NMCB FIVE

PACOM DEPLOYMENT COMPLETION REPORT

JANUARY 2013 – AUGUST 2013

“THE PROFESSIONALS”

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CHAPTER ONE

EXECUTIVE SUMMARY

1. NMCB 5 tackled some great challenges during the 2013 PACOM deployment. While conducting dispersed operations throughout eleven countries in PACOM, NMCB 5 consistently set the standard in professionalism, tactical proficiency, family readiness and mission accomplishment.

a. Administrative. The Administrative/Personnel Office processed 48 transfers, 56 receipts, 50 reenlistments and 112 advancements during this deployment. Additionally, the Battalion deployed to PACOM with 100% dental readiness and maintained readiness well above 98% throughout deployment. The Dental Department provided care for 350 patients, delivered $60K worth of dentistry and improved the digital radiograph capabilities of the Camp Shields dental clinic.

b. Training/Readiness. Completing a seven month PACOM deployment, NMCB 5 maintained 93% total skills attainment per the requirements set forth in COMFIRSTNCDINST 3502.2. In order to achieve high levels of training attainment for the follow-on EUCOM/AFRICOM deployment, training has requested 4,619 seats during the upcoming homeport as specified in the chart below. Additionally, NMCB 5 will take advantage of UDT, STT and other programs at the Battalion, Company and Special Org level to augment current skill requirements and proficiency. The end state is a Battalion that is fully mission capable and at the highest levels of operational readiness prior to the next deployment cycle.

c. Operations. NMCB 5 deployed its Main Body to Camp Shields, Okinawa, Japan and dispersed six Construction Readiness Operation (CRO) details across mainland Japan, Diego Garcia, South Korea, and the United States; three Construction Civil Action Detail (CCAD) sites in Cambodia, Timor Leste, and the Philippines; and supported nine Theater Security Cooperation (TSC) exercises in Thailand, the Philippines, South Korea, Indonesia, Malaysia, Western Samoa, and Tonga. NMCB 5’s command and control ranged over 10,000 nautical miles from China Lake, CA to Diego Garcia with its Seabees expending over 20K mandays widely dispersed amongst 20 detail sites in 13 different countries throughout the Pacific.

d. Logistics. Upon arrival on Camp Shields, NMCB 5 coordinated a complex and efficient turnover with NMCB 74,

including the subsequent Battalion Equipment Evaluation Program (BEEP) of 404 units of Civil Engineer Support Equipment (CESE) and a P25 Table of Allowance (TOA) valued at $60M. The BEEP spanned across seven countries in the PACOM AOR and the Battalion sustained a 98% CESE availability rate. Additionally, the Battalion revitalized the TOA through an aggressive wall-to-wall inventory resulting in the highest level of TOA readiness since the P25 was refreshed in 2008. As a result, NMCB 5 ensured all construction, tactical equipment, and communications assets were on hand and ready to support a Major Combat Operation (MCO) response, TSC and Humanitarian Assistance/Disaster Relief (HA/DR) missions in support of Pacific Fleet’s maritime strategy.

CHAPTER TWO

ADMINISTRATION

The Administrative/Personnel Office processed 48 transfers, 56 receipts, 50 reenlistments and 112 advancements during this deployment. The following statistics highlights the administrative metrics:

ADMINISTRATION

Additional	Gains/Losses	Temporary Orders	Non-judicial punishment	Administrative Separations	Evaluations/ Fitness Reports
E1-E6	50/37	2,000	13	8	359
E7-E9	2/3	100	0	0	42
W2-O5	4/8	50	0	0	21

ADVANCEMENTS

	E2	E3	E4	E5	E6	E7	E8	E9
Time-in rate Eligible	10	12	100	103	40	61	21	4
Participated	10	12	100	103	45	61	21	4
Selected	10	12	45	32	7	8	5	1
Percent Selected	100	100	45.0	31.1	15.6	21.6	23.8	25.0
Navy Wide Percent Selected	N/A	N/A	43.1	26.5	18.0	26.7	13.9	15.7

RETENTION

1 January through 31 July					
	Eligible	Not Eligible	Reenlist	GRS	Navy
1st Term	42	6	32	76.2%	57%
2nd Term	1	0	1	100.0%	69%
3rd Term	8	0	7	87.5%	78%
Career	14	0	10	71.4%	67%

PUBLIC AFFAIRS

The Public Affairs Office (PAO) was actively engaged covering events throughout the deployment. Overall, 15K photos were taken and 35 articles were written along including over 200 captioned photos. Photos were published in a variety of outlets to include The Ventura County Star, The Lighthouse, the Navy.mil website, Seabee Magazine, DVIDS, and the DefenseImagery.mil, PACOM.mil, and CPF.navy.mil websites.

Stories released included topics about NMCB 5 involvement in Cooperation Afloat Readiness and Training (CARAT) exercises, Construction Civic Action Detail (CCAD) sites, Pacific Partnership 2013 (PP13), Construction Readiness Operations (CRO) Projects, the 2013 Seabee Ball, NMCB 5 Change of Command and more.

NMCB 5 also continues to lead the charge for use of Facebook as an effective promotion and communication tool. The PAO harnessed the power of social media with the largest fan base of any NCF organization at more than 4K fans to date. Family and friends are provided regular access to weekly happenings, while the battalion is in homeport or deployed, including battalion events, reenlistments, awards, SCW pinnings, project work and any other accomplishments.

Apart from strategic communications external to the command, the PAO also created a deployment cruise book. The cruise book captured up-to-date photos of all 570 plus members of the command in addition to photos of NMCB 5's Seabees hard at work and play. The book is also a critical piece of the command operations report submitted each year for historical preservation.

NMCB 5's PAO contributions on this deployment positively increased the NCF's strategic communications in order to ensure the critical roles Seabees play in today's Navy were showcased.

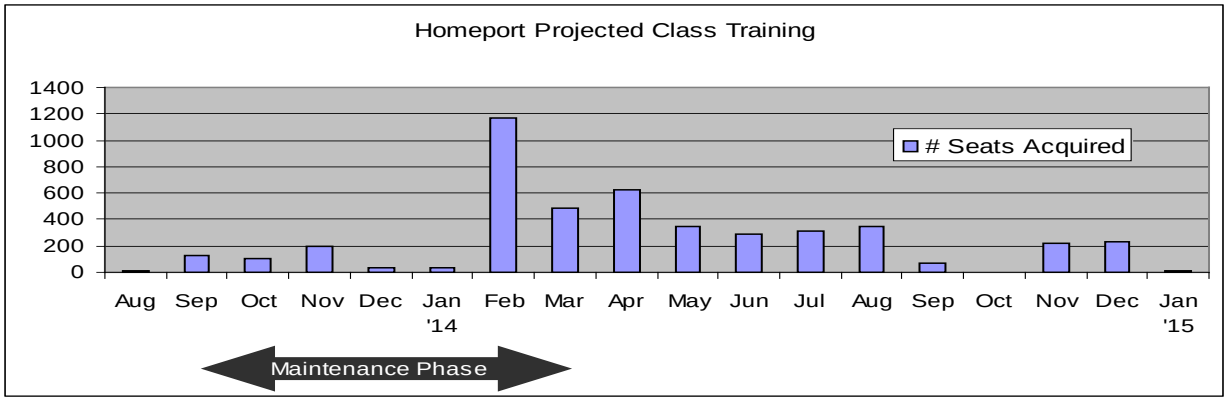
Media Outlets:

- Facebook: https://www.facebook.com/NMCB5
- Navy.mil: http://www.public.navy.mil/
- DVIDS: http://www.dvidshub.net/unit/NMCB5

CHAPTER THREE

TRAINING

Completing a seven month PACOM deployment, NMCB 5 maintained 93% total skills attainment per the requirements set forth in COMFIRSTNCDINST 3502.2. In order to achieve high levels of training attainment for the follow-on EUCOM/AFRICOM deployment, NMCB 5 requested 4,619 seats during the upcoming homeport as specified in the chart below. Additionally, NMCB 5 will take advantage of UDT, STT and other programs at the Battalion, Company and Special Org level to augment current skill requirements and proficiency. The end state is a battalion that is fully mission capable and at the highest levels of operational readiness prior to the next deployment cycle.

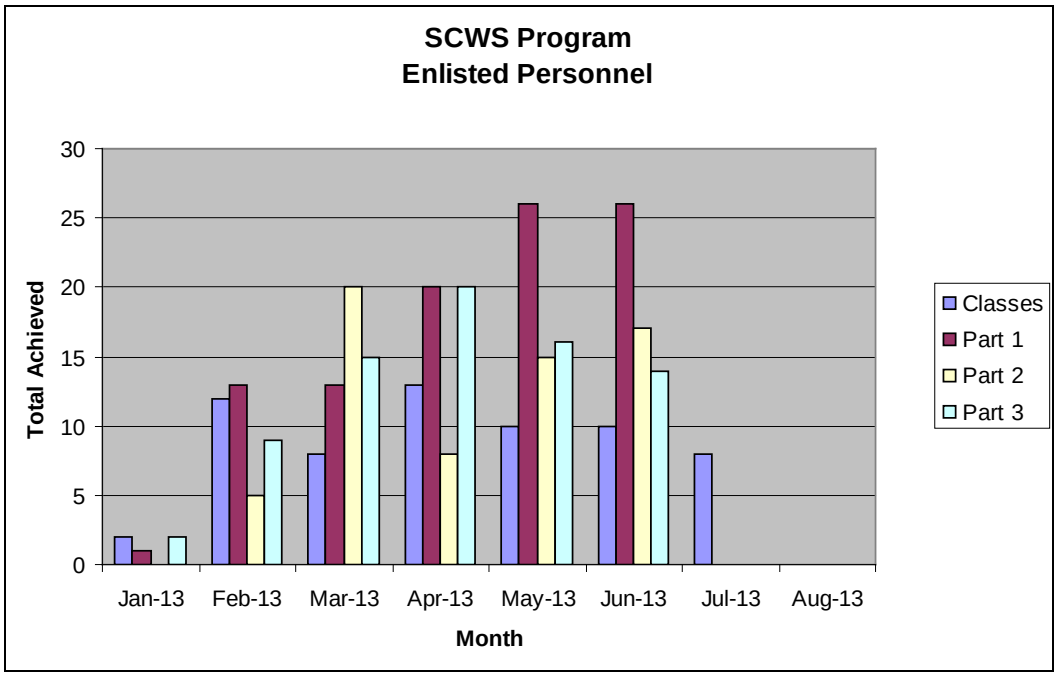


Silver Flag Exercise. Members of the Battalion participated in the Silver Flag Exercise conducted by Detachment 1, 554th Rapid Engineer Deployable Heavy Operational Repair Squadron Engineers (RED HORSE) Squadron (RHS), 36th Contingency Response Group, 36th Wing, Pacific Air Forces (PACAF) at Kadena AFB from 16APR13 to 24APR13. The Exercise provided critical contingency-oriented skill qualifications to construction forces in key positions throughout the Civil Engineer and Force Support units, placing emphasis on team and individual qualifications. Integrating with their Air Force Counterparts, Seabees training in Airfield Damage Repair (ADR) and force bed down practices attended a rigorous class schedule centered on Engineering, Power Production, Structures, Expeditionary Airfield Lighting Systems (EALS), and Equipment and Pavement. As a final event, Seabees were able to

demonstrate their newly acquired skills with a day-long ADR exercise which included U.S. Marines from Kadena's CBRN group to incorporate simulated CBR attacks, downed utilities, tent fires and mass casualties into the scenario. Utilizing the joint training opportunity, NMCB 5 gained valuable in-rate and team skills, learned from Air Force best practices, and were able to cross train in non-traditional equipment including Mobile Airfield Arresting System (MAAS), Folding Fiberglass Matting (FFM) and 2 Megawatt diesel generators. Overall, the exercise enhanced the Naval Construction Force and Air Force preparedness to integrate in future joint operations.

Training Skills Assessment Program (TSAP). The TSAP program continues to face administrative and execution challenges. The 2013 PACOM deployment had the Battalion spread to 13 small detail sites across the Pacific Area of Operations. Absence of Subject Matter Experts at various locations prevented several sites from endorsing the demonstration of specific skills. As the Battalion enters homeport, increased focus on assigning SMEs will be essential to ensuring success of the program. Current numbers have 17 skills attained throughout the Battalion during deployment. However, other methods of qualification and certification were also used to maintain the overall skills attainment within the battalion. The absence of TSAP appointed qualifications was not detrimental to the readiness levels or ability to execute assigned tasking.

Seabee Combat Warfare Specialist (SCWS) Program. The battalion maintained a robust SCWS program throughout the duration of deployment. Demonstrating combined efforts of the training department, detail and company representatives and other command SCW qualified personnel, the battalion conducted over 60 review courses, administered over 100 exams, and executed 65 boards. This resulted in the battalion awarding 76 SCW qualifications during the seven month deployment and increased the NMCB 5 SCW qualification rate from 65% to 72%.



Weapons. Utilizing the small arms range at Camp Schwab, NMCB 5 effectively maintained the battalion's navy pistol and rifle qualifications achieving 20 M-9 and 39 M-16 qualifications at the Main Body site and maintained an 86% qualification rate at the end of the deployment period. Additionally, armory personnel excellently managed the inventory, circulation and turn-in of 420 M-16 rifles, 40 M203s and 8 Shotguns. The armory crew handled all maintenance and shipping requirements ensuring a seamless transition for the follow-on battalion and effectively replacing all rifles in the Okinawa Armory TOA.

MILBLOCK Training. NMCB 5 leveraged opportunities inherent to the Camp Shields deployment site in the execution of the command's week long Military Block Training from 6MAY13 to 11MAY13. Traditional training applications were combined with team building exercises to develop and reinforce the practical application of Seabee Combat Warfare skills. The elaborate training events culminated in a box car competition designed to reinforce logistical management, planning and estimating, Class IV materials requisition and project execution. The events of the MILBLOCK week not only proved valuable in the reinforcement of essential skills, but contributed positively to command

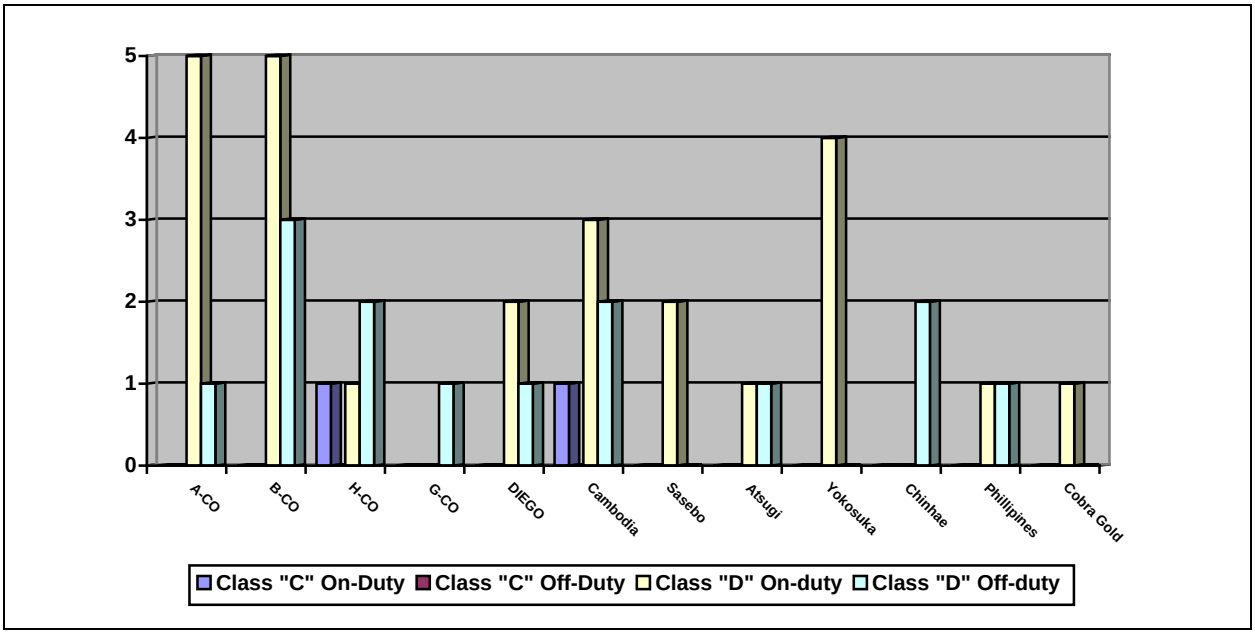
camaraderie and pride. Several departments ran training concurrently during the MILBLOCK week. The Battalion Medical Department identified local training opportunities enabling eight personnel to become qualified as CPR/Basic Life Support Instructors. The Operations Department coordinated with NECC PAC to provide war-fighter seminars, providing battalion leaders with accurate, up-to-date assessment tools to make informed mission and project management decisions. Details departing for Malaysia, Thailand, and Indonesia utilized on-site mobile training teams to develop skills in new construction technologies including Saebi Alternative Building System (SABS) and Explosive Remnants of War (ERW) containments. Finally, the Communications Department worked diligently, successfully employing the Rapidly Deployable Satellite Terminal (RDSAT)/Broadband Reach-back system to update the Tactical Data Network (TDN) thereby maintaining certification of the network system.

CHAPTER FOUR

SAFETY/OPERATIONS

SAFETY

Safety was paramount to the success of the Battalion during the 2013 PACOM Deployment. Safety's priority was to ensure all Battalion personnel align to the standards set forth in Occupational and Safety Health Association (OSHA) and amplifying NAVFAC safety instructions. Safety also ensured that each project followed their project safety plans and utilized detailed Operational Risk Management (ORM) decision making during planning and execution to ensure all hazards were identified and adequate controls were put in place to mitigate risk.



During the deployment, NMCB 5's safety campaign proved successful by completing the deployment with only two lost time mishaps. Keys to the battalion's success lied in the following focus areas.

a. ORM. Operational Risk Management was fully integrated into all project planning, taught to all hands and used as the primary basis for the development of project Safety Plans.

b. In-house safety. Inspection programs focused on teaching safety standards in the field rather than in the classroom and assisting crews in prioritizing their corrective

efforts by integrating the use of RAC Codes into daily project safety inspections. Safety Officers assisted crews in developing and implementing control solutions to meet the intent of all written safety and risk management standards without hindering operations.

c. Motivation. The Safety Office was able to motivate troops and leadership to ensure the Battalion's focus never strayed from mission safety. Programs, such as the Safe Seabee of the Quarter award and spot safety awards given to crews that took no 'hits' on daily job site inspections helped to reinforce daily job site safety lectures.

d. Aggressive Surveillance. Monthly Mishap Review Boards were conducted to review any possible developing trends and allow for the timely implementation of necessary corrective procedures to mitigate any hazards.

e. Safety Meetings. Monthly Enlisted Safety Committee meetings with all Company and Detail Safety Representatives were held to discuss training, review safety programs and policies, as well as discuss any current safety issues or questions with regards to new construction methods or non work related recreational activities, such as the Motorcycle Safety Program. Additionally, monthly OSHROC meetings enabled our staff to review any concerns that were brought up during the Enlisted Safety Committee meetings and were then addressed to the command, discussed and reviewed.

f. Reporting. Mishap reports were reported via chain of command as prescribed and as they occurred in a timely manner. All Class D and above, to include near mishaps, were recorded into ESAMS. Additionally, Health and Tone of the Battalion metrics were kept current to identify trends early and mitigate risk.

DEPLOYMENT TOTALS

	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Total
Fatalities	0	0	0	0	0	0	0	0
# Lost Days	0	0	0	9	14	0	0	23
# Lost Day Cases	0	0	0	1	1	0	0	2
# Light Duty Days	15	58	121	65	152	29	7	447
# Light Duty Day Cases	1	3	6	4	6	3	1	24
# First Aid Mishaps	4	6	3	0	2	2	0	17
# Govt Vehicle Mishaps	2	1	2	1	1	1	0	8
Total Number Mishaps	7	10	11	6	7	2	1	44
Govt Vehicle Repair Costs	$2,305	$500	$0	$150	$4,500	$350	$0	$7,805
Govt Vehicle Miles Driven	7,325	17,166	19,315	20,060	22,876	19,991	22,235	128,968

ON-DUTY MISHAPS

	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Total
Cases Lost Work Days	0	0	0	1	1	0	0	2
Lost Work Days	0	0	0	9	14	0	0	23
Cases Light Duty Days	0	2	4	3	5	0	1	15
Light Duty Days	0	44	100	51	131	0	7	333
First Aid Mishaps	3	5	1	0	2	2	1	14
Fatalities	0	0	0	0	0	0	0	0

OFF-DUTY MISHAPS

	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Total
Cases Lost Work Days	0	0	0	0	0	0	0	0
Lost Work Days	0	0	0	0	0	0	0	0
Cases Light Duty Days	1	1	2	1	2	3	0	10
Light Duty Days	15	14	21	14	21	29	0	114
First Aid Mishaps	1	1	2	0	0	0	0	4
Fatalities	0	0	0	0	0	0	0	0

OPERATIONS

Throughout the deployment, NMCB 5 expended over 20K mandays supporting 17 CRO projects worth over $6M at sites in mainland Japan, Okinawa, Diego Garcia, Korea and China Lake, CA. NMCB 5 successfully completed three PEB projects, a bollard project consisting of 766 individual security bollards, a 600 square foot CMU stock room, three concrete gazebos, 13 bus stop shelters, and produced 6K cubic yards of aggregate material at or ahead of schedule. In addition, the Battalion efficiently and seamlessly turned over seven extended duration CRO projects to NMCB 3 prior to redeploying back to CONUS, enabling future NCF mission success.

NMCB 5 delivered its greatest strategic impact to the Pacific Fleet maritime strategy through its enduring presence at three CCAD sites and nine DOD exercises directly supporting both the III Marine Expeditionary Force (III MEF) and Pacific Fleet (PACFLT). NMCB 5's participating personnel were directly partnered with nine different Pacific host nation militaries and the mission focused on strengthening PACOM regional alliances. The three CCAD sites expended over 8K mandays resulting in the completion of five 300 foot water wells in Cambodia, two new schools in the Philippines, and major renovations for two schools in Timor Leste totaling over $2.5M. In addition to the tasked work at the three CCAD sites, the Battalion also planned and executed seven successful community relations projects, contributing to mission success by advancing the relationships with the citizens and militaries of the host nation.

NMCB 5's exercise support was highlighted by the completion of three category five hurricane proof Saebi Alternative Building Systems (SABS), three Explosive Remnants of War (ERW) bins (to be used by the local villagers to store found UXO), two three-room CMU block classrooms, and a 70 meter long steel cable suspension footbridge that was the first of its kind ever constructed by the U.S. Naval Construction Forces. All of the exercises were executed while partnered with the host nation's military and each project directly benefitted their respective citizens by completing an engineering project that specifically addressed the needs identified by the local host nation governments. By partnering and sharing construction methodology during each exercise, both U.S. and host nation military engineers increased their capabilities to respond to HA/DR efforts, fostered critical regional associations, and helped achieve the U.S. Pacific Fleet mission of protecting and

defending the collective maritime interests of the United States and its allies and partners in the Asia-Pacific region.

ALFA COMPANY

Alfa Company was responsible for horizontal construction, cranes, CESE maintenance and overall transportation for the Battalion during the 2013 PACOM deployment. Successfully completing all assigned tasking, Alfa Company realized across the board achievements with a focus on safety, quality and process improvement.

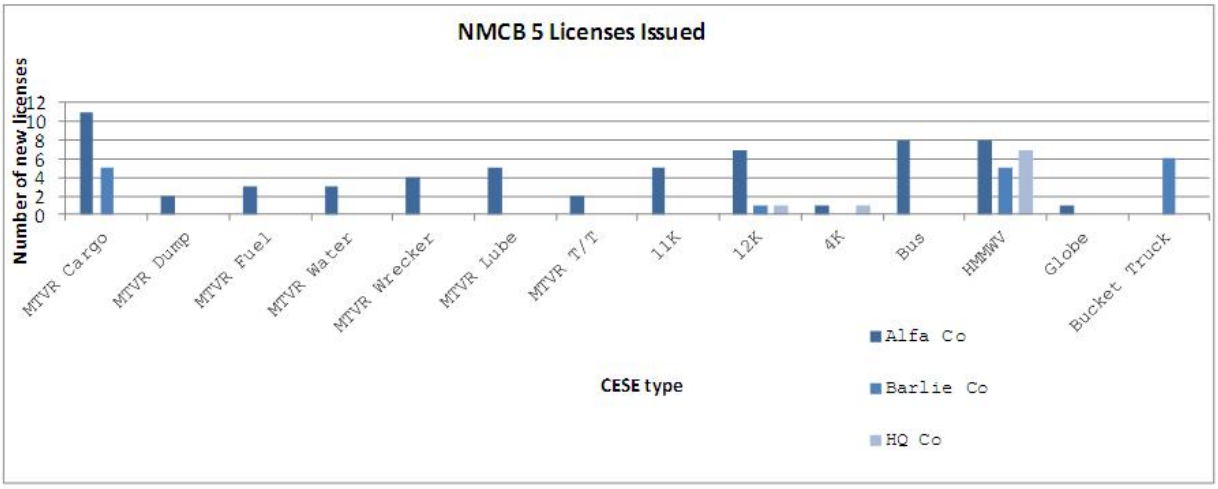
Alfa Company hit the ground running in January 2013 with its Advanced Party pairing up with NMCB 74 personnel to commence turnover. Working nonstop, the two Battalions conducted a seamless Battalion Equipment Evaluation Program (BEEP), inspecting and turning over 406 units of CESE valued at $42.5M. The smooth transfer of authority in each shop and concentrated focus by both Battalions helped complete the BEEP five days ahead of schedule with zero discrepancies. Praised by the 30NCR team assisting the BEEP, NMCB 5 received its deployment BEEP tasking which focused in part on corrosion control, disposition of Legacy equipment and process improvements in the Crane Program.

During the BEEP, the Navy Crane Center conducted an audit of both the NMCB 74 and NMCB 5 Crane Programs, thoroughly inspecting the four cranes aboard Camp Shields, observing a joint lift conducted by both Battalions and evaluating the overall Crane Safety of the companies. With zero discrepancies, both Battalions passed the NCC Audit and were given a green light to continue their crane operations. In addition to the NCC Audit, the Alfa Company Crane Crew had a successful deployment, recertifying a 40 Ton crane and a Category 4 Mk 36 MTVR Wrecker. Additionally, they conducted semi-weekly lifts in the yard, increasing familiarity with the equipment and developing their cohesion as a team. From the unending corrosion control measures required on the wire rope to both Construction Mechanics

obtaining their licenses on the MTVR Wrecker, the Crane Crew increased the operational readiness of the Battalion.

The month of January was especially busy for Alfa personnel as the Battalion moved immediately into a Mount-Out Exercise simulating the stand-up of the Air Detachment. While cleaning, inspecting and dispatching 32 units of CESE for embarkation, Alfa Company personnel worked around the clock and earned accolades from the 30NCR's exercise evaluators for their tireless efforts and attention to detail.

With the success of the Mount-Out Exercise behind them, the Battalion moved on to its Operational Readiness Inspection (ORI). While successfully passing the ORI, the 30NCR inspection team identified a discrepancy in the Company's licensing program. During a spot check, the evaluators discovered license records missing copies of the required written examinations. This



discrepancy turned into a deployment long focus area for the Company, as the License Examiner and a staff of Equipment Operators thoroughly reviewed 556 individual license records for the Battalion, many containing multiple equipment licenses, and re-administered every deficient written exam or pulled the equipment license from the license folder. With a systematic approach, the team started with the equipment operators and Battalion personnel operating CESE in PACOM first, then moved on to Alfa Company and finally the remainder of the Battalion. While a challenging task, the License Examiner and crew were able to correct Alfa Company's ORI discrepancy prior to redeployment, successfully scrubbing license records for the entire Battalion and restructuring the licensing process for future operations.

Alfa Company Equipment Operators were spread across five Okinawa CRO projects where they operated graders, loaders, backhoes and skid steers on various projects in addition to providing daily jobsite transportation to Barlie Company troops. In the evenings and weekends, the EOs directly bolstered the morale of the Battalion with bus and taxi service to Kadena AFB and surrounding USMC bases. Each evening, duty EOs operated the MWR bus transporting NMCB 5 personnel to the Kadena exchange to purchase personal supply items as well as providing access the Kadena MWR facilities.

Due to the oversize vehicle restrictions on the island's roadways, Alfa Company was required to conduct all line haul and CESE movements to the port after midnight. Without complaint and enduring long workdays, the EOs conducted over 40 midnight runs to transport CESE to various projects and to retrieve CESE in support of the various PACOM Exercises. Of note, during embarkation for Exercise Balikatan 2013, Alfa Company successfully inspected, repaired, and transported 35 units of CESE to Naha Port and assisted loading the CESE onto ships for transport to the Philippines. Their support was crucial to the success of the mission and proved the Battalion's readiness to deploy for major contingency and HA/DR operations.

With the EOs stretched thin, Alfa continued to support the Battalion by issuing over 240 training licenses and successfully training and licensing 100 personnel on various light and heavy CESE including, but not limited to, the MTVR, HMMWV, 11K forklift, bucket truck and Category 4 MTVR Wrecker.

BARLIE COMPANY

Barlie Company was responsible for vertical construction and overall camp maintenance at Camp Shields, Okinawa during the 2013 PACOM deployment; always focusing on safety and quality while striving to improve established processes.

Barlie Company Camp Maintenance. Barlie's Camp Maintenance responsibility was to provide proper care, preventative maintenance and construction support for facilities on Camp Shields. Camp Maintenance completed 1K MDs of work (double from the previous battalion) encompassing 506 work orders and CO discretionary MCD projects aboard Camp Shields and in support of adjacent units on Okinawa.

The Camp Maintenance team arrived at Camp Shields and hit the ground running, completing the sidewalk between buildings 7216 and 7148 within the first couple of weeks after arrival. The team continued with anti-terrorism force protection (ATFP) repairs to the camp by replacing the barbed wire at the front gate and repairing the drainage grates throughout the camp. In addition to security concerns, Camp Maintenance focused on improving the quality of life of the Seabees aboard Camp Shields by repairing the galley rear entrance and making it function correctly for the galley crew. Camp Maintenance also renovated three berthing buildings on Camp Shields (66 rooms) which exponentially improved the living conditions, increased morale of the troops and allowed for a higher berthing capacity necessary to support the unprecedented number of Seabees at the Main Body site. Camp maintenance closed 220 emergency service authorization work orders which contributed tremendously to the stellar upkeep of Camp Shields.

Barlie Company vertical construction. Barlie's vertical construction responsibility was to continue the construction projects turned over from the previous battalion and take them to their respective completion percentages. Barlie Company was tasked with safely constructing a quality PEB located at Tengan Pier, communication pads located on Camp Courtney, and a gazebo and warehouse located at White Beach.

The Construct Concrete Gazebo (JK10-820) crew started in February 2013, one month after the beginning of deployment. The project crew was tasked with constructing a 21 ft x 27 ft concrete gazebo located in the vicinity of building 1700 at Naval Facility White Beach. The project was estimated at 344 mandays with a total cost of $97,179. The use of Seabee labor resulted in a cost savings of $120,400 to Commander, Fleet Activities Okinawa. The project start was delayed due to a site location change from a gently sloping grassy hill to an existing concrete pad adjacent to the water. Originally, the project scope included utilities such as exterior lighting, a sink and built in grill at a cost of $140K; however, the utilities requirement was de-scoped thereby lowering the cost to less than $100K. Despite the challenges early on, the project provided a great learning experience for the crew's Builders and Steelworkers due to the extensive concrete work involved. The schedule for the initial site and foundation work was severely impacted by weather but after the footers and grade beams were placed, the columns, pad, and roof construction was met with very few problems. This project was particularly valuable to the Battalion because it was the only Main Body project with an overhead concrete placement and provided a great learning opportunity for every member involved. The project also contributed to high morale and a sense of accomplishment as it was the only Main Body project tasked from 0-100%. The gazebo will improve the morale and quality of life for Commander, Fleet Activities Okinawa tenants and the Sailors and Marines from visiting US and Japanese ships at White Beach.

The Construct CTF 76 Warehouse (JK06-838) project crew was tasked with constructing a 37 ft x 60 ft reinforced CMU storage facility at Naval Facility White Beach. The warehouse includes offices, a telephone/communication room, a unisex toilet and a kitchenette. The project was estimated at 2,178 mandays with a total cost of $489,510. The use of Seabee labor resulted in a cost savings of

$762,300 to Combined Task Force 76. The crew had a tough start at the beginning of deployment. The level of effort required for the initial site work was underestimated and the removal of part of a hillside at the rear of the building and a newly installed stone gabion were necessary before construction could begin. Once the site was excavated, the crew installed a 140 ft concrete u-ditch at the base of the hill to manage runoff water. Unfortunately, the installation of the u-ditch corresponded with the beginning of the rainy season and work on site was often limited due to flooding. Inclement weather continued to negatively impact the project's schedule through May and required re-compaction of fill material for the foundation footers and grade beams. Originally tasked with 0-47% completion, the crew turned the project over at 32% with the completion of placement of the first floor columns. Despite the setbacks, the work in places was of the highest quality. The warehouse will enhance the mission capabilities by providing additional storage capacity and an office facility for CTF 76 Command Operations at White Beach.

The Construct Replacement Ordinance OPS Building (JK09-813) project was turned over at 47% WIP. The project was estimated at 1,280 mandays with a total cost of $685,754. The use of Seabee labor resulted in a cost savings of $448,000. The crew was tasked with construction of a 38 ft x 103 ft Pre-Engineered Building (PEB) with two electric roll-up doors, a four forklift charging bay, a 36 ft x 53 ft maintenance area, an office space/conference room with communications lines, a unisex restroom and septic tank, and fire hydrant to include 500 ft of new waterline. The project was turned over requiring the replacement of all exterior wall panels resulting in significant schedule delays due to the long lead time for delivery of the replacement panels. Once on site, the crew installed all the new panels, interior framing, insulation, drywall, rough-in of plumbing, and rough-in of electrical conduits. The crew also placed new waterlines and completed the installation of the new fire hydrant in preparation for the PWD contracted pressure test and disinfection of the waterlines installed on the pier. The PEB will provide an updated storage facility on the only ordnance pier on Okinawa used by III MEF

and CTF Okinawa to coordinate the operation of ordnance loading and offloading in support of PACOM operations.

The Communication Pads site A and C (JK07-843) project was turned over from the previous battalion at 56% complete. The total project tasking for both pads was to remove existing concrete pads, walkways, sewer lines, light posts, and any existing fence and construct a 53 m x 38 m (174 ft x 125 ft) pad site “A” and 49 m x 31 m (161 ft x 102 ft) pad site “C” with an electrical grounding system, power distribution system, pad mounted transformers, security fences with barbed wire and vehicle entrances with paved access roads. The project required proper drainage, sewage lines and ground restoration. The project was estimated at 2,265 mandays with a total cost of $699,716. The use of Seabee labor resulted in a cost savings of $537,600 to III Marine Expeditionary Force. Site C was nearly complete at turnover from the previous battalion with all major concrete for the pad in place. Ten concrete fence posts were set and the transformer pad, to include a concrete wall, was also completed. The project also included the installation of eight 50 ft concrete poles used for lightning arrestors which was successfully contracted by NMCB 5 personnel. The crew completed all fence installation, panel installation, wire installation and landscaping. Site “C” was turned over to NMCB 3 at 98% complete with only the installation of eight 20 amp receptacles and lightning arrestor hardware remaining. Site “A” was turned over from the previous battalion at 33% with backfill and compaction of the site complete and the first of six phases of the concrete pad in place. Lack of funding due to sequestration delayed further work on the project; however, it was during this time that a number of design issues were identified with the underground power distribution and the lightning arrestor systems. Unsuitable soil at beneath the proposed location of one of the lightning arrestors resulted in a design change to relocate the arrestor to the phase three pad

placement. The communications pads will be used to support training exercises and positively impact the ability for the III Marine Expeditionary Force to effectively evaluate subordinate units' command and control capabilities in advance of PACOM missions.

Barlie Company's vertical construction and Camp Maintenance crews were both responsible for the OIC discretionary projects completed on Okinawa. Barlie Company teamed up with Alfa Company to demolish and remove the storm-damaged and deteriorating fence and dugout located at the Camp Shields baseball field whose condition posed a safety hazard for personnel around the field. Additionally, Barlie Company designed and constructed various mock weapons utilizing wood, plastic and metal in support of a III MEF evolution to train air crew members to identify anti-aircraft weapons during flight operations. The third OIC-D project was the construction of a frame to support the chapel bell and fabrication of a bell clapper at Camp Courtney. Barlie Company constructed the stylish frame for the bell in addition to machining a bell clapper which enabled the bell, valued at over $9K, to become fully functional after years of neglect. The final OIC-D project was the construction of a partition wall in the III MEF's intelligence office spaces.

MAIN BODY PROJECTS SUMMARY

Proj #	Total Project Mandays	Total Project Material Cost	Mandays Tasked	Tasked	Final WIP	Mandays Expended by prior NMCBs	Mandays Expended this Deployment
JK09-813	1,280	$685,754	679	47-100%	85%	601	382
JK07-843	2,265	$699,716	469	56-88%	67%	1,247	469
JK10-820	344	$97,179	333	3-100%	100%	11	517
JK06-838	2,178	$489,510	1,001	2-47%	33%	52	886
JK06-837	106	$42,000	106	0-100%	25%	0	41

At left, the initial site conditions are pictured. Below is the building at turnover.

CONSTRUCT CONCRETE GAZEBO
JK10-820

Project Data

Project Scope: Construct a 21 ft x 27 ft concrete gazebo located in the vicinity of building 1700 at Naval Facility White Beach. The gazebo includes built-in concrete tables and benches.

Personnel:	9	
Duration:	February 2013 – July 2013	
Mandays Expended:	Previous Battalion:	11
	NMCB 5:	517
Tasking:	WIP at turnover:	3%
	WIP at deployment completion:	100%
	MD Tasked to NMCB 5:	333
	Total Project MD:	344
Material Cost:	$97,179	
Cost Savings:	$120,400 ($350/MD)	
Significant Safety Issues:	Work was stopped on the project to allow for proper scaffolding erection.	
Significant QC Issues:	Non-shrink grout was purchased to patch honey combing in the roof and beams.	
Significant Design Issues:	Project site location was not finalized when NMCB 5 arrived causing a one month delay to the start of construction.	
Significant Material Issues:	None.	

At left, the initial site conditions are pictured. Below is the building at turnover.

CONSTRUCT CTF 76 WAREHOUSE
JK06-838

Project Data

Project Scope: Construct a 37 ft x 60 ft reinforced CMU storage facility at Naval Facility White Beach. The warehouse will include offices, a telephone/communication room, unisex toilet and a kitchenette. This project will serve as a warehouse and office facility for CTF 76 Command Operations at White Beach.

Personnel:	12	
Duration:	December 2012 – August 2014	
Mandays Expended:	Previous Battalion:	52
	NMCB 5:	886
Tasking:	WIP at turnover:	2%
	WIP at deployment completion:	33%
	MD Tasked to NMCB 5:	1001
	Total Project MD:	2178
Material Cost:	$489,510	
Cost Savings:	$762,300 ($350/MD)	
Significant Safety Issues:	None.	
Significant QC Issues:	None.	
Significant Design Issues:	The project scope was expanded to incorporate construction of a u-ditch behind the building in addition to the removal of a recently installed gabion and approximately 75 cubic yards of earth from the hillside.	
Significant Material Issues:	None.	

At left, the initial site conditions are pictured. Below is the exterior, with replacement panels installed, in late June 2013.

TENGAN PIER OPERATIONS BUILDING
JK09-813

Project Data

Project Scope: Construct a 38 ft x 103 ft Pre-Engineered Building (PEB) with two electric roll-up doors, a four forklift charging bay, a 36 ft x 53 ft maintenance area, an office space/conference room with communications lines, a unisex restroom and septic tank, and fire hydrant to include 500 ft of new waterline.

Personnel:	10	
Duration:	August 2012 – September 2013	
Mandays Expended:	Previous Battalion:	601
	NMCB 5:	382
Tasking:	WIP at turnover:	47%
	WIP at deployment completion:	85%
	MD Tasked to NMCB 5:	679
	Total Project MD:	1280
Material Cost:	$685,754	
Cost Savings:	$448,000 ($350/MD)	
Significant Safety Issues:	None.	
Significant QC Issues:	Exterior panels were incorrectly installed and were subsequently replaced.	
Significant Design Issues:	None.	
Significant Material Issues:	Incompatibility of standard and metric materials required unplanned procurement of adapters; orders placed by previous battalions were not properly tracked resulting in delivery delays.	

At left, the beginning of Communication Pad A. Below is the completion of Communication Pad C.

CONSTRUCT COMMUNICATION PADS A & C
JK07-843

Project Data

Project Scope: Remove existing concrete pads, walkways, sewer lines, light posts and any existing fencing. Construct a 53m x 38m (174 ft x 125 ft) pad site "A" and 49m x 31m (161 ft x 102 ft) pad site "C" with an electrical grounding system, power distribution system, and pad mounted transformer along with security fences with barbed wire and vehicle entrances with paved access roads. The project requires proper drainage, sewage lines and ground restoration.

Personnel:	7	
Duration:	August 2011 – October 2013	
Mandays Expended:	Previous Battalion:	1247
	NMCB 5:	469
Tasking:	WIP at turnover:	26%
	WIP at deployment completion:	67%
	MD Tasked to NMCB 5:	616
	Total Project MD:	2265
Material Cost:	$699,716	
Cost Savings:	$537,600 ($350/MD)	
Significant Safety Issues:	None.	
Significant QC Issues:	None.	
Significant Design Issues:	Site "C" had an approved design change concerning primary power installation which resulted in the demolition of an installed transformer pad, wall and manhole requiring the relocation of underground utilities.	
Significant Material Issues:	Project estimate was completed in 2004 using a different exchange rate resulting in significant cost difference in materials, rentals and subcontracts. MLO lacked project electrical items required for at turnover and many items on hand were unsuitable for the project. Project funding issues prevented the purchase of material for pad "A".	

At left, Seabees from NMCB 5 perform excavation of project site. Below, site before suspension of work

FUTENMA RUNWAY
JK06-837

Project Data

Project Scope: Construct a new concrete drainage ditch and dams near Taxiway 1, 3 and 4 on board MCAS Futenma IOT prevent flooding and sinkholes in the vicinity of runways and taxiways.

Personnel:	4	
Duration:	April 2013 – June 2013	
Mandays Expended:	Previous Battalion:	0
	NMCB 5:	41
Tasking:	WIP at turnover:	0%
	WIP at deployment completion:	25%
	MD Tasked to NMCB 5:	106
	Total Project MD:	106
Material Cost:	$170,910	
Cost Savings:	$271,600 ($350/MD)	
Significant Safety Issues:	None.	
Significant QC Issues:	Frequent, heavy rainfall prevented crew from meeting soil compaction.	
Significant Design Issues:	Separate from project scope, existing culvert has insufficient drainage capacity.	
Significant Material Issues:	None.	

OIC DISCRETIONARY

MAIN BODY

PROJECT	
Construct frame for chapel bell at Camp Courtney	20
Construct missile and gun mock-ups for III MEF	49
Remove fence and rubble at Camp Shields baseball field	22
P&E office partitions for III MEF office area	2
TOTAL MANDAYS EXPENDED	**93**

Construct frame for chapel bell

Mock gun for III MEF training

Construction of a mock missile for III MEF training

CAMP MAINTENANCE

MAIN BODY

CAMP MAINTENANCE TASKING

	Target Mandays	Actual Mandays	Percent Complete
Maintenance Control Director (MCD)	400	387.0	97%
Standing Job Order (SJO)	400	234.9	59%
Emergency Service Authorization (ESA)	200	364.5	182%
TOTAL TASK	1000	986.4	99%

CAMP MAINTENANCE TASKING

Repair Sidewalk between Buildings 7216 and 7148	14
Barbed Wire Replacement at Front Gate	8
Repair Galley Rear Entrance	2
Paint Buildings 7141, 7142, and 7143	203
Repair Various Drainage Grates on Camp	13
Rehab Interior Building 7146	163
TOTAL MANDAYS EXPENDED	**403**

Repair Sidewalk

Repair Drainage Grates

Barbed wire replacement at front gate

LABOR DISTRIBUTION SUMMARY

Month	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	% Total
Direct Labor MDs	150	542	563	749	786	475	474	65%
Indirect Labor MDs	0	0	0	0	0	0	0	0%
Readiness/ Training	140	210	300	220	660	200	260	35%
Total MDs Expended	290	752	863	969	1446	675	734	5729
# Total Personnel	305	305	304	294	285	288	322	
# Direct Labor	96	96	98	94	85	84	89	
# Workdays	13	21	24	25	25	24	25	
% Direct Labor	28%	44%	43%	49%	81%	40%	39	
Ideal Capability	1404	2268	2646	2644	2391	2268	2503	
Availability Factor	21%	33%	33%	37%	60%	30%	29%	

DETAIL YOKOSUKA

NMCB 5 Detail Yokosuka deployed from Port Hueneme, CA on January 1, 2013 via Okinawa, Japan to Atsugi Naval Air Station. Upon arrival at NAS Atsugi, ground transportation was provided by NMCB 74 to CFA Yokosuka and the teams immediately began the turnover of three projects.

The project tasking included a Pre-Engineered Building (PEB) at Ikego housing, approximately 30 minutes from the CFAY base, for an MWR Youth Center. The building is designed to have two large common areas used for games and viewing movies, two music recording rooms with sound dampening insulated walls, an office for the staff, small storage areas, a computer room, two restrooms and a fire suppression system throughout. The total useable space is approximately 2,800 square feet. This project was de-tasked shortly after arrival because funding was on schedule to break MILCON threshold. NMCB 5 was limited to repairing some water damaged drywall due to vandalism, repairing a fence and conducting a P&E validation for 30NCR and a UMC board.

The next turnover project was a PEB on Azuma Island, approximately 15 minutes from the CFAY base, designated as office space for the Fleet Logistics Center (FLC) fuels department. The project consisted of construction of two large meeting/conference rooms, four smaller offices, a common break area and two restrooms that include a locker and shower area in each. The total useable space is approximately 3,080 square feet.

The final turnover project was a concrete gazebo on the Seventh Fleet pier. A design change was pending at turnover involving the use of a wooden roofing system instead of the concrete system in the original design. The Gazebo consists of an octagon-shaped concrete grade beam with eight concrete columns connected by concrete arches. The roof consists of eight wooden beams anchored to the columns with brackets and a custom ridge cap at the peak. The finished roof is asphalt shingles and finished foundation is a 30 foot octagonal concrete pad.

NMCB 5 was also tasked with a new start project consisting of the demolition of nine existing concrete bus shelters and the construction of 13 new pre-fabricated metal and Plexiglas shelters throughout CFA Yokosuka. All shelters consist of monolithic concrete footers and pad with a colored concrete paver border accent. A design change was also received to add

benches and solar powered safety lights to all of the new shelters.

Seabees utilize FLC for material procurement in Yokosuka. The system is slow and the purchase agents do not have a construction background. Extremely detailed purchase requests and item descriptions are necessary to acquire the correct materials. Close monitoring of the purchase requests is required as the FLC staff does not report issues back to the DET. Some of these issues were mitigated through the use of the highly skilled Logistics Specialist assigned to the DET. The EMALL system was used to purchase debris removal services using a government purchase card. The 30NCR forward deployed LS can support requests and make purchases but requires the project funds information to make the purchases. Any HAZMAT materials (Quick-Crete, paint, solvents) were purchased through the HAZMAT center on separate purchase requests.

The DET had a total of four mishaps during the course of deployment. The first mishap was a sports related injury resulting in a fractured finger during a basketball game. The second mishap occurred while the member was lifting weights without a spotter, resulting in tendonitis bicipetal. The third mishap occurred when a crew member’s glove got caught between a piece of steel reinforcement and the bending surface while bending the steel. The final mishap resulted in a torn foot ligament during an ultimate Frisbee game. Other notable safety issues or recommendations are that rolling scaffolding should be purchased for any future projects that call for work over six feet and all fall protection equipment on hand needs to be recertified.

Personnel movements are made through MILAIR at NAS Atsugi or commercial air at Haneda or Narita international airports. All embark operations are coordinated by Main Body.

At left, the initial site conditions are pictured. Below is the interior in late June 2013.

CONSTRUCT PEB FOR FISC FUELS DEPARTMENT
YO05-894

Project Data

Project Scope: Construct a 40 ft x 77 ft PEB on Azuma Island for FISC Fuels Dept. Project construction is in support of Commander Fleet Activity Yokosuka, Japan to provide the Terminal Director with new office spaces, employee showers and a break room. Work includes interior finish work, finish electrical, finish plumbing and installation of septic tank.

Personnel:	5	
Duration:	March 2013 – July 2013	
Mandays Expended:	Previous Battalion:	1440
	NMCB 5:	325
Tasking:	WIP at turnover:	81%
	WIP at deployment completion:	89%
	MD Tasked to NMCB 5:	340
	Total Project MD:	1780
Material Cost:	$717,995	
Cost Savings:	$623,000 ($350/MD)	
Significant Safety Issues:	None.	
Significant QC Issues:	Significant rework was required to meet fire code. Incorrect material was installed and utilities were installed incorrectly.	
Significant Design Issues:	Ceiling weight overloaded purlin design. Engineering support was required to re-design. Sewer line route to existing holding tank could not be achieved due to existing utilities blocking the route. Filtration tank and holding tank DCD were required for sewage disposal.	
Significant Material Issues:	Long lead times for most material and often received incorrect material.	

At left, the initial site conditions are pictured. Below is the current interior.

CONSTRUCT PEB FOR MWR YOUTH CENTER
YO09-801

Project Data

Project Scope: Construct a pre-engineered building on the Ikego housing installation, which will provide an MWR youth activity center and a needed MWR admin space on Ikego. This facility will include multiple interior rooms and offices. Work includes interior finish work, finish electrical, finish plumbing, finish fire suppression system and installation of drop ceiling. NMCB 5 was de-tasked due to the project nearing MILCON threshold and was submitted for conversion to UMC by CFAY PWD.

Personnel:	5	
Duration:	January 2013 – March 2013	
Mandays Expended:	Previous Battalion:	1569
	NMCB 5:	42
Tasking:	WIP at turnover:	88%
	WIP at deployment completion:	89%
	MD Tasked to NMCB 5:	42
	Total Project MD:	1769
Material Cost:	$702,486	
Cost Savings:	$619,150 ($350/MD)	
Significant Safety Issues:	None.	
Significant QC Issues:	Significant rework was required to meet fire code and insulate building. Incorrect material was installed and utilities were installed improperly.	
Significant Design Issues:	Ceiling weight overloaded purlin design. Engineering support was required to re-design.	
Significant Material Issues:	None.	

At left, the initial site conditions are pictured. Below is the project at turnover.

7TH FLEET PIER UPGRADE
YO12-808

Project Data

Project Scope: Demolish several small structures and construct two concrete gazebos with lighting, wireless internet, and phone lines in order to enhance berthing areas for USS Blue Ridge personnel. Work includes installation of formwork and placement of concrete for gazebo B, construction of gazebo A, and rough/finish electrical for both gazebos.

Personnel:	5	
Duration:	February 2013 – July 2013	
Mandays Expended:	Previous Battalion:	230
	NMCB 5:	240
Tasking:	WIP at turnover:	52%
	WIP at deployment completion:	100%
	MD Tasked to NMCB 5:	212
	Total Project MD:	442
Material Cost:	$184,792	
Cost Savings:	$299,008 ($350/MD + savings from original EAC)	
Significant Safety Issues:	None.	
Significant QC Issues:	Rebar for arches from previous Battalion did not meet clearance and had to be re-installed.	
Significant Design Issues:	Three DCDs were received for this project, the first deleted the second gazebo and the second changed from an all-wooden gazebo to an all-concrete gazebo, and the third DCD changed the roof design to wood with a shingle finish.	
Significant Material Issues:	HAZMAT, custom brackets and roofing material were long lead, over 60 days.	

At left, the initial site conditions are pictured. Below is the completed shelter at the same location.

REPLACE BUS STOP SHELTERS
YO09-805

Project Data

Project Scope: To demolish nine existing concrete bus stop shelters and erect 13 pre-fabricated bus shelter kit which will include site work, forming and reinforcing for concrete, metal kit erection, block work, installation of benches, and solar lighting in order to increase the safety of the users of the bus stops.

Personnel:	5	
Duration:	April 2013 – July 2013	
Mandays Expended:	Previous Battalion:	NEW START
	NMCB 5:	600
Tasking:	WIP at turnover:	N/A
	WIP at deployment completion:	94%
	MD Tasked to NMCB 5:	455
	Total Project MD:	639
Material Cost:	$291,759	
Cost Savings:	$283,891 ($350/MD + savings from original EAC)	
Significant Safety Issues:	None.	
Significant QC Issues:	None.	
Significant Design Issues:	DCDs changed all shelters to a concrete pad with paver trim, two shelters deleted and one added due to existing conditions Solar safety lights and benches added.	
Significant Material Issues:	None.	

OIC DISCRETIONARY

DETAIL YOKOSUKA

PROJECT

Demolish roof over storage area	13
Demolish fence and create walkway	2
Demolish concrete walls	21
TOTAL MANDAYS EXPENDED	**36**

Cutting out rusted fencing

Demolishing an unstable roof

Eight concrete walls demolished for future HAZMAT lockers

CAMP MAINTENANCE

DETAIL YOKOSUKA

CAMP MAINTENANCE TASKING

Clean, organize, and inventory MLO/CTR	63
TOTAL MANDAYS EXPENDED	**63**

Organizing materials in the MLO warehouse

Completing inventory of materials

LABOR DISTRIBUTION SUMMARY

Month	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	% Total
Direct Labor MDs	9	73	117	300	313	287	280	80%
Indirect Labor MDs	54	88	107	0	0	0	0	14%
Readiness/ Training	9	22	13	15	15	18	15	6%
Total MDs Expended	72	183	237	315	328	305	295	1735
# Total Personnel	14	17	18	23	23	23	23	
# Direct Labor	9	12	13	14	15	15	15	
# Workdays	11	22	24	24	24	23	24	
% Direct Labor	64%	71%	72%	61%	65%	65%	65%	
Ideal Capability	111	297	351	378	405	388	388	
Availability Factor	16%	32%	55%	83%	81%	79%	76%	

DETAIL SASEBO

The NMCB 5 Detail Sasebo advance party of 8 personnel arrived in Sasebo, Japan on January 8, 2013. Immediately upon arrival, the team began the working turnover with NMCB 74. Turnover was completed on 12 January and NMCB 74 departed Sasebo on 14 January. The remaining 13 delayed party personnel arrived in Sasebo on 19 January and the team immediately began project operations.

The SA10-871 Construct Inert Storage PEB at Dry Dock #2 project crew was tasked to construct a 4,000 square foot pre-engineered building (PEB) with concrete reinforced floor, waterproof roof, two entrance ramps with roll-up doors, two 36 inch personnel doors, interior/exterior lighting and power outlets. The project was estimated at 657 mandays with a total cost of $365K. The use of Seabee labor resulted in a cost savings of $230K to NAVFAC. The PEB will provide additional storage capacity to the Sasebo Ship Repair Facility (SRF) servicing US Pacific Fleet, Military Sealift Command and Japan Maritime Self-Defense Force vessels operating around the globe.

The SA05-831 Repair/Replace Drainage Ditch at Harioshima Magazine 3019 project crew was tasked with the removal of 144 meters of existing ditch lining and placement of 144 meters of precast concrete u-ditches and concrete inlets. The project was estimated at 229 mandays with a total cost of $46K. The use of Seabee labor resulted in a cost savings to NAVFAC of $80K. The new drainage ditch will serve to reduce flooding around the munitions storage magazine and allow for continuous operations for the Navy Munitions Command East Asia Division (NMC-EAD) Detail Sasebo responsible for supplying munitions to US Pacific Fleet vessels in support of PACOM operations.

The SA13-896 Construct PEB at Port Ops project crew was tasked with the construction of a new 1,062 square foot, three-sided covered storage pre-engineered building (PEB) with concrete reinforced floor, roll-up door and entrance ramps. The project was originally planned for use as a drum storage facility for the recycle yard but due to changing requirements, NAVFAC decided to relocate it for use by Port Operations. The move required a revision to the foundation design and delayed the start of the project. Due to the short-suspense, the project was executed as a joint effort with DET Sasebo and the NAVFAC Sasebo Public Works Department Production Division. PWD completed the site work and construction of the foundation, ramps and bollards. DET Sasebo completed the installation of

the PEB structure. The total project was estimated at 229 mandays with a value of $150K and will provide Commander, Fleet Activities Sasebo (CFAS) Port Operations with additional storage facilities.

The total value of all projects executed by DET Sasebo was $951K with a cost savings to NAVFAC of $390K. The DET was responsible for nearly $1M in facilities, CESE, CTR and MLO assets.

In addition to construction projects, DET Sasebo was also tasked with the shutdown of the CRO DET site. This effort required the redistribution of three units of CESE to two PACOM sites, DRMO of three units of CESE, and the redistribution of MLO/CTR assets to five PACOM sites. The DET also provided support to other commands around CFAS with numerous operations and training evolutions to include:

- Supported offload of equipment and pieces of the former USS Guardian minesweeper that ran aground off the coast of the Philippines
- Supported EODMU-5 with an IED/UXO detection training exercise
- Supported CFAS Fire Department with several training exercises
- Conducted CBR/MOPP training for 20 CFAS personnel to support base wide emergency operations readiness
- Assisted the USS Defender with construction of a paint containment system to prevent paint from contaminating the port waters during the repainting of the ship’s anchor chain
- Assisted EODMU-5 with loading/offloading and transport of inert mines
- Conducted rappelling training with CFAS Fire Department

The DET participated in various base and community volunteer opportunities to include the Shirahama Beach cleanup, CFAS base cleanup, Sasebo Elementary School/E.J. King High School STEM Fair, and the Sasebo Elementary School hike of Mt. Yumihari. Several members also contributed time to repair playground equipment at Sasebo Elementary School and support MWR

construction projects at Nimitz Park. The DET took liberty trips to Nagasaki, Japan to tour the Atomic Bomb Museum and Peace Park, attended a professional baseball game in Fukuoka, Japan and went camping, visited the beaches, and toured a castle in Hirado, Japan. The team also had the opportunity to tour the USS Bonhomme Richard (LHD-6) and USS Defender (MCM-2).

One of the greatest accomplishments of the deployment was the 100% attainment of Seabee Combat Warfare qualifications. One TSAP skill and fifteen JQR skills were also awarded during the deployment and two Seabees were frocked to Petty Officer Third Class.

At left, the initial site conditions are pictured. Below is the completed building.

CONSTRUCT INERT STORAGE PEB AT DRY DOCK #2
SA10-871

Project Data

Project Scope: Construct a 4,000 square foot PEB including reinforced concrete floor, two entrance ramps, roll up doors, and two 36 inch doors in order to increase capacity to store inert materials for the Ship Repair Facility supporting US Pacific Fleet, Japan Maritime Self-Defense Force and Military Sealift Command vessels.

Personnel:	10	
Duration:	September 2012 – July 2013	
Mandays Expended:	Previous Battalion:	396
	NMCB 5:	519
Tasking:	WIP at turnover:	47%
	WIP at deployment completion:	100%
	MD Tasked to NMCB 5:	348
	Total Project MD:	657
Material Cost:	$357,874	
Cost Savings:	$229,950 ($350/MD)	
Significant Safety Issues:	None.	
Significant QC Issues:	Placement of door jamb anchor bolts was overlooked by NMCB 74 and had to be post-drilled. Footers were not placed at the proper depth and additional backfill material and asphalt to meet cover requirements. The PEB vendor provided 3-phase motors for the roll-up doors; PEB has single-phase power. 30NCR purchased replacement motors.	
Significant Design Issues:	None.	
Significant Material Issues:	DCD for efficient lights and funding issues resulted in 3 month delay to order for electrical materials needed to complete the project.	

At left, the initial site conditions are pictured. Below is the completed ditch.

REPAIR/REPLACE DRAINAGE DITCH HARIOSHIMA MAGAZINE 3019 SA05-831

Project Data

Project Scope: Remove existing 147 meters of ditch lining and replace with 147 meters of various wall height precast concrete ditches. Additionally, construct intersection drainage connection at ditch in order to prevent flooding in the vicinity of magazine location. Improve drainage surrounding munitions storage magazine in support of Navy Munitions Command East Asia Division– DET Sasebo Harioshima Facility in order to provide continuous supply munitions to PACFLT vessels operating throughout PACOM.

Personnel:	5	
Duration:	October 2012 – May 2013	
Mandays Expended:	Previous Battalion:	59
	NMCB 5:	214
Tasking:	WIP at turnover:	13%
	WIP at deployment completion:	100%
	MD Tasked to NMCB 5:	199
	Total Project MD:	229
Material Cost:	$45,251	
Cost Savings:	$80,150 ($350/MD)	
Significant Safety Issues:	None.	
Significant QC Issues:	None.	
Significant Design Issues:	None.	
Significant Material Issues:	None.	

At left, the initial site conditions are pictured. Below is the completed building.

CONSTRUCT STORAGE PEB AT PORT OPS
SA13-896

Project Data

Project Scope: Construct a 1062 square foot PEB including one roll-up door and an entrance ramp in order to increase capacity to store inert materials.

Personnel:	6	
Duration:	May 2013 – July 2013	
Mandays Expended:	Previous Battalion:	NEW START
	NMCB 5:	82
Tasking:	WIP at turnover:	N/A
	WIP at deployment completion:	100%
	MD Tasked to NMCB 5:	229
	Total Project MD:	229
Material Cost:	$149,669	
Cost Savings:	$31,500 ($350/MD – MDs earned by PWD)	
Significant Safety Issues:	None.	
Significant QC Issues:	None.	
Significant Design Issues:	Project start delayed by a site change requiring redesign of foundation. A design flaw was discovered during the installation of the roll-up door: there was no secondary egress designed for the enclosed bay, violating fire code and preventing operation of the door. PWD agreed to correct design issues using in house labor and materials. NMCB 5 installed the roll-up door as designed and secured the door in the open position with a lock to prevent the door from closing until the building could be brought up to code.	
Significant Material Issues:	None.	

CAMP MAINTENANCE

DETAIL SASEBO

CAMP MAINTENANCE TASKING

DET Site Shutdown Activities	259
TOTAL MANDAYS EXPENDED	**259**

LABOR DISTRIBUTION SUMMARY

Month	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	% Total
Direct Labor MDs	137	185	213	175	193	234	12	57%
Indirect Labor MDs	42	115	125	170	108	55	18	31%
Readiness/ Training	27	38	55	56	39	22	4	12%
Total MDs Expended	164	223	268	231	232	256	16	2021
# Total Personnel	22	22	22	22	21	20	18	
# Direct Labor	14	14	14	14	14	14	14	
# Workdays	11	21	20	22	20	23	7	
% Direct Labor	64%	64%	64%	64%	67%	70%	78%	
Ideal Capability	173	331	315	347	315	362	110	
Availability Factor	95%	67%	85%	67%	74%	71%	15%	

DETAIL ATSUGI

Detail Atsugi departed Okinawa, Japan on 7 January to Atsugi, Japan commencing a seven month deployment. Despite arriving late in the afternoon, the turnover process began immediately with counterpart introductions over a home cooked dinner provided by NMCB 74. On the following morning, formal turnover began and was completed in just six days before NMCB 74 departed for Okinawa, Japan via MILAIR.

The first and highest priority project, AG10-817 Construct FISC Warehouse, consisted of constructing two 60 foot X 70 foot Butler PEBs from the ground up. Each building required earthwork for the footings and foundations, erecting and sheeting the structure, basic electrical installation and finish work. The warehouses are CNIC funded and provide secure storage for aircraft maintenance and repair parts. The project itself progressed well with only minor delays due to poor weather and some construction equipment availability issues. All equipment issues have since been resolved.

The second and lowest priority project, AG10-818 Install Bollards, consisted of cutting and excavating 71 road crossings and installing 701 pop-up security bollards. The total number of bollards per site varied from six to 34 depending on the width of the road. The bollards are the result of shortfalls discovered during the NAF Atsugi Security Officers ATFP assessment of base vulnerabilities. The installation of the bollards is also CNIC funded, providing proper cordon capabilities to critical base infrastructure. The detail experienced no problems with the project and completed 30 June, 25% ahead of schedule and $180K under budget.

Upon arrival in Atsugi, the DET quickly established a positive working relationship with PWD, FEAD and NAFA personnel. Within a few weeks, a solid rapport was developed that became the foundation of the DET’s ability to acquire external resources. The relationship was also an extremely valuable asset to the supply department’s ability to estimate, order, track and receive materials, equipment, and funds which saved months of work and over $200K between the two projects.

The reputation as “Professionals” quickly spread to other services and outlets such as Fleet and Family Service Center (FFSC), Child Development Center (CDC), and Youth Programs Office. Each of these services at one point requested help for COMREL support ranging from storage space clean up for the Youth

Programs Office, camouflage face painting for during Month of the Military Child, and helping with the Safety Fair.

Safety and Quality Control was the primary focus during the deployment. The amount of emphasis placed on these two areas during the homeport planning phase in the development of Safety and QC plans resulted in zero mishaps and rework. Establishing a solid relationship with the PWD Safety and Quality Control departments helped to work through differences between OSHA manuals, EM385 and local seismic building codes used by NAVFAC FE.

Embark operations utilized commercial resources at nearby Haneda and Narita International Airports in addition to the MILAIR terminal in Atsugi. Vehicles provided to the DET by PWD transportation were used to transport visitors to and from the airports and Yokosuka Naval Base. However, DTS orders for travelers were required to secure toll tickets from PWD for travel on local expressways. Without the actual orders, toll tickets were not provided. Public transportation, including trains and buses, provided alternate means of airport transportation.

At left, the initial site conditions are pictured. Below are the current site conditions.

CONSTRUCT FISC WAREHOUSE
AG10-817

Project Data

Project Scope: Construct two PEB Warehouse facilities for FISC DET Atsugi in order to provide adequate space to support the Air Wing and installation. Work includes demolition of existing concrete pads and U type gutters, excavation for concrete Footers/ Pedestals/ Tie Beams / Pads and parking lot placement along with installation of electrical.

Personnel:	7	
Duration:	January 2013 – July 2013	
Mandays Expended:	Previous Battalion:	176
	NMCB 5:	297
Tasking:	WIP at turnover:	19%
	WIP at deployment completion:	51%
	MD Tasked to NMCB 5:	684
	Total Project MD:	926
Material Cost:	$620,143	
Cost Savings:	$103,950 ($350/MD)	
Significant Safety Issues:	None.	
Significant QC Issues:	The Japanese Industrial Standard (JIS) is the QC manual referenced often.	
Significant Design Issues:	Ensure Japanese code is referenced while designing prints the mitigate delays.	
Significant Material Issues:	Bill of material items quoted out are often significantly higher than actual cost.	

At left, the initial site conditions for one of the 77 bollard sites are pictured. Below is the completed bollard site.

INSTALL BOLLARD SYSTEM
AG10-818

Project Data

Project Scope: Install 766 security bollards at 77 locations onboard Naval Air Facility Atsugi to increase the security posture of the base. Work will include cutting asphalt and concrete in order to excavate and place bollards and encase the top with a concrete cap.

Personnel:	4	
Duration:	January 2013 – July 2013	
Mandays Expended:	Previous Battalion:	75
	NMCB 5:	975
Tasking:	WIP at turnover:	7%
	WIP at deployment completion:	100%
	MD Tasked to NMCB 5:	975
	Total Project MD:	1050
Material Cost:	$318,780	
Cost Savings:	$181,220 ($350/MD)	
Significant Safety Issues:	None.	
Significant QC Issues:	None.	
Significant Design Issues:	None.	
Significant Material Issues:	None.	

LABOR DISTRIBUTION SUMMARY

Month	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	% Total
Direct Labor MDs	132	151	206	274	309	286	272	74%
Indirect Labor MDs	0	59	53	17	110	112	2	16%
Readiness/ Training	22	31	43	31	31	31	20	10%
Total MDs Expended	154	241	302	322	450	429	294	2192
# Total Personnel	22	17	17	17	17	17	17	
# Direct Labor	17	12	12	12	12	12	12	
# Workdays	12	22	23	22	24	21	23	
% Direct Labor	77%	71%	71%	71%	71%	71%	71%	
Ideal Capability	230	297	311	297	324	284	311	
Availability Factor	67%	61%	80%	103%	105%	112%	94%	

DETAIL CHINHAE

NMCB 5 Detail Chinhae provided direct support to the Combined Fleet Activities Chinhae by executing Construction Readiness Operation (CRO) tasks in support of the NMCB 5 PACOM deployment from 01 January to 15 August. The scope of work for DET Chinhae included the demolishing of an existing wall between Republic of Korea (ROK) and combined Air Force component at the end of the existing dead end road; the construction of a concrete retaining wall to support compacted backfill, and the installation of a concrete drainage pipe in place of existing open U ditch; the backfill and compact to level grade between buildings 798 and 710, and the installation of curbing, compacted base course, asphalt cement, and drainage to allow proper site drainage at an adjoining section of road.

DET Chinhae conducted numerous OICD projects to improve the base infrastructure and quality of life. The scope of work for the OICD projects consisted of improving areas base wide to include: sidewalks, curbing, concrete access drives, bollards, and awnings. These short fuse projects enabled the DET to exercise planning, estimating, and material procurement abilities on small scale projects. This greatly enhanced the DET's overall ability to plan, estimate, procure materials, and execute projects from start to finish with the highest quality.

DET Chinhae had the responsibility of hosting four Republic of Korea (ROK) Navy Seabee officers. The DET provided training on the day to day operations of an NMCB DET and the support of the NMCB Main Body (MB) in mission accomplishment, logistics, and reporting procedures, also conducting tactical training on open source military tactics and equipment.

NMCB 5 DET Chinhae participated in the CJLOTS 2013 (CJLOTS13) exercise with the Republic of Korea Navy (ROKN), ACB 1 (Amphibious Construction Battalion One), and the United States Army in order to foster a lasting relationship and enhance regional logistical stability. The exercise included establishing a 1200-1500 man tent camp for UFSK (United States Forces Korea), and working with the ROK Seabees to build a 300 man tent camp to include a Lighterage Control Center (LCC). DET Chinhae and ROK Seabees also conducted a COMREL project at the Seokpyeoung Nursing Facility elderly care home in Pohang working on painting, fixing electrical and grounds maintenance.

Camp Maintenance mandays were utilized to improve the logistical support capabilities of the Detail and enhance the Heritage and

Esprit de Corps of the Seabee spaces on CFAC. The DET completed the comprehensive reorganization of the MLO outdoor storage areas greatly enhancing material storage efficiency by maximizing the use of available space which increased the accuracy of tracking and proper storage of project materials. The DET also increased the spaces sense of heritage with the addition of our legacy items the NMCB 5 concrete BEEP display and our “Rating display and Seabee Memorial quote” wall. All rating symbols and the quote “With willing hearts and skilful hands, the difficult we do at once, the impossible takes a bit longer with compassion for others we build – we fight for peace with freedom”. The restroom addition and multiple other spaces improvement projects were completed to improve the Detail spaces.

DET Chinhae Alfa Seabees were an integral part of the success of the Detail’s deployment. The mechanics skill and efficiency kept aging CESE in working order and provided the projects with the needed equipment to get the job done. Alfa excelled in all facets of equipment maintenance to include: 331 hours of corrective maintenance, submission of 73 2-kilos for parts and maintenance materials and the completion of 159 PMS checks. They were also instrumental in the receipt of a new Excavator and the shipment of an inoperable Loader. The movement of the Loader required extensive networking with Navy, Army, and Air Force supply components.

The DET leadership along with the Safety Officer was very proactive in the ORM process to reduce and eliminate mishaps and keep our Seabees safe. The Safety Officer and the project and shop representatives ensured the proper use of PPE, shoring, scaffolding, ground guides and backing guides. The foremost safety concerns for our projects were shoring, heavy equipment and complacency. These concerns were mitigated through daily safety lectures focusing on safety topics relevant to each specific project. The use of ground guides and wearing safety vests was strictly enforced; all shoring was checked multiple times daily. Safety was paramount in all aspects of our daily work whether it was on the project, in the shop or anywhere in between, we all worked together to ensure that we completed the deployment in the safest manner possible. Working with the Safety First mindset allowed us to complete all missions assigned in an expeditious manner with the highest quality and the return all of our Seabees safely home.

At left, the initial site conditions are pictured. Below is the project site after the shoring system was installed.

BACKFILL ALLEY AND EXTEND SERVICE ROAD
KO13-805

Project Data

Project Scope: Demolish existing wall between Republic of Korea (ROK) and combined Air Force component at the end of the existing dead end road. Construct concrete retaining wall to support compacted backfill. Install concrete drainage pipe in place of existing open U ditch. Backfill and compact to level grade between buildings 798 and 710. Install curbing, compacted base course, asphalt cement and drainage to allow proper site drainage at adjoining section of road.

Personnel:	6	
Duration:	May 2013 – July 2013	
Mandays Expended:	Previous Battalion:	NEW START
	NMCB 5:	182
Tasking:	WIP at turnover:	N/A
	WIP at deployment completion:	24%
	MD Tasked to NMCB 5:	360
	Total Project MD:	1532
Material Cost:	$341,489	
Cost Savings:	$536,200 ($350/MD)	
Significant Safety Issues:	During excavation and heavy equipment operations, a significant amount of spoils were removed from an existing hillside in order to place a new retaining wall and widen the existing road. Installation of “H” pile shoring was required. Due to the proximity of surrounding buildings, the possibility of damaging the buildings is a potential safety hazard.	
Significant QC Issues:	Significant design changes due to the discovery of unknown utilities.	
Significant Design Issues:	Wall design underwent 3 modifications due to discovery of utilities.	
Significant Material Issues:	HAZMAT sourced from local vendors delivered with Korean labels and material safety data sheets; translation of labels and MSDS continue to be an ongoing process.	

OIC DISCRETIONARY

DETAIL CHINHAE

PROJECT LISTING

Repair sidewalks and curbs, base wide	252
Renovate and repair CFAC areas	141
TOTAL MANDAYS EXPENDED	**393**

Placing new concrete sidewalks

Placing forms for concrete curbs

Digging holes for new bollards with the power auger

CAMP MAINTENANCE

DETAIL CHINHAE

CAMP MAINTENANCE TASKING

Build NMCB 5 Legacy and paint wall in Alfa Shop	75
TOTAL MANDAYS EXPENDED	**75**

NMCB 5 Legacy project

Painting wall in Alfa Shop

LABOR DISTRIBUTION SUMMARY

Month	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	% Total
Direct Labor MDs	101	172	143	175	177	0	101	82%
Indirect Labor MDs	0	0	0	0	0	0	0	0%
Readiness/ Training	38	53	17	28	21	0	38	18%
Total MDs Expended	139	225	160	203	198	0	139	1064
# Total Personnel	17	17	17	17	17	17	17	
# Direct Labor	10	10	10	10	10	10	10	
# Workdays	22	24	25	25	24	25	22	
% Direct Labor	59%	59%	59%	59%	59%	59%	59%	
Ideal Capability	248	270	281	281	270	281	248	
Availability Factor	56%	83%	57%	72%	73%	0	56%	

DETAIL DIEGO GARCIA

The NMCB 5 Detail Diego Garcia advance party of 11 personnel arrived in Diego Garcia, British India Ocean Territory (B.I.O.T.) on 8 January. Immediately upon arrival, the team began the working turnover with NMCB 74. Turnover was completed on 11 January and NMCB 74 departed Diego Garcia on 14 January. The first four delayed party personnel arrived to Diego Garcia on 17 January and immediately began project operations. The remaining four delayed party personnel arrived on 25 January bringing the total personnel count for the detail to 19.

The DG10-809 Construct Ship Store Stock Room F#133 project crew was tasked to construct a 600 square foot storage addition to the ship store. The scope included the construction of CMU walls, monolithic concrete beams and roof, built-up roof, fire protection system, electrical and mechanical components. The project was estimated at 776 mandays with a total cost of $235K. The use of Seabee labor resulted in a cost savings of $208K to NAVFAC. The stock room will provide additional storage capacity to the Diego Garcia Ship Store servicing Naval Support Facility (NSF) Diego Garcia, Navy and Air Force Partner Commands, and the Base Operations Support Contractor (BOSC) personnel by providing a critical quality of life improvement.

The DG12-808 Construct Contractor Living Unit #6 in Seabreeze Village project crew was tasked to construct a 3,000 square foot modified contractor living unit (CLU) consisting of twelve rooms with shared bathrooms, common area, kitchen and laundry. Concrete slab construction will provide the base for metal wall studs wrapped in gypsum board with wood trusses, exterior 24 gauge metal siding and roof panels. The project was estimated at 1,169 man-days with a total cost of $600K. The use of Seabee labor resulted in a cost savings to NAVFAC of $347K. The new living unit replaced aging seahuts and will serve as housing for 12 BOSC personnel, improving the quality of life considerably for these crucial workers.

The total value of all projects executed by Detail Diego Garcia was $835K with a cost savings to NAVFAC of $555K. The detail was responsible for nearly $1M in facilities, CTR and MLO assets.

Detail Diego Garcia was required to relocate their entire MLO and CTR due to extensive remodeling of their spaces. This involved the movement and inventory of 14 toolkits, $200K worth of shelf tools, and 3,800 line items of material.

Additionally, $120,875 worth of material for one of the CRO projects had to be shipped from the U.S. by 30NCR due to the BOSC turnover for the island. This created numerous operational hurdles which were overcome through hard work and perseverance.

Detail Diego Garcia also provided support to other commands and annexes around NSF Diego Garcia with numerous OIC-Discretionary Projects to include:

- Replacement of the floor in the island's Square & Compass Club which serves as a meeting point and social outlet for the contractors in Seabreeze Village

- Construction of a sail storage shed for the island's Yacht Club

- Placement of a concrete pad in front of the island's Ship Store to support two racks for bicycle parking

- Installation of a new wrap-around counter for the island's Fire Station 911 Emergency Control Center to accommodate new electronics and provide a better and more efficient working environment

The detail participated in numerous base activities and community volunteer opportunities ranging from MWR sponsored soccer, basketball, dodge ball and softball tournaments, to an island beach cleanup and participation in the annual Seabee Ball.

Detail Diego Garcia performed 129 man-days of physical, tactical and general military training. Two detail personnel obtain their Seabee Combat Warfare qualifications during deployment. The detail had two reenlistments and four advancements during deployment. Twelve total JQRs were completed covering 140.2 Masonry Unit Construction II and 150.2 Light Frame Construction II. Fourteen TSAP skills were completed for 191.1 Powder Actuated Tools. Three personnel qualified with the M-16, M-9 and M-500. Two personnel completed 40 hours of training for SAPR Victim Advocate; in addition to filling the detail requirement, they contributed directly to the base's VA program thereby benefiting the whole island.

At left, Seabees from NMCB 5 corefill the first six courses of the CMU wall. Below, the completed facility as it nears BOD.

SHIP STORE STOCK ROOM #F133
DG10-809

Project Data

Project Scope: Construct a 600 square foot storage addition to the ship store. Provide and construct CMU walls, monolithic concrete beams and roof, complete with built-up roof, fire protection system, electrical, and mechanical components.

Personnel:	5	
Duration:	March 2011 – July 2013	
Mandays Expended:	Previous Battalion:	272
	NMCB 5:	468
Tasking:	WIP at turnover:	35%
	WIP at deployment completion:	100%
	MD Tasked to NMCB 5:	504
	Total Project MD:	776
Material Cost:	$170,910	
Cost Savings:	$208,091 ($350/MD)	
Significant Safety Issues:	Fall protection was pivotal as the majority of work was 16 feet overhead.	
Significant QC Issues:	Design of the formwork for the concrete monolithic overhead placement required significantly more time and effort than was estimated initially.	
Significant Design Issues:	Portions of the design did not match existing structure and required adjustment.	
Significant Material Issues:	None.	

At left, Seabees from NMCB 5 work to prepare the initial site. Below, the completed facility as it nears turnover with NMCB 3.

CONTRACTOR LIVING UNIT #6, SEABREEZE
DG12-808

Project Data

Project Scope: Construct a 3,000 square foot modified contractor living unit (CLU) consisting of 12 rooms with shared bathrooms, common area, kitchen and laundry. Concrete slab construction will provide the base for metal wall studs wrapped in gypsum board with wood trusses, exterior 24 gauge metal siding and roof panels.

Personnel:	5	
Duration:	January 2013 – March 2014	
Mandays Expended:	Previous Battalion:	NEW START
	NMCB 5:	660
Tasking:	WIP at turnover:	N/A
	WIP at deployment completion:	45%
	MD Tasked to NMCB 5:	529
	Total Project MD:	1169
Material Cost:	$536,468	
Cost Savings:	$346,550 ($350/MD)	
Significant Safety Issues:	Installation of roof trusses required working directly with the BOSC crane crew.	
Significant QC Issues:	Lessons learned from previous CLUs were implemented to improve quality.	
Significant Design Issues:	The design provided did not contain the redline updates from previous CLUs. This meant that many of the previous FARs needed to be resubmitted.	
Significant Material Issues:	Due to the BOSC turnover, 20% of the project materials had to be shipped by 30NCR. This caused delays and constant adjustment of the project schedule.	

OIC DISCRETIONARY

DETAIL DIEGO GARCIA

PROJECT LISTING

Square & Compass Club Floor Replacement	35
Yacht Club Sail Storage Shed	26
Ship Store Concrete Bike Parking Pad	41
Fire Station Emergency Control Center Wrap-around Counter	27
TOTAL MANDAYS EXPENDED	**129**

Replacement of flooring

Finishing the sail storage shed

Placement of concrete bike parking pad for the island's ship store

CAMP MAINTENANCE

DETAIL DIEGO GARCIA

CAMP MAINTENANCE TASKING

CLU #5 Punchlist Items	18
Seabee Spaces and Warehouse Relocation, F#437	228
Relocate, Clean, Organize, and Inventory MLO/CTR	60
TOTAL MANDAYS EXPENDED	**306**

Organizing materials in the MLO yard and warehouses

Movement of toolkits for spaces and warehouse relocation

LABOR DISTRIBUTION SUMMARY

Month	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	% Total
Direct Labor MDs	97	244	251	240	259	216	237	70%
Indirect Labor MDs	25	75	74	98	88	83	75	24%
Readiness/ Training	13	17	26	28	19	13	13	6%
Total MDs Expended	135	336	351	366	366	312	325	2191
# Total Personnel	14	19	19	19	19	19	19	
# Direct Labor	10	13	13	13	13	13	13	
# Workdays	11	22	24	24	24	23	24	
% Direct Labor	71%	68%	68%	68%	68%	68%	68%	
Ideal Capability	124	322	351	351	351	299	312	
Availability Factor	89%	81%	79%	76%	79%	77%	80%	

DETAIL CHINA LAKE

NMCB Five Detail China Lake departed from Camp Shields, Okinawa, on 18 April via commercial air through Narita/Tokyo International Airport. Upon arrival at LAX, personnel traveled to Port Hueneme where they acquired tools and equipment from NCG1 preparing for follow-on travel to NAWS China Lake. The DET arrived at NAWS China Lake on 20 April. Personnel checked into the BEQ. Crusher and screening operation training took place from 22 April to 06 May.

The mission of NMCB Five Detail China Lake is to provide blasting and quarry operation in order to support future airfield construction. NAWS China Lake is the Navy’s premier armament research, development, acquisition, testing and evaluation (RDAT&E) use. All aircraft operations at NAWS China Lake are conducted at Armitage Field which has three runways in constant use. Providing timely airfield repairs and upgrades to the existing runway and parking aprons will ensure that the war fighters have proven armament to defend US interests in PACOM and around the world.

At left, Seabees from NMCB 5 work to prepare the initial site. Below, ¾" minus aggregate is loaded into a dump.

MINERAL PRODUCTS
CL13-001

Project Data

Project Scope: To conduct crushing operations IOT support future CRO airfield construction operation.

Personnel:	13	
Duration:	May 2013 – August 2013	
Mandays Expended:	Previous Battalion:	NEW START
	NMCB 5:	490
Tasking:	WIP at turnover:	N/A
	WIP at deployment completion:	100%
	MD Tasked to NMCB 5:	490
	Total Project MD:	490
Material Cost:	$0	
Cost Savings:	$171,500 ($350/MD)	
Significant Safety Issues:	None.	
Significant QC Issues:	None.	
Significant Design Issues:	None.	
Significant Material Issues:	None.	

DETAIL GUAM

At Camp Covington, Guam, Detail Guam commenced an unprecedented seven month mission to work with the historic assumption of command of the Army's 84th Engineer Battalion deployed in the traditional Seabee role of maintaining the Guam TOA, camp, and its day to day operations. The DET's mission was to provide key subject matter expertise in critical Navy systems to reduce the impact of differences in various cross service systems, standards and culture. During their time, the DET performed over 300 3M qualifications, issued 1,240 vehicle licenses and trained 26 soldiers in Crew Leader Academy and Quality Control Management while directly executing the 84th Engineer Battalion's Financials and Navy Crane programs.

DET Guam provided training to multiple key Seabee equivalent billets positively influencing the 84th Engineer Battalion's Guam operations to include: two S3Cs, three QC Chiefs, three QC Inspectors, the Safety Chief, three Safety Inspectors, the Alfa Maintenance Chief, the Alfa Operations Chief, Cost Control, Work Center Supervisors, DTO, RPPO, PM Clerk, Transportation Supervisor, Dispatcher, Collateral Custodian, License Examiner, the Embark Officer, and the Embark Chief. Construction operations training included multiple subjects tailored specifically for translating Army Engineer practices to Seabee systems such as Planning & Estimating, Project Management, Quality Control Inspections, the Safety Inspection Process, Project Briefings and Project Packages.

In addition to providing key Subject Matter Expertise to the 84th Engineer Battalion, DET Guam was tasked with executing the Naval Crane Program on their behalf. During the seven months on Guam, the DET Crane Crew executed over 67 lifts for the 84th Engineer Battalion and various tenant commands on Naval Base Guam. The Crane Team also sought to share Naval Crane Center TTPs to their Army counterparts, taking in two Army personnel to gain on the job training in rigging, safety and general operations where NCC prerequisites allowed. Within the Crane Crew, crew members were encouraged to cross train into different roles, training two crane crew leaders, three crane operators, two lead crane riggers, one crane mechanic and three crane riggers.

Stressing a unified team culture in working with the 84th Engineer Battalion, the DET succeeded in other areas unfamiliar to the Army Battalion. The DET went above and beyond tasking by aiding in the various Mount Out Exercises executed throughout the deployment and by providing training in safety execution and

organization. Key subject matter expertise was provided in the Armory and the Communications shop aiding the 84th Engineer Battalion to gain and maintain NCF standards. Finally, DET Guam made an enormous impact to 84th EN BN operations in the execution of the financials and MLO/CTR programs. Overall, DET Guam contributed to "The Professionals" legacy by exemplifying a "one team, one fight" ethic in the historic Army assumption of the Guam mission extending NCF tactics, techniques, and procedures to our Army counterparts and further strengthening the overall NCF impact in the PACOM AO.

SKILLS AND LICENSES AWARDED

	Skill	# Qualified		Skill	# Qualified
3M	301	268	Light Licenses	OF346	300
	302	15		Tractor Trailer	100
	303	11		MTVR Cargo	80
	304	4		MTVR Dump	40
	305	3		11K Forklift	30
	306	3		12K Forklift	15
Cranes	Mobile Crawler	4		MTVR Water Truck	25
	MTVR Wrecker	4		44 Pax Bus	30
	Crew Leader	2	Heavy Licenses	11260/1	150
	Operator	3		D6 Dozer	95
	Lead Rigger	2		Backhoe	70
	Mechanic	1		924G Loader	95
	Rigger	3		120 Grader	70
	Safety	2		Roller	60
				Excavator	80

For pre-deployment preparation, DET Guam brought all members to 100% medical and dental readiness. Three sets of uniforms were treated with Permethrin spray to mitigate any risk of Malaria or Dengue Fever. JEV Immunizations were required to mitigate the risk of Japanese Encephalitis. No incidents during the deployment required significant medical care. If it were required, the 84th EN BN had medics to provide any urgent first aid while Naval Base Guam and Naval Hospital Guam provided higher levels of care within a close proximity.

Financial management was an instrumental contribution the DET made not just for the 84th Engineer Battalion, but for all NCF Southeast Asia DETs to include Cambodia, Timor Leste, Palau, and Diego Garcia. The financial team was responsible for the successful management of a $2.4M budget and $84K GCPC credit line, improving the financial management in NMCB 5's Supply shop

to 85% effectiveness on behalf of the 84th Engineer Battalion during the 2013 Guam ORI and supported the ordering of over $134,326 worth of parts and supplies. More than 2,540 high priority part requisitions were managed under the Automotive Repair Parts program along with diligent oversight of daily processing, tech editing, ordering, and purchase releases that were instrumental to expediting key deliveries that had an extremely high impact on operations. Contributions in MLO and CTR also made a large impact on operations in the management of $2,380,434 in project materials, $2,190,377 in CTR inventory and over $100K in consumables and other items.

Throughout the deployment, DET Guam maintained a high standard of safety in every operation. DET Guam experienced one mishap early in the deployment. While operating a forklift in the central tool room, the forklift operator bumped into a half-opened overhead roll-up door. No injuries or equipment damage resulted and the minimal property damage was repaired on the spot.

DET Guam's Quality Control Subject Matter Experts were critical to training the 84th EN BN's construction operations staff in the proper execution of the three phases of Quality Control. Together, they trained 26 soldiers in an extensive and thorough Crew Leader Academy and Quality Control Management class that aided the 84th EN BN to gain the quality necessary to execute all 30NCR construction tasks.

On the job training was an essential tool for DET Guam personnel to pass on knowledge to the 84th Engineer Battalion soldiers in the assumption of Seabee equipment, systems, and TTPs. Notably, the Communications and Armory Subject Matter Experts provided by DET Guam were critical in resolving the significant organizational differences in the equipment and accountability systems utilized by the Navy and the Army. In doing so, the Armory executed a full P-25 refresh flawlessly while the Communications Shop executed five Communications Exercises in conjunction with NMCB 5's Main Body in Okinawa.

To practice readiness for 48 hour Air DET missions, the DET contributed at all levels to make each of the three Emergency Deployment Readiness Exercise (EDRE) more effective and thorough by contributing MTVR licensed drivers for priority list movements, giving hands on training in all stages of the embark process, and providing post exercise feedback. Additionally, the DET played a key role in supporting the deployment from Camp

Covington of details to Timor Leste, Diego Garcia and Cambodia by processing 85 DTS orders and managing outgoing DET CLL gear.

Interaction with the local Guam community continued to be a focus for the Seabees of DET Guam. Throughout the deployment, the DET volunteered over 147 mandays to the beautification and safety of the local Chief Brodie Memorial Elementary School, a school with its own personal connection to Seabee legacy on the island. The DET also contributed a team of volunteers to the Annual Guam Special Olympics filling the roles of judges, time keepers and organizers to the extremely inspiring island event. Above all, DET Guam paid proper respects to the legacy of Seabee Betty, providing upkeep to her gravesite grounds and organizing both the anniversary of her death and the Guam Proclamation Day which honors her legacy to the island.

DETAIL TIMOR LESTE

CCAD Timor Leste hit the ground running. In response to a request directly from PACOM to support CARAT Timor Leste on short notice due to the grounding of the USS Guardian, NMCB 5 utilized four of the Seabees attached to CCAD Timor Leste to conduct Subject Matter Exchanges with the local military defense force (F-FDTL) from 25 – 28 January. Complementing US Marine and USCG practical application, Seabees taught vital skills in First Aid, Electrical Theory and Engine Theory to 43 Navy and Marines from the F-FDTL in the first-ever CARAT Timor Leste. Leaders from NMCB 5 CCAD Timor Leste continued to support future exercises by assisting with scope development in coordination with Australian Defense Cooperation Program (DCP), the FFDTL, and the US Embassy for SAPPER 13, a joint exercise between the US, Australians, and Timorese in October 2013.

In addition to exercise support, CCAD Timor Leste completed multiple HA-funded projects. First completed was the Metinaro Primary School Renovation, a turnover project which benefitted 400 local Timorese children by reducing overcrowding by 50%. Next was Phase I of the Becora Secondary School Renovation, consisting of the first of three school buildings that will improve the learning environments of over 1,100 students in an underdeveloped neighborhood. The final tasked project was a mission in the remote district of Oecussi, an enclave in the middle of Indonesia where no Seabees had ventured before and which sees few foreigners. CCAD Timor Leste embarked to the new location and completed renovations on a total of two clinics, three community centers, a hospital and a primary school in 30 days. The crown jewel of their impact in the district was their work on the Oecussi Hospital, which is the referral center of all 70,000 citizens in the district, and which had no power until the Seabees of NMCB 5 added solar panels in order to provide power to the Emergency Room, bringing state-of-the-art equipment into operation which was previously left untouched due to lack of electricity. This project brought US military presence to an extremely isolated district, projecting positive US influence in support of PACOM and Department of State objectives.

CCAD Timor Leste also completed six OIC-D projects, six COMRELs, and provided Subject Matter Experts in 10 classes at the Australian-led Defense Cooperation Program, resulting in high-quality, practical application instruction for 61 F-FDTL Army, Marines and Navy personnel. One of the highlights of the OIC-D projects included the Gleno Community Health Clinic Renovation,

which brought clean water to the referral clinic for a district of 120K residents and was the first joint venture between USAID and the Seabees. Working jointly with the USAID subcontractor, Ha Diak, Seabees completed infrastructure work such as plumbing and electrical improvements in addition to building custom shelving units based off of Ha Diak doctors' expert recommendations. After the renovations, Ha Diak then arrived with the knowledge to train health workers in proper sanitation and medical practices offering the full package to the once-dilapidated clinic. The highlight of NMCB 5's COMRELs in Timor Leste included the building of 10 triple-bunk beds for an all-girl Muslim orphanage giving every girl her own bed.

At left, the initial site conditions are pictured. Below is the completed building.

METINARO PRIMARY SCHOOL RENOVATION
TL12-004

Project Data

Project Scope: Construct a 12 ft x 12 ft outdoor kitchen with a three bay concrete stove. Columns and exterior walls consist of CMU block with a stucco finish. Truss roof design which contains one gutter to serve as water catchment system. Rehabilitation of existing school including capping existing sidewalks and 4 classrooms utilizing cast in place concrete. Repair or replace existing doors as necessary. Repair and rehabilitate existing windows. Demolish existing roof and replace with steel trusses and corrugated sheeting. Replace ceiling grid and panels with 3/8" plywood. Make repairs to existing electrical system and install outlets, switches and lighting. School and kitchen will be painted to match other primary schools in the area.

Personnel:	8 NMCB 5 / 6 Host Nation	
Duration:	December 2012 – April 2013	
Mandays Expended:	Previous Battalion:	545
	NMCB 5/Host Nation:	946/528
Tasking:	WIP at turnover:	37%
	WIP at deployment completion:	100%
	MD Tasked to NMCB 5:	LOE
	Total Project MD:	1474
Material Cost:	$116,320	
Cost Savings:	$515,900 ($350/MD)	
Significant Safety Issues:	None.	
Significant QC Issues:	Interior block walls were not core-filled or tied into existing building structure. NMCB 5 removed block walls, added tie-ins utilizing rebar, and core-filled the walls. Interior walls are now structurally sound.	
Significant Design Issues:	None.	
Significant Material Issues:	None.	

At left, the initial site conditions are pictured. Below is the completed building.

BECORA SECONDARY SCHOOL RENOVATION – PHASE I
TL13-001

Project Data

Project Scope: Phase I included initial site work and demolition of Building 1 roof trusses, doors, windows, exterior concrete planters and interior tile lab counters. Steel trusses and roof sheeting was installed, as well as new windows and doors. Building 1 grading was completed and a trench was dug and electrical line installed to bring service to Building 1 and prepare service to Building 2. Concrete sidewalks were placed around the outside of the building, and rainwater collection was installed. All walls were patched with stucco and paint was applied. Lights and receptacles were placed, ceiling system was installed and patio area was capped and repainted.

Personnel:	8 NMCB 5 / 4 Host Nation	
Duration:	April 2013 – July 2013	
Mandays Expended:	Previous Battalion:	NEW START
	NMCB 5/Host Nation:	191/128
Tasking:	WIP at turnover:	N/A
	WIP at deployment completion:	22%
	MD Tasked to NMCB 5:	LOE
	Total Project MD:	854
Material Cost:	$288,540 (All Phases)	
Cost Savings:	$111,650 ($350/MD – Phase I)	
Significant Safety Issues:	None.	
Significant QC Issues:	None.	
Significant Design Issues:	None.	
Significant Material Issues:	None.	

At left, the initial site conditions are pictured. Below is the completed building.

NITIBE CLINIC RENOVATION – OECUSSI
TL13-002

Project Data

Project Scope: FFDTL personnel will repair leaks on the roof. Seabees and FFDTL will install a new battery for the solar energy storage system, replace damaged fascia, repair a leaky waste water pipe, install a fabricated door frame for kitchen access and apply a coat of white paint to interior and exterior of the building.

Personnel:	3 NMCB 5 /2 Host Nation/ 2 Volunteers	
Duration:	June 2013 – July 2013	
Mandays Expended:	Previous Battalion:	NEW START
	NMCB 5/Host Nation:	18/20
Tasking:	WIP at turnover:	N/A
	WIP at deployment completion:	100%
	MD Tasked to NMCB 5:	LOE
	Total Project MD:	38
Material Cost:	$15,144	
Cost Savings:	$13,300 ($350/MD)	
Significant Safety Issues:	Due to limited MEDEVAC capabilities, crew was required to limit high-risk activities including roof work and hot electrical and abstain from working at night.	
Significant QC Issues:	None.	
Significant Design Issues:	None.	
Significant Material Issues:	None.	

At left, the initial site conditions are pictured. Below is the completed building.

USITACO CLINIC RENOVATION – OECUSSI
TL13-003

Project Data

Project Scope: FFDTL personnel will repair leaks on the roof, install a solar water heating system and replace water-damaged sheathing. An FFDTL electrician will repair and replace damaged or exposed wire with assistance from a Seabee electrician. Seabees will install new door knobs, jambs and hasps on nine doorways as required, install a small covered kitchen area, and apply a new coat of paint to the interior and exterior of the building.

Personnel:	3 NMCB 5/ 2 Host Nation/ 2 Volunteers	
Duration:	July 2013	
Mandays Expended:	Previous Battalion:	NEW START
	NMCB 5/Host Nation:	18/20
Tasking:	WIP at turnover:	N/A
	WIP at deployment completion:	100%
	MD Tasked to NMCB 5:	LOE
	Total Project MD:	38
Material Cost:	$14,337	
Cost Savings:	$13,300 ($350/MD)	
Significant Safety Issues:	Due to limited MEDEVAC capabilities, crew was required to limit high-risk activities including roof work and hot electrical and abstain from working at night.	
Significant QC Issues:	None.	
Significant Design Issues:	None.	
Significant Material Issues:	None.	

At left, the initial site conditions are pictured. Below is the completed building.

USITACO COMMUNITY CENTER RENOVATION - OECUSSI
TL13-004

Project Data

Project Scope: Seabees and FFDTL will install a prefabricated wooden partition wall between two offices in the interior of the community center, and apply a new coat of paint to the interior and exterior of the building.

Personnel:	3 NMCB 5/2 Host Nation/10 Volunteers	
Duration:	July 2013	
Mandays Expended:	Previous Battalion:	NEW START
	NMCB 5/Host Nation:	3/4
Tasking:	WIP at turnover:	N/A
	WIP at deployment completion:	100%
	MD Tasked to NMCB 5:	LOE
	Total Project MD:	7
Material Cost:	$4,645	
Cost Savings:	$2,450 ($350/MD)	
Significant Safety Issues:	Due to limited MEDEVAC capabilities, crew was required to limit high-risk activities including roof work and hot electrical and abstain from working at night.	
Significant QC Issues:	None.	
Significant Design Issues:	None.	
Significant Material Issues:	None.	

At left, the initial site conditions are pictured. Below is the nearly completed building awaiting window installation.

BOACNANA PRIMARY SCHOOL RENOVATION - OECUSSI
TL13-005

Project Data

Project Scope: Seabees and FFDTL will install a gutter system on the face of the building, a water catchment system and prefabricated stand, and custom windows in the school and head facility, replace hose bibs in the head facility, and apply a new coat of paint to the interior and exterior of the building.

Personnel:	4 NMCB 5 / 2 Host Nation	
Duration:	July 2013	
Mandays Expended:	Previous Battalion:	NEW START
	NMCB 5/Host Nation:	32/10
Tasking:	WIP at turnover:	N/A
	WIP at deployment completion:	100%
	MD Tasked to NMCB 5:	LOE
	Total Project MD:	42
Material Cost:	$185,206	
Cost Savings:	$14,700 ($350/MD)	
Significant Safety Issues:	Due to limited MEDEVAC capabilities, crew was required to limit high-risk activities including roof work and hot electrical and abstain from working at night.	
Significant QC Issues:	None.	
Significant Design Issues:	None.	
Significant Material Issues:	None.	

At left, the initial site conditions are pictured. Below is the completed building.

BOBOCASE COMMUNITY CENTER RENOVATION - OECUSSI
TL13-006

Project Data

Project Scope: F-FDTL will repair roof leaks. Seabees and F-FDTL will install a water catchment system and gutters, replace ceiling sheathing where previous water damage has deteriorated, and apply a coat of paint to the exterior of the community center.

Personnel:	3 NMCB 5/ 2 Volunteer	
Duration:	July 2013	
Mandays Expended:	Previous Battalion:	NEW START
	NMCB 5/Host Nation:	28/10
Tasking:	WIP at turnover:	N/A
	WIP at deployment completion:	100%
	MD Tasked to NMCB 5:	LOE
	Total Project MD:	38
Material Cost:	$15,268	
Cost Savings:	$16,800 ($350/MD)	
Significant Safety Issues:	Due to limited MEDEVAC capabilities, crew was required to limit high-risk activities including roof work and hot electrical and abstain from working at night.	
Significant QC Issues:	None.	
Significant Design Issues:	None.	
Significant Material Issues:	None.	

At left, the initial site conditions are pictured. Below is the completed building.

NAIMECO COMMUNITY CENTER RENOVATION - OECUSSI
TL13-007

Project Data

Project Scope: Seabees and FFDTL will install a water catchment system and gutters, and apply a coat of paint to the exterior and interior of the building.

Personnel:	5	
Duration:	July 2013	
Mandays Expended:	Previous Battalion:	NEW START
	NMCB 5/Host Nation:	29
Tasking:	WIP at turnover:	N/A
	WIP at deployment completion:	100%
	MD Tasked to NMCB 5:	LOE
	Total Project MD:	29
Material Cost:	$15,932	
Cost Savings:	$13,650 ($350/MD)	
Significant Safety Issues:	Due to limited MEDEVAC capabilities, crew was required to limit high-risk activities including roof work and hot electrical and abstain from working at night.	
Significant QC Issues:	None.	
Significant Design Issues:	None.	
Significant Material Issues:	None.	

At left, the initial site conditions are pictured with only one solar panel. Below is the completed additional solar panel system.

OECUSSI REFERRAL HOSPITAL REPAIRS
TL13-008

Project Data

Project Scope: Seabees and FFDTL will install a water catchment system and gutters, and apply a coat of paint to the exterior and interior of the building.

Personnel:	2 NMCB 5 / 1 Host Nation	
Duration:	June 2013 – July 2013	
Mandays Expended:	Previous Battalion:	NEW START
	NMCB 5/Host Nation:	28/14
Tasking:	WIP at turnover:	N/A
	WIP at deployment completion:	100%
	MD Tasked to NMCB 5:	LOE
	Total Project MD:	42
Material Cost:	$19,780	
Cost Savings:	$14,700 ($350/MD)	
Significant Safety Issues:	Due to limited MEDEVAC capabilities, crew was required to limit high-risk activities including roof work and hot electrical and abstain from working at night.	
Significant QC Issues:	None.	
Significant Design Issues:	None.	
Significant Material Issues:	None.	

At left, practical application instruction is being taught. Below are students who have completed a Seabee-taught course.

DEFENCE COOPERATION PROGRAM SUPPORT

Project Data

Project Scope: Assist Australian Engineers in Subject Matter Exchanges with the local military Falintil Forca de Defensa Timor Leste (FFDTL). Topics included Plumber OJT, Carpenter OJT, Outboard Motor Maintenance, Chainsaw Maintenance, Welder OJT, Plant Recertification, AutoCAD, and Builder Framing.

Personnel:	10 NMCB 5 / 61 Host Nation	
Duration:	January 2013 – July 2013	
Mandays Expended:	Previous Battalion:	NEW START
	NMCB 5/Host Nation:	165
Tasking:	WIP at turnover:	N/A
	WIP at deployment completion:	100%
	MD Tasked to NMCB 5:	LOE
	Total Project MD:	165
Material Cost:	$0	
Cost Savings:	$57,750 ($350/MD)	
Significant Safety Issues:	None.	
Significant QC Issues:	None.	
Significant Design Issues:	None.	
Significant Material Issues:	None.	

OIC DISCRETIONARY

CCAD TIMOR LESTE

PROJECT LISTING

Bario Pite Clinic Repairs	4
St. Bakhita Clinic Renovation	16
Gleno Community Health Clinic Renovation	77
Baucau Music Festival Construction	10
Sport Dili e Benfica Boxing Ring Construction	29
Maintenance and Assessment Program	241
TOTAL MANDAYS EXPENDED	**377**

Baucau Music Festival Stage

Sport Dili e Benfica Boxing Ring

Before and after photos of the main outpatient hallway at Gleno Community Health Clinic.

CESE/CAMP MAINTENANCE

CCAD TIMOR LESTE

CESE MAINTENANCE

3M, corrective and emergent repairs	231

CAMP MAINTENANCE

N/A	0
TOTAL MANDAYS EXPENDED	**231**

Performing corrective maintenance

LABOR DISTRIBUTION SUMMARY

Month	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	% Total
Direct Labor MDs	33	182	206	264	249	270	242	40%
Indirect Labor MDs	106	306	426	296	298	339	292	56%
Readiness/ Training	5	32	29	30	29	21	12	4%
Total MDs Expended	144	520	661	590	576	630	546	3667
# Total Personnel	22	22	22	24	24	24	24	
# Direct Labor	14	15	15	17	17	16	16	
# Workdays	6	23	25	22	25	24	23	
% Direct Labor	64%	68%	68%	71%	71%	67%	67%	
Ideal Capability	95	388	422	421	478	432	414	
Availability Factor	40%	55%	56%	70%	58%	67%	61%	

DETAIL PALAWAN, PHILIPPINES

Construction Civic Action Detail (CCAD) Philippines successfully completed a seven month deployment that covered over 3,300 mandays and $108K of humanitarian assistance construction, OIC-D and COMREL activities while maintaining six units of CESE.

CCAD PHL deployed a total of 18 Seabees to the western region of the Philippines to construct two Engineering Civic Action Program (ENCAP) projects, humanitarian assistance, subject matter exchanges with host nation engineers and to support maritime security and joint operations within the Philippines. The ENCAP missions were a bilateral effort between NMCB 5 Seabees and the Vertical Utilities & Engineering Company 3rd NMCB Philippine Navy (PN) Seabees. The two ENCAP missions were executed from 17 January to 15 April and 22 April to 26 July.

These two school projects were located at Barangay Tagburos and Barangay Simpucan, respectively, both of Puerto Princesa City, Palawan Province. Both projects included over 110 cubic meters of concrete, 4,000 hollow concrete blocks, 3,800 linear feet of metal roofing. The work was completed in 124 workdays and increased school capacity by a total of 400, directly supporting COMPACFLT’s maritime strategy.

CCAD PHL had a junior crew with most on their first PACOM deployment. The construction activities were based on US standards as the project was planned and estimated in homeport. The PN Seabees, with an average age of 40 years, were more experienced having previously built similar schools for other exercises in the AO. US Seabees brought a rigorous quality control and safety awareness program to the projects. The combined result was successful, allowing NMCB 5 to learn valuable construction methods not utilized previously while teaching the PN Seabees an emphasis on safety and quality vice speed for building longevity. Both units gained invaluable knowledge, experience, and strengthened an already strong alliance.

The Philippine Marines Security detail assigned to CCAD PHL was focused on their mission of maintaining security and protecting us at the project site. At both locations the whole community, civilian and military, came together to provide the much needed safety network to the community. The students, their parents, teachers and local officials visited the jobsites daily to extend their gratitude. While community members were aware that the projects were funded by U.S. Forces, the challenge was to

educate them that the projects were a joint effort and a partnership between US Seabees and the Armed Forces of the Philippines.

At left, the initial site conditions are pictured. Below is the completed building.

BARANGAY TAGBUROS APLAYA ELEMENTARY SCHOOL
NCF# PHL13-001, DSCA# RP-HA-2012-00022496

Project Data

Project Scope: Construct a 7 m x 16 m two-room concrete masonry classroom. Requires demolition of existing two-classroom wood and plant-woven walls building. New building to include concrete footers, concrete columns, concrete slab, concrete hollow block (CHB) walls, prefabricated steel trusses, corrugated metal sheeting, metal doors, jalousie windows, cement board (hardiflex) drop ceiling, and sidewalk. Prime and paint all interior and exterior surfaces of new building.

Personnel:	13 NMCB 5/3 Host Nation	
Duration:	January 2013 – April 2013	
Mandays Expended:	Previous Battalion:	NEW START
	NMCB 5/Host Nation:	563/364
Tasking:	WIP at turnover:	N/A
	WIP at deployment completion:	100%
	MD Tasked to NMCB 5:	LOE
	Total Project MD:	927
Material Cost:	$57,820	
Cost Savings:	$324,450	
Significant Safety Issues:	Elevated heat conditions; frequent breaks from the sun, lots of water and ice.	
Significant QC Issues:	Concrete strength testing services not available.	
Significant Design Issues:	None.	
Significant Material Issues:	Inferior quality lumber (formwork).	

At left, the initial site conditions are pictured. Below is the current building.

BARANGAY SIMPUCAN ELEMENTARY SCHOOL
NCF# PHL13-002, DSCA# RP-HA-2012-00020824

Project Data

Project Scope: Construct a 7 m x 16 m two-room concrete masonry classroom. New building to include concrete footers, concrete columns, concrete slab, concrete hollow block (CHB) walls, prefabricated steel trusses, corrugated metal roof sheeting, gutter, downspout, metal doors and cement board (hardiflex) drop ceiling, and sidewalk. Prime and paint all interior and exterior surfaces of new building.

Personnel:	13 NMCB 5/7 Host Nation Engineers	
Duration:	April 2013 – July 2013	
Mandays Expended:	Previous Battalion:	NEW START
	NMCB 5/Host Nation:	652/349
Tasking:	WIP at turnover:	N/A
	WIP at deployment completion:	100%
	MD Tasked to NMCB 5:	LOE
	Total Project MD:	1001
Material Cost:	$42,794	
Cost Savings:	$350,350 ($350/MD)	
Significant Safety Issues:	Elevated heat conditions; Presence of 3 creek crossing during rainy season.	
Significant QC Issues:	Concrete strength testing services not available.	
Significant Design Issues:	None.	
Significant Material Issues:	Inferior quality lumber (formwork).	

OIC DISCRETIONARY

CCAD PHILIPPINES

PROJECT LISTING

Install sidewalk at Aplaya ES area	9
Build perimeter fence at Aplaya ES	20
Install sidewalk at Simpucan ES area	21
TOTAL MANDAYS EXPENDED	**50**

Placing sidewalk at Aplaya ES

Perimeter fence at Aplaya ES

Sidewalk at Simpucan Elementary School

CAMP MAINTENANCE

CCAD PHILIPPINES

CAMP MAINTENANCE

Clean, organize, and inventory CONEX Box	63
TOTAL MANDAYS EXPENDED	**63**

Organizing toolkits in the Conex box

Inventory of materials

Inventory of materials

LABOR DISTRIBUTION SUMMARY

Month	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	% Total
Direct Labor MDs	164	320	315	300	313	300	319	65%
Indirect Labor MDs	86	150	150	172	120	125	172	31%
Readiness/ Training	9	22	13	15	15	18	15	3%
Total MDs Expended	259	492	478	487	448	443	506	3113
# Total Personnel	14	17	18	23	23	23	23	
# Direct Labor	9	12	13	14	15	15	15	
# Workdays	11	22	24	24	24	23	24	
% Direct Labor 2	64%	71%	72%	61%	65%	65%	65%	
Ideal Capability	111	297	351	378	405	388	405	
Availability Factor	156%	115%	93%	83%	81%	82%	82%	

DETAIL CAMBODIA

Construction Civic Action Detail (CCAD) Cambodia successfully completed a seven month deployment executing over 3,500 mandays and $185K of humanitarian assistance construction, OIC-D and COMREL projects while maintaining 20 units of mission critical CESE.

CCAD Cambodia drilled five wells, renovated two primary schools while completing two discretionary and five community relations projects throughout the country and was one of the only USN units allowed to work outside Military Region Three (MR3) and move into the more rural Military Region Five (MR5). The importance of this movement goes far above the two wells that were drilled in the northern Battambang Province; it was a step forward in fulfilling PACOM priorities and supporting U.S. State Department objectives in the country.

Drilling in the Northern Province was not without its challenges. One location consisted of mostly clay soil and did not support any water bearing formations closer than 200 meters (656 feet). Current water well capabilities cannot develop a well deeper than 600 feet because the PVC casing cannot sustain borehole pressures below that depth. The other location in Battambang was drilled near the Phnom Sampov Mountain and produced over 300 gallons of water an hour without the need to recharge. This was due to an underground river that was being fed by large caverns in the mountainside that connected with other underground channels. Additionally, it was discovered that U.S. standard pumps will not work in country due to the difference in electric current supporting the pump. A Euro standard pump was identified and successfully installed in four operational water wells without issues.

At left, the initial site conditions are pictured. Below is the completed project.

HUN SEN KRONG PRIMARY SCHOOL NEW WATER WELL
CA13-003

Project Data

Project Scope: Drill and develop new 300 ft water well with electric pump. Install a water storage pad, 2000L storage tank and a fabricated water storage tank stand.

Personnel:	10	
Duration:	January 2013 – February 2013	
Mandays Expended:	Previous Battalion:	NEW START
	NMCB 5:	180
Tasking:	WIP at turnover:	N/A
	WIP at deployment completion:	100%
	MD Tasked to NMCB 5:	LOE
	Total Project MD:	180
Material Cost:	$10,000	
Cost Savings:	$63,000 ($350/MD)	
Significant Safety Issues:	None.	
Significant QC Issues:	None.	
Significant Design Issues:	None.	
Significant Material Issues:	U.S. standard pumps and wire are not compatible with local electricity.	

At left, the initial site conditions are pictured. Below is the completed building.

HUN SEN KRONG PRIMARY SCHOOL RENOVATION
CA13-004

Project Data

Project Scope: Repair/renovate a four classroom school building. Patch and repair interior/exterior walls and floors. Paint and repair all interior/exterior walls, doors, windows and shutters. Prep floors and place new ceramic tile floors in classrooms. Install new distribution panel, two outlets, two 4 ft fluorescent light fixtures per classroom and place gravel walkway to concrete steps.

Personnel:	6	
Duration:	January 2013 – February 2013	
Mandays Expended:	Previous Battalion:	NEW START
	NMCB 5:	102
Tasking:	WIP at turnover:	N/A
	WIP at deployment completion:	100%
	MD Tasked to NMCB 5:	LOE
	Total Project MD:	102
Material Cost:	$10,000	
Cost Savings:	$35,700 ($350/MD)	
Significant Safety Issues:	None.	
Significant QC Issues:	None.	
Significant Design Issues:	None.	
Significant Material Issues:	None.	

At left, the initial site conditions are pictured. Below is the completed building.

CHEA SIM PRIMARY SCHOOL LIBRARY RENOVATION
CA13-005

Project Data

Project Scope: Repair/renovate a two classroom library building. Patch, paint and repair interior/exterior walls. Patch and repair exterior concrete pad. Demo existing roof and install new metal corrugated roof system. Remove wooden windows, shutters and doors and replace with new aluminum windows and new wooden doors. Install panel box with one light and one light switch in each room.

Personnel:	6	
Duration:	February 2013 – March 2013	
Mandays Expended:	Previous Battalion:	NEW START
	NMCB 5:	180
Tasking:	WIP at turnover:	N/A
	WIP at deployment completion:	100%
	MD Tasked to NMCB 5:	LOE
	Total Project MD:	180
Material Cost:	$10,000	
Cost Savings:	$63,000 ($350/MD)	
Significant Safety Issues:	None.	
Significant QC Issues:	None.	
Significant Design Issues:	None.	
Significant Material Issues:	None.	

At left, the initial site conditions are pictured. Below is the completed well.

TRAPAING RUNG HEALTH CENTER NEW WATER WELL
CA13-006

Project Data

Project Scope: Drill and develop new 300 ft water well with electric pump. Connect well plumbing to existing 1000L storage tank.

Personnel:	12	
Duration:	February 2013 – March 2013	
Mandays Expended:	Previous Battalion:	NEW START
	NMCB 5:	145
Tasking:	WIP at turnover:	N/A
	WIP at deployment completion:	100%
	MD Tasked to NMCB 5:	LOE
	Total Project MD:	145
Material Cost:	$10,000	
Cost Savings:	$50,750 ($350/MD)	
Significant Safety Issues:	None.	
Significant QC Issues:	None.	
Significant Design Issues:	None.	
Significant Material Issues:	U.S. standard pumps and wire are not compatible with local electricity.	

At left, the initial site conditions are pictured. Below is the site of the abandoned well.

KOR KOSH HEALTH CENTER NEW WATER WELL
CA13-007

Project Data

Project Scope: Drill and develop new 300 ft water well with electric pump.

Personnel:	18	
Duration:	April 2013 – May 2013	
Mandays Expended:	Previous Battalion:	NEW START
	NMCB 5:	303
Tasking:	WIP at turnover:	N/A
	WIP at deployment completion:	100%
	MD Tasked to NMCB 5:	LOE
	Total Project MD:	303
Material Cost:	$10,000	
Cost Savings:	$106,050 ($350/MD)	
Significant Safety Issues:	Fire accident burned up trash pump.	
Significant QC Issues:	None.	
Significant Design Issues:	Borehole issues and no water detected led to an abandoned well.	
Significant Material Issues:	U.S. standard pumps and wire are not compatible with local electricity.	

At left, the initial site conditions are pictured. Below is the completed well.

PHNOM SAMPOV HEALTH CENTER NEW WATER WELL
CA13-008

Project Data

Project Scope: Drill and develop new 300 ft water well with electric pump. Install water storage pad, 2000L storage tank and a fabricated water storage tank stand.

Personnel:	14	
Duration:	June 2013	
Mandays Expended:	Previous Battalion:	NEW START
	NMCB 5:	228
Tasking:	WIP at turnover:	N/A
	WIP at deployment completion:	100%
	MD Tasked to NMCB 5:	LOE
	Total Project MD:	228
Material Cost:	$10,000	
Cost Savings:	$79,800 ($350/MD)	
Significant Safety Issues:	None.	
Significant QC Issues:	None.	
Significant Design Issues:	None.	
Significant Material Issues:	U.S. standard pumps and wire are not compatible with local electricity.	

OIC DISCRETIONARY

CCAD CAMBODIA

PROJECT LISTING

Sihanoukville Orphanage Renovation	45
Cambodian Landmine Museum Ditch Project	27
REAM Naval Base Water Well	64
TOTAL MANDAYS EXPENDED	**136**

Renovated orphanage building

Drainage ditch at Landmine Museum

Finishing up REAM Naval Base water well project

CESE/CAMP MAINTENANCE

CCAD CAMBODIA

CESE MAINTENANCE

3M, corrective and emergent repairs	405
Building storage facilities and expanding MLO/Alfa Yard	225
TOTAL MANDAYS EXPENDED	**630**

Performing corrective maintenance

Completed outside MLO storage area

LABOR DISTRIBUTION SUMMARY

Month	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	% Total
Direct Labor MDs	192	254	110	308	10	228	50	33%
Indirect Labor MDs	55	237	300	204	525	291	450	59%
Readiness/ Training	14	44	68	29	64	39	39	8%
Total MDs Expended	261	535	478	541	599	558	539	3511
# Total Personnel	19	21	21	21	21	21	21	
# Direct Labor	16	18	18	18	18	18	18	
# Workdays	12	21	22	24	24	24	24	
% Direct Labor 2	84%	86%	86%	86%	86%	86%	86%	
Ideal Capability	216	425	446	486	486	486	486	
Availability Factor	95%	70%	40%	69%	15%	55%	18%	

EXERCISE COBRA GOLD

Exercise Cobra Gold 2013 was designed to improve multinational interoperability and capability to effectively plan and execute complex multinational operations, to include Humanitarian Civic Assistance (HCA) events. The multinational HCA Task Force (HCATF) personnel executed HCA projects from 14 January to 22 February. Their contributions to the economic and social development of select Thai communities strengthened the professional relationship between participating military forces. NMCB 5 deployed 23 Seabees to Chiang Mai, Thailand to conduct one Engineering Civic Assistant Project (ENCAP) in support of Exercise Cobra Gold 2013, led by the Marine Corps Forces, Pacific (MARFORPAC). NMCB 5 fell under tactical control of the Coalition Joint Civil-Military Operations Task Force (CJCMOTF). These ENCAP missions were a bilateral effort between NMCB 5 Seabees and a composite of 22 Royal Thai Air Force (RTAF) engineers, 10 Malaysian Army Construction Engineers (MACE), and 12 Tentara Nasional Indonesia (TNI) engineers.

The exercise brought NMCB 5 Seabees, MACE, TNI, and RTAF engineers together and allowed them to share knowledge with each other. The RTAF had more construction experience but NMCB 5 Seabees provided better equipment, newer technology, and a rigorous quality control program. MACE and TNI engineers were proficient in applying stucco, painting, and laying brick. NMCB 5 Seabees learned valuable construction methods like using the water level and string lines in place of more advanced technology. NMCB 5 Seabees taught the other units about construction and construction management techniques focusing on safety and quality control. All parties gained valuable knowledge and experience from the exercise and, more importantly, were able to forge international partnerships and develop mutually beneficial relationships.

At left, NMCB 5. Below is the completed building.

BAN PIANG RAT SCHOOL
ENCAP SITE #1

Project Data

Project Scope: The project included the construction of a 7.8 m x 20 m CMU block three-room building. It was specified in plans to include concrete slab on grade, pre-cast concrete columns, CMU block walls with exterior stucco/interior plaster, movable accordion style partition walls, six single doors, 12 windows, concrete sidewalks, and internal electrical distribution.

Personnel:	23 NMCB 5/ 54 Host Nation	
Duration:	January 2013 – February 2013	
Mandays Expended:	Previous Battalion:	NEW START
	NMCB 5/Host Nation:	429
Tasking:	WIP at turnover:	N/A
	WIP at deployment completion:	100%
	MD Tasked to NMCB 5:	LOE
	Total Project MD:	429
Material Cost:	$62,631	
Cost Savings:	$150,150 ($350/MD)	
Significant Safety Issues:	None.	
Significant QC Issues:	None.	
Significant Design Issues:	None.	
Significant Material Issues:	None.	

EXERCISE BALIKATAN

In response to the 30NCR PACOM Deployment OPORD 01-10 and Combined Joint Civil Military Operations Task Force (CJCMOTF) EXPLAN 01-11, NMCB 5 deployed a total of 25 Seabees to the Zambales Province of the Philippines to construct two Engineering Civic Action Program (ENCAP) projects in support of Exercise BALIKATAN 2013. NMCB 5 fell under tactical control of the CJCMOTF, located at Naval Education and Training Command (NETC), Naval Station San Miguel in San Antonio, Zambales. The Balikatan HQ component was located at Camp Aguinaldo, Manila. These ENCAP missions were a bilateral effort between NMCB 5 Seabees, Filipino (PN) Seabees from the 4th NMCB and Naval Construction Brigade (NCB), PN Army Engineers, and PN Air Force Engineers. The ENCAP missions were executed from 17 March to 17 April.

The first project that NMCB 5 was tasked with, ENCAP 4, was to construct a 210 foot long steel cable suspension footbridge, outfitted with handrails, chain link fence sides, and wood plank decking for the Barangay of San Pascual. The footbridge was built to specification with 15 foot high Construction Masonry Unit (CMU) block abutments and backfilled with earth to form a 25 degree slope that was capped in concrete to form the bridge’s approach ramp. Although the San Pascual River is easily fordable during the dry season, the completed footbridge facilitated the local village’s access of farmland across the river during the rainy season when the river reaches max capacity and is too dangerous to cross. Prior to the construction of the footbridge, village farmers were forced to walk two miles to a heavily trafficked highway bridge to access their farmlands and bring their goods back to market. Now that the footbridge has been built, villagers have ease of access to their farmland directly adjacent to the Barangay center.

The second project that NMCB 5 was tasked with, ENCAP 8, was to construct a 45 cubic meter ferro-cement water tank. The tank was composed of a concrete pad foundation, reinforcing steel (RST) and chicken wire walls/roof, and coated with a four inch ferro-cement coating on the interior and exterior. The water tank was built for an elementary school in the Barangay of Looc. The school’s potable water source comes from a spring which completely dries up during the dry season. The water tank will provide the school with a potable water source during the dry season when the natural spring no longer provides any water.

After completing both projects, while partnered with Filipino Engineers, it was evident by the show of support by the local citizens of San Pascual and Looc that both ENCAPs had a very positive and significant impact on the local communities. In addition to leaving a lasting positive impact, the Seabees of NMCB 5 and Filipino Engineers were able to foster a strong relationship and share construction techniques and knowledge, thereby furthering PACOM’s presence and strategy in the AO.

At left, Seabees from NMCB 5 install decking for the footbridge. Below, the completed footbridge pictured from the west side of the river.

SAN PASCUAL FOOTBRIDGE

Project Data

Project Scope: Construct a 70 m steel cable suspension foot bridge consisting of 5 m tall CMU block abutments, 25 degree sloped concrete-capped ramp, cable handrails, chain link fence sides and wood plank decking.

Personnel:	24 NMCB 5/ 16 Philippine Seabees	
Duration:	March 2013 – April 2013	
Mandays Expended:	Previous Battalion:	NEW START
	NMCB 5:	584
Tasking:	WIP at turnover:	N/A
	WIP at deployment completion:	100%
	MD Tasked to NMCB 5:	584
	Total Project MD:	584
Material Cost:	$60,000	
Cost Savings:	$204,400 ($350/MD)	
Significant Safety Issues:	Fall protection was pivotal as the majority of work was 16 ft overhead.	
Significant QC Issues:	None.	
Significant Design Issues:	None.	
Significant Material Issues:	None.	

At left, the partnered crew applies stucco to the roof. Below, the completed water tank pictured.

LOOC FERRO CEMENT WATER TANK

Project Data

Project Scope: Place a CMU block/concrete pad foundation and build a 45 cubic meter ferro-cement water tank composed of RST, chicken wire, and stucco. Install utilities with inlet and outlet valves coming from the water source and leading to the school.

Personnel:	9 NMCB 5/ 6 Philippine Engineers	
Duration:	March 2013 – April 2013	
Mandays Expended:	Previous Battalion:	NEW START
	NMCB 5:	195
Tasking:	WIP at turnover:	N/A
	WIP at deployment completion:	100%
	MD Tasked to NMCB 5:	195
	Total Project MD:	195
Material Cost:	$6,000	
Cost Savings:	$68,250 ($350/MD)	
Significant Safety Issues:	None.	
Significant QC Issues:	None.	
Significant Design Issues:	None.	
Significant Material Issues:	None.	

EXERCISE CJLOTS

NMCB 5 DET Chinhae and Combined Forces Command (CFC) units along with other U.S. and ROK assets conducted Combined Joint Logistics over the Shore (CJLOTS) training and executed CJLOTS operations in the Korean Theater of Operations (KTO) in conjunction with OPERATION FOAL EAGLE 13 to train and assess theater CJLOTS capabilities.

The purpose of this operation was to train CJLOTS in the context of an Assault Follow-On Echelon (AFOE) operations scenario, integrating ROK and U.S. C4I in support of CJLOTS operations, improve ROK and U.S. alliance readiness, and support SA 2015 objectives. During the exercise, the team was tasked with in-stream discharge and lighterage operations (100/460 ROK/U.S. units of rolling stock and containers), offshore petroleum discharge operations, and inland petroleum distribution operations in addition to CJLOTS operations for both dry and wet cargo to increase the force projection and sustainment options available to the Joint Force Commander.

CJLOTS is an essential element of the tactical, operational, and strategic logistics capabilities in the KTO. Execution of periodic CJLOTS training enables units to maintain and improve their core competencies for these types of operations. In order to continue the CJLOTS capabilities in the KTO, CFC units conducted JLOTS & CJLOTS exercises from 18 April to 28 April, during KEY RESOLVE/FOAL EAGLE 2013. The exercise intent was to enhance readiness through exercising C2, multi-national functions and logistics capabilities, and exercising combined and joint assault follow-on echelon operations via CJLOTS capabilities. The Joint Mobility Construction Team (NMCB 5 and ROK) established and provided an ROK Joint Command Post and LSA to accommodate 1,500 personnel.

At left, the initial site conditions are pictured. Below is the completed 1500 man tent camp with all support structures.

COMBINED JOINT LOGISTICS OVER THE SHORE
CJLOTS 2013

Project Data

Project Scope: Deploy in the vicinity of Pohang, South Korea from 01APR2013 to 21APR2013. While deployed to Pohang, NMCB 5 will work with Amphibious Construction Battalion One (ACB 1), in the construction of a 1200-1500 man camp and then construct 300 man ROK camp, LCC and COMREL with the ROK Seabees.

Personnel:	10	
Duration:	April 2013	
Mandays Expended:	Previous Battalion:	NEW START
	NMCB 5:	210
Tasking:	WIP at turnover:	N/A
	WIP at deployment completion:	100%
	MD Tasked to NMCB 5:	210
	Total Project MD:	210
Material Cost:	$80,272	
Cost Savings:	$73,500 ($350/MD)	
Significant Safety Issues:	Heavy winter rains inundated the site increasing the potential for cold weather injuries and tripping/slipping hazards.	
Significant QC Issues:	None.	
Significant Design Issues:	None.	
Significant Material Issues:	Materials for the exercise were purchased and staged prior to the beginning of the Camp build. No apparent material issues or concerns. Additional tools were required from Detail Chinhae to expedite construction of tent decking and walk ways.	

EXERCISE CARAT

Cooperation Afloat Readiness and Training (CARAT) is a 7th Fleet sponsored series of bilateral Navy to Navy exercises focusing on improving interoperability and increasing regional stability in Southeast Asia. Engineers from the US Navy Seabees, Indonesian Marine Corp (TNI-AL), Royal Thai Navy Engineers (RTN), Royal Malaysian Engineer (RMAE), and Philippines Seabees conducted general and specialized engineer operations in support of CTF73/DESRON 7.

All engineering activities were relevant to contingency and HA/DR and demonstrated new building technologies such as Saebi Alternative Building System (SABS), Concrete Cloth, and Explosive Remnants of War Collection Points (ERW-CP).

NMCB 5 deployed two teams of 10 Seabees to Indonesia, Thailand, Malaysia and the Philippines in support of CTF 73 CARAT Exercise from 13 May to 29 July. The exercise was an overwhelming success due to the hard work and dedication of NMCB 5 Seabees and their counterpart nations. With an aggressive schedule before them, all personnel involved gained invaluable knowledge and experience through effective communication and sharing construction methods. Close communication with partner nations allowed the parties to enhance cultural knowledge while leaving a positive impression on all visited countries. In addition to strengthening the professional relationship between participating countries, the exercise promoted regional security and enhanced the capabilities of and interoperability between each host nation military engineer forces while developing local communities.

The engineering mission conducted by NMCB 5 in conjunction with their engineering partners accomplished several PACOM strategic objectives including:

- Strengthen existing alliances and partnerships while building new ones by conducting engineering activities that

improve interoperability between U.S. Navy, partner nation, other government agencies and non-government organizations

- Ensure freedom of movement in the global commons by deploying engineer forces to areas of strategic interest to PACOM

- Enhance regional security by conducting engineering activities that improve bilateral respond to contingency and HA/DR scenarios

At left, the initial site conditions are pictured. Below is the completed building.

SAEBI ALTERNATIVE BUILDING SYSTEM (SABS)
CARAT INDONESIA 2013

Project Data

Project Scope: Construct a 16 ft x 13 ft SABS on four inch concrete slab with thickened edge IAW provided drawings. Install three windows, one door, interior electrical and panel box (TNI-AL will connect power to grid). Complete interior/exterior paint and affix plaque.

Personnel:	10 NMCB 5/ 15 Host Nation	
Duration:	May 2013	
Mandays Expended:	Previous Battalion:	NEW START
	NMCB 5/Host Nation:	101
Tasking:	WIP at turnover:	N/A
	WIP at deployment completion:	100%
	MD Tasked to NMCB 5:	LOE
	Total Project MD:	101
Material Cost:	$15,674	
Cost Savings:	$35,350 ($350/MD)	
Significant Safety Issues:	None.	
Significant QC Issues:	None.	
Significant Design Issues:	Original plan of SABS electrical branch circuits to be ran with rigid non-metallic tubing. Material could not be acquired locally and was substituted with Romex type wire.	
Significant Material Issues:	The quality of the concrete plays an important factor during GFRC application. Recommend having a translator when contractor is ready to purchase the concrete in order to translate the instruction printed on the concrete bags to ensure that purchase of correct material.	

At left, the initial site conditions are pictured. Below is the completed building.

CONCRETE CLOTH CARAT INDONESIA 2013

Project Data

Project Scope: Utilize two rolls of concrete cloth in support of Humanitarian Assistance and Disaster Relief (HA/DR).

Personnel:	4 NMCB 5/ 4 Host Nation	
Duration:	May 2013	
Mandays Expended:	Previous Battalion:	NEW START
	NMCB 5/Host Nation:	32
Tasking:	WIP at turnover:	N/A
	WIP at deployment completion:	100%
	MD Tasked to NMCB 5:	LOE
	Total Project MD:	32
Material Cost:	$0	
Cost Savings:	$11,200 ($350/MD)	
Significant Safety Issues:	None.	
Significant QC Issues:	None.	
Significant Design Issues:	None.	
Significant Material Issues:	Recommend application of a concrete mix to the edge of the concrete cloth and at contact areas with structures to seal properly and prevent any erosion beneath the cloth.	

At left is the initial ERW-CP classroom instruction. Below is the completed ERW-CP.

EXPLOSIVE REMNANTS OF WAR COLLECTION POINTS (ERW-CP) CARAT INDONESIA 2013

Project Data

Project Scope: Install new gutters and water catchment system. Repair existing restroom facility to include installation of nine new toilets and two faucets. Construct partition wall in school library and install four fluorescent light fixtures. Replace 150 broken/missing window louvers. Repair fence. Repair elevated tank pad. Prime and paint the exterior of all school buildings.

Personnel:	2 NMCB 5/ 8 Host Nation	
Duration:	May 2013	
Mandays Expended:	Previous Battalion:	NEW START
	NMCB 5/Host Nation:	32
Tasking:	WIP at turnover:	N/A
	WIP at deployment completion:	100%
	MD Tasked to NMCB 5:	LOE
	Total Project MD:	32
Material Cost:	$520	
Cost Savings:	$11,200 ($350/MD)	
Significant Safety Issues:	None.	
Significant QC Issues:	None.	
Significant Design Issues:	None.	
Significant Material Issues:	None.	

At left, the initial site conditions are pictured. Below is the completed building.

SAEBI ALTERNATIVE BUILDING SYSTEM (SABS)
CARAT THAILAND 2013

Project Data

Project Scope: Construct 16 ft x 13 ft SABS on four-inch concrete slab with thickened edge IAW provided drawings. Install three windows, door, interior electrical, and panel box (RTN will connect power to grid). Complete interior/exterior paint and affix plaque.

Personnel:	10 NMCB 5/ 10 Host Nation	
Duration:	May 2013 – June 2013	
Mandays Expended:	Previous Battalion:	NEW START
	NMCB 5/Host Nation:	108
Tasking:	WIP at turnover:	N/A
	WIP at deployment completion:	100%
	MD Tasked to NMCB 5:	LOE
	Total Project MD:	108
Material Cost:	$16,582	
Cost Savings:	$8,000	
Significant Safety Issues:	None.	
Significant QC Issues:	None.	
Significant Design Issues:	None.	
Significant Material Issues:	None.	

At left, ERW-CP before explosion.
Below is ERW-CP after explosion.

EXPLOSIVE REMNANTS OF WAR COLLECTION POINTS (ERW-CP)
CARAT THAILAND 2013

Project Data

Project Scope: Construct ERW-CP with four used tires, concrete, and local inexpensive materials. Demonstrate the use of ERW-CP in support of Humanitarian Assistance and Disaster Relief (HA/DR) Field Training Exercise.

Personnel:	3 NMCB 5/ 3 Host Nation	
Duration:	June 2013	
Mandays Expended:	Previous Battalion:	NEW START
	NMCB 5/Host Nation:	32
Tasking:	WIP at turnover:	N/A
	WIP at deployment completion:	100%
	MD Tasked to NMCB 5:	LOE
	Total Project MD:	32
Material Cost:	$0	
Cost Savings:	$11,200	
Significant Safety Issues:	None.	
Significant QC Issues:	None.	
Significant Design Issues:	None.	
Significant Material Issues:	None.	

At left, the initial site conditions are pictured. Below is the completed building.

SAEBI ALTERNATIVE BUILDING SYSTEM (SABS)
CARAT MALAYSIA 2013

Project Data

Project Scope: Construct a 16 ft x 13 ft SABS on an 8-in reinforced concrete slab with thickened edges IAW provided drawings. Install three windows, one door, interior electrical and service panel (RER will tap grid power), one split-system A/C unit, and one pedestal sink with cold water supply. Complete interior/exterior paint and affix plaque.

Personnel:	10 NMCB 5/ 15 Host Nation	
Duration:	June 2013	
Mandays Expended:	Previous Battalion:	NEW START
	NMCB 5/Host Nation:	124
Tasking:	WIP at turnover:	N/A
	WIP at deployment completion:	100%
	MD Tasked to NMCB 5:	LOE
	Total Project MD:	124
Material Cost:	$17,623	
Cost Savings:	$43,400	
Significant Safety Issues:	None.	
Significant QC Issues:	None.	
Significant Design Issues:	None.	
Significant Material Issues:	None.	

At left, the initial site conditions are pictured. Below is the completed building.

CONCRETE CLOTH
CARAT MALAYSIA 2013

Project Data

Project Scope: Utilize two rolls of concrete clothe in support of Humanitarian Assistance and Disaster Relief (HA/DR).

Personnel:	2 NMCB 5/ 4 Host Nation	
Duration:	June 2013	
Mandays Expended:	Previous Battalion:	NEW START
	NMCB 5/Host Nation:	32
Tasking:	WIP at turnover:	N/A
	WIP at deployment completion:	100%
	MD Tasked to NMCB 5:	LOE
	Total Project MD:	32
Material Cost:	$0	
Cost Savings:	$11,200 ($350/MD)	
Significant Safety Issues:	None.	
Significant QC Issues:	None.	
Significant Design Issues:	None.	
Significant Material Issues:	Recommend application of a concrete mix to the edge of the concrete cloth at contact with structures to seal properly and prevent erosion under the concrete cloth.	

At left is the initial ERW-CP classroom instruction. Below is the completed ERW-CP.

EXPLOSIVE REMNANTS OF WAR COLLECTION POINTS (ERW-CP)
CARAT MALAYSIA 2013

Project Data

Project Scope: Construct ERW-CP with four used tires, concrete, soil and natural fibers. The preferred dissemination technique is a train-the-trainer format though local engagement regardless of program or organization. To overcome all language barriers, use this "How To Manual" in conjunction with "How To Poster." Demonstrate the use of ERW-CP in support of Humanitarian Assistance and Disaster Relief (HA/DR).

Personnel:	2 NMCB 5/ 8 Host Nation	
Duration:	May 2013	
Mandays Expended:	Previous Battalion:	NEW START
	NMCB 5/Host Nation:	32
Tasking:	WIP at turnover:	N/A
	WIP at deployment completion:	100%
	MD Tasked to NMCB 5:	LOE
	Total Project MD:	32
Material Cost:	$520	
Cost Savings:	$11,200 ($350/MD)	
Significant Safety Issues:	None.	
Significant QC Issues:	None.	
Significant Design Issues:	None.	
Significant Material Issues:	None.	

At left, the initial site conditions are pictured. Below is the completed building.

SAEBI ALTERNATIVE BUILDING SYSTEM (SABS)

Project Data

Project Scope: Construct a 16 ft x 13 ft SABS on 4 in concrete slab with thickened edge IAW provided drawings. Install three windows, door, interior electrical, and panel box (PN Seabees will connect power to grid). Complete interior/exterior paint and affix plaque.

Personnel:	10 NMCB 5/ 7 Host Nation	
Duration:	July 2013 – August 2013	
Mandays Expended:	Previous Battalion:	NEW START
	NMCB 5/Host Nation:	108
Tasking:	WIP at turnover:	N/A
	WIP at deployment completion:	100%
	MD Tasked to NMCB 5:	LOE
	Total Project MD:	108
Material Cost:	$16,582	
Cost Savings:	$37,800 ($350/MD)	
Significant Safety Issues:	None.	
Significant QC Issues:	None.	
Significant Design Issues:	None.	
Significant Material Issues:	None.	

EXERCISE PACIFIC PARTNERSHIP

Pacific Partnership is an annual exercise conducted by PACOM in conjunction with host nations (HN) and partner nations (PN). The exercise grew out of the 2004 Indonesian Tsunami disaster where a primary lesson learned was that increased interoperability was needed between regional partners to respond to regional disasters and security needs. Pacific Partnership 2013 focused on the Oceania region in HN of Western Samoa, Tonga, Papua New Guinea, the Solomon Islands, Kiribati, and the Republic of the Marshall Islands. PN included Australia, Canada, France, Japan, New Zealand, and Malaysia. 2013 was the first year that PN's led individual phases of the exercise with Australia leading efforts in Papua New Guinea and New Zealand in Kiribati and the Solomon Islands.

The exercise combined engineering, medical, non-governmental organizations, and subject matter expert exchange (SMEE) engagements in each host nation conducted by multi-service and multi-national teams with the objectives of increasing host nation capacity and building interoperability. NMCB 5 deployed a team of 25 Seabees in support of the engineering mission in Western Samoa and Tonga from 30 April to 28 June. NMCB 5 was joined by 24 engineers from the French Armed Forces of New Caledonia (FANC), 12 Seabees from Amphibious Construction Battalion ONE (ACB1), 13 Marines from the 7th Engineer Support Battalion (7ESB), and 7 New Zealand engineers from the 25th Engineering Support Squadron of the New Zealand Army.

The engineering team completed five ENCAPs in Samoa. Projects included renovations at the Asau, Falealupo, and Neiafu Primary Schools, Fale Construction at Tuasivi Hospital, and installation of 10 water tanks at seven different schools. The combined impact of these projects increased usable classroom facilities for 925 students, patient caregiver living and cooking facilities for a hospital that serves 150 patients daily and provided an increase of 52K liters of rain water harvesting. In Tonga, the engineering team completed 5 ENCAPs. Projects included renovations at Atele, Lapaha, Malapo, and Afa Primary Schools and installation of eight water tanks at four clinics. The combined impact of these projects increased usable classroom facilities for 723 students and provided an increase of 32K liters of rainwater harvesting.

The engineering mission executed by NMCB 5 in conjunction with their engineering partners accomplished several PACOM strategic objectives including:

- Improving maritime security through interoperability

- Improving ability to respond to all hazard events by increasing HN capacity through facilities improvements and empowering local leaders to take part in and participate in engineering activities

- Building partnerships throughout Oceania with regional nations by including French and New Zealand engineers, particularly NCO’s in leadership roles during execution

- Increasing DOD readiness to respond to an all hazards event by personnel participating in PP13

At left, the initial site conditions are pictured. Below is the completed building.

FALEALUPO PRIMARY SCHOOL RENOVATIONS
PACIFIC PARTNERSHIP 2013

Project Data

Project Scope: Demolish and rebuild a four stall restroom. Install 500 ft of gutters and four additional 6000L water tanks. Construct 40 ft sidewalk between school and existing restroom. Prime and paint the exterior of all school buildings.

Personnel:	2 NMCB 5/ 9 Host Nation	
Duration:	May 2013 – June 2013	
Mandays Expended:	Previous Battalion:	NEW START
	NMCB 5/Host Nation:	540
Tasking:	WIP at turnover:	N/A
	WIP at deployment completion:	100%
	MD Tasked to NMCB 5:	LOE
	Total Project MD:	540
Material Cost:	$24,556	
Cost Savings:	$189,000 ($350/MD)	
Significant Safety Issues:	None.	
Significant QC Issues:	None.	
Significant Design Issues:	None.	
Significant Material Issues:	None.	

At left, the initial site conditions are pictured. Below is the completed building.

ASAU PRIMARY SCHOOL RENOVATIONS
PACIFIC PARTNERSHIP 2013

Project Data

Project Scope: Replace six toilets, repair six damaged toilets, and replace one faucet. Repair plumbing and drains in teacher's restroom. Renovate old restroom to a shower (6 heads). Replace 14 fluorescent light fixtures. Rebuild and convert existing building for a library/computer lab. Prime and paint all interior and exterior surfaces.

Personnel:	12 NMCB 5/ 18 Host Nation	
Duration:	May 2013 – June 2013	
Mandays Expended:	Previous Battalion:	NEW START
	NMCB 5/Host Nation:	621
Tasking:	WIP at turnover:	N/A
	WIP at deployment completion:	100%
	MD Tasked to NMCB 5:	LOE
	Total Project MD:	621
Material Cost:	$36,895	
Cost Savings:	$217,350 ($350/MD)	
Significant Safety Issues:	None.	
Significant QC Issues:	None.	
Significant Design Issues:	None.	
Significant Material Issues:	Contractor frequently delivered incomplete material orders causing personnel to have to reutilize material from demolition to keep construction on schedule.	

At left, the initial site conditions are pictured. Below is the completed building.

NEAIFU PRIMARY SCHOOL RENOVATIONS
PACIFIC PARTNERSHIP 2013

Project Data

Project Scope: Install new gutters and water catchment system. Repair existing restroom facility to include installation of nine new toilets and two faucets. Construct partition wall in school library and install four fluorescent light fixtures. Replace 150 broken/missing window louvers. Repair fence. Repair elevated tank pad. Prime and paint the exterior of all school buildings.

Personnel:	4 NMCB 5/ 11 Host Nation	
Duration:	May 2013 – June 2013	
Mandays Expended:	Previous Battalion:	NEW START
	NMCB 5/Host Nation:	152
Tasking:	WIP at turnover:	N/A
	WIP at deployment completion:	100%
	MD Tasked to NMCB 5:	LOE
	Total Project MD:	152
Material Cost:	$26,371	
Cost Savings:	$53,200 ($350/MD)	
Significant Safety Issues:	None.	
Significant QC Issues:	None.	
Significant Design Issues:	None.	
Significant Material Issues:	None.	

Water catchment systems installed at Apia Primary School and Samoa College.

WATER CATCHMENT SYSTEM INSTALLATION - SAMOA PACIFIC PARTNERSHIP 2013

Project Data

Project Scope: Construction of ten 6000L water catchment systems on concrete pad with gutters and down spouts located at school locations based on the recommendations of the Ministry of Education, Sports, and Culture.

Personnel:	1 NMCB 5/ 19 Host Nation	
Duration:	May 2013 – June 2013	
Mandays Expended:	Previous Battalion:	NEW START
	NMCB 5/Host Nation:	100
Tasking:	WIP at turnover:	N/A
	WIP at deployment completion:	100%
	MD Tasked to NMCB 5:	LOE
	Total Project MD:	100
Material Cost:	$26,106	
Cost Savings:	$35,000 ($350/MD)	
Significant Safety Issues:	None.	
Significant QC Issues:	None.	
Significant Design Issues:	None.	
Significant Material Issues:	None.	

At left, the initial site conditions are pictured. Below is the completed building.

MALAPO PRIMARY SCHOOL RENOVATIONS
PACIFIC PARTNERSHIP 2013

Project Data

Project Scope: Demolish and reconstruct existing 120ft x 6ft veranda along two school buildings including roof support columns using pressure treated lumber and galvanized fasteners. Replace deteriorated siding on buildings. Replace 70 missing/damaged window louvers. Prime and paint exterior of both school buildings.

Personnel:	4 NMCB 5/ 7 Host Nation	
Duration:	June 2013	
Mandays Expended:	Previous Battalion:	NEW START
	NMCB 5/Host Nation:	90
Tasking:	WIP at turnover:	N/A
	WIP at deployment completion:	100%
	MD Tasked to NMCB 5:	LOE
	Total Project MD:	90
Material Cost:	$9,307	
Cost Savings:	$31,500 ($350/MD)	
Significant Safety Issues:	None.	
Significant QC Issues:	None.	
Significant Design Issues:	None.	
Significant Material Issues:	None.	

At left, the initial site conditions are pictured. Below is the completed building.

ATELE PRIMARY SCHOOL RENOVATIONS
PACIFIC PARTNERSHIP 2013

Project Data

Project Scope: Demolish and replace existing roof system, including trusses, roof sheeting, fascia, soffit, guttering, and ceiling, window and door replacement including glass louvers, paint and prime exterior and interior of building, floor repairs, and electrical upgrades to provide lighting in classrooms. Prime and paint interior and exterior of both buildings

Personnel:	7 NMCB 5/ 18 Host Nation	
Duration:	June 2013	
Mandays Expended:	Previous Battalion:	NEW START
	NMCB 5/Host Nation:	225
Tasking:	WIP at turnover:	N/A
	WIP at deployment completion:	100%
	MD Tasked to NMCB 5:	LOE
	Total Project MD:	225
Material Cost:	$70,338	
Cost Savings:	$78,750 ($350/MD)	
Significant Safety Issues:	None.	
Significant QC Issues:	None.	
Significant Design Issues:	None.	
Significant Material Issues:	None.	

At left, the initial site conditions are pictured. Below is the completed building.

AFA PRIMARY SCHOOL RENOVATIONS
PACIFIC PARTNERSHIP 2013

Project Data

Project Scope: Replace existing deteriorated siding on school building, install new fascia and barge flashing on existing classroom building, replace 20 window louvers, replace ten windows and four doors, one restroom sink, and a 9ft x 3ft damaged concrete sidewalk section. Prime and paint all interior and exterior surfaces.

Personnel:	3 NMCB 5/ 9 Host Nation	
Duration:	June 2013	
Mandays Expended:	Previous Battalion:	NEW START
	NMCB 5/Host Nation:	84
Tasking:	WIP at turnover:	N/A
	WIP at deployment completion:	100%
	MD Tasked to NMCB 5:	LOE
	Total Project MD:	84
Material Cost:	$9,307	
Cost Savings:	$29,400 ($350/MD)	
Significant Safety Issues:	None.	
Significant QC Issues:	None.	
Significant Design Issues:	None.	
Significant Material Issues:	None.	

At left, the initial site conditions are pictured. Below is the completed building.

WATER CATCHMENT SYSTEM INSTALLATION - TONGA
PACIFIC PARTNERSHIP 2013

Project Data

Project Scope: Install gutters, concrete pad, and two 5000L water tanks at multiple clinics on Tongatapu Island. Locations are Fua'amoto Clinic, Nukunuku Clinic, Kolonga Clinic, and Houma Clinic.

Personnel:	3 NMCB 5/ 8 Host Nation	
Duration:	June 2013	
Mandays Expended:	Previous Battalion:	NEW START
	NMCB 5/Host Nation:	100
Tasking:	WIP at turnover:	N/A
	WIP at deployment completion:	100%
	MD Tasked to NMCB 5:	LOE
	Total Project MD:	100
Material Cost:	$25,080	
Cost Savings:	$35,000 ($350/MD)	
Significant Safety Issues:	None.	
Significant QC Issues:	None.	
Significant Design Issues:	None.	
Significant Material Issues:	None.	

At left, the initial site conditions are pictured. Below is the completed building.

LAPAHA PRIMARY SCHOOL RENOVATIONS
PACIFIC PARTNERSHIP 2013

Project Data

Project Scope: Demolish existing roof and exterior walls to existing CMU knee wall and 20ft x 24ft slab. Demolish 180ft x 24ft building. Construct exterior and interior walls, trusses, roof sheeting, fascia, soffit, gutters, doors, windows and louvers, floor repair, electrical, and prime and paint interior and exterior. Replace three toilets and showers, one sink, doors, roof sheeting and prime and paint interior exterior of classroom and restroom facility.

Personnel:	4 NMCB 5/ 14 Host Nation	
Duration:	June 2013	
Mandays Expended:	Previous Battalion:	NEW START
	NMCB 5/Host Nation:	100
Tasking:	WIP at turnover:	N/A
	WIP at deployment completion:	100%
	MD Tasked to NMCB 5:	LOE
	Total Project MD:	100
Material Cost:	$65,220	
Cost Savings:	$35,000 ($350/MD)	
Significant Safety Issues:	None.	
Significant QC Issues:	None.	
Significant Design Issues:	None.	
Significant Material Issues:	None.	

ADMM PLUS

NMCB 5 deployed two members aboard the USNS Matthew Perry (T-AKE 9) for one month alongside a small team of Marines to support a Subject Matter Expert Exchange (SMEE) in Brunei. The exercise was hosted by ASEAN (Association of Southeastern Asian Nations) and officially titled, ASEAN Defense Ministers Meeting plus Humanitarian Aide and Disaster Relief and Military Medicine Exercise (ADMM-Plus HA/DR & MM EX). The week-long exercise's mission was to assess the disaster relief readiness capabilities of all nations within ASEAN. There were a total of 19 participating countries including: Australia, Brunei, China, Indonesia, Japan, Malaysia, New Zealand, Singapore, Thailand, and the United States. While NMCB 5 played only a minor role in the actual execution of the operation, the exercise provided a significant opportunity for the NCF to showcase its capabilities to multiple partner nations operating throughout PACOM.

Due to a significant history of earthquakes, hurricanes, and volcanic eruptions and its developing infrastructure, the Southeast Asian region is more likely to be the victim of a major natural disaster than anywhere else in the world. The threat is known and accepted by the militaries of ASEAN and each country provided equipment and personnel to demonstrate their unique capability set to respond to different HA/DR crises. The senior Seabee present was assigned as the Senior Enlisted Leader of a seven person detachment tasked with operating a water purification unit currently being tested by MARFORPAC. The team consisted of a Marine Combat Engineer Officer, two utilities Marines, two Seabees, and an Independent Duty Corpsman from III Marine Logistics Group. Additionally, a civilian currently employed by MARFORPAC joined the team as the SME for the Miniature Deployable Assistance System (MiDAS). The MiDAS consists of two components: a hasty communication system and a water purification unit known as the Solar Hybrid Expeditionary Purification System (SHEPS). The SHEPS is composed of four Pelican cases allowing the system flexibility to be portable and deployable in remote locations.

Participating nations demonstrated various capabilities in response to a notional hurricane scenario including damage assessment, search and rescue, bridging, earth moving, water purification, and casualty evacuation. During the exercise, the two NMCB 5 participants successfully operated the MiDAS system and instructed military personnel from Brunei, Singapore and China on proper setup and operation procedures. Additionally, the Seabees were able to cross train by receiving instruction

from Chinese and Malaysian engineers on operation of the Chinese water purifying vehicle and a Bruneian water purification trailer. The impact of the exercise was the development of stronger relations with participating nations, improving partnering capabilities in the area of HA/DR and advancing the U.S. regional ties in the PACOM AO.

CHAPTER FIVE

INTELLIGENCE

The Intelligence Department consisted of two organic Intelligence Specialists and two augmented Intelligence Specialists from the Office of Naval Intelligence, Kennedy Irregular Warfare Center during the PACOM 2013 deployment. The S2 Department's focus was on providing timely and relevant intelligence information on potential threats, violent geopolitical crises and weather conditions in support of NMCB 5 operation thereby enhancing decision-maker situational awareness.

The S2 Department sustained Battalion information superiority via all source analysis production to include: weekly Commander's Update Briefs, Open Source Roll Ups, weekly classified briefs to Battalion leadership and Executive-Level Intelligence Read Book provided on an adhoc basis. Additionally, the department created and delivered multiple intelligence briefings and cultural products in support of seven major theater-level exercises and one subject matter expert exchange. Concurrently the department coordinated with PACOM, PACFLT, COMSEVENTHFLT, CTF 76 and 3rd MARDIV in support of contingency planning. These products provided Seabees with an enhanced situational knowledge of detail sites and the AOR resulting in the successful execution of all assigned missions leaving lasting impression as well as the strengthening of partnerships across PACOM.

The S2 department provided leadership with current intelligence information as well as preliminary planning support for numerous detail sites and military to military exchange exercises throughout the PACOM AOR.

Battalion detail and exercise personnel were geographically dispersed to over eleven separate Pacific nations. The department effectively identified, monitored, tracked and provided information on significant geopolitical and meteorological developments potentially adversely impacting engineering operations. Daily items of interest were briefed at morning staff call to ensure situational awareness was maintained. The department created or procured cultural awareness products and briefed all personnel prior to departing for the various detail locations.

The department continuously evaluated security threats and adverse conditions to detail and exercise personnel over the

span of the deployment, retrieving information from a multitude of sources to provide Battalion leadership with the latest information available. The S2 Department utilized a variety of sources including Intelink-S, message traffic, HOT-R, SIPRNET and open source information.

The Department also played an integral part during the Battalion's Mount Out Exercise held in late January. The team was thoroughly involved in planning efforts and execution efforts by providing a comprehensive Intelligence Preparation of the Environment and cultural awareness briefings. The team's actions ensured the preparation and notional dispatch of the Battalion's Air DET in support of a simulated humanitarian mission. The exercise was critical in identifying potential shortfalls which enhanced mission readiness.

S2 personnel significantly contributed to the success of seven major theater-level exercises and one subject matter engagement. The team developed and presented 16 intelligence briefings and cultural awareness products in support of COBRA GOLD, BALKATAN, PACIFIC PARTNERSHIP and CARAT exercises. These products ensured participants were apprised of current and pertinent issues in host nations. Separately the team played a critical role during the Battalion's All Khaki 2013 War Fighters seminar delivering a comprehensive intelligence briefing on enemy threat capabilities and tactics.

While on deployment the department encountered several technological and software challenges due to the existing systems infrastructure. The S2 department worked closely with the S6 Department to identify and submit an S2 systems requirement to improve future Battalion operations in the Pacific.

CHAPTER SIX

LOGISTICS (SUPPLY, Equipment Management, 3M, EMBARK)

SUPPLY

Upon completion of turnover in January, NMCB 5 immediately began implementing the standards that labeled the Battalion as the Professionals. Identifying numerous discrepancies throughout various outlets within the department, the motivated team of 46 personnel got right to work. Consumable items were ordered and stocked, unallocated funding was recovered, subsequent inventories were conducted, and additional money was obligated to keep continuing services running. Although turnover inventory was at a satisfactory level, it was deemed necessary to conduct a wall-to-wall inventory of the entire P-25 TOA as well as the Automotive Repair Parts (ARP) work center. Major stock shortages were identified in both the TOA and ARP, negatively impacting the material readiness level of the Battalion. Immediate corrective action was taken by ordering replenishment stock to backfill shortages to ensure the Battalion was ready and capable of executing a 48-hour mount out. It was clear right from the start that NMCB 5 had its work cut out, with the potential to make vast improvements to the site while setting the bar high with new procedures for future battalions to emulate.

Other challenges that arose included the implementation of the NTCSS Patriot application. The existing MicroSnap operating system was shut down for a 60-day period, during which all Supply operations, including the financial program, were processed via manual records. When the R-Supply system was implemented, training for all applicable personnel was conducted and backlogged entries were manually inputted into the system. Although the R-Supply install was time consuming and arduous, it was highly beneficial for the Battalion. The program provided the Supply Department access to the latest software information technology modernization that including an improvement to Selected Item Maintenance (SIM) ordering, Automated Shore Interface (ASI) processing, material inventory tracking, material requirements, supply status processing, material receipts and expenditures tracking. The system also allows access to financial management functions that include the ability to post and adjust funding grants in the financial ledgers IAW the Relational Supply Support Procedures (RSSP) User’s Manual and NAVSUP P-485.

Over the course of deployment, the department managed a maintenance and consumable budget of approximately $975K. A closer look at the budget revealed that approximately $500K was spent on repair parts, maintenance items and POL's. The remaining $475K went to consumable purchases, Camp OIC project support, MRE's, medical supplies and various service contracts. This money not only supported Camp Shields operations, but also 12 Detail sites located throughout the PACOM AOR. The detail sites included South Korea, Malaysia, Guam, Indonesia, Cambodia, Philippines, Timor Leste, Atsugi, Sasebo, Yokosuka, China Lake and Diego Garcia. There were also five project sites located throughout the island of Okinawa that were supported along with the Balikatan, CARAT and Cobra Gold exercises. Commonly utilized methods of procurement included funding documents via NAVSUP, U.S. Air Force Medical Material Center Kadena database, Government Purchase Card and MILSTRIP requisitions.

In addition to the maintenance and consumable budget, the Defense Travel System (DTS) team managed a deployment travel budget of approximately $5M. Battalion mobility is a key ingredient to a successful deployment in an area as widespread as the PACOM AOR. The NMCB 5 DTS team provided support to all 12 deployment sites as well as Cobra Gold, Balikatan and CARAT missions. The five-person team was responsible for the proper execution of over 5K authorizations and vouchers.

Throughout the course of deployment, 19 Emergency Red Cross Messages were received and orders were created within hours supporting the expedient return of members to CONUS.

Additionally, two exercises were held on Camp Shields as well as the Operational Readiness Inspection (ORI). The first evolution was the Mount-out Exercise (MOX) which tested the Battalion's ability to mount out the Air Detachment in 48 hours while utilizing P-25 TOA assets to assist with the exercise in support of perceived mission tasking. Supply was able to provide 24 hour service for the duration of the exercise, expeditiously supporting all Battalion requirements. The contributions made by the Supply Department contributed to the Battalion's high marks during the exercise and proved it could conduct a successful mount out within 48 hours. The second evolution was the MILBLOCK exercise, which required equipment from 20 TOA containers to be utilized in training and familiarizing Seabees with proper usage of the equipment. All containers used were inventoried prior to and immediately following the exercise by Supply to ensure proper stowage and material readiness. Aside from the usage of the TOA, the exercise also aimed at process

improvements within the Battalion, such as reordering parts, checking out tools and submitting bills of material. Supply was able to grade and train a large portion of the personnel in the Battalion on the proper procedures for requisitioning materials and tools from MLO and CTR. The ORI was conducted in February by 30NCR. The Supply department was awarded an overall score of Above Average with no major discrepancies identified.

FY13 FINANCIAL SUMMARY

OPTAR: $975,150.00

Number of REQUISITIONS:

Consumables: 134
EMV: $67,151.73

Medical Supplies: 139
EMV: 19,313.07

Tools: 441
EMV: $67,814.00

Repair/Maintenance: 1618
EMV: $322,312.44

CREDIT CARD PURCHASES:

63 Transactions
EMV $42,198.59

ARP INVENTORY

12,957 Line Items
EMV $2,341,642.94

MATERIAL LIAISON OFFICE

Meeting project material requirements effectively and in a timely manner is a critical vulnerability for any engineering unit. NMCB 5 MLO provided invaluable support to all CRO tasked projects in Okinawa and five CRO sites across the PACOM AO. The seven-person MLO team at Main Body managed $8M in material and services procurement for 17 projects.

At Main Body, MLO faced significant logistical challenges immediately following turnover. Within the six weeks leading up to the ORI from 30NCR, the organization and administration of the department was repaired to an acceptable condition. More specifically, the EAC report was updated to 100% accuracy, the PMSR was rectified following multiple wall-to-wall inventories of over 1,500 line items, and an overhaul of the stock record card system was performed. These accomplishments enabled the accurate communication of vital project information both to 30NCR at higher and laterally to the Operations Department and project crews within the Battalion. Additionally, site specific SOPs were developed and the MLO warehouse, yard, and offices

were reorganized allowing for more efficient and effective customer service. All of this preparation led to a successful ORI from 30NCR with accolades that NMCB 5 restored the NCF's PACOM MLO operation to the highest level in years.

Following the ORI, MLO continued to tackle multiple issues in the procurement of both funds and materials for tasked projects. A major accomplishment for MLO was working with the project crews to create consolidated bills of material. This enabled MLO to create the Battalion Spend Plan and execute purchases with the $1.3M in funds secured by 30NCR, despite budget cuts from sequestration. The financial side of MLO was also critical to ensure at least four tasked projects would not exceed the MILCON threshold. In particular, the FISC Fuels PEB at Azuma Island in Yokosuka took substantial effort by the MLO staff to confirm the project could actually be completed within the required timeframe. Understanding, organizing, and communicating all of the financial details of a long, complex project history is just one example of how the NMCB 5 MLO enabled the Battalion to meet its assigned project tasking.

While funds were being secured and the consolidated BMs were being worked, MLO was still able to support the projects with needed materials. Working through multiple procurement avenues, no major work stoppages were incurred by material delays from NMCB 5 MLO ordered items. A large part of this success was due to continually improving relationships with vendors and establishing new procurement options when necessary. Some of these new options included establishing relationships with FLC in Sasebo and Chinhae, learning ROICC processes for subcontracting certain scope items, and even locating local sources for open purchases when absolutely necessary. This aspect was especially important when MLO was called upon to support short suspense procurements for Battalion exercises such as the MILBLOCK and various CARAT missions constructing Saebi Alternative Building System (SABS) structures.

Overall, NMCB 5 MLO's accomplishments in PACOM were two-fold. First, the MLO records were returned to a much higher level of reliability through the diligent efforts of the team at Main Body and the various detail sites. Second, operational understanding of financial and material processes was greatly expanded from information provided at turnover. The total value of MLO orders placed was $1M out of $8M total expenditures for 17 projects. The average MLO inventory validity was 99% throughout deployment.

CENTRAL TOOL ROOM

NMCB 5's Central Tool Room at Camp Shields provided superb customer service and project/shop support for Okinawa and 12 detail sites across PACOM, enabling the successful execution of the NCF PACOM mission. During this deployment, in addition to the management of an extensive inventory of more than $3M in shelf tools and tool kits, the CTR team faced a variety of challenges to include revamping the CTR 3M program, assisting with the TOA inventory, salvaging DRMO items, and coordinating the shut-down and retrograde of Detail Sasebo CTR.

Similar to MLO, CTR also faced significant challenges. Following turnover, significant discrepancies were discovered in the records-keeping process. After conducting a complete inventory to verify the stock record cards, CTR procedures as outlined in the Seabee Supply Manual were reestablished to ensure proper management of the 270 kits and 867 shelf and augment tools located within the work center. Beyond the management of existing inventory, CTR also supported CRO sites and various exercises in the ordering and tracking of 1,757 items valued at approximately $70K. A prime example of this support was the replenishment of major deficiencies at the Yokosuka CTR, totaling 269 line items valued at over $25K.

In addition to repairing CTR records and procedures, 3M also required a major overhaul. The CTR team at Main Body updated 10 MIP's and 29 MRC's and installed a force revision for the work center in SKED. Furthermore, the physical 3M binders were updated to match, including establishment of sections previously missing. The dedicated efforts of the CTR team resulted in receiving a passing grade of 86% on the TYCOM level 3M inspection for the Camp Shields site.

Additional CTR accomplishments included TOA inventory assistance, salvage of DRMO items, and coordination for Sasebo CTR shutdown. Beyond normal operations, CTR was able to provide approximately 30 man-days of labor to assist with the complete inventory of the Camp Shields TOA. The CTR team also recognized that numerous pieces of equipment slated for DRMO were still salvageable and required for ongoing operations. Overall, 21 items worth $40K were salvaged, including five ‘wacky packers’ which were frequently used inventory items in support of various projects. After learning the Sasebo site would be closed, CTR coordinated the redistribution of their tool inventory across 3 Detail sites and Main Body. In all, 47 kits and 6,186 shelf items from the Sasebo CTR inventory were redistributed in support of ongoing operations or were shipped back to 30NCR in Port Hueneme for support in future missions. All remaining unusable material was properly disposed of through DRMO on site.

NMCB 5’s CTR team performed well above expectation for the duration of the deployment. Beyond managing the day-to-day operations of CTR, the records, processes, and overall operations were improved both at Main Body and across all detail sites throughout PACOM. In order to ensure this upward trend continued a thorough overview of the CTR SOPs and situation was provided to NMCB 3 at turnover. CTR maintained an average inventory validity of 99% throughout deployment.

AUTOMOTIVE REPAIR PARTS

No supply outlet faced more challenges than ARP during this deployment. The Supply Department assumed custody of ARP with numerous warehouse deficiencies to include inventory inaccuracies and location audit errors. To rectify the situation, a complete wall to wall inventory of 227 SIM items and 12,730 Non-SIM items for a total of 12,957 line items was conducted. Over 3,000 line items of excess materials valued at $176K were

offloaded to 30NCR in Port Hueneme. Through the inventory process, Supply was able to identify and stock the proper SIM items and ensure the MOD 97 and MOD 98 was both in line with the COSAL requirements. Due to a lack of oversight and proper management for countless years, the ARP warehouse had numerous legacy parts still stocked on the shelves. The oldest part found during the wall-to-wall inventory was a bearing, packed in 1957, which belonged to a legacy unit of CESE no longer carried in the TOA. The following pictures show the item still in its original foil and cloth packaging.

Throughout the deployment, ARP maintained a great working relationship with the Alfa Company work centers. This well-established relationship was critical to ensuring the Battalion's ability to properly identify required parts and materials and guarantee the shelves were stocked to meet those requirements. Because of this close working relationship, ARP saw a drastic increase in net and gross effectiveness levels within RCRP. The following chart outlines the Net and Gross Effectiveness numbers upon turnover with NMCB 74, compared to five months after turnover.

NMCB 74 CAMP SHIELDS NET & GROSS EFFECTIVENESS: DECEMBER 2012								
	NIS Demands	N/C Demands	Stock Issues	Total Demands	Net Effect	Goal	Gross Effect	Goal
SIM	147	N/A	28	175	16%	90%	16%	N/A
NON-SIM	70	85	201	356	74%	N/A	56%	N/A
Total	217	85	229	531	51%	85%	43%	65%
NMCB 5 CAMP SHIELDS NET & GROSS EFFECTIVENESS: DECEMBER 2012								
	NIS Demands	N/C Demands	Stock Issues	Total Demands	Net Effect	Goal	Gross Effect	Goal
SIM	11	N/A	156	167	93%	90%	93%	N/A
NON-SIM	16	21	988	1,025	98%	N/A	96%	N/A
Total	27	21	1,144	1,192	97%	85%	95%	65%

This vast improvement was a direct result of the tireless efforts of the motivated ARP team to support the mission. Aside from working closely with the work centers to project future requirements, the team worked to identify other areas of improvement to the operation. It became apparent early in the deployment that parts ordered by the previous battalion were not flowing in at a fast rate. After reviewing past reorders, it was identified that priorities were being incorrectly assigned to materials required to repair deadline CESE. By allowing SIM items, which are frequently used maintenance parts, to fall below their required "low level" limits, work centers were left unable to perform their required maintenance. By adjusting priorities on a number of requisitions and ensuring all future orders were coded with the correct priority, ARP was able to vastly improve its stock posture and ensure superior support was provided to all customers.

Another issue threatening to potentially impact the ARP operation was the transition to the new NTCSS Patriot operating system. Prior to the shutdown of MicroSnap, ARP worked closely with Alfa Company to identify all required materials for remaining preventative maintenance checks for third quarter 2013. ARP also developed an extensive SOP outlining proper execution of the manual requisition process during the 2-month transition to the new system. This allowed Alfa Company to continue the mission during the period ARP was on manual records without long delays. Through proper forecasting and aggressive reordering prior to the MicroSnap shutdown, ARP only had to process 26 requisitions out of more than 2,000 for reorder.

The ARP staff performed well above expectations throughout the deployment to PACOM and set the standard that has now become the benchmark for the NCF. ARP maintained an average inventory validity of 98%.

ARP Warehouse – Post Inventory

ARP Legacy Offload

SHIPPING/RECEIVING

The NMCB 5 shipping and receiving department provided exceptional support to Main Body and 13 Detail sites by processing and shipping over 200 shipments. The department received and distributed 1,011 consumables, 987 tools, 658 medical items, and 1,420 repair parts valued at approximately $668K. After receipt, the individual items were separated and either embarked forward to detail sites or distributed appropriately to Main Body.

MAIN BODY & DETAILS

Consumables:	1,011 line items at $56, 686.19
Tools:	987 line items at $514,404.00
Medical Supplies:	658 line items at $17,473.46
Repair Parts:	1,420 line items at $296,325.64
Total:	4,076 Line items at $885K

POST OFFICE

The NMCB 5 Post Office provided direct support while significantly increasing morale for Main Body and 13 Detail sites by processing and delivering over 20,993 pounds of mail. The Postal Custodian received, separated and shipped mail daily to more than 250 Seabees assigned to various detail sites throughout PACOM. NMCB 5 Postal operations were coordinated with Kadena Air Force Base postal service and mail carriers throughout PACOM to ensure mail was received. A proactive approach was taken to ensure the best possible solution was being utilized in delivering mail to the DET sites, as their proximity to other military postal operations and husbanding agents varied from country to country. Through research and lessons learned provided from previous Battalions, NMCB 5 Postal was able to efficiently deliver mail to all personnel in a timely manner.

DRMO

Material appeared to have piled up on Camp Shields for a number of years, with rusted equipment and damaged organizational gear cluttering the supply yard. Through more than 20 DRMO runs during the deployment, the department was able to dispose of more than 80% of this material, freeing up much needed space in the supply yard while properly accounting for all of the material. In all, more than 30K tons of material was removed from the site.

TABLE OF ALLOWANCE

Of all work completed during the 2013 PACOM deployment, none was more impactful to Battalion readiness than the inventory project initiated by NMCB 5. It was apparent during the turnover process that the P25 TOA located on Camp Shields had been neglected and improperly accounted for throughout the 4 years it had been on site. It became evident during turnover that the TOA had not been inventoried since its arrival from NFELC in 2008. Rusted and corroded container seals were prevalent on most containers, indicating the material condition inside the containers had likely exceeded its shelf life. NMCB 5 Supply Department leadership developed an extensive plan to break all seals and conduct a 100% inventory of more than $5.8M in equipment and material reported present within the 163 containers. The original projection was to have the full inventory completed within five months. However, through an aggressive approach and a high level of performance and commitment, the inventory was completed in just three months.

The 163 TOA containers within the P25 TOA are designed to house over 42K line items at the assembly level. Upon completion of the inventory, 2,396 NSNs were identified as missing. Some of these items carried a greater Line Item Weight (LIW) than others which had a greater impact on readiness.

Many tool kits carried within the TOA are identified as individual NSNs. The inventory identified 52 tool kits and a number of other critical end items such as generators and WHE equipment that were missing from the TOA. In all, more than $468K in shortages was identified with no supporting documentation to show where the items were or if they were ever on site. The follow table breaks down the numbers from the TOA inventory:

Module	# Tricons Inventoried	As-Packed NSNs	On-Hand Quantity	Delta	$ of Missing Items
CC	20	2,900	2,899	1	$10.67
EM	27	5,828	5,419	409	$165,967.50
JT	6	2,662	2,662	0	$0.00
SS	29	3,090	3,084	6	$245.82
SCM1	27	8,576	7,227	1,349	$179,745.18
SCM2	27	8,754	8,644	110	$30,105.70
SCM3	27	9,281	8,760	521	$92,304.62
Total	163	41,091	38,695	2,396	$468,379.49

Upon completion of the inventory, discrepancies within the three SCM's were identified in an effort to isolate the majority of the shortages to SCM three, thus ensuring the ready battalion had two fully capable SCMs to deploy multiple Air Detachments. The next step was to identify previously shipped material, much of which was still packaged and palletized from its original shipment, and distribute it to fill some of the remaining shortages. Excess equipment and tool kits were then verified within the CTR augment section in order to backfill some of the voids still remaining. Finally, a final list of requirements not available in Okinawa were compiled and sent to 30NCR to coordinate the replenishment of the remaining material.

During the final month of deployment, a shipment of 624 line items was received, leaving 1,090 of the 2,396 identified shortages remaining at turnover. Most of the high LIW items were filled through this process thereby directly increasing the readiness of the TOA and ensuring future missions would not be jeopardized.

III MARINE EXPEDITIONARY FORCE (MEF) SUPPORT

During the first two months of deployment, Supply and Alfa Company worked closely to improve operations within ARP. During this process, it became apparent that routine repair part orders took an excessive amount of time to arrive and expedited shipments came with heavier than normal shipping costs especially when shipped from the U.S.

Deployed Battalions operating onboard Camp Shields have always utilized the Navy Supply System for replenishment of Class IX parts. For CESE overhaul, equipment was shipped back to NCG1 in Port Hueneme for overhaul and maintenance exceeding the organizational level capabilities. Understanding these costs, the department began to research support capabilities organic to Okinawa that could expedite Class IX support at a reduced cost. Jointly, Supply and Alfa Company leadership began to engage with III MEF and 3rd Marine Logistics Group (MLG) to identify other available support resources. 3rd MLG provides parts and maintenance support to various Marine Corps Units in addition to Army and Air Force units on Okinawa. It became abundantly clear after the first meeting that III MEF and 3rd MLG had a vast array of support that could greatly benefit the NCF. Some of these capabilities include:

- Robust Class IX support – With an on-hand inventory of approximately 18K line items, 3rd MLG has the ability to support NMCB Class IX requisitions without preventing reduction below low level requirements. NMCB's maintain a significantly smaller Class IX warehouse, frequently placing orders as high priority and incurring excessive shipping costs. On average, 3rd MLG is able to order supplies in bulk at a shipping cost two orders of magnitude less than individual part requisitions.

- Depot Level Maintenance – 3rd MLG has the ability to conduct depot level maintenance/repair, while NMCB's possess only organizational maintenance capabilities. Utilizing this support drastically decreases cost by eliminating the transportation fees associated with shipping CESE back to Port Hueneme for depot level repair.

- Corrosion Control – NMCB CESE rapidly deteriorates in Okinawa's marine climate and requires preventive measures (painting and rust repair) approximately every 4-5 years. III MEF possesses a corrosion control facility capable of supporting these requirements.

Through extensive coordination with III MEF and 3rd MLG, NMCB 5 established the ground work for a long term partnership with III MEF while also bolstering the Navy/Marine Corps relationship and directly supporting the Naval Logistics Integration (NLI) Strategic Plan. These efforts saw 30 HMMWV turrets sent to the III MEF corrosion control facility for refinishing, saving the NCF more than $30K in transportation costs. Extensive coordination has also taken place with 3rd MLG to provide Class IX support to NMCB units at Camp Shields. Both units made progress in drafting a Memorandum of Agreement between 3rd MLG and NECC to provide parts and maintenance support to resident NMCB's. Upon completion of this MOA, resident battalions will be able to leverage 3rd MLG for parts support, saving the unit significant amounts of time and money.

The NMCB 5 Supply Department demonstrated superior performance and provided exceptional customer support across all areas of the operation. The ingenuity, determination and forward thinking approach of all outlets within Supply provided the best support possible to our Seabees and made a significant impact in improving mission readiness masterfully sustaining NCF operations in the PACOM AO.

EQUIPMENT MANAGEMENT

Faced with dispersed operations and challenging repair parts acquisition, Alfa Company personnel provided thorough, diligent and responsive preventive maintenance on over 400 units of CESE this deployment.

With a CESE to Mechanic ratio as high as 10:1 while Alfa personnel were tasked to support various PACOM Exercises, the CMs maintained an impressive 98% CESE availability. Increasing availability from 94%, the CMs removed a total of 25 units of CESE from deadline status. The company's wealth of knowledge was put to the test as they prevented corrosion to equipment, performed corrective maintenance on damaged equipment, and repaired CESE damaged in transit to/from various Exercises.

Working closely with the Supply Department, Alfa Company's Repair Parts Petty Officer enabled the command to expedite the timely delivery of over 1,300 repair parts valued at over $300K. Developing a strong working relationship with the Supply

personnel assigned to manage the ARP and DTO warehouses was a key reason for the Company's maintenance success this deployment.

With impressive ingenuity and initiative, the Inactive Equipment Maintenance crew reorganized the CESE layout in Camp Shields's undersized IEM warehouse, increasing capacity for an additional 40 units of CESE inside the warehouse. By pulling this equipment out of the harsh marine environment, the CMs had more time to focus on preventive maintenance without the added burden of performing additional corrosion control measures.

The IEM crew further helped attack the corrosion issue by removing and sending 28 MTVR crew served weapon turrets to III MEF's corrosion control facility. A major success for NMCB 5 supporting the Naval Logistics Initiative (NLI), the $24K spent on these turrets will reap dividends in corrosion control measures for years to come and furthers the mission capability of the Camp Shields P-25 TOA.

Aggressively focused on 3M maintenance, the CMs performed over 8,300 PMS checks and 315 spot checks this deployment, achieving a near perfect Recorded Accomplishment Rate. The handful of checks that fell out of periodicity were due to hard-to-obtain POLs on the Joint Environmental Material Management Services (JEMMS) HAZMAT list. The Alfa HAZMAT manager identified these POLs and immediately ordered the material, often well-before the checks were due. While some of the material remained on order during turnover with NMCB 3, follow-on Battalions will have access to the HAZMAT and are postured to achieve a 100 percent RAR.

As part of 30 NCR's BEEP tasking, the mechanics prepared and sent four units of CESE to DRMO removing old Legacy Equipment from the TOA. Additionally, the Maintenance Chief identified and initiated paperwork to dispose eight legacy vehicles that have unnecessarily burdened the Okinawa TOA with excessive repairs. The removal of these units will increase productivity and allow

the CMs to focus on maintaining a more useful, robust CESE inventory without the burden of maintaining unreliable equipment.

CESE POPULATION

Vehicles	BEEP	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	BEEP
In Service	184	175	175	175	192	192	198	199	142
IEM	207	218	218	224	206	206	196	195	252
Total	391	393	393	399	398	398	394	394	394

WORK CENTER RAR/2 KILO SUMMARY

MONTH	BEEP	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	BEEP
On Deadline									
Auto	9	2	5	8	2	5	2	4	9
Construction	8	4	5	7	5	5	8	8	8
MHE	4	2	1	2	3	2	2	2	2
Total	21	8	11	17	10	12	12	14	19
Total EQ in Service	370	385	382	382	388	386	382	380	380
Percent Availability	94.6%	98.0%	97.2%	95.7%	97.5%	97.0%	97.0%	96.4%	95.0%

MAINTENANCE AND MATERIAL MANAGEMENT (3-M)

The 3-M program is designed to provide a simple and standard means for planning, scheduling, controlling, and performing maintenance on all systems and equipment. The primary objective of 3-M is to manage maintenance in a manner which will ensure maximum equipment and system operational readiness.

During the NMCB 5 PACOM deployment, two force revisions were performed, one self assessment was performed resulting in scoring at standards with 81.67%, and one ISIC inspection was received scoring at standards with 88.77%. The Command had 13,453 scheduled maintenance checks and accomplished 13,350 of them resulting in an overall 99.2% Recorded Accomplishment Rate (RAR). The department opened 812 4790/2K's and closed 911. The monthly cumulative total of 2K's exceeding 30 days was 939.

1 JAN 2013 – 15 AUG 2013

WORK CENTER	REQUIRED CHECKS	CHECKS PERFORMED	RAR%	OPENED 2K	CLOSED	2K > 30DAYS Cumulative by month –Not the Current Total
AC13	123	122	99.2	56	46	8
AH03	1,246	1,238	99.4	331	96	240
AL03	1,494	1,494	100	291	320	308
AO01	4,759	4,759	100	0	0	0
AT03	1,070	1,069	99.9	34	146	7
BE01	1,902	1,900	99.9	0	0	0
CS02	514	475	92.4	159	154	108
KN01	542	539	99.2	28	41	99
KS01	262	262	100	10	22	43
MH02	52	52	100	0	0	0
SC01	177	128	69.4	0	0	0
WG02	1,133	1,133	100	2	85	123
WG03	186	186	100	1	1	3
TOTAL:	13,453	13,350	99.2	812	911	939

EMBARK

NMCB 5's Embark team expertly synchronized the RIP/TOA with NMCB 74, moving 1,050 personnel over 45K miles to 17 detail sites. During the first month of deployment, Embark led 56 Seabees in the highly successful execution of a 48-hour Air Detachment mount out exercise, confirming the Battalion's ability to respond to worldwide events. They ensured 35 units of CESE, two tricons, 10 pallets of material and 32 personnel successfully deployed for Balikatan, the annual Philippines-U.S. Military Bilateral Training Exercise. Coordinating with III MEF, NALO, and Military Surface Deployment and Distribution Command, Embark facilitated movements for five other exercises totaling 47

personnel in six countries, directly supporting 7th Fleet's maritime strategy. In total (excluding deployment and redeployment), the team moved more than 470 passengers, 48 units of CESE, and 15 pallets of material and tools throughout the PACOM AOR. As part of redeployment and RIP/TOA with NMCB 3, NMCB 5's Embark team ensured the timely and efficient embarkation of 1,150 personnel over 30K miles to 10 detail sites.

-----OFFICIAL INFORMATION DISPATCH FOLLOWS-----
RTTUZYUW RHOIAAA0001 2392336-UUUU--RHSSSUU.
ZNR UUUUU
R 272208Z AUG 13
FM COM THREE ZERO NCR
TO NMCB FIVE
INFO COMNECCPAC PEARL HARBOR HI
NAVCONSTGRU ONE PORT HUENEME CA
NAVCONSTGRU TWO GULFPORT MS
COMNECC LITTLE CREEK VA
COMPACFLT PEARL HARBOR HI
COMSEVENTHFLT
CTF 73
CTF 76
COMFLEACT CHINHAE KOR
COMFLEACT OKINAWA JA
COMFLEACT YOKOSUKA JA
COMJTREG MARIANAS GU
COMNAVFORKOREA SEOUL KOR
NAVFAC MARIANAS GU
NAVFAC FAR EAST YOKOSUKA JA
JSOTF PHILIPPINES
AMEMBASSY MANILA
AMEMBASSY DILI
AMEMBASSY PHNOM PENH
CG III MEF
AMEMBASSY KOLONIA
COM THREE ZERO NCR
BT
UNCLAS
SUBJ/BRAVO ZULU MESSAGE FOR NMCB 5//
1. CONGRATULATIONS TO THE SEABEES OF NAVAL MOBILE CONSTRUCTION BATTALION (NMCB) FIVE! YOU HAVE SUCCESSFULLY COMPLETED ONE OF THE MOST DEMANDING MISSIONS ANY NAVAL CONSTRUCTION FORCE (NCF) UNIT WILL FACE. SPREAD ACROSS THOUSANDS OF MILES, 11 SITES, AND MULTIPLE EXERCISE LOCATIONS, NMCB FIVE ROSE TO THE OCCASION, PROVIDING SUPERB SUPPORT TO COMMANDER, UNITED STATES PACIFIC COMMAND AND OTHER SUPPORTED COMMANDERS THROUGHOUT THE PACIFIC AREA OF OPERATIONS (AO). YOUR BATTALION ADVANCED STRATEGIC AND OPERATIONAL OBJECTIVES WHILE ACHIEVING SIGNIFICANT SUCCESS AND BALANCED EXCELLENCE ACROSS ALL FUNCTIONAL AREAS.
2. NMCB FIVE*S AGGRESSIVE EXECUTION OF THEATER SECURITY COOPERATION OPERATIONS THROUGH FOUR EXERCISES AND THREE CONSTRUCTION CIVIC ACTION DETAILS WAS INSTRUMENTAL TO BUILDING STRATEGIC PARTNERSHIPS IN NINE COUNTRIES THROUGHOUT THE PACIFIC. YOUR EFFORTS TO CONDUCT MILITARY-TO-MILITARY SUBJECT MATTER EXPERT EXCHANGES DURING COMBINED EXERCISES ADVANCED THE ENGINEERING CAPABILITIES OF US AND PARTNER NATION MILITARIES. BY INTRODUCING INNOVATIVE TECHNOLOGY, YOU ENHANCED THE ABILITY OF PARTNER NATIONS TO SAFELY COLLECT AND DISPOSE OF EXPLOSIVE REMNANTS OF WAR THROUGH THE CONSTRUCTION OF COLLECTION POINTS AND ENABLED RAPID ENGINEERING RESPONSE FOLLOWING DISASTER EVENTS BY USING CONCRETE CLOTH AND STYROFOAM BUILDING TECHNOLOGY. YOU EXPANDED US INFLUENCE AND SUCCESSFULLY DEMONSTRATED YOUR ABILITY TO OPERATE IN REMOTE LOCATIONS DURING THE OECUSSI MISSION, PROVIDING CRITICAL SUPPORT TO AN UNDERSERVED POPULATION OF TIMOR-LESTE IN SUPPORT OF FLEET AND STATE DEPARTMENT OBJECTIVES.

3. NMCB FIVE ALSO PERFORMED EXCEPTIONALLY WELL DURING THE 2013 DEPLOYMENT IN YOUR EXECUTION OF CONSTRUCTION READINESS OPERATIONS (CRO). THROUGH ENGAGED LEADERSHIP, YOU IMPROVED THE NCF CRO PROGRAM BY CONSISTENTLY EXECUTING HIGH-QUALITY, COST-CONTROLLED CONSTRUCTION, LEAVING A LASTING, POSITIVE IMPRESSION OF SEABEES THROUGHOUT THE PACIFIC. THE SEABEES AT CRO SITES FORGED CRUCIAL RELATIONSHIPS WITH THE REPUBLIC OF KOREA NAVY SEABEES AND ADJACENT UNITS IN OKINAWA, ENHANCING OUR ABILITY TO RESPOND TO MAJOR COMBAT OPERATIONS. YOUR DETAIL IN GUAM CERTAINLY ENABLED THE SUCCESSFUL DEPLOYMENT OF THE FIRST ARMY ENGINEER BATTALION TO CAMP COVINGTON WHERE YOU SEAMLESSLY INTEGRATED INTO A COHESIVE, JOINT TEAM DEMONSTRATING TRUE INTEROPERABILITY. FURTHER, YOU SOUGHT OUT AND CREATED ADDITIONAL INTEROPERABILITY OPPORTUNITIES ACROSS THE THEATER THAT WILL ENHANCE NCF MISSION READINESS AND COMBINED/JOINT ENGINEER OPERATIONS. NMCB FIVE*S HIGH STANDARD OF QUALITY AND UNWAVERING MISSION FOCUS ARE GREATLY APPRECIATED.
4. NMCB FIVE PROVIDED EXCELLENT LOGISTICS OVERSIGHT AND MANAGEMENT FOR YOUR ASSIGNED MISSIONS AND IN SUPPORT OF THE 84TH ENGINEER BATTALION IN GUAM. YOUR DILIGENT MAINTENANCE AND PRESERVATION OF THE TABLE OF ALLOWANCE (TOA) IN OKINAWA GREATLY ENHANCED CIVIL ENGINEER SUPPORT EQUIPMENT (CESE) AVAILABILITY AND READINESS. BY IMPLEMENTING NEW STORAGE METHODS AND PLACING 90% OF THE EQUIPMENT AT MAIN BODY IN INACTIVE EQUIPMENT MAINTENANCE (IEM) STATUS, YOU REDUCED MAINTENANCE AND RESTORATION REQUIREMENTS RESULTING FROM WEATHER; AND YOU GREATLY INCREASED MAINTENANCE EFFICIENCY BY MOBILE LOADING EQUIPMENT WITH LIKE PREVENTIVE MAINTENANCE SCHEDULES. NMCB FIVE*S ABILITY TO DEVELOP A CLOSE WORKING RELATIONSHIP WITH THE III MARINE EXPEDITIONARY FORCE CORROSION REHAB FACILITY TO PAINT AND PRESERVE EQUIPMENT EXTENDED EQUIPMENT LIFE SPANS AND SAVED MILLIONS OF DOLLARS IN FUTURE REPLACEMENT COSTS. YOU ALSO DEMONSTRATED EXCELLENT FINANCIAL MANAGEMENT AND ACCOUNTABILITY, SKILLFULLY IDENTIFYING NON-CESE TOA SHORTAGES THROUGH A COMPREHENSIVE INVENTORY AND SPEARHEADING A SIGNIFICANT NAVAL LOGISTICS INTEGRATION INITIATIVE, LEVERAGING MARINE CORPS LOGISTICS SUPPORT IN OKINAWA AND REDUCING COSTS TO THE NAVY BY TENS OF THOUSANDS OF DOLLARS. YOUR EFFORTS TO VALIDATE AND RECTIFY MATERIAL LIAISON OFFICE PROCESSES AND RECORDS THROUGHOUT THE AO WERE SECOND TO NONE AND GREATLY ENHANCED THE ABILITY TO ACCURATELY REFLECT PROJECTS COSTS * NO SMALL FEAT GIVEN THE VOLUME AND COMPLEXITY OF MATERIAL MANAGEMENT IN THE PACIFIC.
5. NMCB FIVE MADE IMPRESSIVE CONTRIBUTIONS TO NCF READINESS IN THE PACIFIC DURING THE 2013 DEPLOYMENT. BY TAKING 300 RADIOS OUT OF IEM, IDENTIFYING NEEDED UPDATES, AND SPEARHEADING THE REPLACEMENT OF 211 RADIOS, YOU ENHANCED TOA READINESS AND ENSURED NCF ABILITY TO EXECUTE COMMAND AND CONTROL DURING CRISIS EVENTS. YOUR ACCURATE AND CANDID READINESS REPORTS DIRECTLY LED TO THE REVIEW AND EXPEDITING OF THE COMMUNICATIONS TOA FIELDING PLAN. YOUR TIRELESS EFFORTS RAISED THE BAR FOR NCF DEPLOYED READINESS.
6. THANK YOU FOR YOUR OUTSTANDING SERVICE TO OUR COUNTRY AND THE EXCELLENT CONSTRUCTION SUPPORT YOU PROVIDED TO OUR SUPPORTED COMMANDERS AND REGIONAL PARTNERS. YOUR TREMENDOUS EFFORTS AND EXEMPLARY CONDUCT HAVE BEEN WIDELY RECOGNIZED AND ARE THOROUGHLY APPRECIATED BY ALL LEADERS IN THIS THEATER. BRAVO ZULU TO *THE PROFESSIONALS* OF NMCB FIVE. WELCOME HOME, SHIPMATES, JOB WELL DONE.
CDRE MOORE SEND//