOR EXPENDED: NMCB ONE: 933
Cumulative: 933

3. COMPOSITION OF WORK FORCE: BU: 3 CE: 1 SW: 3

4. STATUS OF PROJECT: Start Date: 90 Oct
% at takeover: 0%
% at turnover: 70%

5. MATERIALS: No material problems.

6. ENGINEERING: No engineering problems encountered.

SAUDI ARABIA

LESSONS LEARNED

1. ITEM/ISSUE: Compatibility of Weapons/Ammunition

.45 Cal and 5.56mm rounds for the M16A1 were difficult to obtain from the Marine Corps Ammunition Supply System during the conflict. Also repair parts for NCF weapons were difficult to obtain.

Recommendation: Equip NCF units with weapons compatible with Marine Corps inventory.

2. ITEM/ISSUE: Project Responsibility/Ownership

Responsibility for a single project was assigned to several different battalions, which lead to a lack of overall control and efficiency. When the project was beyond a single battalion capability, it was better to loan them more equipment from another battalion than to subdivide responsibility to that battalion.

Recommendation: Assign project responsibility to a single unit. Have assets controlled and distributed by the regiment to augment a battalion's manpower and equipment.

3. ITEM/ISSUE: Moving in and out of a Combat Zone with personal protection gear.

By turning over personal protective gear from one unit to another in a combat zone, some personnel must go without protection during the turnover period.

Recommendations: Incoming units should issue personal protective gear at their point of embarkation before entering the Combat Zone.

4. ITEM/ISSUE: Inadequate Communications/Crypto Equipment

Seabee units deployed to Southwest Asia experienced difficulties utilizing organic communications equipment due to the lack of secure voice capability and insufficient quantities to equip the numerous details sent out from the mainbody sites. For example; there were no radios available for issue to the two NMCB ONE details which augmented NMCB 5 and 40. Another common problem was the inability to operate radios in the secure voice mode which meant Seabee units could not communicate with I MEF units they were supporting or with each other.

Recommendation: Study the need for additional communications equipment with secure voice capability. The study should also consider attaining compatibility with Marine Corps communications equipment.

5. ITEMS/ISSUE: Communications Gear for Stevedore Operations

Seabee battalions do not possess hand-held radios in sufficient quantities which are suitable for conducting stevedore operations at pierside when embarking equipment and cargo. Hand-held radios are essential to the safe operation of cranes and communication between crews working in ships' holds and on the pier. Cargo handling Battalions have this capability but as we saw in Rota, Spain, the Cargo Handling Battalions may not be on scene.