

**U.S. NAVAL MOBILE
CONSTRUCTION BATTALION
THREE**



**USINDOPACOM DEPLOYMENT
COMPLETION REPORT
JUNE 2020 – JANUARY 2021**

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BATTALION LAYDOWN



EXECUTIVE SUMMARY

U.S. Naval Mobile Construction Battalion 3 (NMCB THREE) deployed a fully manned and trained battalion from Port Hueneme, California to the U.S. Indo-Pacific Command (USINDOPACOM) Area of Responsibility (AOR) from June 2020 to January 2021. NMCB THREE successfully executed construction operations supporting Fleet Commanders at Main Operating Base (MOB) sites, Theater Security Cooperation (TSC) engineering projects, an Innovative Readiness Training (IRT) initiative, and multiple joint interoperability exercises under the operation control (OPCON) of THIRTIETH Naval Construction Regiment (30NCR). Throughout the duration of deployment NMCB THREE maintained a constant readiness to support blue-water Fleet maneuverability during Major Combat Operations (MCO) or come to the aide of partner nations through Humanitarian Assistance/Disaster Recovery (HA/DR).

The onset of the Novel Coronavirus Disease (COVID-19) pandemic in early 2020 resulted in a stop movement order issued by the Secretary of Defense (SECDEF), delaying the battalion's scheduled rotation in April 2020 to relieve U.S. Naval Mobile Construction Battalion 5 (NMCB FIVE) as the forward-postured Commander, Task Unit (CTU) 75.5.1. While enacting COVID-19 measures to mitigate the spread of contagion, the battalion utilized alternative communication mediums to develop a detailed plan for Relief in Place/Transfer of Authority (RIP/TOA) with NMCB FIVE while ensuring the accountability, continuity of operations, and uninterrupted flow of information across all sites throughout the AOR, despite multiple detail sites executing RIP/TOA without a traditional face-to-face turnover.

From June through August 2020, NMCB THREE executed pre-deployment Restriction of Movement (ROM) in Port Hueneme, California and a dynamic embarkation Scheme of Movement (SOM) utilizing strategic lift, Navy Air Logistics Office (NALO) military airlift, and commercial flights IOT deploy their Main Body to Okinawa, Japan, and deploy task-tailored details to Iwakuni and Sasebo, Japan, Guam, Tinian, Chinhae, Republic of Korea (ROK), Diego Garcia, and Timor Leste. NMCB THREE's detailed embarkation and mission planning established the standard for pre-deployment COVID-19 mitigation and testing, logistics, and embarkation into and throughout the USINDOPACOM AOR for future Naval Construction Force (NCF) and Navy Expeditionary Combatant Command (NECC) forces.

NMCB THREE executed TSC missions and IRT in support of U.S. Pacific Fleet (PACFLT) and USINDOPACOM campaign plan objectives during their Fiscal Year (FY) 20/21 deployment. Detail Tinian executed construction of Camp Tinian, designed to support enduring NMCB details and other postured joint-forces with organic life support for up to 110 personnel while executing construction and exercises in partnership with the Commonwealth of Northern Marianas Islands (CNMI). Detail Tinian began executing the IRT Marpo Heights road improvement project constructing 2.25 miles of U.S. Department of Transportation (USDOT) design standard roads for CNMI, the first such roads on the island, improving safety and stability of the community. Tasked by 30NCR to integrate Mobile User Objective System (MUOS) communications at remote detail sites, NMCB THREE was the first battalion to send MUOS equipment to Detail Tinian, showcasing the NCF's ability to operate Controlled Cryptographic Items (CCI) in a remote environment. Detail Timor Leste executed construction of two school-houses in partnership with the Timor Leste Defense Force (F-FDTL), strengthening their image in the local community while enhancing educational opportunities for children, and supporting U.S. Department of State (DoS) objectives. Seabees of NMCB THREE deployed to Camp Katuu, Palau in support of joint Civic Action Team Palau (CAT Palau) operations, making base improvements for sustainability and future-expansion.

NMCB THREE deployed an Advanced Party (AP) to Manus, Papua New Guinea (PNG) in order to meet USINDOPACOM intent to establish an enduring NCF presence at the PNG Defense Force's (PNGDF) Lombrum Naval Base to reinforce PNG political and military leaders of the U.S. commitment to their nation.

NMCB THREE executed construction operations at MOB sites ISO Commander, Navy Installations Command (CNIC), Marine Corps Installations Command, Pacific (MCIPAC), and other Department of Defense (DoD) installations, and tenants. The projects provided supported commanders' infrastructure improvements while Seabees were able to hone construction skills and remain postured at strategic first island chain locations. Overall, NMCB THREE executed 17 MOB projects worth \$8M in four different countries and at six different locations during their USINDOPACOM deployment. In Okinawa, NMCB THREE began construction of a Ground/Air Task Oriented Radar (G/ATOR) support facility at Camp Hansen despite a gap in service funding by leveraging relationships with adjacent units. Once completed, the project will increase 12th Marine Regiment's ability to deter adversaries threatening U.S. and Japanese interests. In Guam, NMCB THREE obtained environmental certification of the Asphalt Batch Plant (ABP), and are now able to utilize the ABP to produce, material test, and deliver asphalt in support of paving operations in the deployed theater. This is the first time since 2002 that the NCF has had the organic capability to produce asphalt Outside the Contiguous United States (OCONUS). In Sasebo, Japan, NMCB THREE constructed two Pre-Engineered Buildings (PEB) which will provide Naval Beach Unit 7 (NBU SEVEN) facilities for Landing Craft Air Cushion (LCAC) storage and maintenance, increasing their lethality by improving equipment readiness. In Iwakuni, Japan, NMCB THREE worked on a large-scale landfill capping project IOT reduce Bird/Wildlife Aircraft Strike Hazards (BASH) and provide useable acreage for Marine Corps Air Station (MCAS) Iwakuni base expansion in the future. In addition to the tasked construction operations, Seabees from NMCB THREE also conducted discretionary projects, to improve the quality of life on the bases they supported.

Throughout the USINDOPACOM deployment, NMCB THREE took advantage of COVID-19 related travel constraints as an opportunity to build stronger interoperability relationships in Okinawa with adjacent Navy, Marine Corps, and Air Force engineering forces through partnerships on various training and exercises. Integration of operations led to OPLAN and Expeditionary Advanced Base Operations (EABO) concept development and force-employment discussions, participation in 3rd Marine Expeditionary Force (III MEF) and Commander, Seventh Fleet (C7F) staff planning conferences, and coordination of future opportunities to demonstrate integrated naval engineering operations in littoral environments in support of blue water lethality.

Across the USINDOPACOM AOR, NMCB THREE persevered through a dynamic global pandemic environment to maintain forward-posture as the stand-in Navy Expeditionary Combat Force (NECF) while demonstrating remarkable professionalism, flexibility, technical expertise, and unit and individual commitment to strategic and operational objectives. The ambitious, proud, respectful, and combat-ready Seabee Teams of NMCB THREE executed engineering missions to defend the United States, its territories, allies, and interests, promote regional security, and deter adversary aggression.

CHAPTER I: ADMINISTRATION

The NMCB THREE Administration Department (S1) supported the battalion with administrative, personnel, and legal support to personnel dispersed over nine details throughout the USINDOPACOM AOR during the course of the deployment. Headquartered at Camp Shields, Okinawa, Japan, the S1 Department processed awards, evaluations, fitness reports, no-cost, and North Atlantic Treaty Organization (NATO) orders, and travel claims. The S1 Department also provided support to identify and resolve pay discrepancies for all personnel through two internal Battalion-wide pay audits. During the course of the deployment, 43 personnel were selected for promotion or advancement to the next pay grade and 12 were selected for the Meritorious Advancement Program, while 26 members reenlisted.

Awards:

- Personal Decorations (MSM/NCM/NAM) – 91
- Seabee Combat Warfare Specialists - 105
- Expeditionary Warfare Specialists - 53
- Military Outstanding Volunteer Service Medal - 1
- Sailor of the Quarter - 8
- Sailor of the Year – 4

ADMINISTRATION

ADDITIONAL	GAIN/LOSSES (through Feb)	NON-JUDICIAL PUNISHMENTS	ADMINISTRATIVE SEPARATIONS	EVALUATIONS /FITNESS REPORTS
E1-E6	80 / 66	21	3	370
E7-E9	4 / 7	1	0	35
O1-O5	13 / 12	0	0	17

ADVANCEMENTS

	E2	E3	E4	E5	E6	E7	E8	E9
Navy Wide Time-In-Rate Eligible	0	0	19,620	33,118	27,624	29,812	12,202	3,338
NMCB THREE Participated	0	0	115	109	48	42	16	7
NMCB THREE Selected	0	0	36	14	4	2	2	1
NMCB THREE Percent Selected	0	0	31.38	12.80	8.30	4.70	12.50	14.30
Navy Wide Selected	0	0	5,824	5,637	3,029	25	14.3	13.1
Navy Wide Percent Selected	0	0	29.68	17.02	10.97	4.54	5.88	28.57

MERITORIOUS ADVANCEMENTS

	E4	E5	E6
Authorized	6	5	1

RETENTION

	ELIGIBLE	NOT ELIGIBLE	REENLIST-MENTS	GRS (%)	NAVY GOAL (%)
ZONE A	32	4	18	71.4	57
ZONE B	5	0	4	100	67
ZONE C	5	0	4	80	82

CHAPTER II: INTELLIGENCE

INTELLIGENCE OVERVIEW

The Intelligence Department (S2) provided intelligence support to NMCB THREE forces deployed across the USINDOPACOM AOR. The S2 Department maintained intelligence products and situational awareness for all detail sites ensuring the Commanding Officer, Operations Officer, and detail personnel had the most up to date information to make operational decisions in an informed and timely manner.

PRODUCTS

The S2 Department produced 30 intelligence briefings to maintain battlespace awareness, covering adversary developments and Geographic/Political events that impacted NMCB THREE operations throughout the AOR and covered topics pertinent to NCF interests, with a focus on operational impacts in the Pacific. Supported 22 Commander's Update Brief (CUB), updating the Battalion Commanding Officer (CO) on weather with a focus on tropical storm updates during typhoon season in USINDOPACOM and wildfire updates in Southern California, and highlighting operations and administrative aspects of the S2 Department that could impact NMCB THREEs mission.

The S2 Department created and disseminated 120 open source intelligence products covering the USINDOPACOM AOR and coordinated with higher headquarters to update Intelligence Preparation of the Environment (IPOE) briefings as needed throughout deployment, providing valuable information to support higher headquarters and NCF operations. Information provided included regional stability items, terror threats, Political/Military engagements, and other items of interest. The S2 Department also supported pre-deployment cultural awareness briefs for all sites. Provided IPOE briefs prior to embarkation to establish an enduring detail site in Manus, PNG. Throughout deployment the S2 department constantly monitored threat situations and updated the command on health considerations throughout the AOR.

EXERCISE SUPPORT / TRAINING

The S2 department provided staff planning, scenario development, and intelligence support to NMCB THREE's Mount-Out Exercise and two Command Post Exercises (CPX) events, producing products such as: planning maps/charts, imagery, indications/warnings, and Operational Planning Team (OPT) intelligence updates products.

Provided basic intelligence and classification training throughout deployment. Covering topics such as operational, personnel, security, and communications security, classification markings, classified material handling, and the strategic role of the NCF and NMCB in USINDOPACOM.

COORDINATION

Collaborated with Army Special Operations Task Force (SOTF) 511, CTF-76, and Navy Expeditionary Intelligence Command (NEIC) Intelligence Exploitation Teams for integration opportunities; as well as Naval Criminal Investigative Service (NCIS) and US State Department Regional Security Offices for information on local threats affecting NMCB THREE.

CHAPTER III: OPERATIONS SUMMARY

From June 2020 to January 2021, NMCB THREE deployed ambitious, proud, respectful and combat-ready Seabee Teams to the USINDOPACOM AOR and executed general engineering missions across the full Range of Military Operations (ROMO) in order to serve as Navy's stand-in force to enable blue water lethality amidst a great power competition.

NMCB THREE personnel were task-organized into details and deployed to 10 geographic locations in seven countries through USINDOPACOM to support Phase Zero and One operations through high-quality construction, maintain Phase Two and Three response capabilities, build lasting partnerships through collaboration with host nations, allies, and adjacent units, and maintain NMCB Table of Allowance (TOA) to combat-ready standards.



Seabees and Airman from 18th CES conduct a joint rapid ADR exercise on Kadena Air Base in Okinawa, JP.

Details were task-organized and deployed to the Japan, the Republic of Korea, Diego Garcia, Timor-Leste, Guam, Tinian, Palau, and Papua New Guinea. NMCB THREE's Main Body element remained at Camp Shields in Okinawa, Japan to maintain the forward deployed NMCB TOA and complete tasked construction operations, while maintaining readiness to support MCO and HA/DR operations.

The Battalion's deployment was characterized by flexibility in the global pandemic environment. Host

Nation COVID-19 travel restrictions prevented the execution of tasked detail operations in: Yap and Pohnpei, Federated States of Micronesia (FSM), Palawan, Philippines, Thailand, the Marshall Islands, and Fiji. Numerous exercises were also cancelled including: Pacific Partnership, Balikpapan, and Koa Moana.

QUALITY CONTROL / ENGINEERING

The Quality Control (QC) Shop and Engineering Shop were responsible for the quality construction and management of 23 projects and 55 OIC-Ds valued at \$18.2M during the FY20 and FY21 deployment. The QC Shop and Engineering Shop prioritized back to the basic's quality construction, proactive project management, and world-class engineering services at main body projects and remote details sites throughout deployment.

To ensure high quality construction and combat operating conditions created by the COVID-19 pandemic, the QC Shop conducted a thorough review of battalion QC standard operating procedures, implementing changes at the beginning and throughout deployment. Updated SOP's included designating Chief Petty Officers as the QC Specialist for projects; daily QC reports were required to include photos of active construction activities, enabling oversight at remote detail sites in order to mitigate rework due to QC

discrepancies; hard card requirements were changed from the standard 24 hours prior to 72 hours prior, allowing ample time for final checks and adjustments and ensuring project crews were 100% ready for upcoming concrete placements.

The Engineering Shop completed a total of 167 engineering service requests for nine projects in Okinawa, Japan. Some of their major accomplishments on deployment included conducting 67 concrete material tests for six projects and 35 soil material tests for three projects, providing the project teams reliable and accurate results on major definable features of work. The Engineering Aides also surveyed over 120 hours at the G/ATOR Pad at Camp Hansen project and Camp Shields Wash Rack projects and reproduced redline prints for 14 projects around the USINDOPACOM AOR. Additionally, the extra khaki at main body due to the COVID-19 pandemic allowed the Operations Department to fill the S3 Engineering (S3E) role with an experienced Chief Petty Officer whose sole job was to focus on project management and engineering services for main body and remote detail site projects. The increased oversight and focus on engineering services and project management enabled quality and on-time construction at all locations.



NMCB THREE Engineering Aides and 9th ESB Marines measure the progress of backfilling the 5 ft deep excavation site at JK18-877 G/ATOR Support Facilities project.

As a direct result of the engagement from the QC and Engineering Office 9,800 man-days (MDs) of construction were completed with zero quality discrepancies, 537 tons of asphalt laid, 40,000 CZ of spoils and fill moved, and 919 CZ of concrete was placed which 97 CZ was high risk vertical or overhead placements with zero quality discrepancies.

EMBARKATION

Embark shipped 98 TRIWALLs filled with PGI gear for all main body and detail sites, as well as two TRICONS containing NMCB THREE's NETC2 system and one TRICON for the Supply Department. NMCB THREE's Embark staff was operating at a high tempo upon arrival of AP in Okinawa, Japan due to the coordination required to get multiple detail sites to their respective locations through commercial flights, NALO airlifts, AMC rotator flights, and chartered flights IOT comply with the various Host Nation COVID-19 travel restrictions and ROM requirements in the USINDOPACOM AOR. In total, NMCB THREE's Embark Staff was able to successfully coordinate the movement for 91.6 tons of cargo, 539 NMCB THREE personnel, and the re-deployment of 220 NMCB FIVE personnel during RIP/TOA with NMCB FIVE.

During deployment, the Embark Staff managed the movements of arriving and departing Battalion personnel to and from Camp Shields and detail sites. Embark successfully coordinated 115 flights utilizing both MILAIR and commercial flights, accounting for over 1,800 passengers and 50 tons of cargo. Asides from airlift missions, Embark Staff actively began coordinating the surface ship movement of 32 units of CESE and non-CESE TOA to PNG IOT support Detail PNG execution of critical projects at Lombrum Naval Base, establishing DOD presence at a strategic USINDPACOM location. Embark Staff also coordinated the surface ship movement of three TRICONS for U.S. Naval Mobile Construction Battalion 4 (NMCB FOUR) COBRA GOLD 21 exercise in Thailand.

The staff worked closely with the personnel department for Prospective Gains (PG) and Prospective Losses (PL) to the Battalion. The Battalion received 13 PG's and re-deployed 42 PL's. Administratively, Embark oversaw the completion of 13 Individual Anti-Terrorism Plans (IATP), 20 Aircraft and Personnel Automated Clearance System (APACS) requests, 30 CTF 75 COVID-19 TAD Decision Slides, and 22 NECC COVID-19 Travel Waivers, allowing NMCB THREE personnel to move freely within the USINDOPACOM AOR.

In August, NMCB THREE conducted a 48 Hour Air Detachment Mount-Out Exercise (MOX) to ensure the Battalion was operationally ready to mount-out an Air Detachment within a 48 hour notice to move (NTM) ISO MCO or HA/DR missions. Prior to the exercise, Embark went through vast organizational changes due to detail manning. With the majority of the Embark organization relatively new, the staff had to train the new members in all aspects of an Embark Mount-Out, while also adhering to COVID-19 mitigations limiting the maximum gathering size of 10 personnel or less. Tropical Cyclone Conditions of Readiness (TCCOR)-3 weather conditions and load-planning software malfunctions severely impacted the Battalion's ability to execute mount-out operations. Despite an inexperienced Embark specialty organization and unforeseen circumstances, the Battalion was still able to successfully stage all units of CESE at the marshalling yard in designated chalks within the prescribed 48 hour time frame. This proved the Battalion was prepared to rapidly respond as CTU 75.5.1 the "stand-in" Naval Force to any situation throughout the USINDOPACOM AOR during their FY20/21 deployment.

BATTALION PROJECT STATISTICS SUMMARY

SITE	# PROJECTS ¹	TOTAL PROJECT MDs (TASKED) ²	MDs EARNED (WIP) ³	MDs EXPENDED (EFFORT) ³	\$ VALUE ⁴
OKINAWA	5	1,731	817	1,304	\$3,201,520
GUAM	5	859	1,215	2,315	\$5,157,086
TINIAN	5	3,561	1,442	2,268	\$5,712,411
PALAU	1	100	51	89	\$174,376
IWAKUNI	2	868	315	407	\$629,957
SASEBO	1	540	258	1,150	\$1,184,253
CHINHAE	1	137	137	184	\$27,228
DIEGO GARCIA	1	401	409	411	\$1,387,743
TIMOR LESTE	2	1,172	623	516	\$707,423
TOTAL	23	9,369	5,267	8,644	\$18,181,947

Notes:

- (1) Only consists of construction projects executed by NMCB THREE. Doesn't include OIC-D construction.*
- (2) Based off of NMCB THREE 100% tasking.*
- (3) Based off of Biweekly PSR.*
- (4) Based off of Biweekly PSR EAC.*

MAIN BODY OKINAWA

NMCB THREE Main Body deployed to Camp Shields, Okinawa, Japan in June 2020 to execute construction operations and maintain personnel and TOA readiness for MCO or HA/DR response. NMCB THREE expended a total of 1,304 MDs on five tasked projects with a total value of \$3,201,520 including three turnover projects and two new start projects.

ALFA COMPANY

Throughout NMCB THREEs USINDOPACOM deployment, Alfa Company provided equipment operator support to projects and operations and maintained the homeport and deployed TOAs through a rigorous maintenance and CESE cycling program. Alfa Company was responsible for 782 units of CESE, with 381 of the 782 units spread across the USINDOPACOM providing critical capabilities to Main Body in Okinawa, Japan and detail sites spread across the AOR, enabling Seabee teams to provide high quality construction for supported commanders and host nations at MOB sites, TSC construction projects and missions, and IRT construction projects.

Upon arrival in the USINDOPACOM AOR, NMCB THREE conducted an efficient Battalion Equipment Evaluation Program (BEEP) turnover with NMCB FIVE and began their tasking following RIP/TOA. Throughout deployment, Alfa Company completed 4,443 preventative maintenance checks, 32 crane lifts, re-certified the Camp Shields 40 ton crane, sent 35 units of CESE to the Corrosion Correction Facility for treatment, and convoyed over 1,149 miles in support of numerous operations.

Alfa Company focused on improving interoperability with adjacent units on Okinawa including units at Kadena AFB and Camp Hansen. Alfa Company conducted ADR training with 18th Civil Engineer Squadron (CES), conducted clear and grub operations at Site K for the 1-1 Air Defense Artillery (ADA) missile pad launching area improving mobility and access to the critical site, supported Underwater Construction Team (UCT) Two with the removal of concrete piles at White Beach IOT increase small boat maneuverability in the White Beach Basin, and established contacts and a location for reliable CESE cycling on Kadena AFB. Alfa Company's "Can Do" spirit resonated with adjacent units setting the stage for future engagements, enhancing interoperability and unit cohesion.

DELTA COMPANY

NMCB THREE began construction on two new-start projects; JK 18-877 Camp Hansen G/ATOR and JK 16-857 Camp Shields Wash Rack Project. Initial project start for Camp Hansen G/ATOR was scheduled for 20 Aug 20, but due to lack of Marine Corps Installations Pacific (MCIPAC) funding for services the project was delayed until spoil dumping locations could be identified. The project team, working with



Seabees conduct overhead concrete placement for four 9 ft concrete walls for CESE wash rack on Camp Shields.

Marines on Camp Hansen, were able to identify alternative methods for dumping spoils on Camp Hansen ranges which enabled the project team to move-in and start the project on 10 Sep 20 prior to NMCB THREE Material Liaison Officer (MLO) obtaining dumpster services through Government Commercial Purchase Card (GCPC) purchase. The project is a six-bay, 2,500 square-foot (sqft) reinforced facility that will support 12th Marine Regiment operations. The project is scheduled to be completed 30 Aug 21 and has estimated cost at completion of \$1,032,885. MCIPAC plans to contract for additional electrical and fire suppression features of construction after the NMCB scope is complete, but prior to the facility being complete and usable. On 26 Oct 20, NMCB THREE began construction on the Camp Shields Wash Rack project. The project consists of demolition of an existing four-lane wash rack to be replaced by a three-lane wash rack with eight foot (ft) high concrete walls, improved lighting, and a new vacuum station.

Once completed the project will provide NMCBs with an improved wash rack enabling CESE TOA readiness for MCO response. The project is scheduled to be completed 01 May 21 at a cost of \$177,332.

NMCB THREE relieved NMCB FIVE of three K-Span projects; JK16-859, JK16-860, and JK16-861. These are Type-2 K-Spans with stem walls at a height of 22 ft and a total area of 6,700 sqft and all three facilities will be utilized for CESE overflow. Shortly after turnover multiple quality discrepancies were identified including using an incorrect paint color on the K-Span doors and the use of plumbing PVC conduit instead of electrical-rated conduit to house the underground electrical lines. The identified discrepancies resulted in NMCB THREE drafting a Quality Deficiency Report (QDR) for all three K-Span projects after NAVFAC PAC directed the replacement of plumbing PVC. Due to rework identified in the QDR and required long lead times, NMCB THREE will turnover these projects with NMCB FOUR. During turnover with NMCB FOUR a vehicle accident damaged the JK16-859 roll-up door, the damage will result in approximately 30 MDs of rework to include removal of roll-up door, removal and replacement of damaged slats, and the reinstallation and painting of door. Currently awaiting quotes and delivery dates for replacement parts to determine an updated estimated completion date for the project. The other two K-Span

projects, JK16-860 and JK16-861 have less than one month of construction remaining, with respective estimated completion dates of 04 Mar 21 and 17 Feb 21, pending receipt of materials.

EXERCISES / JOINT INTEROPERABILITY



Seabees and Marines assigned to Bridge Company, 9th ESB, 3rd MLG demonstrate the employment of an IRB to transport CESE.

NMCB THREE took advantage of extra manning and limited travel for key leadership to focus on interoperability with adjacent units on Okinawa and participate in multiple planning conferences. NMCB THREE integrated into operations with adjacent joint-engineering forces during four exercises in Okinawa throughout deployment. From 21 Sep 20 – 02 Oct 20, a team of eight Seabees participated in Exercise Valiant Workhorse 20, supporting 9th ESB constructing a Medium Girder Bridge (MGB) and execute rafting operations with an Improved Ribbon

Bridge (IRB) IOT refine integration of Marine Corps and Navy Engineer capabilities. During the IRB portion of the exercise, the Marine and Seabee team experimented with docking a Landing Craft Utility (LCU) on the IRB ISO littoral maneuver concepts. From 18 – 19 Nov 20, a team of 16 Seabees participated in an 18th CES ADR exercise that involved damage response, asphalt capping, fiberglass matting, and excavation and concrete repairs. 18th CES conducts regularly occurring ADR exercises throughout the year and are interested in NMCB participation during future training. From 30 Nov 20 – 10 Dec 20, a team of six Seabees supported 9th ESB during their Jungle Warfare Training Center (JWTC) Concrete Exercise. During the exercise the team of Seabees attached to a platoon plus sized element of 9th ESB Marines constructed two concrete masonry unit buildings and three concrete sentry towers, providing JWTC with additional infrastructure to support training and preparing 9th ESB for their upcoming involvement in Exercise Cobra Gold in Thailand.

DISCRETIONARY PROJECTS

Throughout deployment, small-scale discretionary projects were executed at Camp Shields to improve quality of life on camp while training on relevant construction skills. Projects included the placement of two 48 ft by 19 ft concrete pads that will be used to secure the bleachers on Camp Shields football field, the project increased Camp Shields TCCOR readiness and provided valuable concrete training for Seabees of NMCB THREE. Additional projects included tile replacement in Building 7216, curb painting throughout the camp, and placement of a concrete bike pad outside of the medical building.

PROJECT SUMMARY

Project Number	Total Project MDs ¹	Estimate at Completion ₁	Tasked % ²	Final WIP (%) ¹	MDs Expended by Prior NMCBs ¹	MDs Expended This Deployment ¹
JK16-857	862	\$177,332	63%	71%	0	443
JK16-859	1,886	\$566,776	8%	99%	1,868	79
JK16-860	1,767	\$846,044	9%	98%	1,771	76
JK16-861	1,786	\$558,513	15%	99%	1,771	73
JK18-877	2,029	\$1,032,855	36%	13%	0	633
Total	8,330	\$3,201,520			5,410	1,304

Notes:

(1) Based off of Biweekly PSR.

(2) Based off of NMCB THREE 100% tasking.



K-Span I End View (Facing North)



4 inch Plumbing PVC Used as Electrical Conduit

Construct K-Span I JK16-859

Project Purpose: Construct a new Type-2 K-Span with stem walls, 6,700 sqft, and a height of 22ft. Facility will be used to manage the NCF CESE overflow at Camp Shields.

Project Data

Project Scope: In order to manage the Naval Construction Force (NCF) CESE overflow at Camp Shields, Okinawa, three enclosed Type-2 K-Spans will be constructed. Each K-Span will be 52 ft wide and 127 ft long (6,604 sqft) with 22 ft high corrugated metal roofing system and 8 ft high concrete side walls. Each K-Span will include, but is not limited to, the installation of grounding loop and lightning protection systems, two way egress with roll-up garage doors and two personnel entry doors on each end wall, installation of ventilators, and roofing insulation. It will be constructed in the Seabee compound next to the existing MLO PEB structure.

Personnel:	4	
Duration:	26Oct20 – 04Mar21	
MDs Expended:	NMCB THREE Prior NMCBs	79 MDs 1868 MDs
Tasking:	WIP Total Project MDs	99% 1886 MDs
Estimate at Completion:	\$566,775.54	

Significant Safety Issues: N/A

Significant QC Issues: Underground electrical, 4 inch conduit runs have been identified as plumbing PVC instead of the required electrical PVC. Rework has been estimated and purchased.

Significant Design Issues: N/A

Significant Material Issues: N/A

Significant Tool/Equipment Issues: N/A



K-Span II End View (Facing South)



K-Span II Ventilation Fan

Construct K-Span II JK16-860

Project Purpose: Construct a new Type-2 K-Span with stem walls, 6,700 sqft, and a height of 22ft. Facility will be used to manage the NCF CESE overflow at Camp Shields.

Project Data

Project Scope: In order to manage the Naval Construction Force (NCF) CESE overflow at Camp Shields, Okinawa, and three enclosed Type-2 K-Spans will be constructed. Each K-Span will be 52 ft wide and 127 ft long (6,604 sqft) with 22 ft high corrugated metal roofing system and 8 ft high concrete side walls. Each K-Span will include, but is not limited to, the installation of grounding loop and lightning protection systems, two way egress with roll-up garage doors and two personnel entry doors on each end wall, installation of ventilators, and roofing insulation. It will be constructed in the Seabee compound next to the existing MLO PEB structure.

Personnel:	4	
Duration:	26Oct20 – 17Feb21	
MDs Expended:	NMCB THREE	76 MDs
	Prior NMCBs	1771 MDs
Tasking:	WIP	98%
	Total Project MDs	1767 MDs
Estimate at Completion:	\$846,044.23	

Significant Safety Issues: N/A

Significant QC Issues: Underground electrical, 4 inch conduit runs have been identified as plumbing PVC instead of the required electrical PVC. Rework has been estimated and purchased.

Significant Design Issues: N/A

Significant Material Issues: N/A

Significant Tool/Equipment Issues: N/A



K-Span III End View (Facing West)



Pedestrian Door and Hand Rails

Construct K-Span III JK16-861

Project Purpose: Construct a new Type-2 K-Span with stem walls, 6,700 sqft, and a height of 22ft. Facility will be used to manage the NCF CESE overflow at Camp Shields.

Project Data

Project Scope: In order to manage the Naval Construction Force (NCF) CESE overflow at Camp Shields, Okinawa, three enclosed Type-2 K-Spans will be constructed. Each K-Span will be 52 ft wide and 127 ft long (6,604 sqft) with 22 ft high corrugated metal roofing system and 8 ft high concrete side walls. Each K-Span will include, but is not limited to, the installation of grounding loop and lightning protection systems, two way egress with roll-up garage doors and two personnel entry doors on each end wall, installation of ventilators, and roofing insulation. It will be constructed in the Seabee compound next to the existing MLO PEB structure.

Personnel:	4	
Duration:	26Oct20 – 18Feb21	
MDs Expended:	NMCB THREE	73 MDs
	Prior NMCBs	1771 MDs
Tasking:	WIP	99%
	Total Project MDs	1786 MDs
Estimate at Completion:	\$588,512.96	

Significant Safety Issues: N/A

Significant QC Issues: Underground electrical, 4 inch conduit runs have been identified as plumbing PVC instead of the required electrical PVC. Rework has been estimated and purchased.

Significant Design Issues: N/A

Significant Material Issues: N/A

Significant Tool/Equipment Issues: N/A



Placement of Pad 1



Project Turnover

Construct Support Facilities for G/ATOR Systems JK18-877

Project Purpose: Provides the 12th Marines a support facility to stage and perform maintenance for six new Ground/Air Task Oriented Radar (G/ATOR) systems increasing their ability to detect and deter adversaries that threaten U.S. and Japanese interests in the AOR while strengthening U.S. Navy and USMC relationships and interoperability.

Project Data

Project Scope: Demolish existing asphalt lot, excavate 5 ft, backfill/compact and then construct a 98 ftLx23 ftWx20 ftH concrete facility of six staging bays with 21 columns, roll-up doors, exterior and interior electrical to include a transformer, and fire suppression system rough-in plumbing aboard USMC Camp Hansen, Okinawa.

Personnel:	17	
Duration:	10Sep20 – 30Aug21	
MDs Expended:	NMCB THREE	633 MDs
	Prior NMCBs	0 MDs
Tasking:	WIP	13%
	Total Project MDs	2029 MDs
Estimate at Completion:	\$1,032,855.00	

Significant Safety Issues: N/A

Significant QC Issues: N/A

Significant Design Issues: N/A

Significant Material Issues: N/A

Significant Tool/Equipment Issues: N/A



Before Project Start



Preparation for Footer Placement

CESE Wash Rack JK16-857

Project Purpose: Construct a new three lane wash rack with 8 ft-0 inch high concrete divider walls equipped with wall-mounted LEDs to more effectively inspect and wash CESE for MCO response.

Project Data

Project Scope: Scope of work includes; removal of existing wash rack, two light poles, construction of new wash rack and supporting utilities. Converts the existing four lanes wash rack with low CMU block walls to a wider three lane wash rack with 8 ft 0 inch high concrete divider walls to allow more width for ladders, electrical, hose bibs, and work space. New steel bollards to be located on both ends of each wall, to prevent wall damage form vehicle. Two existing parking stalls will be converted into a vacuum station. The existing concrete curbs and drain system will remain.

Personnel:	15	
Duration:	26Oct20 – 01May20	
MDs Expended:	NMCB THREE	443 MDs
	Prior NMCBs	0 MDs
Tasking:	WIP	71%
	Total Project MDs	862 MDs
Estimate at Completion:	\$177,332.33	

Significant Safety Issues: N/A

Significant QC Issues: Project team discovered that the wrong copper pipe (type L) was used during the installation of the underground water lines (type K required). Material is on order. Rework required – 20 MDs.

Significant Design Issues: N/A

Significant Material Issues: Material shortfalls will delay critical path activity (Below Ground Installation, ESD 13JAN21). Item is critical for electrical PVC conduit in connecting to RMC above ground (Plastic to metal connection).

Significant Tool/Equipment Issues: N/A



Before Project Start



After Project Completion

“First and Finest” Curb Painting
MCD M010-20

Project Purpose: Increase camp Beautification by repainting curbs to properly display caution, parking and no parking areas.

Project Data

Project Scope: Scrape old/chipping paint to be bagged for disposal through ALFA Company Hazmat. Tape edges of curbs/sidewalk and repaint two coats high temperature yellow oil based outdoor paint on prepared surface.

Personnel:	5	
Duration:	08Aug20 – 12Aug20	
MDs Expended:	NMCB THREE	14 MDs
Tasking:	WIP	100%
	Total Project MDs	14 MDs
Estimate at Completion:	\$185.00	

- Significant Safety Issues:** N/A
- Significant QC Issues:** N/A
- Significant Design Issues:** N/A
- Significant Material Issues:** N/A
- Significant Tool/Equipment Issues:** N/A



Before Project Start



After Project Completion

Hilton Tile Renovation MCD M005-20

Project Purpose: Due to construction and old age the entry way tile of the Hilton has been cracked and damaged posing a tripping hazard. New tile is to be installed to create a visibly appealing product and eliminate any possible tripping hazard.

Project Data

Project Scope: Remove all pre-existing tile and mortar, cut existing pad to square and resurfaced the existing pad prior to placing tile. Tile will be laid out and placed on a ½ mortar bed ensuring slope away from building. Grout will be used between all tiles with grout lines not to exceed 5/8 inch.

Personnel:	7	
Duration:	17Sep20 – 06Oct20	
MDs Expended:	NMCB THREE	63 MDs
Tasking:	WIP	100%
	Total Project MDs	63 MDs
Estimate at Completion:	\$2,000.00	

Significant Safety Issues: N/A

Significant QC Issues: N/A

Significant Design Issues: N/A

Significant Material Issues: N/A

Significant Tool/Equipment Issues: N/A



Before Project Start



After Project Completion

Medical Bike Rack
MCD M001-20

Project Purpose: Construct a new concrete pad for bike rack installation at Medical to serve troops traveling to medical using bicycles.

Project Data

Project Scope: Construct one concrete pad for a bike rack installation at building 8210. Remove all existing vegetation in the footprint of the new grade concrete slab construction area. Crew members will excavate, level and compact a 4 inch select fill base, install formwork, and install reinforcing bars for a 12 ft 6 inch long by 9 ft 1 inch wide by 6 inch thick concrete slab. After placement and form removal, the soil around the pad will be leveled.

Personnel:	6	
Duration:	16Nov20 – 23Nov20	
MDs Expended:	NMCB THREE	38 MDs
Tasking:	WIP	100%
	Total Project MDs	38 MDs
Estimate at Completion:	\$1,872.25	

- Significant Safety Issues:** N/A
- Significant QC Issues:** N/A
- Significant Design Issues:** N/A
- Significant Material Issues:** N/A
- Significant Tool/Equipment Issues:** N/A



Before Project Start



First Bleacher Pad Placement

Bleacher Pad OIC-D

Project Purpose: This project enabled Seabees to utilize skills providing sustainment training in tasks such as concrete and rebar placement along with practical application of the use of our pump truck. Additionally it increased camp beautification and TCCOR readiness by creating anchor points for the spectator bleachers.

Project Data

Project Scope: Excavate roughly a 50 ft x20 ft x 8 inch area, backfilling and compacting up 90% compaction. Place two 47 ft 9 inch x 19 inch x 6 inch concrete pad with 220 sticks of #5 rebar for reinforcement. Create one control joint through the length and three control joints through the width of the pad an inch deep and equally spaced. Install nine anchor bolts securing bleachers to pad.

Personnel:	14	
Duration:	09Nov20 – 01Dec20	
MDs Expended:	NMCB THREE	184 MDs
Tasking:	WIP	100%
	Total Project MDs	184 MDs
Estimate at Completion:	\$10,906.50	

Significant Safety Issues: N/A

Significant QC Issues: N/A

Significant Design Issues: N/A

Significant Material Issues: N/A

Significant Tool/Equipment Issues: N/A



Initial Site



Cleared Site

Site K, Kadena AFB
OIC-D

Project Purpose: This project helped strengthen relationships between 1-1 ADA and CTU 75.5.1 Seabees promoting interoperability and setting the precedent for future projects and training opportunities.

Project Data

Project Scope: Cleared and grubbed the United States Army 1-1 ADA missile pad launching area of Kadena AFB, Okinawa and performed CESE maintenance on the ammo vehicle delivery haul road IOT improve access to the critical location, while providing a CESE cycling and training opportunity.

Personnel:	4	
Duration:	18Oct20 – 28Oct20	
MDs Expended:	NMCB THREE	36 MDs
Tasking:	WIP	100%
	Total Project MDs	36 MDs
Estimate at Completion:	\$0.00	

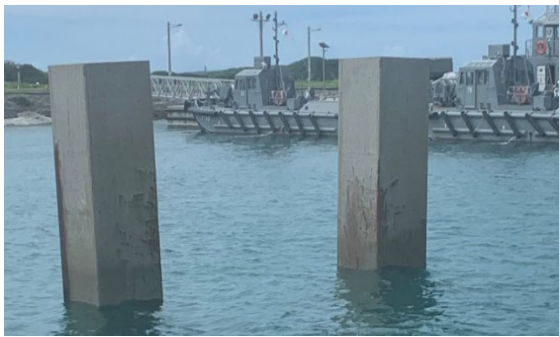
Significant Safety Issues: Steep hills – potential vehicle rollover. Ground guides, slow CESE operations and areas clearly marked to identify potential high risk areas.

Significant QC Issues: N/A

Significant Design Issues: N/A

Significant Material Issues: N/A

Significant Tool/Equipment Issues: N/A



Initial Site



Cleared Site

White Beach Pile Removal OIC-D

Project Purpose: Remove steel and concrete piles at White Beach, Okinawa IOT increase small boat maneuverability and capitalize on the opportunity to increase training opportunities for amphibious operations.

Project Data

Project Scope: Move the piles away from the high traffic boat area IOT increase maneuverability in the White Beach Basin

Personnel:	4	
Duration:	30Jul20	
MDs Expended:	NMCB THREE	4 MDs
Tasking:	WIP	100%
	Total Project MDs	4 MDs
Estimate at Completion:	\$0.00	

Significant Safety Issues: No-go criteria included the winch line more than 20 degrees below horizontal, winch line rubbing on the seawall, and the load getting stuck which would overstress the winch.

Significant QC Issues: N/A

Significant Design Issues: N/A

Significant Material Issues: N/A

Significant Tool/Equipment Issues: N/A

CAMP SHIELDS CAMP MAINTENANCE

Service	MDs Expended This Deployment
Emergency/Service Authorization (ESA)	1,192
Standing Job Orders (SJO)	248
TCCOR Prep/ Clean-up	115
P&E (MCD/OIC-D)	252
M001-20 Medical Bike Rack (MCD)	38
M005-20 Hilton Tile Renovation (MCD)	83
M010-20 First and Finest (MCD)	17
Bleacher Pad (OIC-D)	211
Total MDs Expended	2,156

MAIN BODY LESSONS LEARNED

ALFA COMPANY

1. Topic: Licensing program - Concrete Pump Truck license

Problem: Only one qualified operator for pump truck.

Recommendation: Build a Homeport plan to qualify and sustain operators across all Units of CESE; specifically, six operators at all times for pump truck. Three operators will deploy with main body.

2. Topic: CESE Cycling and heavy equipment licenses

Problem: No established location to properly cycle Camp Shields CESE TOA.

Recommendation: Future NMCBs must continue building relationships with Camp Hansen and Kadena AFB units in order to continue to utilize their CESE cycling areas. Team will ensure that we pass along all contact information to continue building interoperability with adjacent units.

3. Topic: Shop Maintenance

Problem: Alfa Company leadership recognized that delineating a shop to be corrective maintenance and the other to be preventative maintenance was creating a bottle neck in operations and preventing the CMs from becoming versed in both maintenance areas.

Recommendation: Make both shops capable of completing corrective and preventative maintenance to allow experts on the floor to note and make corrections on units of CESE on the spot in the shop and enhance technical training for floor mechanics so they don't just do one or the other (PM or Corrective).

4. Topic: Assignment of RPPO to cover Details repair parts

Problem: Details lacked repair parts being ordered and shipped to their site. Three RPPOs managed the detail sites and Main Body (MB) site. They prioritize parts ordering and shipping based on info received from the details and MB. Similar to a first come first serve process. If one RPPO covered the details sites the details sites would have a representative engaged with their parts ordering process at all times, potentially eliminating delay in receiving.

Recommendation: Assign an RPPO to cover details repair parts as their only focus.

5. Topic: Mechanic tool calibration

Problem: Details staying ahead of tools that need to be recalibrated.

Recommendation: Assign a METCAL program representative and coordinate with local METCAL team to schedule re-calibration of tools ahead of time. Details cannot wait till it's due for calibration to schedule. Details with a local program need to coordinate with MB representative 90 days in advance so MB can ship calibrated tools to their site in time for them to continue maintenance with calibrated tools. A6 suggests that OIC/ AOIC are engaged with this program.

DELTA COMPANY

1. Topic: Electrical and Plumbing Materials Based on American Standard not Locally Available

Problem: American and Japanese electrical and plumbing systems are not compatible. American Standard materials have long lead times sometimes extending to several months.

Recommendation: To the maximum extent possible, projects should be designed to Japanese standards in order to enable local procurement. Alternatively, ensuring that a building system (such as electrical) is

sourced entirely with either imperial or metric components will ensure that there are no issues with compatibility of system components. Determine during project planning if American Standard will be used or if local equivalents are acceptable. If American Standard materials are required, it is imperative this is identified during project start and BOMs are submitted ASAP.

2. Topic: OPTAR for Project Funding

Problem: CESE Wash Rack (JK16-857) is funded by CNIC. Funding for dumpster services was not allotted for in the current fiscal year. The direction given by 30NCR Camp Czar was that the project could not break ground until dumpsters were ordered and had a scheduled arrival date. Project funding was closed for the fiscal year and therefore camp OPTAR was utilized with approval of NECCPAC comptroller.

Recommendation: The deployed battalion should carefully review required services and their associated costs in order to determine if there are other options available. BOMs for services should be broken up by fiscal year because current year funding is required for services. The use of dumpsters should not always be the answer for removal of concrete, asphalt, or spoils.

3. Topic: Electrical Layout for Project Site

Problem: CESE Wash Rack (JK16-857) reached out to CFAO PWD for electrical plans for the site. This was unnecessary when ultimately the power connected to Wash Rack was shut off at collateral by camp maintenance, who is authorized to shut the power off for any building they have the authority to enter.

Recommendation: Coordinate with camp maintenance to determine if they can shut power off prior to reaching out to PWD.

4. Topic: Toning for Project Sites

Problem: CESE Wash Rack (JK16-857) required toning for the project site prior to execution. There were no service funds to contract for toning. However, the dig permit with PWD covers toning.

Recommendation: Projects on Camp Shield do not need to contract out toning services, toning is covered under a dig permit with PWD.

5. Topic: Services Funding for MCIPAC Projects

Problem: G/ATOR at Hansen (JK18-877) is funded by MCIPAC. Services funding did not take into consideration dumpsters, port-a-johns, or handwash stations for the project site. The direction given by FEAD was that the project could not break ground until dumpsters were ordered and had a scheduled arrival date, which resulted in a project delay of over two weeks.

Recommendation: Close scrutiny of services for MCIPAC funded projects could prevent this issue. When receiving initial project funding, 30NCR should communicate future FY service funding requirements to supported customers. Additionally, the deployed battalion should carefully review required services and their associated costs in order to determine if other options available. BOMs for services should be broken up by fiscal year because current year funding is required for services. The use of dumpsters should not always be the answer for removal of concrete, asphalt, or spoils.

DETAIL GUAM

NMCB THREE Detail Guam deployed to Camp Covington, Naval Base Guam in order to execute high-quality horizontal and vertical construction, and begin hot mix asphalt batching operations with the expeditionary asphalt batch plant. Detail Guam's forward presence in the USINDOPACOM AO enabled Seabees to work on technically challenging projects that broaden their skillset with overhead concrete work, improve interoperability with the United States Air Force 554 Rapid Engineer Deployable Heavy Operational Repair Squadron Engineer (RED HORSE) Squadron, and demonstrate the concept of operations of Seabees batching and laying down asphalt, a critical strategic capability.

Details Guam, Tinian, Marshall Islands, Yap, Pohnpei, and Timor-Leste, a total of 116 personnel, arrived on the island of Guam on 24 Jun 2020, after a 19-day pre-movement ROM-S at a hotel in Oxnard, CA. Details Tinian and Timor-Leste continued on their missions on 26 Jun 20 and 11 July 20, respectively. The remaining details personnel stayed on Guam, prepared to forward deploy to respective detail sites once Host Nation travel restrictions were lifted. Turnover with NMCB FIVE took place on 24 June 2020.

Upon completion of turnover, Details Guam and Marshall Islands began work on assigned tasking, with Detail Marshall Islands taking the lead on completing GM11-809 due to the limited remaining scope and the possibility of being called to move on to their ultimate detail site. The expeditionary asphalt batch plant completed its stack emissions testing in mid-July 2020, with support from Naval Base Guam's Environmental air quality manager. This stack emissions test established the baseline of emissions for the plant's operations, and is only required to be performed once every five years.



Detail Guam Seabees conduct maintenance on the Asphalt Batch Plant

In mid-August, it was determined that Detail Marshall Islands was not expected to move on to their ultimate destination due to the travel restrictions and limited entry into the nation to protect itself from the COVID-

19 pandemic. At that time, Detail Marshall Islands was stood down and the personnel were integrated into Detail Guam's operations. The timing of this integration lined up with the new tasking to complete the Expedient Small Asset Protection (ESAP) foundation for the 554th RED HORSE, enabling Detail Guam to take on the additional tasking mid-deployment.

In early September, a member of Detail Guam was positively diagnosed with COVID-19. The service member was immediately placed under ROM Isolation (ROM-I) to prevent the further spread of the disease to other personnel on board Camp Covington. This immediate action resulted in containing the disease to that one individual, permitting the remainder of the detail to continue their operations. While the individual was recovering, underlying health issues required that they seek additional medical treatment back in CONUS and they were sent home in early October.

Detail Guam earned 1,215 MDs of Work in Place (WIP) at five project sites while meeting critical construction and engineering requirements. Significant projects completed by Detail Guam during this deployment include an EOD Storage Building, ADA ramp, an Expedient Small Asset Protection (ESAP) Enclosure concrete pad, improvements to base roads, and the substantial completion of a U.S. Coast Guard Pavilion,.

NMCB THREE Detail Guam was relieved by NMCB FOUR Detail Guam on 21 Jan 21.

Detail Guam's tasking for the FY20-21 deployment included the following:

Priority #1: GM18-879 Construct Coast Guard Pavilion

The result of a QDR with significant quality deficiencies, this project was demolished by NMCB FIVE, who began the re-construction and turned the project over at the definable feature of work (DFOW) of placing footers. NMCB THREE resumed the operations, installing the pavilion's columns, slab, overhead beams, and the roof slab. This project was a technically challenging for the project team with the placement of overhead beams and roof. But the team was able to demonstrate how the scaffolding and formwork from PERI Formwork Systems, Inc. can be re-purposed from one project to another, saving time and money. This tasking was substantial completed but will be turned over to NMCB FOUR, estimated completion date is 29 Jan 21.



GM18-879: Seabees conduct overhead concrete placement.

Priority #2: GM11-809 Construct EOD Facility

Turned over from NMCB FIVE, it was discovered after turnover that there were quality concerns with the installed electrical work and that paint finishes were not properly applied. Originally tasked to Detail Marshall Islands who were on standby to deploy once travel restrictions lifted, the details eventually merged to complete the tasking. Upon walkthroughs with NAVFAC and customer it was determined the wrong electrical meter was installed by a prior NMCB. NMCB THREE turned over the tasking with only ordering and installation of electrical meter to NMCB FOUR.

Priority #3: GM20-813 Expedient Small Asset Protection (ESAP) Foundation

New tasking while deployed, Detail Guam was tasked with a time critical construction project to install foundation grade beams and pads for an ESAP structure to support the 554TH RED HORSE, Silver Flag flight. The ESAP facility is a modular container structure that is utilized by the United States Air Force. The construction of the ESAP foundation was delivered in time for the Silver Flag flight to update its curriculum to include the construction of the ESAP structure for future Silver Flag students.

Priority #4: GM13-829 Repair Parking Lot and Construct Walk Path

Turned over from NMCB FIVE, the resurfacing of the parking lot was completed, however the sidewalks were unable to be completed due to Munitions and Explosives Considerations (MEC) requirements. Once MEC clearance was approved, Detail Guam dispatched a crew on 12 November 2021 to resume work and completed the sidewalk installation. This tasking was completed with a beneficial occupancy date of 28 Dec 21.

Priority #5: GM19-600 Asphalt Batching Setup

Turned over from NMCB FIVE, the ABP required a final stack emissions certification that would establish the plant's baseline of emissions under normal operations. The stack emissions testing was completed in Aug 20 and the findings provided in Sep 20. During the setup of the ABP, the crew was challenged with continual part failures and preventative maintenance checks, however they took these setbacks as opportunities to capture critical lessons learned, order and begin a minor stock of replacement parts on-site to maintain the plant's operations.

Priority #6: GM20-811 Re-Pave South Tupalao Housing Roads



Detail Guam Seabees and 554th RHS practice sand laydown in preparation for upcoming paving evolution

New tasking upon arrival, Detail Guam was tasked with the concept of operations project of installing a road overlay with organic personnel and equipment 1,500 ft for a new road at Known Distance Range on Naval Base Guam. This tasking was not completed while on deployment due to funding availability for the milling services and higher priority tasking from Detail Tinian that required the NCF paver be shipped in Nov 20 to meet demand signal.

Priority #7: GM20-810 Re-Pave South Tupalao Housing Roads

New tasking upon arrival, Detail Guam was tasked with the concept of operations project of milling (contracted support) and repaving with organic personnel and equipment 1,200 ft of new roads in an abandoned housing sub-division on Naval Base Guam. This tasking was not completed while on deployment due to funding availability for the milling services and the higher priority tasking from Detail Tinian that required the NCF paver be shipped in Nov 20 to meet demand signal.

PROJECT SUMMARY

Project Number	Total Project MDs ¹	Estimate at Completion ₁	Tasked % ²	Final WIP (%) ¹	MDs Expended by Prior NMCBs ¹	MDs Expended This Deployment ¹
GM11-809	2,555	\$845,832	2%	100%	2,407	679
GM13-829	78	\$132,485	64%	100%	0	142
GM18-879	531	\$231,046	36%	98%	531	753
GM19-600	300	\$388,150	100%	100%	0	560
GM20-813	92	\$59,573	100%	100%	0	181
Total	3,556	\$5,328,420			2,938	2,315

Notes:

(1) Based off of Biweekly PSR.

(2) Based off of NMCB THREE 100% tasking.

LABOR DISTRIBUTION SUMMARY

Month	Jul 20	Aug 20	Sep 20	Oct 20	Nov 20	Dec 20	Jan 21	Total
Direct Labor MDs ¹	403	392	369	309	455	347	100	2,375
Indirect Labor MDs ^{1,2}	156	118	112	136	189	109	32	852
Readiness/Training ¹	0	0	0	0	0	0	0	0
Total MDs Exp	559	510	481	445	644	456	132	3,227
# Total Personnel	55	55	55	54	52	52	18	
# Direct Labor	27	27	27	24	23	23	8	
# Workdays³	23	21	21	21	21	20	10	
% Direct Labor⁴	49%	49%	49%	44%	44%	44%	44%	
Ideal Capability⁵	698	638	638	567	543	518	90	
Availability Factor⁶	.58	.61	.58	.57	.84	.67	1.11	

Notes:

(1) Direct and Readiness/Training MDs are expended MDs, not earned.

(2) Indirect Labor MDs are MDs spent (expended) on indirect activities by DL personnel. This reflects "X" coded time from timecards.

(3) Number of workdays = DL workdays + DL training days.

(4) Percentage of DL (%DL) = 100% * (DL/Total Personnel).

(5) MD Capability = (ME * DL * Workdays) = 1.125 x DL x (# Workdays).

(6) Actual Availability Factor = (DL MDs + Readiness/Training MDs) / (MD Capability).



Project at Turnover



Project at Completion

Construct EOD Storage Facility GM11-809

Project Purpose: The project provides a permanent concrete vehicle storage facility for EODMU 5. Personnel will have easy and expedient access to properly stored vehicles for training and real world evolutions at any time. Providing an opportunity for our Seabees to gain technical abilities building finishes and electrical installation, while developing key skills in the event of MCO or HA/DR response.

Project Data

Project Scope: Construct a 50 ft x 56 ft concrete storage facility. Work includes interior and exterior painting, installing a 13.8kW pole transformer, and installing interior and exterior lighting, main distribution panel, and service disconnects.

Personnel:	10	
Duration:	06Jul20– 17Nov20	
MDs Expended:	NMCB THREE	679
	Prior NMCBs	2,407
Tasking:	WIP at Deployment Completion	100%
	Total Project MDs	2,555
Initial Estimate at Completion:	\$550,000.00	
Current Estimate at Completion:	\$845,831.85	

Significant Safety Issues: None.

Significant QC Issues: Electrical not installed correctly, required re-work on all installed electrical. Interior and exterior finishes not completed to spec; required extra coats to correct deficiencies.

Significant Design Issues:

Significant Material Issues:

Significant Tool/Equipment Issues:



Project at Turnover



Project Current Status

Reconstruct Coast Guard Pavilion GM18-879

Project Purpose: The project will provide the USCG with an outdoor covered structure for command functions, such as holding quarters, honors, and awards ceremonies while contributing to the morale and welfare of USCG personnel. This project provides an opportunity for Seabees to hone technical abilities in advanced concrete work, developing key skills in the event of an MCO or HA/DR response.

Project Data

Project Scope: Rebuild pavilion and add sidewalk at USCG, NBG. Prefabricate and install forms and RST for footers, slab on grade, columns, overhead beams, and roof. Place concrete for 10 footers, slab, 10 columns, overhead beams, and roof. Install lights, switches, and junction box. Excavate a utility trench from building for electrical services. Pre-Fab RST and forms for a sidewalk to the pavilion, along with placing concrete for sidewalk.

Personnel:	8	
Duration:	06Jul20– 29Jan20	
MDs Expended:	NMCB THREE	753
	Prior NMCBs	531
Tasking:	WIP at Deployment Completion	98%
	Total Project MDs	531
Initial Estimate at Completion:	\$147,030.00	
Current Estimate at Completion:	\$231,046.02	

Significant Safety Issues: None.

Significant QC Issues: Rebuild work was due to results of a QDR prior to NMCB THREE's arrival.

Significant Design Issues: Detail of overhead beam to roof slab connection was not provided in original drawings, or revised drawings after design changed from timber supported roof to a concrete supported roof. A 14 calendar day delay impacted production until the design change directive was provided by the designer of record.

Significant Material Issues:

Significant Tool/Equipment Issues:



Project at Turnover



Project Current Status

Repair Parking Lot and Construct Walkpath at Bldg. 492
GM13-829

Project Purpose: Provide Naval Computer and Telecommunications Station Guam personnel ease of access for handicapped individuals with ADA compliant ramps to building 492 and demonstrate proof of concept paving operations.

Project Data

Project Scope: Demolish pre-existing concrete access ramp replacing it with an ADA ramp. Construct a 171 ft x 68 ft, 39 stall parking lot that will be resurfaced with a 2 inch asphalt cap. Place a 46 ft x 5 ft sidewalk on the north side of the project connecting the parking lot to the new ADA access ramp and a 4 ft x 22 ft walkway connecting to the A/C lot to existing sidewalk.

Personnel:	8	
Duration:	11Nov20– 30Dec20	
MDs Expended:	NMCB THREE	142
	Prior NMCBs	0
Tasking:	WIP at Deployment Completion	100%
	Total Project MDs	78
Initial Estimate at Completion:	\$285,752.46	
Current Estimate at Completion:	\$132,485.08	

- Significant Safety Issues:** None.
- Significant QC Issues:** None.
- Significant Design Issues:** None.
- Significant Material Issues:** None.
- Significant Tool/Equipment Issues:** None.



Project at Turnover



Project Completion

Expedient Small Asset Protection (ESAP) Foundation GM20-813

Project Purpose: 554 RED HORSE will have a permanent training site incorporating a new curriculum for future Silver Flag students on the proper erection of the Expedient Small Asset Protection (ESAP) structure immediately upon conclusion of NMCB THREE's tasking. This project will provide an opportunity for Seabees to improve technical capabilities in form work construction, rebar bending, and concrete placement, while developing key skills in the event of an MCO or HA/DR response.

Project Data

Project Scope: Construct a concrete foundation for a future training site for 554 RED HORSE at Northwest Field, Anderson Air Force Base. Remove asphalt from existing lot. Excavate for a pad and beams. Place continuous concrete grade beams that are 1 ft 6 inch x 2 ft 8 inch. Place a 2,174 sqft, 6 inch concrete pad with a broom finish.

Personnel:	8	
Duration:	02Nov20– 22Dec20	
MDs Expended:	NMCB THREE	181
	Prior NMCBs	0
Tasking:	WIP at Deployment Completion	100%
	Total Project MDs	92

Initial Estimate at Completion: \$42,000.00

Current Estimate at Completion: \$59,573.00

Significant Safety Issues: None.

Significant QC Issues: None.

Significant Design Issues: Provided prints from 554 RED HORSE had dimensions from both the ESAP manufacturer and from 554 RED HORSE engineering aide shop. This created a conflict when installing the formwork for the grade beams and 2 days of re-work was required to match the manufacturer's drawings.

Significant Material Issues:

Significant Tool/Equipment Issues:



Corrosive preventative maintenance.



Project Current Status

Asphalt Batch Plant Setup, Produce, and Test GM19-600

Project Purpose: Beginning asphalt batch plant operations, begin creating hot mix asphalt designs to support a variety of horizontal paving projects, demonstrate the concept of operations of a Naval Construction Force to batching, transporting, and installing asphalt, resulting in high-quality products that will enable fleet forces forward posture in the INDOPACOM AO.

Project Data

Project Scope: Complete setup, environmental stack emissions testing, and transition into normal operations to support tasked horizontal projects on board Naval Base Guam.

Personnel:	6	
Duration:	06Jul20– 21Jan21	
MDs Expended:	NMCB THREE	560
	Prior NMCBs	0
Tasking:	WIP at Deployment Completion	100%
	Total Project MDs	300 (LOE)

Initial Estimate at Completion: \$388,150.09

Current Estimate at Completion: \$388,150.09

Significant Safety Issues: None.

Significant QC Issues: None.

Significant Design Issues: None.

Significant Material Issues: None.

Significant Tool/Equipment Issues: Availability of repair parts on island will impact plant operations if critical parts fail. This will be a continual process to build the on-site stock of repair parts for just-in-time repairs.

OIC Discretionary Projects

<u>Project Listing</u>	<u>Cost</u>	<u>MDs Expended</u>
NBG FLC HHQ Demo File Cabinet	\$0.00	3
CTF 75 Flag Pole Refurbishment	\$0.00	2
USO Sneeze Guard Installation	\$0.00	3
USO Fiber Optics Trench	\$0.00	22
CDC Install Playground Drains	\$0.00	3
USO Furniture Assembly and Placement	\$0.00	25
Total	\$0.00	58



Seabees dig trench for future fiber optics ISO USO.



Seabees assemble furniture ISO USO.



CDC playground for newly installed drains.



Installed sneeze guard at USO.

GUAM LESSONS LEARNED

1. Topic: Turnover of Facilities to NAVFAC

Problem: At the completion of the project, the utility connection request was submitted to NAVFAC with a planned connection within 30 days. After the submission of the utility connection request NAVFAC UEM was fully engaged with the project's status and started to question the material that was installed. It was determined that the local PWD never reviewed the updated drawings issued to the NCF.

Recommendation: Prior to release of drawings to the NCF, ensure that the drawings are reviewed by the local unit of action to ensure all local codes and requirements are addressed at the appropriate level.

2. Topic: Ordering Fuel for Asphalt Batch Plant

Problem: NAVFAC Marianas relies heavily on BOS contractor (DZSP) for a variety of services. Fuel purchase is a two-step process: 1) order the fuel material itself and 2) order the labor to deliver the fuel. This extends the process of ordering fuel unnecessarily and can severely impact batching operations.

Recommendation: Work with DLA Energy and develop IDIQ contract that is inclusive of fuel delivery service, to include material and labor costs. In absence of a contract, NMCB must be aware of process.

3. Topic: Project Site Approval and NEPA Documentation

Problem: NCF projects are appear to be tasked prior to site approval or NEPA documentation being completed. While these documents do have a shelf life, it is best practice that when tasking is being developed, the pre-construction documentation process is already underway so projects can be "shovel ready" prior to the oncoming battalion's arrival.

Recommendation: 30 NCR AOs champion the pre-construction documentation process, working with the local PWD or HN representatives to ensure proper documents are submitted in a timely manner. This will also translate into bi-weekly calls with OICs at detail sites, as well as with the incoming OICs to ensure all parties are aware of the current status of critical documents.

4. Topic: Munitions and Explosive Consideration Documentation and Estimates

Problem: The island of Guam is littered with munitions leftover from World War II. The Naval Ordnance Safety and Security Activity published instructions on how construction projects must adhere to munitions and explosive consideration (MEC), which can impact overall project schedule and cost if pre-construction documentation is not submitted prior to a battalion's tasking. Additionally, MEC is a contracted service that needs to be accounted for during planning to ensure adequate funding is available.

Recommendation: 30 NCR AOs champion the pre-construction documentation process, obtain historical data for executed MEC contracted service contract actions to enable proper P&E.

5. Topic: Financial Transparency

Problem: While required to be responsible for project financials, OICs are restricted to basic reporting of financial records provided by higher. When asked specific questions about the status of funding documents, the OIC is limited to communicating with the battalion's MLO for a status, or with 30 NCR directly. Once BOMs are submitted for funding requests, the detail has very limited control with enabling the expedited funding of a requirement, or simple tracking of funding requests and the current status if the funding has been released and/or accepted.

Recommendation: Include OICs as project/technical POC with NAVFAC's eTracker to maintain up-to-date tracking of funding requests through funding acceptance.

DETAIL TINIAN

On 22 Jun 20, NMCB THREE Detail Tinian deployed to Tinian, CNMI to execute high-quality construction of roads, harbor repairs, and a 110-man camp IOT improve stability and safety of local communities while reinforcing the U.S. commitment to CNMI, a key strategic partner in the region. Deployment tasking included the following: Priority #1 TI20-300 Construct Camp Tinian, Priority #2 TI20-801 IRT Tinian Road Improvements Phase I (Road G), Priority #3 TI19-800 Tinian Harbor Repair Phase I, and Priority #4 TI20-301 Level of Effort (LOE) Marpo Heights Road Maintenance.

On 26 Jun 20, Detail Tinian's 48 personnel arrived on the island of Tinian, following a 19-day ROM in Oxnard, CA and a three day ROM in Camp Covington, Guam. Travel from Guam to Tinian was executed through a CNMI Exception to Policy (ETP) which allowed Detail Tinian to bypass a 14-day ROM in Guam and Saipan, CNMI. Turnover with NMCB FIVE took place from 26 Jun 2020 through 2 Jul 20 and included the turnover of 38 units of CESE and the Camp Tinian project.



Detail Tinian Seabees complete demo of bollards in support of Tinian Harbor Project

On 4 Jul 20, Detail Tinian participated in the CNMI Liberation Day parade with the municipality and local government officials from Tinian and Saipan. Five units of CESE were included in the parade and the detail participated in festivities with the local community to include an equipment display event. On 6 Jul 20, Detail Tinian continued construction on TI20-300 Camp Tinian, to include (11) 16 ft x 32 ft SWA huts for berthing, (1) 16 ft x 32 ft SWA hut for showers and laundry, (1) 16 ft x 32 ft SWA hut for a Morale, Welfare, and Recreation (MWR) center, (1) 16 ft x 32 ft SWA hut for an administrative shop, (1) 16 ft x 32 ft SWA hut for a Basic Aid

Station (BAS), and (1) 48 ft x 32 ft SWA hut to be used a galley. Each SWA hut will receive power to include lighting, air conditioning, and commercial power outlets built-in. The camp will also include an Alfa yard and MLO/Central Tool Room (CTR) yard, and will be utilized to house future NCF and Marine Corps units to continue operations and training on Tinian.

Major challenges that the Camp Tinian project faced include: logistical delays, scope changes, and inclement weather and flooding. Logistics during the COVID-19 pandemic proved to be challenging and was the main issue NMCB FIVE faced during camp construction. Material procurement timelines significantly impacted and delayed Camp Tinian construction for NMCB THREE, averaging between 4-16 weeks for materials to arrive from CONUS. Overall, material procurement timelines have improved throughout deployment but did significantly impact NMCB THREE camp construction.

Another challenge to Camp Tinian reaching full operational capacity included scope of work changes for the disposal and storage of greywater on camp. The initial plan for greywater disposal was through an expeditionary leach field but due to environmental permitting issues, the plan shifted in Jun 20 to an above-ground storage tank system for contracted greywater removal. Due to further environmental permitting issues the plan shifted again to tie into an existing septic tank in close proximity to Camp Tinian. The add-



Detail Tinian Seabees perform excavations in support of Marpo Heights Road G

on bill of materials (BOM) for the existing septic tank scope change is anticipated to arrive O/A Jan 21, allowing NMCB FOUR to execute the remaining one-month worth of work on Camp Tinian and bring the camp to full operational capacity. The septic tank also cannot be tied-in until the completion of the NAVFAC contractor repairs with an expected completion date of Jan 21 which will impact NMCB FOUR moving into the camp. 9th ESB is also scheduled to deploy to the camp once complete.

Lastly, heavy rain negatively impacted operations throughout Camp Tinian construction. Rainy season in Tinian lasts from Jul – Nov, a majority of the deployment. Camp drainage improvements were made to divert water to the east and west side of the camp and prevent flooding of the galley, admin, and BAS SWA-Huts. NMCB THREE Detail Tinian will be turning over 194 MDs of work to NMCB FOUR to include tie-in to the septic tank and leach field following repairs made by a NAVFAC contractor in early 2021.



Camp Tinian, Tinian, CNMI

On 24 Sep 20, Detail Tinian started the TI20-801 IRT Road Improvement (Road G) project with clearing and grubbing operations IOT support Fleet Commander objectives, ahead of the planned mid-Nov start date due to delayed utility relocations by CNMI. NAVFAC awarded all material on 23 Sep 20 and Detail Tinian and the Navy Expeditionary Force Regional Services Contract (NEFRSC) contractor worked to procure required Storm Water Pollution Prevention Plan (SWPPP) material, safety items, and aggregate to execute

Road G construction operations on the “southeast portion” of Road G (last 1/3rd of roadway toward Canal St). Explosive Ordnance Disposal Mobile Unit FIVE (EODMU5) mobilized to Tinian from Guam IOT



Seabees execute asphalt paving operations in support of Marpo Heights Road G construction in Tinian. provide Unexploded Ordnance (UXO) support for excavations greater than six inches. Excavation on the southeast portion of Road G lasted from 14 – 26 Oct. Fine grading was completed on 5 Dec 20. The asphalt pave occurred on 9 and 10 Dec followed by complete work stoppage due to delayed utility relocations preventing further work on the Road G project. Challenges for the IRT Road G project included utility obstructions throughout the roadway to include power poles and underground water and fiber lines.

Lastly, with work stoppage on Camp Tinian Road G projects, the detail began a LOE on the Tinian Harbor Project. In the month of Dec the detail demolished and concrete capped eight bollards, demonstrating commitment to repairing the harbor in support of increasing Tinian’s mobility infrastructure.

PROJECT SUMMARY

Project Number	Total Project MDs ¹	Estimate at Completion ₁	Tasked % ²	Final WIP (%) ¹	MDs Expended by Prior NMCBs ¹	MDs Expended This Deployment ¹
TI20-300	1,524	\$1,093,193	100%	87%	204	1,563
TI20-801	936	\$3,755,091	100%	25%	0	258
TI19-800	710	\$864,127	30%	0%	0	0
TI20-301 LOE	150	\$0	100%	89%	0	133
TI20-300 LOE	300	\$0	100%	105%	0	314
Total	3,620	\$5,712,411			204	1,821

Notes:

(1) Based off of Biweekly PSR.

(2) Based off of NMCB THREE 100% tasking.

LABOR DISTRIBUTION SUMMARY

Month	Jul 20	Aug 20	Sep 20	Oct 20	Nov 20	Dec 20	Jan 21	Total
Direct Labor MDs¹	338	433	357	378	356	358	48	1,862
Indirect Labor MDs^{1,2}	358	263	300	189	272	321	13	1,382
Readiness/Training¹	0	30	30	29	29	33	0	118
Total MDs Exp	696	726	687	596	657	712	61	3,362
# Total Personnel	48	48	47	47	47	44	20	
# Direct Labor	28	28	27	27	27	24	7	
# Workdays³	22	22	21	22	23	25	10	
% Direct Labor⁴	58%	58%	57%	57%	57%	55%	35%	
Ideal Capability⁵	693	693	638	668	699	675	79	
Availability Factor⁶	.49	.69	.56	.61	.55	.58	.61	

Notes:

(1) Direct and Readiness/Training MDs are expended MDs, not earned.

(2) Indirect Labor MDs are MDs spent (expended) on indirect activities by DL personnel. This reflects "X" coded time from timecards.

(3) Number of workdays = DL workdays + DL training days.

(4) Percentage of DL (%DL) = 100% * (DL/Total Personnel).

(5) MD Capability = (ME * DL * Workdays) = 1.125 x DL x (# Workdays).

(6) Actual Availability Factor = (DL MDs + Readiness/Training MDs) / (MD Capability).



Project Start



Project Completion

Construct Camp TI20-300

Project Purpose: Camp Tinian will be an enduring camp with organic life support capabilities for future NCF and joint-focus personnel operating within CNMI.

Project Data

Project Scope: NMCB THREE is tasked with establishing a new camp on Tinian, CNMI. The camp will consist of (11) 16 ft x 32 ft SWA huts for Berthing, (1) 16 ft x 32 ft SWA hut for Showers and Laundry, (1) 16 ft x 32 ft SWA hut for MWR, (1) 16 ft x 32 ft SWA hut for Admin, (1) 16 ft x 32 ft SWA hut for BAS, and (1) 48 ft x 32 ft Galley SWA hut. Each SWA hut will receive power to include lighting, air conditioning, and commercial power outlets built-in. The camp will also include an alfa yard, CTR/MLO yard, and be utilized to house future NCF and Marine Corps units to continue operations in Tinian.

Personnel:	18	
Duration:	06Mar20 – 25Feb21	
MDs Expended:	NMCB THREE	1563
	Prior NMCBs	204
Tasking:	WIP at Deployment Completion	87%
	Total Project MDs	1524

Initial Estimate at Completion: \$663,173

Current Estimate at Completion: \$1,093,193

Significant Safety Issues: N/A.

Significant QC Issues: Once rainy season started in July, detail QC Inspector identified that poor drainage, low-lying grades and inadequate soil compaction around four concrete slabs (galley, BAS, admin and (1) berthing) began to form rainwater channels under the existing slabs. FAR 003 was submitted to place reinforced concrete thickened edge 6 inch wide by 12 inch deep around the pad with a 4 inch thick select fill of ¾ inch minus with compaction at 90%. Fortifying around the concrete slabs will prevent rain water drainage from seeping under concrete slab, prevent lateral shifting, and improve soil stabilization to prevent slab from sinking and cracking. FAR 003 approved by 30NCR on 21 Jul 2020.

Significant Design Issues: Environmental permitting was denied for an expeditionary leach field and above ground greywater storage tanks, which voided 30NCR approved FAR 005 to use above ground greywater storage. FAR 006 was submitted to construct a CMU lift station to pump camp greywater into an existing septic tank. FAR 006 was approved by 30NCR on 30 Oct 2020.

- NAVFAC septic tank repairs ECD NET Apr 2021. Lift station installation depends on completed contractor repairs and will delay NMCB FOUR camp move-in and 9th ESB deployment.

Significant Material Issues: Add-On BOM submitted due to insufficient L/I's based off of original BOM that aren't compatible to efficiently support all camp electrical requirements and materials required per 30NCR approval to FAR 006 to construct a CMU catchment tank with a lift station to pump galley and laundry/shower greywater to an existing septic tank. These materials are critical to complete the project and meet the project scope of work.

Significant Tool/Equipment Issues: N/A.



Project Start



Project Turnover

IRT Tinian Road Improvements, Phase I TI20-801

Project Purpose: The project will improve a deteriorated road within the Tinian community, causing unsafe conditions, particularly during rain. These construction efforts will add resiliency to the local community in order to continue the longstanding alliance with CNMI, contributing to regional security.

Project Data

Project Scope: NMCB THREE Detail Tinian will improve and repair Road G to bring the road to Department of Transportation standards for resident roadway systems. The total length of Road G is approximately 0.70 miles and will include new subbase course, final grading, tack coat, new asphalt pavement, concrete drainage ditches, piping and other associated repairs.

Personnel:	10	
Duration:	01Oct20 – 30Jun21	
MDs Expended:	NMCB THREE	258
	Prior NMCBs	0
Tasking:	WIP at Deployment Completion	25%
	Total Project MDs	936

Initial Estimate at Completion: \$3,755,091.00

Current Estimate at Completion: \$3,755,091.00

Significant Safety Issues: Local traffic on Canal Road and driving through blocked off site. Local government agencies informed.

Significant QC Issues: Existing grades often do not reflect the same elevations as the prints.

Significant Design Issues: Unidentified underground utilities not on the prints.

Significant Material Issues: N/A.

Significant Tool/Equipment Issues: The Guam TOA nine ton tandem roller arrived in Tinian from Guam on 14 Nov 20 and is currently on deadline. Specialty tools and fuel injection pump ordered; ETA TBD. DynCorp is coordinating for a CAT Rep to assist with repairs and operationally test once part and tools are received. Detail rented a seven ton tandem roller through the NEFRSC contract to support the asphalt pave scheduled on 09-10 Dec. Tandem roller removed from deadline on 30 Dec 20 with assistance from CAT rep.



Project Start



Project Turnover

Tinian Harbor Repair Phase 1 TI19-800

Project Purpose: Repair phase one of the Tinian harbor in support of future operations.

Project Data

Project Scope: Repair approximately 1400 ft of concrete pile cap, replace deteriorated mooring hardware/foundations, construct a new 200 ft x 40 ft concrete pad, and install new foam filled and arch fenders. The customer is the Commonwealth of Northern Marianas (CMNI) Port Authority.

Personnel:	7	
Duration:	07Dec20 – 18Jun21	
MDs Expended:	NMCB THREE	0
	Prior NMCBs	0
Tasking:	WIP at Deployment Completion	0%
	Total Project MDs	710
Initial Estimate at Completion:	\$864,127	
Current Estimate at Completion:	\$864,127	

Significant Safety Issues: Working over the water to install 3000lb fenders.

Significant QC Issues: N/A

Significant Design Issues: The existing asphalt to be demolished between STA 0+00 to 2+45 is larger than the 40 ft x 200 ft concrete pad to be placed. Prints do call for the asphalt to be replaced within excavated limits where this occurs to match existing thickness. This was overlooked during planning phase and an add-On BOM for asphalt will need to be submitted.

Significant Material Issues: Arch Fenders, Foam Filled Fenders, and epoxy have an ETA of mid-April.

Significant Tool/Equipment Issues: NMCB THREE Detail Tinian has working with U.S. Naval Mobile Construction Battalion 133 (NMCB ONE THIRTY THREE) Guam CTR to support a #8 hydraulic rebar bender and 1-1/8 inch & 1-3/8 inch Hilti hammer bits that will be required to prefabricate mooring bollard rebar cages and drill anchor bot holes on bulkhead to install fender. An emergency OPR has been submitted for the rebar bender, but still pending funding. This will be required NLT the first day of WIP after RIP/TOA with NMCB FOUR to prevent

impact to NMCB FOUR project operations. Hilti hammer bits were sourced on FEDMALL, will be required NLT 76 days after project start.

TINIAN LESSONS LEARNED

1. Topic: Certified Test Laboratories / Concrete Strength Tests

Problem: There are no certified concrete test laboratories on the island. Local concrete vendor (FPA) does provide test results, but testing equipment hasn't been calibrated in over a year and due to COVID travel requirements the company that calibrates all the testing facilities in CNMI will not come out to re-calibrate and certify equipment till travel restrictions are lifted. Detail Tinian does have two concrete testing kits, but their certifications are severely outdated and will require re-calibrating.

Recommendation: Detail Tinian has been working with Detail Guam and Helicopter Sea Combat Squadron (HSC) 25 since Oct 2020 to get concrete test kits back to Guam to be re-calibrated and certified by METCAL in Guam.

2. Topic: Proper Quality Control (QC) Reporting

Problem: Prior to Total Camp Readiness Assessment (TCRA) by 30NCR, QC reports did not include daily concrete test results, nor did they include verbatim phrasing from Navy Tactical Reference Publication (NTRP) after an activity was completed.

Recommendation: Attach each test result separately and use verbatim phrasing from NTRP.

3. Topic: Repair Part Shipments are Inconsistent

Problem: Inconsistency in arrival dates for repair parts caused delays getting equipment operational.

Recommendation: (1) Forecast parts and order parts as early as possible. (2) Work with DynCorp International (DI), Derek or Les will be the point of contact (POC) to order mission essential deadline parts. Majority of time ordering parts through DI will have a shorter lead time than ordering parts through Guam. These will have to be approved by your OIC/AOIC. (3) Order parts at least one month before the end of the year to use available emergency funds for deadline repairs and use Petroleum, Oil, and Lubricant (POL) allotment if necessary.

4. Topic: Construction Mechanic Tools

Problem: Tinian has limited diagnostic and shop tools available.

Recommendation: (1) Bring a CAT ET laptop. (2) Utilize FPA, they are the only shop on island that is capable of making the majority of repairs required such as repairing hydraulic hoses. Work with DI with getting parts repaired/made with FPA. OIC/AOIC will have to approve all of these transactions.

5. Topic: Equipment Automotive Repair Parts (ARP) & POL

Problem: Equipment received is in good condition, but have had to replace hydraulic lines, hoses, and belt numerous times. Possibly from inactivity in warehouse storage. FPA has been helpful in hydraulic line repair on island. Currently we are funded \$15K for emergency repair per calendar year and we have already used almost all of that within six months.

Recommendation: Highly recommend having emergency repair funds doubled to support the 57 units of CESE augmented from Guam's TOA.

6. Topic: Wash Rack

Problem: With the amount of earthwork being conducted in Tinian it has been a challenge to thoroughly clean CESE before transiting between project sites. We currently have an electronic pressure washer that we use to wash our contracted vehicle rentals.

Recommendation: Get a gas powered pressure washer and establish a wash rack at Camp Tinian.

7. Topic: Proper Project Management and Execution

Problem: All projects tasked have not been executed according to plan due to; scope change, lack of CNMI support to relocate utilities, septic tank repairs being delayed due to permits, and material delays.

Recommendation: Communicate early and often to Operations Department and 30NCR Action Officers if timelines and agreements are not being met on Tinian.

8. Topic: Isolated Heavy Rainfall causing Work Stoppages.

Problem: Rainy season falls between Aug to Dec. Weather radar is not reliable, with Tinian being very small it can be clear skies on the south side and heavy rain on the north side at the same time. It rains almost every day during the rainy season, sometimes causing a minor work stoppage of five minutes, but some days upwards to a total of four hours.

Recommendation: Develop rain day Construction Activity Summary Sheets (CASS) for every 100 MDs. The Detail typically only used these CASS when more than half the day was lost from inclement weather. Always have two COA's accounted for in your two week schedule during the rainy season. Use the nice days to execute outside activities and poor weather days for inside activities.

9. Topic: Proper Site Drainage

Problem: Camp Tinian's site was cleared and graded during the dry season and without the proper surveying equipment to verify elevations. The galley, BAS and admin SWA-Hut slabs were placed at the lowest elevation and once the rainy season started the camp flooded several times fully submerging the 6 inch slabs. We implemented trench drains along the roads inside the camp, but they couldn't percolate fast enough against the high volume of rainfall and flooding was still occurring. Once we received batteries for the S6 Tremble we verified existing elevations and then graded the site away from the three rows SWA-huts at a 3% slope, draining into a perpendicular earth swell that feeds into a large catch pond on the eastside of camp and also feeds to a run off to the west side of camp.

Recommendation: Utilize surveying equipment for an accurate site assessment prior to starting any groundwork to ensure proper drainage.

10. Topic: Blueprint Elevations

Problem: Existing grades often do not reflect the same elevations as the blueprints.

Recommendation: Confirm and verify all elevations prior to starting any excavation. Some locations may require a deeper or shallower footprint than what's depicted on the prints.

11. Topic: Unforeseen Underground Obstructions

Problem: During clearing and grubbing operations on Road G we hit unidentified water lines that were less than 6 inch below existing grade. Tinian Department of Public Works (DPW) was able to assist and cap off lines without causing any work outages to locals. Crew also found large deposits of coral rock when excavating sub grade, which slowed down excavation time.

Recommendation: (1) Ensure to use ground guides and always proceed with caution when excavating to prevent the possibility of hitting an unidentified line. (2) Apply a multiplier of two for excavation activities to allow more time to account for unforeseen subgrade obstructions.

12. Topic: Limited Quantity of Safety Items

Problem: Due to the harsh working conditions in Tinian, personnel's PPE wears out quickly. Tinian does not have an abundance of PPE that can be procured locally. It was difficult to maintain necessary quantity of PPE for personnel and due to the remoteness of the island, resupply timelines can take a while.

Recommendation: Order items as early as possible and communicate with main body to get safety items replenished to support future operations.

13. Topic: Local Equivalency Procured Materials

Problem: Material that were accepted for local equivalency didn't meet project requirement.

Recommendation: Ensure when developing BOM for projects to identify all specifications and requirements in material description and that during technical acceptance all specification and requirements are met so when DI procures material they meet project requirements.

14. Topic: Material Shipping Cost to Tinian

Problem: Significant increase on cost to have material shipped to Tinian. An average of 100% increase in cost for material due to shipping cost and taxes.

Recommendation: When developing BOM would highly recommend increasing percentages for; (Contingency FEE, KTR Incentive Fee, and KTR Indirect Fee) in funding source before 30NCR submits to NAVFAC for RFP to provide a more accurate cost for funds.

17. Topic: Proper Material Storage

Problem: Insufficient space to store all materials from outside elements and with rainy season from Aug to Dec it was challenging to keep all outside materials dry, even with the tarps that we ordered.

Recommendation: Camp Tinian's five year plan includes a MLO/CTR PEB to support storage for tools and materials, until then we recommend requesting for three to four more 20 ft containers for storage or more tarps to help keep equipment and material out of the elements.

18. Topic: Heat Casualties

Problem: LSSV ambulance currently doesn't have a working air conditioner in the patient area.

Recommendation: Recommend bringing or purchasing ice packs/coolers to use for heat casualties until repair parts can be received to repair the broken air conditioner.

19. Topic: Health Center Fee

Problem: The local health clinic requests a \$10 processing fee (non-TriCare refundable) when obtaining a copy of treatment the clinic performs.

Recommendation: Work with the Tinian Mayor's office to rectify the issue, NMCB THREE Detail Tinian has already notified the office on the issue. The clinic is also aware that military personnel have been informed to avoid paying the fee.

DETAIL PALAU

This Deployment Completion Report covers the period of Oct 20 to Jan 21, during which time NMCB THREE's Detail Palau was deployed to Camp Katuu to execute construction of a Containerized Living Unit (CLU) concrete pad and build grassroots relationships with locals IOT reinforce and demonstrate U.S. commitment to Palau ISO USINDOPACOM campaign plan while increasing infrastructure capacity onboard Camp Katuu for future operations.

Detail Palau initially deployed with main body to Okinawa, Japan due to Host Nation COVID travel restrictions denying the ability to enter the country directly from Port Hueneme, CA via COMAIR. In Okinawa, the detail was on hold, waiting for a dig permit to be approved before entering the country. In Sep 20, Detail Palau received notice that the dig permit was approved allowing entry into Palau. On 10 Oct 20, Detail Palau arrived in Palau and conducted a 15 day ROM in a Ministry of Health (MOH) approved facility. Upon completion of ROM the detail moved into Camp Katuu and began construction the following day.



Detail Palau Seabees excavate and remove spoils in support of a CLU facility on Camp Katuu

Detail Palau began construction on the CLU project, 26 Oct 20. Detail Palau didn't conduct a Pre-Deployment Site Survey (PDSS) prior to their USINDOPACOM deployment; having never seen the site in person nor having a printed site plan, the first priority of the crew was to assess the area and establish the boundaries for the project. Upon completion of the project site survey the crew then leveled the site and excavated four inches of soil.

Shortly after excavation operations commenced, regular heavy rainfalls began, filling the excavations with four to six inches of standing water within a half hour of rainfall. In an attempt to mitigate the excavations from flooding, the crew dug drainage trenches around and through the site in an attempt to redirect runoff. Upon completion of the drainage trenches the detail then continued excavation, digging three 45 ft trenches for the CLU footers, but then encountered a perched aquifer that leached groundwater in to the excavation, preventing backfill and compaction to occur. To mitigate the groundwater infiltration, the crew dug down another ft and backfilled with six inch aggregate IOT provide a stable foundation and mitigate the groundwater, but groundwater continued to fill up the excavation. The next course of action was to dig a fourth trench in an attempt to sever the aquifer from their excavation, as the groundwater was leaching primarily from the southern side of the project. To accomplish this they required an amendment to their dig permit, but it was not approved by the time they turned over with NMCB FOUR.

Detail Palau also faced spoil disposal issues due to both MK31 dump trucks on Camp Katuu on deadline. To mitigate the issue, Detail Palau advertised free earth spoils that locals could come and haul away.

Because of the advertising the detail was able to dispose of 377 cubic yards of earth spoils and provide free dirt spoils for the local community.

Despite suffering many roadblocks, Detail Palau constructed wooden formwork and prepared reinforcing steel for the placement of the concrete footers by NMCB FOUR. Detail Palau conducted 234 hours of COMREL activities and executed three OIC-D's continuing and strengthening the strong Seabee legacy in Palau.

PROJECT SUMMARY

Project Number	Total Project MDs ¹	Estimate at Completion ₁	Tasked % ²	Final WIP (%) ¹	MDs Expended by Prior NMCBs ¹	MDs Expended This Deployment ¹
PU19-804	193	\$174,376	100%	27%	0	89
Total	193	\$174,376			0	89

Notes:

(1) Based off of Biweekly PSR.

(2) Based off of NMCB THREE 100% tasking.

LABOR DISTRIBUTION SUMMARY

Month	Jul 20	Aug 20	Sep 20	Oct 20	Nov 20	Dec 20	Jan 21	Total
Direct Labor MDs¹	0	0	0	25	60	105	26	216
Indirect Labor MDs^{1,2}	0	0	0	2	0	4	4	10
Readiness/Training¹	0	0	0	0	20	10	5	35
Total MDs Exp	0	0	0	27	80	119	35	261
# Total Personnel	0	0	0	8	8	8	8	
# Direct Labor	0	0	0	5	5	5	5	
# Workdays³	0	0	0	5	21	23	7	
% Direct Labor⁴	0%	0%	0%	63%	63%	63%	63%	
Ideal Capability⁵	0	0	0	28	118	129	39	
Availability Factor⁶	0	0	0	.89	.68	.89	.79	

Notes:

(1) Direct and Readiness/Training MDs are expended MDs, not earned.

(2) Indirect Labor MDs are MDs spent (expended) on indirect activities by DL personnel. This reflects "X" coded time from timecards.

(3) Number of workdays = DL workdays + DL training days.

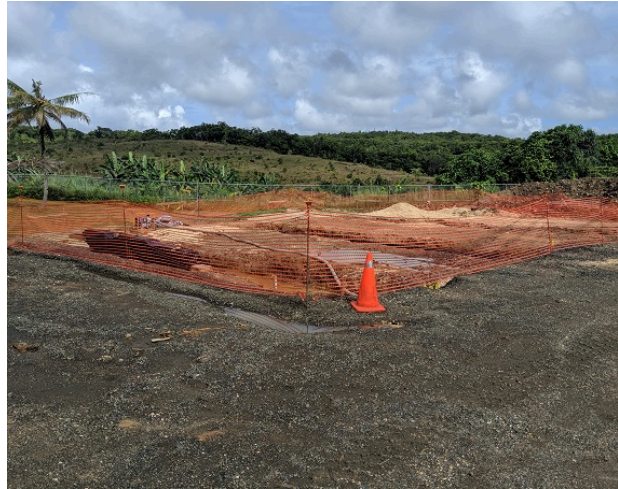
(4) Percentage of DL (%DL) = 100% * (DL/Total Personnel).

(5) MD Capability = (ME * DL * Workdays) = 1.125 x DL x (# Workdays).

(6) Actual Availability Factor = (DL MDs + Readiness/Training MDs) / (MD Capability).



Project Start



Project Turnover

Place CLU Pads PU19-804

Project Purpose: Increase berthing capacity on Camp Katuu to support increased Palau Civic Action Team’s operations to enhance public facility infrastructure and health services in the Republic of Palau.

Project Data

Project Scope: Project consists of concrete placement of three 42 ft reinforced footers/grade beams and a 48 ft x 48 ft concrete pad. Using a crane, place eight 40 ft Containerized Living Units (CLU’s) stacked two high on steel reinforced grade beams. Crew will install electrical panels and trench for the installation of new electrical lines. Crew will install doors, windows, split unit air conditioners, and tie electrical lines into each room. Fabricate and weld metal mezzanine and stairs to reach 2nd deck.

Personnel:	5	
Duration:	26Oct20 – 18Apr21	
MDs Expended:	NMCB THREE	89
	Prior NMCBs	0
Tasking:	WIP at Deployment Completion	27%
	Total Project MDs	193
Initial Estimate at Completion:	\$174,376	
Current Estimate at Completion:	\$174,376	

Significant Safety Issues: NONE

Significant QC Issues:

- Aquifer was found during excavation and has led to multiple attempts to gain compaction/ suitable area for footers to be placed.
- Site was unknown due to no PDSS, resulting in additional work for site excavation/layout.

Significant Design Issues:

Significant Material Issues:

Significant Tool/Equipment Issues:

OIC Discretionary Projects

<u>Project Listing</u>	<u>Cost</u>	<u>MDs Expended</u>
Renovate Camp Katuu Lounge	\$0.00	8
Maintenance Compressor Shed	\$0.00	35
Horseshoe Pit Renovation	\$0.00	10
Total	\$0.00	53



Camp Katuu Lounge with 2nd row seating riser.



Renovated Horseshoe Pits



Renovated Maintenance Shed.

PALAU LESSONS LEARNED

1. Topic: No PDSS

Problem: NMCB THREE intended to send a late PDSS, when NMCB FIVE Tiger Team was on ground in Palau. Due to COVID-19, NMCB FIVE was de-tasked from their mission, and NMCB THREE Detail Palau never conducted a PDSS, leading to project delays due to unforeseen site conditions.

Recommendation: Utilize virtual PDSS if an in-person PDSS cannot be conducted.

2. Topic: Class IV Procurement

Problem: Purchasing in Palau is OPR and GCPC driven, with cardholder and approvers at 30NCR. 30NCR cardholder turnover over right around when Detail Palau arrived in-country and the new cardholder didn't receive the GCPC in a timely fashion, resulting in slower than normal Class IV procurement timelines. Materials quoted from vendors were sometimes out of stock when OPRs were approved, meaning that new quotes and OPRs would have to be submitted for materials.

Recommendation: Expect delays to procurement timelines during GCPC cardholder turnover periods. Utilize CAT Team to submit all initial OPRs as soon as possible once a quote is obtained, and purchase at vendors as soon as OPRs are approved. Plan ahead for ~8 hours per week to source and process quotes.

3. Topic: Host Nation COVID-19 Requirements in Palau

Problem: Palau MOH doesn't maintain a consistent set of guidelines, and written policies. These guidelines sometimes don't align with guidance received from the U.S. Embassy in Palau. Palau requires a final COVID-19 test <72 hours prior to arrival, and not all areas (Okinawa in particular) can conduct a test and receive results within this timeframe.

Recommendation: Communicate with Military Liaison Officer at the Embassy early and often for up-to-date guidance on MOH requirements. Do not rely on MOH publications of policy, or information from sources outside the Embassy (JRM, etc.), always use Embassy instructions. Ensure incoming personnel fly from an area that is able to conduct a COVID test and receive results within 72 hours.

4. Topic: No DOD Network Assets

Problem: No ONE-NET or other DOD assets available for use on Camp Katuu.

Recommendation: All personnel will need to work off of command issued assets, or personal laptops. Ensure all service members have CAC readers, can access OWA, and are familiar with DoD Safe. Recommend all members have access to and are familiar with CVR/Microsoft Teams, as it was invaluable as an approved file sharing platform. Microsoft Projects is not available here so it should be brought if required.

5. Topic: Weather

Problem: Heavy rainfall and rain runoff causes delays in construction. Camp Katuu is sloped, with high side primarily to the south, but elevations vary throughout camp. During rainy season it can rain an inch or more in less than an hour. Soil is a mixture of red clay and broken coral, and is difficult to work with, even more when it is wet.

Recommendation: We had good results using a mud-hog dewatering pump and digging trenches on high sides of surrounding grade to redirect runoff. Recommend planning measures like this into project plans.

6. Topic: Communication Issues

Problem: No DSN lines in Port Hueneme or Okinawa can call Palauan cell phones, only land-lines. No U.S. cell carriers operate in Palau and only one cell phone is available for the Tiger Team. Personnel must purchase local SIM cards if they wish to have voice or data off of Camp Katuu.

Recommendation: If Tiger Team is gapped ensure CAT Teams recognize their critical role in supporting the planning process of incoming Tiger Team Detail and reach out early to establish communications. Any phone calls between incoming personnel and members in Palau must be initiated by Palauan cell phones, or alternate means of communication (WhatsApp, etc.). Recommend more SIM cards for Tiger Team so individuals can maintain contact when off camp when getting quotes, meals, on liberty, etc. Most off-camp liberty is inherently higher risk (hiking, water activities, SCUBA, etc.) and not having contact with emergency services or camp can increase risk severity.

7. Topic: CESE Availability

Problem: Army and Air Force CAT Teams do not use 3M program unless they are deployed to Palau, so maintenance program have discrepancies due to Army and Air Force unfamiliarity with the program. The local environment is hard on CESE and parts have to be ordered from Guam. Multiple units of CESE are usually on deadline and units that aren't are prone to sudden failures due to years of patchwork repair.

Recommendation: Keeping a 3M SME in Palau year-round and bolstering the number of mechanics on hand can help with CESE availability. If funding permits overhauls or replacements are recommended.

8. Topic: Shared Resources

Problem: CAT Team and Tiger Team share resources (CESE, tools, shops, GSAs, work spaces, etc.) This can cause availability conflicts when CAT Team prioritizes their mission over the Tiger Team.

Recommendation: Communicate early and often to CAT Team about tool and CESE requirements. Have OIC or AOIC sit in morning CAT Team meetings and weekly operations meetings to track CAT operations, and provide clear updates on Tiger Team operations. Provide CESE requirements list to CAT Dispatch and tool requirements list to CAT CTR. Utilize two-week schedule heavily. This will not de-conflict emergent priority tasking, but it will mitigate conflicts.

9. Topic: Public Access to Camp Katuu

Problem: CAT Team regularly hosts COMRELS on Camp Katuu with large public attendance. For example, over 1200 people came to the Haunted House that the CAT Team built in their shops that was open to the public on 30 – 31 Oct. It was unsafe to conduct construction operations with the number of families adjacent to the project site so the job site was closed at 1600 on both days. Public access can introduce a security risk to personal items as well.

Recommendation: Inquire about upcoming events on Camp Katuu that the CAT Team will host during project planning to anticipate times where project crews, concrete pours, aggregate deliveries, CESE operations, etc. will introduce too much risk. To protect against theft of personal items residents of Camp must lock their rooms when they are unoccupied.

DETAIL PAPUA NEW GUINEA

On 16 Sep 20, NMCB THREE deployed Detail Papua New Guinea (PNG) to Manus, PNG IOT demonstrate U.S. commitment to the longstanding alliance with PNG which has contributed to regional security and stability by adding resiliency to Lombrum Naval Base through sustainable, high impact assistance that enables the PNG Defense Force (PNGDF) to properly survey and enforce its exclusive economic zone. Detail PNG is the first enduring Seabee detail to deploy to Manus, PNG since World War II. Detail PNG's primary efforts were to establish an enduring Seabee detail site and execute high-quality construction at Lombrum Naval Base.



Seabees from Detail PNG conduct a visit with local government officials on Manus Island, PNG.

30NCR, Detail PNG solicited the first four months of construction material for RMTTC through Fleet Logistics Command – Yokosuka (FLC-Y) IOT begin construction operations O/A Oct 2020. The remainder of construction material would be solicited through NEFRSC by DI.

Due to COVID-19 travel restrictions, Detail PNG executed approximately five weeks of ROM in-route to Manus Island. Detail CONOPS consisted of deploying an initial AP to establish detail site logistics and begin required coordination for project execution and deploying a DP to enable execution of assigned construction tasking. Both AP and DP conducted a one week ROM in Okinawa, Japan prior to embarking on NALO flights to Port Moresby, PNG. In Port Moresby, AP and DP personnel conducted a 14-day ROM at a designated location IAW PNG National Pandemic Measures and two COVID-19 tests through a local testing clinic before flying COMAIR on Air Niugini to Manus Island. Tests were conducted by the Pacific International Hospital, a TRICARE approved hospital. After arriving in Manus, both AP and DP personnel conducted a 14-day restriction to the Seadler Bay Hotel, while monitoring for COVID-19 symptoms and avoiding any close contacts.

In Aug 20, NMCB THREE received notice from 30NCR to stand-up Detail PNG IAW 7th Fleet intent of having Seabees in Manus, PNG NLT 16 Sep 20. From Aug 20 through beginning of Sep 20, Detail PNG conducted comprehensive mission planning for the establishment of an enduring detail site on Manus and planning and estimating (P&E) for their #1 priority project, the Regional Maritime Training Center (RMTTC) (NG20-802). NMCB THREE sought to execute demolition and horizontal construction for the RMTTC IOT prepare for NMCB FOUR to execute vertical phases of construction. As directed by

Upon AP arrival on Manus on 02 Oct 20, construction material from FLC-Y for the first four months of construction had not been delivered, delaying the start of work on the RMTC. During this time it was determined that to rent equipment and tools for the entirety of RMTC construction using DI would put the cost of the project extremely close to the MILCON threshold of \$2M. To get the total project cost further below MILCON, NMCB THREE began looking into airlift options to get equipment and tools from the Okinawa TOA onto Manus to lower the overall cost of the project. After surveys of the airfield on Manus and coordination with U.S. TRANSCOM and NALO, it was determined that the airfield was not able to support MILAIR flights bringing in equipment and tools due to location, refueling capacity, ROM requirements of air crews, and insufficient airfield lighting. 30NCR and NMCB THREE began looking into sealift COA's to embark equipment and tools to Manus, identifying an Expeditionary Fast Transport (EPF) from CTF-73 as a feasible COA.



Detail PNG Seabees and PNGDF pose for a picture onboard PNGDF Naval Vessel.

On 15 Oct 20, AP completed their 14-day ROM at Seadler Bay Hotel and started conducting port surveys ISO EPF shipment. The goal was to identify potential ports on Manus where an EPF vessel could offload CESE. Specific data collection included channel and pier side depths, pier/wharf structural integrity, crane availability, and stevedoring services. Detail PNG conducted site surveys on Bimark Wharf, Salasia Wharf, Lombrum Naval Base Wharf/Ramp, and Momote Wharf/Ramp.

At the same time, the Detail began looking into the possibility of renting equipment and tools on island to start the demolition phases of RMTC project, but, quickly discovered that the cost for only two weeks of demolition by a local contractor was \$110K. Due to the risk of putting the project over MILCON, the detail decided against renting equipment for demolition and planned to utilize organic Seabee equipment and tools for all phases of the project, further delaying project start.

By 17 Nov 20, it was determined that the EPF COA directly into Manus was not feasible. CTF-73 had determined that insufficient information on the various waterways leading into Manus produced too much

risk for an EPF shipment, in addition to the lack of a C7F approved Naval Criminal Investigative Service (NCIS) Port Assessment (PA). Once the EPF COA was officially cancelled, coordination began with U.S. Army Surface Deployment and Distribution Command (SDDC) to contract a commercial shipment.

At this time it was also determined that without the signature of the Defense Cooperation Agreement (DCA) by the PNG parliament, taxes and other overhead costs would be applied to material procurement quotes previously provided by the NEFRSC contractor, increasing proposals by roughly 30%, and the overall project estimate at completion now exceeded the \$2M MILCON threshold. 30NCR determined the Dental Facility (NG20-803) would be the #1 priority project for the Seabees. Detail PNG began site surveys of the dental facility and continued coordination with NMCB FOUR Detail PNG, who would be the unit to start construction. However, the ADF was not in support of the Seabees starting the dental facility until their contractor, Hornibrook, completed the adjacent medical facility.

By 01 Dec 20, 30NCR officially switched Seabee project priority #1 from Dental facility to NG20-804 Small Boat Team and Bosun Facility. Detail PNG was tasked to conduct a site survey ISO NMCB FOUR's project planning. During the site survey, Detail PNG discovered that there was an extensive amount demolition that wasn't within the scope of work. The site was previously the location for a messing facility that supported a refugee detainment center. Demolition work included removal of water tanks, containerized reverse osmosis units, underground service connections, high security fencing, and a galley. According to the ADF, any demolition work outside of the scope of work was the responsibility of the PNGDF but, to date there had been no hard commitments by PNGDF to execute the demolition. ADF stated that if they were to take on the demolition, they would not start until May 21 and it would take an estimated six weeks to complete. By 08 Dec 20, 30NCR informed Detail PNG to identify approximately \$15K worth of OIC-Ds and Community Relation Events (COMRELS). The Detail was instructed to seek Humanitarian Civic Assistance (HCA) funding which required submitting DD Form 1391s to request for funds to execute the work. In Dec, the detail executed multiple OIC-D's at LNB ISO base relocation efforts.

By 16 Dec 20, 30NCR and Battalion Ops were actively coordinating three different shipment COAs: Army SDDC commercial shipment, Army 10th Support Group LCU vessel, and Army 8th Theater Sustainment Command Logistics Support Vessel (LSV). The shipment of equipment and tools will provide the detail with the ability to begin construction of tasked and discretionary projects to demonstrate U.S. commitment to the longstanding alliance with PNG by adding resiliency to Lombrum Naval Base through sustainable, high impact assistance that enables the PNG Defense Force (PNGDF) to properly survey and enforce its exclusive economic zone.

OIC Discretionary Projects

<u>Project Listing</u>	<u>Cost</u>	<u>MDs Expended</u>
Lombrum Naval Base Relocation Efforts 1	\$0.00	48
Lombrum Naval Base Relocation Efforts 2	\$0.00	15
Total	\$0.00	63



PNG Equipment Relocation Site



Detail PNG Seabees move equipment with PNGDF in support of base relocation efforts.

PAPUA NEW GUINEA LESSONS LEARNED

1. Topic: Travel Coordination with U.S. Embassy Defense Attaché Office

Problem: Entering PNG requires extensive coordination through the U.S. Embassy (USEMB) because as the sole conduit for submitting travel requests to the PNG COVID-19 task force. USEMB processes and timelines were not always clearly defined. On both movements for AP and DP, the Aircraft Clearance Letter was not approved until the very last hour.

Recommendation: Follow up with USEMB DAO on Aircraft Clearance Letter. Past experience has shown that Seabees must follow up on status of Aircraft Clearance Letter with DAO to ensure that document is making progress in the USEMB and PNG routing chains. Additionally, it is on the detail to provide all documents at least three weeks ahead of their intended arrival, including specific flight itineraries. Any personnel or flight information changes can cause the routing process to start over.

2. Topic: COMAIR CCI Plan

Problem: Detail PNG was unable to bring MUOS to detail site IAW 30NCR order because they were not able to get a COMAIR CCI Plan approved by NECC Key Management Infrastructure (KMI) manager before departing Okinawa. Detail originally requested MILAIR all the way to Manus but NALO was unable to land a MILAIR flight on Manus, and the detail was forced travel commercial air from Port Moresby to Manus.

Recommendation: Secure a CCI plan well in-advance if planning to embark CCI via COMAIR. The plan must include their itinerary with flight numbers, flight paths, and travel dates & times. It must also show how they mitigate loss or tampering of CCI while transporting it on COMAIR. Recommendation is that they pack the communications gear in small pelican cases that can be kept on their person the whole time, and not be let out of their sight.

3. Topic: Poor Internet Service

Problem: Manus Island has unreliable internet. During NMCB THREE's deployment, internet was inconsistent. When internet was working, it was usually slow to the point that emails could not be sent or website could not be reached. Sometimes, internet would just completely drop for hours at a time. This affected ability to conduct on-line training, submit reports, send/receive emails, and connect with main body and 30NCR. Local internet service providers state that on-going network improvements will allow users to start seeing faster and more consistent service in the near future.

Recommendation: Have secondary Wi-Fi pucks with a different company. There are 3 internet service providers on island: Telikom, Bmobile, and Digicell. Sometimes one service has better connection when the other is down. Having a secondary internet service provider will give you flexibility if your primary one goes down. Also recommend getting local smart phones on NEFRSC contract to allow the detail to reach back to main body when the internet service is down. Broadband Global Area Network (BGAN) can also be used to connect to internet using CF-54s if needed.

4. Topic: Life Support on NEFRSC

Problem: The following services are undergoing modifications to get added into the PNG section of the NEFRSC. NMCB THREE Detail PNG has had to make do without these services but, the lack thereof put a strain on operations, administrative tasks, and morale of the detail. Services that will be added include local cell phone, phone cards, office room, vehicles, fuel cards, laundry, and bottled water.

Recommendation: NMCB FOUR should be prepared to use their government travel charge card (GTCC) to pay for rooms, office space, and MUOS watch room. Additionally, until CESE arrives on Manus, they will have to rent vehicles on their GTCCs. They should have their GTCC limits raised to a minimum of \$15K so that they can have enough credit to pay for all of these items. All troops will have to pay for their berthing room. It will fall on the khaki and FCPOs to put secondary rooms and vehicles on their GTCCs. Recommend purchasing a local pre-paid phone on-island to keep in contact with local POCs.

5. Topic: OIC-D funding

Problem: Detail PNG experienced difficulty finding OIC-Ds to execute because the detail was relying on and unable to find potential customers that would provide all construction materials for the projects.

Recommendation: Request Line of Accounting (LOA) and Government Purchase Credit Card (GPCC) from 30NCR or battalion for OIC to make small purchases for OIC-Ds. Additionally, request 30NCR/NAVFAC PAC to create a line item on NEFRSC for OIC-D and COMREL purchases.

6. Topic: Detail and Per Diem

Problem: Detail was not paid per diem for two months because of LOA issues on their orders, and lack of FY20 funding to pay members per diem in FY21. Troops were getting low on personal funds and GTCC credit was not being paid back. As a result, troop's livelihood and morale was affected. Secondly, detail was running out of money to pay for their rooms and rented vehicles.

Recommendation: Have battalion and detail voucher out of fiscal year LOA they are currently using instead of using old fiscal year money.

7. Topic: Lack of Government Approved Secure Storage Locations

Problem: There are no government approved secure storage locations on island, so assigned CCI requires constant supervision. This requires dedicated troops to be assigned watch on CCI equipment.

Recommendation: Rent an additional berthing room and use a MUOS watch floor. Have 24/7 TPI rotating watch on it.

DETAIL IWAKUNI

NMCB THREE deployed a 19-person detail to Iwakuni, Japan to execute a landfill capping project and CMU enclosure project in support of operations and tenants at MCAS Iwakuni while providing Seabees and opportunity to develop and improve combat skills at a location postured in the first island chain. Detail Iwakuni's AP and DP arrived in Iwakuni 22 Jul 20 and 28 Jul 20, respectively, from Point Mugu, California via military airlift to Okinawa, Japan. AP immediately began turnover with NMCB FIVE and conducted RIP/TOA on 25 Jul. DP arrived on 28 Jul and immediately went into 14-days of ROM in Iwakuni.

Detail Iwakuni's AP personnel spent the week after turnover preparing to begin project execution upon DP's completion of ROM. The crew for IW19-856 Concrete Masonry Unit (CMU) Environmental Enclosures officially began work on 10 Aug and was tasked with the completion of two CMU enclosures, which would close-out the project. Meanwhile the IW20-855 Landfill Cap and Close crew continued to conduct detailed P&E. The detail was immediately presented with challenges with the landfill project, identifying that a crane would need to be contracted to install a culvert bridge to gain access to the project location. At this time 30NCR and MCAS Iwakuni FEAD agreed upon an updated scope for NMCB tasking which adjusted the initial 30 acre, three zone project to a single zone (Zone A), requiring additional planning and estimating and a re-baselining of the project schedule.

The CMU crew which consisted of two Seabee's quickly assessed project requirements to complete the concrete top beam, sidewalk, mess top closure, and gate systems for the two CMU enclosures. NMCB FIVE had executed 80% of the construction on the forms for the top beam placement. After the crew completed the form construction, installation of the form work began. When installing forms, the crew identified that one of the top rows of block wasn't within QC standards, having a gap greater than ½ inch between the forms and the row of block. Project leadership decided to remove the top row of block that wasn't within standards and replace it. The rework created only a three day delay in construction and once replaced satisfied required QC standards. With rework complete the top beam forms could be installed, and concrete was ordered for the scheduled placement. The top beam and sidewalk concrete placement



Seabees and 9th ESB Marines conduct earthwork operations for the Marine Corps Air Station Iwakuni landfill project.

were conducted in two placements instead of one due to receiving poor quality concrete on the scheduled concrete pour date. Upon completion of the second concrete pour, the crew completed texture and paint and installed the gate system which NMCB FIVE had already assembled prior to their departure. The expertise of the crew, allowed for the final two CMU enclosures to be completed and turned over to MCAS Iwakuni Facilities Department, closing out the project. IW19-856 was a 637 MD, multi-year project that will provide a sanitary atmosphere for inhabitant's on-base, prevent wildlife from accessing waste, and provided valuable vertical construction training for NMCB THREE Seabees.

On 12 Aug, DP was cleared to exit ROM, the crew quickly began activating and moving CESE to the landfill project site. While P&E was underway for the new scope of work, the crew of 10, made up of Equipment Operators (EO), an Engineering Aide (EA), and Construction Electricians (CE) began to assess site conditions, identifying challenges likely to be faced during project execution. While installation of the culvert bridge was being coordinated with PWD Iwakuni Crane Crew, the crew began construction of the approach ramp for the bridge. In preparation for the culvert bridge placement, the crew filled the rainwater canal with 12 inch Rip Rip to stabilize the ground, ensuring a solid base for the bridge to be placed on. Late Oct 20, PWD crane crew installed the (12) 5,000 lb box culvert sections to allow access into Zone A for the project equipment.



Seabees conduct joint operations with MWSS 172 constructing a 30 ft culvert bridge for the landfill cap project.

Shortly after completion of the culvert bridge, work began in Zone A, excavating and relocating spillage outside of landfill boundaries and grading. Throughout the project, Detail Iwakuni used various local resources and support from Marine Wing Support Squadron 171 (MWSS-171), receiving heavy equipment and Marine Corps EO's support on landfill operations. During this time Detail Iwakuni was completing the P&E for the updated scope of work and on 10 Nov 20 received permission from 30NCR to begin executing the updated scope of work for Zone A. The updated

project package, estimated the project would take 2,563 MD to complete, with an estimated date of completion of 25 Jul 22. The change to the scope of work reduced the project duration from six years to 18 months. Throughout the project, the detail had to overcome multiple CESE breakdowns, construction mechanics on the detail worked overtime to ensure that critical CESE stayed operational allowing the project to continue. Identifying the need for more construction equipment based on the large scale of horizontal construction required to complete the project, roughly 15 acres of earthwork, waste relocation, and reshaping of the contour of the landfill, Detail Iwakuni quickly realized additional support would greatly support the ability to keep the project on track and provide an opportunity to work closely with adjacent units in the AOR. A formal request was sent from CTF 75 to III MEF to gain support from 9th ESB. The detail and main body worked closely with 9th ESB and 30NCR, and within three months, 9th ESB arrived on site on 22 Oct 20. 9th ESB deployed a team of 16 Marines and eight units of construction equipment, providing valuable support, enabling the crew to maintain the project schedule. Coordination with 9th ESB was initially planned for a six-month support timeline, NMCB THREE and 30NCR are currently working to extend the support until completion of the project O/A Jul 22.

In late Dec 20, the local environmental officer ordered the detail to seize operations because multiple units of deadline CESE on the project site were leaking POL's. The Detail OIC attended coordination meetings with the local environmental officer to correct the issue and continue project execution. The detail was required to move all deadlined, leaking CESE, off of the project site before project execution could begin again. The Detail OIC, NMCB THREE Environmental Officer, and the PWD Environmental Officer have been in close coordination throughout the month of January, actively pursuing a way-forward to execute the project while meeting required environmental standards.

In Jan 21, Detail Iwakuni conducted turnover of the landfill project with NMCB FOUR. Throughout deployment, Detail Iwakuni, created strong working relationships with MWSS-171, Combat Logistic Company 36, Marine Air Group 12, 9th ESB, and PWD Iwakuni, these relationships with adjacent units will allow future NMCB's in Iwakuni to continue to receive support needed to complete the landfill project. Detail Iwakuni demonstrated the "CAN DO" spirit of the Seabees through their ability to adapt and overcome multiple hurdles throughout deployment, while providing vital infrastructure that will support safe air operations and tenants onboard MCAS Iwakuni.

PROJECT SUMMARY

Project Number	Total Project MDs ¹	Estimate at Completion ₁	Tasked % ²	Final WIP (%) ¹	MDs Expended by Prior NMCBs ¹	MDs Expended This Deployment ¹
IW19-856	637	\$141,957	100%	100%	600	91
IW20-855	2,534	\$488,000	12%	4%	815	316
Total	3,171	\$629,957			1,415	407

Notes:

(1) Based off of Biweekly PSR.

(2) Based off of NMCB THREE 100% tasking.

LABOR DISTRIBUTION SUMMARY

Month	Jul 20	Aug 20	Sep 20	Oct 20	Nov 20	Dec 20	Jan 21	Total
Direct Labor MDs ¹	0	156	114	61	80	83	31	525
Indirect Labor MDs ^{1,2}	0	213	303	355	613	537	39	2,060
Readiness/Training ¹	0	18	19	38	19	19	17	130
Total MDs Exp	0	387	436	454	712	639	87	2,715
# Total Personnel	0	18	19	19	19	19	17	
# Direct Labor	0	10	10	10	10	10	10	
# Workdays ³	0	15	23	23	21	23	6	
% Direct Labor ⁴	0%	56%	53%	53%	53%	53%	59%	
Ideal Capability ⁵	0	169	259	259	236	259	68	
Availability Factor ⁶	0	1.02	.51	.38	.42	.39	.71	

Notes:

(1) Direct and Readiness/Training MDs are expended MDs, not earned.

(2) Indirect Labor MDs are MDs spent (expended) on indirect activities by DL personnel. This reflects "X" coded time from timecards.

(3) Number of workdays = DL workdays + DL training days.

(4) Percentage of DL (%DL) = 100% * (DL/Total Personnel).

(5) MD Capability = (ME * DL * Workdays) = 1.125 x DL x (# Workdays).

(6) Actual Availability Factor = (DL MDs + Readiness/Training MDs) / (MD Capability).



Project Start



Project Completion

CMU Trash Enclosures at MCAS Iwakuni IW19-856

Project Purpose: Enclosures will present a sanitary atmosphere for housing inhabitants and prevent wildlife access to disposals.

Project Data

Project Scope: Construct 2 CMU enclosures consisting of concrete pad, CMU walls with core fill. Place concrete beams for each enclosure and place connecting sidewalks to the existing site. Complete each enclosure with chain linked fenced door, chain linked canopy, and finish with paint. Remaining DFOW's for completion of (2) type A enclosures: Install Beam Forms & RST (Phase 5), Place Slope Forms and RST (Phase 5), Place Concrete Sloped Pad (Phase 5), and Place Concrete for Beams (Phase 5).

Personnel:	2	
Duration:	10Aug20 – 29Sep20	
MDs Expended:	NMCB THREE	91
	Prior NMCBs	600
Tasking:	WIP at Deployment Completion	100%
	Total Project MDs	637
Initial Estimate at Completion:	\$141,957	
Current Estimate at Completion:	\$141,957	

Significant Safety Issues: None

Significant QC Issues: Remove and replace top run of block, cracked mortar joint. Alignment of gate hinges.

Significant Design Issues: None

Significant Material Issues: None

Significant Tool/Equipment Issues: None



Project Start



Clearing of vegetation and removal of waste

Cap and Close Landfill at MCAS Iwakuni IW20-855

Project Purpose: Landfill Capping will enable MCAS Facility's to properly maintain area reducing BASH Hazard on airfield, as well as provide usable acreage for base expansion in the future.

Project Data

Project Scope: Complete Phase One of Landfill Cap at North end of installation. Site work to include demo of existing structures, and perimeter fence line, excavation and relocation of approx. 70,000CD of spillage outside landfill bounds, haul 64,000CD of fill from offsite to area B and C, grade to complete 6 in interim grading layer, and replace perimeter fence line in preparation for Phase 2.

Personnel:	10	
Duration:	16Dec19 – 25Jul22	
MDs Expended:	NMCB THREE	316
	Prior NMCBs	815
Tasking:	WIP at Deployment Completion	4%
	Total Project MDs	2534

Initial Estimate at Completion: \$488,000

Current Estimate at Completion: \$488,000

Significant Safety Issues: Based on 1995 Environmental Report, possibility of asbestos.

Significant QC Issues: Ensuring accuracy of survey marker. For follow on contract work.

Significant Design Issues: None

Significant Material Issues: None

Significant Tool/Equipment Issues: Proper equipment for the scale of the project, ensuring an effective parts delivery program from MB. Maintenance and repair of CESE is critical to the completion of the program.

IWAKUNI LESSONS LEARNED

1. Topic: Head Facilities at the Maintenance Shop and Project

Problem: During PDSS it was identified that the maintenance facility and project site at the landfill did not have any head facilities or hand wash stations for sanitary purposes. Due to location of both, access to a head facility was not convenient. Travel time to a location from the landfill and shop to use a head facility took away from the production of the project along with inconveniencing other units.

Recommendation: Work with FEAD to get a one-year contract with local vendor for port-a-john cleaning services and provide hand wash stations. FEAD has port-a-johns on hand to issue, however they do not have ability to clean and service. Contract was developed with FEAD to begin Dec 20 and expire Dec 21. Built into the contract is a follow on option if service needs to be extended. Units deploying around Dec 21 timeline should ensure if an extension is needed and work with FEAD to execute contract.

2. Topic: Repair Parts Shipment

Problem: CESE assigned to Detail Iwakuni falls under Okinawa 3M work center, all parts repair and PMS are ordered in Okinawa. This creates a time delay from submitting 2K to Okinawa, to inputting into supply system, receiving part in Okinawa, and shipping to Iwakuni. Delaying the repair of CESE in Iwakuni along with possibly impacting forward progress of project based on the CESE needed.

Recommendation: Develop a robust plan of how and when repair parts are shipped from Okinawa. I recommend that projects and details have priority of parts available in ARP or due to funding. This will allow for speedy receipt of parts and then work with command embark staff to work with local units to get the parts shipped to Iwakuni. We have multiple air assets from units flying from Okinawa to MCAS Iwakuni daily. This will allow for timely delivery of parts and reduce CESE and project down time.

3. Topic: Proper CESE for the Job

Problem: During initial planning and understanding of the project scope, it was identified that the CESE on site was not adequate for the project. The right CESE must be on-site and maintained in an operational status in order to stay on schedule for this project comprised of 95% earthwork over 15 acres. The project completion must remain on schedule in order to support a follow-on MILCON contract.

Recommendation: Providing the proper equipment to do the assigned task is key to the NCF's success on this project. The P25 TOA was built and designed for expeditionary combat construction and ability to respond globally. We have P-32 Augment TOA available for large earthwork and quarry projects and missions. Allowing the release and use of the CESE in a timely manner to the project is critical.

4. Topic: Full Understand of Administrative Requirements for Higher

Problem: Format and reporting requirements from main body, 30NCR, and locally caused confusion on deployment. It is vital for higher to give clear and direct guidance in a timely manner on required reports. Multiple times during deployment, formats and requirements changed, and we also have multiple reports that essentially repeat the same information. This increases the administrative requirements on detail leadership and prevents them from being able to be on the deck plates, ensuring high-quality construction.

Recommendation: Develop standard working format that works both for higher and main body. Create a live edit portal or platform that allows updates to files that can just be edited on the platform. Utilize the same format developed by higher for report submissions, which will make it easier for units in the AO to be familiar with requirements. Redesign or revise current CPM Program allowing for required reports to be updated and printed right into CPM. This allows Time Cards, Level I, Level II to all match and even develop the required PSRs.

DETAIL SASEBO

On 20 Jul 20, NMCB THREE Detail Sasebo deployed personnel from Okinawa to Sasebo, Japan to execute SA19-813 Construct Operational and Vehicle Maintenance Facility IOT provide NBU SEVEN with two PEB facilities for Landing Craft Air Cushion (LCAC) storage and maintenance, increasing their lethality within USINDOPACOM and providing NMCB THREE Seabees the opportunity to hone vertical construction skills while postured at a relevant location in the first island chain.



Seabees and Public Works Department Sasebo crane crew install purlins for one of two PEBs being constructed for NBU 7.

AP and DP movements arrived in Sasebo, Japan on 20 Jul 20 and 25 Jul 20, respectively. The project was turned over at 30% based on NMCB FIVE's approved project package, but the actual turn over percentage was found to be closer to 14% (quantified upon approved re-baseline). The turnover DFOV from NMCB FIVE to NMCB THREE was the completed placement of all PEB 1 pedestals and foundation beams' RST. A project turnover meeting was held on 23 Jul 20 with NBU SEVEN representatives, NMCB THREE AP leadership, NMCB FIVE DP leadership, along with the Sasebo

Public Works Officer (PWO), construction manager, and Lead Chief Petty Officer (LCPO) of Self Help from Sasebo PWD. The project will provide key infrastructure that is lacking at Yokose Naval Base in Sasebo, Japan for NBU SEVEN that will help upkeep their support equipment which assists in their LCAC operations and their overall mission of conducting amphibious operations in the USINDOPACOM littoral environments. NBU SEVENs support equipment has been stored outside with no dedicated storage or maintenance facility available. These two PEBs will provide NBU SEVEN with high quality facilities to maintain and store their support equipment, extending its operational readiness and longevity.

Detail Sasebo first day of work was on 10 Aug 20 once Sasebo DP was released from ROM, bringing the total direct labor to 14 personnel. Work for the next month and a half consisted of backfilling and compacting above PEB 1 (40 ft x 80 ft storage PEB) footers (a CASS that was previously closed by prior command, but still had work remaining), and assembling and erecting the pad forms. The fill above the footers was placed by the crew using PWD provided pickup trucks and shovels. Once the backfill was brought up 6 inch, compaction tests were performed in each of the 12 footers, achieving the required compaction of >95%. While the backfill and compaction of the footers was in progress, the crew also worked on prefabrication and assembly of the exterior and construction joint formwork and the fabrication of the RST double mat for all three pad sections. The forms had a longer than anticipated duration due to the unique challenge of a dual sloping existing grade and the existing concrete in between the footer excavations. Each stud and plywood sheet for the forms was custom cut to achieve a level plane at the top

of the formwork. While assembling the forms, some re-work was performed to ensure quality and functionality requirements was achieved.

Our first major risk to mission and challenge to overcome was available funding with the impending crossover of fiscal years. Due to our remaining funding for FY20 being recouped at the end of the FY, the decision was made to continue moving forward and begin erection of PEB 1 while funding for crane services was still available. Erection of PEB 1 commenced on 15 Sep 20 by utilizing the PWD crane to lift the pre-assembled apex assemblies into place over top the anchor bolts. This process of installing the primary apex structures took nine days to complete. This was due in part to the availability of personnel lifts and the limitation posed by only have one crane to lift all five apexes, and 80 purlins and girts into place one by one. The original plan called for the use of a telehandler forklift to assist in the placement of girts and purlins but that type of forklift was not available or common in the Sasebo area.

The process of assembling the PEB frame and secondary components was hindered upon the discovery that the manufacturer had sent the wrong type of bolts for fastening secondary components to the frame members and had also not included the bolt tensioning gauges to ensure the required tightness was achieved on bolted connections. This was corrected initially by crew members utilizing the washers that were included in the shipment as directed by the manufacturer until those washers



Seabees organize structural steel members of the PEB. The two PEBs will support NBU 7 LCAC (in background) maintenance and operations.

were exhausted. The manufacturer was immediately contacted and remedied the situation by sending 4,800 washers to compensate for the shortened bolt threading as well as the tension gauges. The incorrect washers that were placed to continue forward progress were then removed and replaced by the correct washers once they arrived on 30 Sep 20. Progress continued on the erection and smaller secondary connections until it was determined that the nuts required to fasten the eave strut members to the eave strut purlins were not included in the shipment. This was again brought up to the manufacturer immediately and the required nuts were sent out on 28 Sep 20 and arrived on site on 16 Oct 20. Work then began on the sheeting of the roof and the walls.

It is important to note that these missing/wrong parts sent by the manufacturer were only discovered wrong when Detail Sasebo learned that there were ~300 pages of missing assembly drawings not originally turned over and included in the initial tasking of this project to NMCB FIVE. The detail has since received those drawings for use and has turned over those drawings to NMCB FOUR.

The crew continued working towards the concrete placement for PEB 1 pad, placing all exterior formwork and installing the double RST matting for the first and third pad sections. Concrete was placed in the first slab section on 01 Oct 20 and followed the next day, 02 Oct 20, by slab section three. The final slab section

was placed on 16 Oct 20, after the removal of both construction joints and placement of the double mat RST. During all three concrete placements, the crew faced and overcame challenges such as the vibratory screed not being usable which required the crew to use a fabricated screed which was pulled by hand the length of the placements. All three slab sections were finished by both the mechanical power trowel and by hand-held steel trowels. For curing, the crew covered the slabs in plastic sheeting and ponded the slabs to keep them from overheating. Saw-cutting occurred following a three day set-up period by use of the 12 inch walk behind concrete saw.

Work on PEB 2 commenced after the final pad was placed for PEB 1. The building lines that NMCB FIVE had marked out were once again verified and remaining sections were completed. The use of a contracted saw capable of cutting the 15 inch+ existing concrete made quick work of cutting out the footer, beam, building ramp and most utility footprints. While the saw cutting was being conducted, an excavator with a hydraulic concrete breaker and bucket was delivered and was quickly put to work demolishing and removing the concrete. The concrete was loaded into contracted dump truck and transported off-site. The excavator then went to work on removing the spoils from the footer locations. Backfill and compaction commenced on 04 Nov 20 but was delayed due to two of the seven footers being continually saturated by an unknown water source. This was remedied when plastic sheeting was installed to line the footer openings, allowing compaction to be achieved. NMCB THREE final concrete placements occurred on 24 Dec and 12 Jan which consisted of 50% of PEB 1 ramp, PEB 2 pedestals, and PEB 1 footer caps.

NMCB THREE turned over the project to NMCB FOUR on 21 Jan 21. Major work remaining for PEB 1 includes installation of PEB siding and interior/exterior electrical work, ridge cap and vents/trim, and exterior concrete. Remaining work for PEB 2 includes placement of concrete pads and ramp, placement of PEB structural members, roof, and siding, and all interior and exterior utility work.

PROJECT SUMMARY

Project Number	Total Project MDs ¹	Estimate at Completion ₁	Tasked % ²	Final WIP (%) ¹	MDs Expended by Prior NMCBs ¹	MDs Expended This Deployment ¹
SA19-813	1,115	\$1,184,253	67%	48%	281	1,150
Total	1,115	\$1,184,253			281	1,150

Notes:

(1) Based off of Biweekly PSR.

(2) Based off of NMCB THREE 100% tasking.

LABOR DISTRIBUTION SUMMARY

Month	Jul 20	Aug 20	Sep 20	Oct 20	Nov 20	Dec 20	Jan 21	Total
Direct Labor MDs¹	0	109	204	216	192	190	122	1,033
Indirect Labor MDs^{1,2}	0	136	88	151	175	145	25	720
Readiness/Training¹	0	12	12	16	16	15	15	86
Total MDs Exp	0	245	293	366	367	335	147	1,839
# Total Personnel	0	18	18	22	21	21	20	
# Direct Labor	0	13	13	17	17	16	15	
# Workdays³	0	18	22	24	18	23	10	
% Direct Labor⁴	0%	76	76	80	80	80	30	
Ideal Capability⁵	0	222	271	387	290	349	143	
Availability Factor⁶	0	.55	.80	.60	.71	.59	.96	

Notes:

(1) Direct and Readiness/Training MDs are expended MDs, not earned.

(2) Indirect Labor MDs are MDs spent (expended) on indirect activities by DL personnel. This reflects "X" coded time from timecards.

(3) Number of workdays = DL workdays + DL training days.

(4) Percentage of DL (%DL) = 100% * (DL/Total Personnel).

(5) MD Capability = (ME * DL * Workdays) = 0.95 x DL x (# Workdays).

(6) Actual Availability Factor = (DL MDs + Readiness/Training MDs) / (MD Capability).



Site Overview



40 ft x 80 ft Storage PEB

Construct Operational Vehicle & Maintenance Facility SA19-813

Project Purpose: Provide NBU-7 with facilities to store and maintain their support equipment currently out in the open exposed to corrosive salt air from the bay. The project will further enhance their readiness for MCO response and other C7F missions.

Project Data

Project Scope: Construct operational vehicle and maintenance facilities consisting of one 40 ft x 80 ft x 15 ft pre-engineered building for vehicle storage and one 40 ft x 35 ft x 28 ft pre-engineered building for vehicle maintenance. Each building will be outfitted with ventilation, electrical, drainage and fire protection systems. Demolition of existing concrete will make way for the extensive foundation work; including reinforced footers, grade beams, and slab on grade. Under slab utilities will support the electrical, fire protection, and drainage systems.

Personnel:	17	
Duration:	Dec19 – 01May21	
MDs Expended:	NMCB THREE	1,150
	Prior NMCBs	281
Tasking:	WIP at Deployment Completion	48%
	Total Project MDs	1,115

Initial Estimate at Completion: \$900,000

Current Estimate at Completion: \$1,184,253

Significant Safety Issues: Working at height while assembling PEB frame members and attaching roof and wall paneling. Using rescue saw and the concrete walk-behind saws were the largest risk on the project. Also of note was the excessive use of jackhammering, both the vibrations and the noise decimal range.

Significant QC Issues: Mark out of grade beams for both PEB's was on building line and not offset, requiring alteration of pedestal location on footer. (Anchor bolt placement, and rebar spacing were the largest QC points for turnover to NMCB THREE. Anchor bolts and rebar spacing were both verified to be within required tolerances).

Significant Design Issues: Change to double rebar mat requirements due to increased pad thickness ranging from 6 inch – 14 inch vice the uniform 6 inch shown in the prints, DCD to add electrical components to design in order to match future expansion at Yokose Naval Base, and FAR 008 to relocate construction joints so joints didn't pass through foundation beams as depicted on the prints which was a change request for FAR 003 to add additional CNJ on concrete pads requiring the pad placement to be complete in four placements vice the two depicted in the prints.

SASEBO LESSONS LEARNED

1. Topic: Funding

Problem: Funding recoupment and issuance gaps in the fiscal year shift caused delays in project execution. Accurate material and rental service estimating is critical to ensuring that work stoppages do not occur impacting the project. Underestimating the duration of the erection of the PEB's allotted to a shortage of rental service days for the lift equipment to be used.

Recommendation: Funding that is allocated for the project should remain with that project until used or recouped at the BCD of the project. Planning out a project's materials and service requirements for a fiscal year and then being pigeon holed into utilizing that full amount or else it gets recouped creates a huge burden on project when funding is not available in new FY.

2. Topic: Training/Experience

Problem: Project planning and management training is insufficient.

Recommendation: Realign training so that the P&E classes are not solely being attended by E5 and above personnel. Maintain forecasted detail integrity throughout a larger portion of homeport and schedule those detail members to attend all of the same classes as much as possible. Allow each detail crew to work together on homeport projects, CTX, FTX, etc. This will increase detail capability, project knowledge and ultimately lead to increased safety, quality, and efficiency.

3. Topic: Training/Experience

Problem: There is the basic erection of a PEB covered in the STT 8.0 mod and the finishing of that PEB in STT 9.3. While the general concepts are similar, the actual assembly of the PEB components are specific to the manufacturer and not identical every time. A roof seaming class is offered at Visalia CA, but this three day class does not cover the intricate assembly portions.

Recommendation: More comprehensive training should be established that covers the entire assembly of specific PEB models rather than learning on-the-job. Coordinating a more inclusive PEB erection training at the STT with a Butler representative present would be very beneficial for future PEB projects. Training was coordinated with the Butler Rep to give classes over CVR and YouTube was utilized for instructional videos on proper assembly techniques.

4. Topic: Training/Experience

Problem: Detail did not have personnel qualified to operate man lift required for PEB erection. Detail scheduled training to obtain licenses from NAVFAC, but classes were cancelled due to COVID.

Recommendation: Add licensing of this nature to the Battalion training plan. Look to establish an in-house training/qualification course managed by Alfa Company.

5. Topic: Training/Experience

Problem: Ensuring that the correct quantity of rental equipment that is being ordered is critical during PEB erection. We were hindered by the use of only one part-time man-lift and an insufficient quantity bucket trucks from local vendors. Not having personnel qualified to operate the equipment was also a challenge as the original rentals were procured without rental operators.

Recommendation: Utilize TOA assets to save the Navy money on rental expenses when already purchased equipment may be available in the region.

6. Topic: Training/Experience

Problem: Planning and estimating solely off the NTRP has been shown to have inaccuracy. Quantifiable activities such as concrete placement or formwork is relatively accurate but the math attributed to the Specialties Construction (Master Activity 13) does not take into account the variety of intricate parts that go into assembling a PEB. The only way to get an accurate estimate is to include similar work elements from other Master Activities to account for the man hours for the duration of the erection process.

Recommendation: Send more junior personnel through a P&E course as they are ones primarily conducting P&E for the respective projects.

7. Topic: Global Shipments of Pre-Engineered Buildings

Problem: When the PEBs were initially ordered, they were placed onto eight tractor trailers and from those loaded into six 40 ft containers. When this occurred, the original shipping manifests tracking the eight original shipments was not updated. Locating components of the PEB based on those manifests proved quite difficult as shipping numbers and locations were not matching what the manifests stated.

Recommendation: The initial PEB order and purchase is executed from NCG1. Between NCG1, 30NCR, and executing battalion, there needs to be a better flow of information to include the proper shipping and tracking of the PEB as well as receipt of all manufacturing documents, shipping manifests and erection designs are attained prior to execution of the project. Somewhere in this flow, 300 pages of part drawings were not received and utilized by battalion.

DETAIL CHINHAE

NMCB THREEs Detail Chinhae deployed to the Korean Theater of Operations (KTO) in Jun 20 to conduct training and engagement with Republic of Korea (ROK) Seabees, construct new Seabee office and conference room spaces, and provide OIC-D construction support for Commander, Fleet Activities Chinhae (CFAC) and tenant commands. Detail Chinhae strengthened the relationship between U.S. Navy and ROK forces through joint construction and exercises, provided critical construction to CFAC, and enabled further operations and training for this enduring detail site postured on the Korean Peninsula.

Chinhae's AP arrived in ROK on 23 Jun 20 and conducted a 14-day ROM at Camp Humphreys before onward movement to CFAC. After completion of ROM, AP arrived at CFAC on 08 Jul 20 and began turnover with NMCB FIVE. RIP/TOA was executed from the 09 Jul 20 to 13 Jul 20. NMCB THREE DP arrived to CFAC on 30 Jul 20 following completion of ROM at Camp Humphreys.



Seabees and members of the ROK Navy pose for celebration after completing an expedient PDR wall at the conclusion of a joint PDR exercise supporting Combined Command Post Training Exercise 20.

Detail Chinhae's priority construction task was the KO19-846 Seabee Conference Room, a 137 MD project that upon completion provided the detail two climate controlled offices on the second floor mezzanine of the Seabee warehouse. An additional 336 sqft of office space provided four extra computer work stations which increased detail efficiency in completing operational reports and administrative requirements. Relocating work stations from the previous office space permitted its utilization as a conference room to use for leadership meetings, training, and project P&E. To aid in facilitating these activities a projector and smart board were installed in the conference room. The primary obstacles the detail overcame during construction were obtaining a satisfactory level of finish on interior and exterior drywall before the paint was applied and installing the HVAC units within each office. Despite these challenges, quality construction of the offices was completed on schedule, on budget and with no safety incidents, allowing Detail Chinhae occupancy on 07 Oct 2020.

At Combined Command Post Training (CCPT) 20-2, Detail Chinhae participated in a Port Damage Repair (PDR) exercise with ROK NMCB ONE on 19 Aug 20. Detail Chinhae and ROK NMCB ONE were broken up into two teams, each responsible for constructing a 4 meter (m) wall section, which were then bolted together to form an 8 meter (m) x 2 m temporary retaining wall. The 8 m wall was then placed on the damaged pier where the joint team laid CMU Block on each side completing the retaining wall. The final step consisted of spreading compactable fill behind the wall in lifts until the finished grade. The combined Detail Chinhae and ROK Seabee team completed the repair in three hours and five minutes, well ahead of the four hour maximum time allotted. The PDR exercise assisted ROK NMCB ONE in increasing the efficiency of their process by comparing different methods of construction and provided valuable PDR training for Detail Chinhae. The exercise strengthened communication and relations between forces, increasing MCO readiness.

The Airfield Damage Repair (ADR) exercise during CCPT 20-2 with the ROK Air Wing Six was executed on 20 AUG 20. The ADR exercise involved working side-by-side with the ROK Air Wing Six to assemble a 23 m x 18 m AM2 pad. Detail Chinhae divided into three teams which consisted of the mat placers, locking bar/spacer inserters, and the mat guide assemblers. The three teams worked side-by-side with their ROK counterparts which, despite the translator present, was initially challenging due to the language barrier. Through repetition, the teams overcame the language barrier, developing a rhythm to complete the 23 m x 18 m AM2 pad in one hour and 23 minutes, under the two hour target time.



Seabees and USAF personnel work together to repair a runway during Silver Flag Exercise.

Detail Chinhae also assembled various tents on the ROK Busan Base with ROK NMCB ONE during CCPT 20-2 on 22 Aug 20. This opportunity with the ROK NMCB ONE provided Detail Chinhae a chance to train multiple personnel on assembling the familiar 307 tent and NETC2 dome tent as well as tents not associated with NMCB TOA. ROK NMCB ONE assisted in erecting the tents while comparing methods

to increase efficiency for both parties. This exercise had to be cut short due to a forecasted typhoon scheduled to impact the Busan area.

On 31 Aug 20, twenty Detail Chinhae personnel along with U.S. Air Force 51st CES participated in Silver Flag Korea Training Exercise. Silver Flag Korea consisted of six days of rating specific classroom training covering detailed roles and responsibility within the ADR process and practical application training culminating in a full scale Rapid Airfield Damage Repair (RADR) joint exercise comprised of USN and USAF personnel on 06 Sep 20. The 554th Rapid Engineer Deployable Heavy Operational Repair Squadron Engineer (RED HORSE) were the cadre during the evolution and provided invaluable guidance and knowledge in ADR execution. This opportunity enabled Detail Chinhae to train personnel with limited ADR experience, providing NMCB THREE additional trained personnel in ADR to share their knowledge during homeport with other members of the battalion, and support future ADR missions.

Five Detail Chinhae personnel traveled to Yokjido Island on 02 Nov 20 to assist ROK NMCB ONE in local infrastructure improvements while continuing to build ROK – U.S. interoperability. The five personnel drove to Samedok Port to board the ferry transporting directly to Yokjido Island. The COVID-19 environment introduced challenges to the scheme of movement which was mitigated by staying inside the vehicles during transit and minimizing exposure to the Korean public. While on the island, Detail Chinhae personnel berthed within their single man tents for the duration of the mission. Detail Chinhae assisted ROK NMCB ONE with constructing a 1.6 m x 32 m CMU wall, placed and finished 70 cubic yards of concrete for a concrete pad, and constructed a shaded rest area. Upon completion of construction tasking and site clean-up, the area was ready for public use on 05 Nov20, the detail returned to Chinhae the following day. The cooperative effort between ROK Engineers and Detail Chinhae provided island residents a vastly improved recreational area to build a strong community while leveraging the core capabilities of Seabees to enhance military partnerships on-island.

PROJECT SUMMARY

Project Number	Total Project MDs ¹	Estimate at Completion ₁	Tasked % ²	Final WIP (%) ¹	MDs Expended by Prior NMCBs ¹	MDs Expended This Deployment ¹
KO19-846	137	\$27,228.94	100%	100%	0	193
Seabee ROK Interaction	220	N/A	100%	100%	0	223
OIC-D	300	\$0 Customer Provided	100%	100%	0	383
Camp Maintenance	75	N/A	100%	100%	0	114
Exercise	158	N/A	100%	100%	0	158
Total	557	\$27,228.94			0	1,071

Notes:

- (1) Based off of Biweekly PSR.
 (2) Based off of NMCB THREE 100% tasking.

LABOR DISTRIBUTION SUMMARY

Month	Jul 20	Aug 20	Sep 20	Oct 20	Nov 20	Dec 20	Jan 21	Total
Direct Labor MDs¹	0	181	304	156	186	187	0	1,014
Indirect Labor MDs^{1,2}	0	83	60	135	142	170	0	590
Readiness/Training¹	0	20	20	40	20	20	20	140
Total MDs Exp	0	284	384	331	348	377	20	1,744
# Total Personnel	0	20	20	20	20	20	20	
# Direct Labor	0	13	13	13	13	13	0	
# Workdays³	0	16	21	21	19	25	0	
% Direct Labor⁴	0%	65%	65%	65%	65%	65%	0	
Ideal Capability⁵	0	234	307	307	278	366	0	
Availability Factor⁶	0	.86	1.05	.64	.74	.57	0	

Notes:

- (1) Direct and Readiness/Training MDs are expended MDs, not earned.
 (2) Indirect Labor MDs are MDs spent (expended) on indirect activities by DL personnel. This reflects "X" coded time from timecards.
 (3) Number of workdays = DL workdays + DL training days.
 (4) Percentage of DL (%DL) = 100% * (DL/Total Personnel).
 (5) MD Capability = (ME * DL * Workdays) = 1.125 x DL x (# Workdays).
 (6) Actual Availability Factor = (DL MDs + Readiness/Training MDs) / (MD Capability).

)



Project Start



Project Completion

Seabee Conference Room KO19-846

Project Purpose: Provide Detail Chinhae additional work stations which increases operational capacity to better support various entities on CFAC.

Project Data

Project Scope: Construct two offices with a total sqft of 33.625 ft x 10 ft on the second floor mezzanine. Each office will have interior and exterior trim including HVAC.

Personnel:	5	
Duration:	10Aug20 – 09Oct20	
MDs Expended:	NMCB THREE	184
	Prior NMCBs	0
Tasking:	WIP at Deployment Completion	100%
	Total Project MDs	137
Initial Estimate at Completion:	\$26,374	
Current Estimate at Completion:	\$27,228	

Significant Safety Issues: None.

Significant QC Issues: None.

Significant Design Issues: None.

Significant Material Issues: None.

Significant Tool/Equipment Issues: None.

OIC Discretionary Projects

<u>Project Listing</u>	<u>Cost</u>	<u>MDs Expended</u>
Locker Installation	\$0.00	7
Security Dept. Workout Station	\$0.00	5
Turnstile Extension	\$0.00	3
Security Bollards	\$0.00	20
Olympic Stage	\$0.00	9
MWR Outdoor Games	\$0.00	45
MWR Photo Cut-Outs	\$0.00	3
NMCB THREE Workout Station	\$0.00	19
Alfa Office Renovation	\$0.00	30
Fire Department Workout Station	\$0.00	5
CT JOY Cypher Lock	\$0.00	2
EOD Line Haul Assistance	\$0.00	5
BLDG 776 Workout Station Repair	\$0.00	9
Stump Removal from CO's Side Yard	\$0.00	5
Medical Dip Station	\$0.00	19
PWD Transportation Concrete Ramp	\$0.00	30
MLO-CTR Customer Service Counter	\$0.00	10
Construct Conference Room Table Top	\$0.00	7
BLDG 794 Access Road Stump Removal	\$0.00	3
Smartboard and Projector Install	\$0.00	6
Security Bollards Repair	\$0.00	9
POW Memorial Renovation	\$0.00	8
Misc.	\$0.00	111
Total	\$0.00	383



Transporting ROK EOD supplies.



Renovation of POW MIA memorial located on CFAC.



Using an auger to create holes for workout station.



Typhoon clean-up on CFAC.

CHINHAE LESSONS LEARNED

1. Topic: SIPRNET for ONE NET

Problem: SIPRNET is required during CCPT exercises, OIC didn't have SIPRNET account when arriving in Chinhae. Without a SIPRNET account one cannot participate fully in CCPT.

Recommendation: Ensure you create SIPRNET account for personnel involved in CCPT exercise. Log into SIPR at least once a month to prevent getting locked out.

2. Topic: Finding OIC-Ds

Problem: Detail leadership is responsible to make contacts on CFAS in order to develop a running list of OIC-D projects in order to keep the detail fully-employed, particularly if the detail has minimal formal tasking.

Recommendation: Socially interact with other units stationed at CFAC to identify potential OIC-Ds that the detail can complete. Also, be active and participate in the different CFAC events that regularly occur each month, you will be able to identify new OIC-Ds and COMREL opportunities by doing this.

3. Topic: Personnel That Can Drive a Manual

Problem: Any movements that require the whole detail or cargo, will require the use a box truck that you can get from CFAC. The only box truck available on CFAC has a manual transmission. It will be difficult to coordinate a mass movements without being able to utilize the box truck. The box truck will also be needed to pick up detail personnel from ROM in Camp Humphreys upon entry into ROK.

Recommendation: Ensure 1-2 members on your detail know how to drive a manual transmission vehicle.

4. Topic: Adaptability When Working With the ROK Seabees

Problem: ROK Seabees control the dates for exercises and typically other ROK engagement opportunities. The dates and information that they pass are constantly changing, making it hard for the detail to plan around the events.

Recommendation: Expect the date that is passed by the ROK Seabees to change. Other work can be planned around the specific ROK event, but be prepared to adjust to prioritize ROK engagement.

DETAIL DIEGO GARCIA

On 04 Jul 20, NMCB THREE Detail Diego Garcia deployed to Naval Support Facility (NSF) Diego Garcia to construct a Tension Fabric Structure (TFS) that will provide weather resistant and securable storage for War Reserve Material (WRM) for the Pacific Air Force (PACAF), support NSF Diego Garcia through various OIC-D projects, and provide a postured NMCB detail capable of responding to MCO or HA/DR missions throughout USINDOPACOM.

Upon deployment, NMCB THREE Detail Diego Garcia AP traveled with the main body STRATLIFT flight to Okinawa on 04 Jul 20 and flew COMAIR from Naha to Tokyo the following day. After a three day stay on Yokota AB, they traveled via C-17 to Diego Garcia and executed a 14-day ROM. Following ROM, NMCB THREE conducted a 72 hour face-to-face turnover with NMCB FIVE.

DP personnel traveled with main body DPS STRATLIFT flight and were in Okinawa for three weeks while waiting on their Air Mobility Command (AMC) flight from Kadena to Yokota. Upon arrival they were moved to Atsugi and placed in ROM rooms until their flight to Diego Garcia via C-17. Following arrival in Diego Garcia, they completed the mandatory 14-day ROM.

NMCB THREE Detail Diego Garcia turned over with NMCB FIVE and completed a 770 MD project as well as four OIC-D's, with a total value of \$1.5M. The detail participated in three COMRELS contributing six hours to beautifying and protecting the beaches of Diego Garcia as well as volunteering a total of 40 hours in support of PWD's Haunted House. Administratively, the detail had three Sailor of the Quarter selections, two advancements, and achieved 100% of their SCW and EXW qualifications.



Seabees work with contractors to weave together the canvas top of the tension fabric structure. The structure will support Pacific Air Forces Command War Reserve Material by providing a weather resistant and securable storage area.

DG19-848 Construct Air Force Equipment Storage consisted of placing the concrete foundation, electrical and erection/installation of a 65 ft x 120 ft TFS. The project was initiated by NMCB FIVE in Oct 19 and turned over to NMCB THREE at 49 % WIP, which included demolition of existing structure and placement of the concrete footer. Detail Diego Garcia officially began execution on 17 Aug 20. The scope of work

executed by NMCB THREE consisted of placing eight concrete slabs, erecting the TFS with the assistance of a TFS technical representative, cutting and sealing control joints, anchoring bollards, and installing electrical to include a panel, four outlets, flood lights, and 10 high-bay overhead lights. The project was a joint effort with support from BOS Contractors, PWD, and the PACAF. The TFS will support the operational war-fighting capability of PACAF by providing 8000 sqft of weather resistant and securable storage for War Reserve Material (WRM). NMCB THREE completed the project on schedule with no quality or safety issues, following a final inspection on 12 Nov.



Seabees celebrate the completion of their tension fabric structure with personnel from the U.S. Air Force, Public Works Department Diego Garcia and civilian contractors during a ribbon cutting ceremony.

After completion of tasked construction projects, Detail Diego Garcia executed three OIC-Ds in order to keep Seabees engaged and to continue providing engineering and construction support to NSF Diego Garcia. The OIC-Ds included construction of a concrete pad for a baling machine that will support a 22 ton metal baling machine that will increase the operating efficiency of the adjacent waste facility; the removal of roughly 200 ft of damaged chain link fencing, decaying tensioning bars, and barbed wire at the NSF Diego Garcia Fuel Farm; and the demo of 1000 sqft of decking and 100 ft of fencing and construction of a new wooden perimeter wooden fence for the base MWR facility.

PROJECT SUMMARY

Project Number	Total Project MDs ¹	Estimate at Completion ₁	Tasked % ²	Final WIP (%) ¹	MDs Expended by Prior NMCBs ¹	MDs Expended This Deployment ¹
DG19-848	770	\$1,387,743	52%	100%	362	408
Total	971.18	\$1,387,743			362	632

Notes:

(1) Based off of Biweekly PSR.

(2) Based off of NMCB THREE 100% tasking.

LABOR DISTRIBUTION SUMMARY

Month	Jul 20	Aug 20	Sep 20	Oct 20	Nov 20	Dec 20	Jan 21	Total
Direct Labor MDs¹	0	50.5	138.5	193	94	140	15.5	631.5
Indirect Labor MDs^{1,2}	0	17.5	41.5	13	58	58	11.5	199.5
Readiness/Training¹	0	4	8	0	19	0	0	31
Total MDs Exp	0	72	188	206	171	198	27	862
# Total Personnel	0	9	9	10	10	10	10	
# Direct Labor	0	3	6	7	7	7	6	
# Workdays³	0	18	23	24	19	22	3	
% Direct Labor⁴	0%	33%	67%	70%	70%	70%	60%	
Ideal Capability⁵	0	48.6	124.2	151.2	119.7	138.6	16.2	
Availability Factor⁶	0	1.12	1.17	1.28	.94	1.01	.96	

Notes:

(1) Direct and Readiness/Training MDs are expended MDs, not earned.

(2) Indirect Labor MDs are MDs spent (expended) on indirect activities by DL personnel. This reflects "X" coded time from timecards.

(3) Number of workdays = DL workdays + DL training days.

(4) Percentage of DL (%DL) = 100% * (DL/Total Personnel).

(5) MD Capability = (ME * DL * Workdays) = 1.125 x DL x (# Workdays).

(6) Actual Availability Factor = (DL MDs + Readiness/Training MDs) / (MD Capability).



Project Start



Current Project Status

Construct AF Equipment Storage

DG19-848

Project Purpose: This project will increase the storage capacity of the Pacific Airforce (PACAF) War Reserve Stock on Diego Garcia.

Project Data

Project Scope: Detail Diego Garcia will perform demolition on existing Facility 951 wooden structure as well as constructing a 122 ft x 67 ft Tension Fabric Structure (TFS) complete with electrical.

Personnel:	5	
Duration:	21Oct19 – 12Nov20	
MDs Expended:	NMCB THREE	411
	Prior NMCBs	370
Tasking:	WIP at Deployment Completion	100%
	Total Project MDs	770
Initial Estimate at Completion:	\$1,164,336	
Current Estimate at Completion:	\$1,387,742	

- Significant Safety Issues:** None.
- Significant QC Issues:** None.
- Significant Design Issues:** None.
- Significant Material Issues:** None.
- Significant Tool/Equipment Issues:** None.

OIC Discretionary Projects

<u>Project Listing</u>	<u>Cost</u>	<u>MDs Expended</u>
Construct Concrete Pad for Baler Machine	\$0.00	92
Replace Fuel Fence	\$0.00	56
MWR Deck Removal and Fence Installation	\$0.00	75
Total	\$0.00	223



Completed concrete pad for baler machine.



Installed RST and forwork in preparation for baler pad concrete pad placement.



Crew securing new chain link fencing to posts at fuel farm.



Completed MWR Liberty Center Perimeter Fence.

DIEGO GARCIA LESSONS LEARNED

1. Topic: Travel

Problem: Travel to Diego Garcia is limited. Flights to/from the island are arranged and booked via NAVPTO which typically works with PCS through CPPA's. They require multiple approved documents prior to booking flights and can be difficult to get in touch with.

Recommendation: Start working travel arrangements as early as possible! Members must arrange travel with the nearest NAVPTO (San Diego, Okinawa, and Yokota). We have created templates of all the required documents which will be turned over to relieving NMCB Detail.

2. Topic: Travel

Problem: Unexpected fees. Depending on whether cruise boxes are authorized, you may be charged excess baggage for anything above two pieces of checked luggage. Additionally, flights have a tendency to be delayed resulting in requiring lodging in transit.

Recommendation: Anticipate excess baggage (roughly 125 per piece) if you are unable to send cruise boxes or have to carry organizational boxes or PGI gear. Expect the worst and account for lodging in your planning budget, it's easier to remove on the back end. Ensure orders reflect potential requirements.

3. Topic: Time Difference

Problem: The 3 hour difference between Japan and DG will cause some issues in reporting requirements.

Recommendation: Plan ahead. Review the due dates/meeting times and get ahead of potential issues. We worked with JPERSTAT requirement to allow us to report accountability later as well as submit our documents a day early for any required the next morning (JST). If there are conflicting issues, speak up and let main body know so they can adjust if possible.

4. Topic: Weather

Problem: Diego Garcia is a tropical island and brings with it unpredictable weather. We were able to avoid any significant delays due to rain, as the rainy season is fall/winter time frame. The rain has ranged from short showers to multiple days of non-stop rain.

Recommendation: Anticipate rain and hot muggy days. If you have concrete placements specifically, closely monitor weather and coordinate with the batch plant. Additionally, we used a pop up tent in order to protect from the elements. Always keep water coolers full and available. (Ice is free at barracks).

5. Topic: Concrete

Problem: The concrete on the island is all batched and delivered from one location on island. There are two functional cement trucks and only 5 ft of chute available. Further, due to the weather concrete has a tendency to cure very quickly requiring a deliberate execution.

Recommendation: 1) DRY RUN. We came up with our plan for how we would place our concrete and worked with the contractors in order to execute a dry run on site. This was highly effective as we ended up having to change how we wanted to execute due to the short chute and avenue of approach for the truck.

2) Do the placements as early as possible (we were on site at 0700) this will afford the most amount of time before the heat sets in. 3) Ensure there are no additives, there have been issues in the past with contractors adding accelerants.

6. Topic: Materials

Problem: Due to the contracting process, all projects are planned and material ordered through contractor. This allows for very little influence that NMCB has in what material gets ordered.

Recommendation: Work closely with contracting staff and PWD Construction Manager. Typically, if we needed something they were able to help us out. NMCB warehouse also has a fairly broad range of excess

which we also were able to utilize to fill some gaps. Ensure that you verify the material matches what was ordered and keep your PMSR updated.

7. Topic: Working Relationships

Problem: The Island is very small, not maintaining or building on working relationships will directly impact your operational capability on the island.

Recommendation: Important relationships include contractors (differ depending on project), PWD (construction manager, LCPO, Self-Help, PWO), customers, NSF (admin, urinalysis, etc). We hold internal Operations, Training, Logistics meetings bi-weekly and invite PWD, customer, and contractor representative to attend. This keeps everyone in the loop and helps improve our relationship.

DETAIL TIMOR-LESTE

NMCB THREE Detail Timor-Leste (TL) AP of four personnel experienced a very unusual and unprecedented deployment due to COVID-19. Prior to deployment, the Detail AP had to sequester at the Residence Inn Hotel in Oxnard for 21 days, from 4 Jun through 25 Jun, along with other details initially deploying to Guam. Once out of sequester, all of the details boarded buses and departed to Point Mugu in order to board a STRATLIFT flight which arrived in Guam on 26 Jul 20. However, once in Guam, Detail TL AP had to once again self-isolate and quarantined for 16 days before boarding a NALO flight on 11 Jul 20 to Timor-Leste. Once in Timor-Leste, NMCB FIVE picked up NMCB THREE at the airport and headed to Seabee Camp Lenhoff. Upon arrival in Camp Lenhoff, they had to self-isolate and quarantine another 14 days due to Timor Leste Ministry of Health (MOH) policy. Finally on 26 Jul, after nearly two months of ROM, Detail TL AP was released from ROM and began RIP/TOA with NMCB FIVE. Turnover was completed 28 Jul 20, NMCB THREE DP arrived 30 Jul 20 via NALO flight, and NMCB FIVE Detail TL DP departed on the same aircraft. Following DP completion of ROM on 13 Aug 20 Detail TL was able come together with all 20 personnel in order to start deployment tasking.



Seabees are joined by Casa Vida members while painting the exterior walls of Cas Vida Timor-Leste. Casa Vida is a non-profit organization committed to providing victims of child abuse a place of security and to receive care.

Detail TL's deployment tasking included construction of two schools, renovation of an airfield fence, and one multinational military exercise. All tasked projects were located in the district of Baucau, which is approximately three hours east of where Camp Lenhoff is located. Prior to project execution, detail leadership met with the NEFRSC contractor, Dyncorp International (DI) to set up short term lodging and site security in Baucau, and how to ensure the timely delivery of all equipment, tools, and materials to the job site. DI contracted lodging accommodations for the entire detail at the Pousada de Baucau Hotel including breakfast, Wi-Fi, laundry services, and room cleaning. The hotel was very nice and the staff worked tirelessly to accommodate our Seabees. The Timor Leste Liaison Officer (LNO) coordinated with the U.S. Embassy to incorporate members of the Falintil - Forcas de Defesa de Timor-Leste (F-FDTL), also known as the Timor Leste Defense Force into the project team in order to provide construction skills training while improving local infrastructure and strengthening the F-FDTL reputation within the local population. With life support and logistics in-place, it was time for the Better than Best NMCB THREE Seabees to begin construction.

The detail started construction on project TL20-847 Vila Nova Three Room School on 17 Aug 20 with 20 personnel and augmented with 10 F-FDTL members. Volcanic and coral rock extended all throughout the Baucau district and it was no different at the school site. Detail operations began the arduous task of excavating the soil for the foundation which consists of column footers, grade beams, and the slab. With excavation lasting longer than planned, the project supervisor was able to mitigate delays, working several activities concurrently; such as prefabricating woods forms, rebar cages, and ordering the pre-cast columns. Pre-cast columns were utilized instead of cast-in-place due to better concrete dispersion and uniformity,

and being more aesthetically pleasing; a lesson learned by prior battalions. Once excavation was complete, it was time to install rebar cages and place concrete for the footers. Once the concrete had cured enough to support the weight of the columns, it was time to erect the 25 pre-cast columns, ensuring they were plum and level. The columns were secured in place by installing another rebar cage and placing the second phase of concrete in order to cap the columns. The crew transitioned to placing 40 cubic meters of concrete for grade beams and building pad, completing the building foundation on 24 Sep 20. The CMU block phases, which consisted of 2,500 CMU blocks and 20 cubic meters of concrete core fill, was completed on 10 Oct 20. The transition of work commenced into two phases, stucco and installation of the roof structure. Work included the installation of seven trusses, 60 purlins, 66 sheets of corrugated roofing, 22 pieces of fascia and 10 ridge cap planks. Stucco application and the installation of the windows and doors were contracted out to allow the detail to complete roof installation and eventually the painting. The Project Crew of 12 completed 575 MDs of construction on 29 Oct 20, one month ahead of schedule and under budget. The closing ceremony was held on 30 Oct 20 with many VIPs and dignitaries in attendance, including; the US Ambassador, Commander of F-FDTL forces, Minister of Education, and the Mayor of Baucau District.



Seabees participate in Exercise Hari'I Humatuk a joint multinational exercise to increase interoperability among partner military forces. This year's exercise included the F-FDTL and Australian Defense Force.

Beginning 29 Sep 20, two members from Detail TL participated in Exercise Hari'i Hamutuk 2020 (HH20) at the F-FDTL and Component Military Base in Baucau. Hari'i Hamutuk is Timorese for "Building Together" and is a multinational military exercise with forces from the Australian Defense Force (ADF), Japan, New Zealand, F-FDTL, U.S. Marines, and U.S. Navy Seabees. Due to COVID-19, this year's HH20 exercise was heavily scaled down in tasking and consisted of a joint group from only the ADF, F-FDTL, and Seabees. The tasking involved renovation of a vehicle inspection warehouse and placement of a concrete pad for an above-ground fuel storage container aboard the F-FDTL base in Baucau. The focus of the exercise was to develop friendly forces military capabilities, improve military infrastructure, and increasing interoperability between forces. The closing ceremony was held on 19 Oct 20, including attendance by: the US Ambassador, ADF Defense Attaché, and Timor-Leste Minister of Defense. Seabees and ADF were personally recognized for their contributions and were gifted ceremonial scarfs called "tais" by the Timor-Leste Minister of Defense.

NMCB THREE Detail TL was also tasked to support U.S. Air Force 554th RED HORSE Squadron with construction and renovation of the Baucau Airfield. From the onset, there was a lot of excitement and controversy surrounding U.S. presence and construction at the Baucau Airfield. Detail tasking involved removal and replacement of approximately five miles of perimeter chain-link fence, to include repair of fence posts, gates, and installing three strands of barb wire. Due to COVID-19, recent elections, and changes in the Timor-Leste government, there were withdrawals and hesitation to allow the U.S. access to the airfield. However, the U.S. Ambassador has been working diligently and assuring the local government

that the U.S. is a friend to Timor-Leste and only wants to assist in protecting their sovereignty. The U.S. Ambassador combined with the high-quality construction completed by the detail and F-FDTL forces has made great progress towards the Timor-Leste government granting U.S. access to the Baucau Airfield and a pending agreement is expected to be signed shortly following turnover to NMCB FOUR. The project will highlight interoperability between F-FDTL, USAF, and U.S. Navy Seabees and benefit the government of Timor-Leste by improving the existing airfield infrastructure.



Seabees participate in ribbon cutting ceremony after completion of the Vila Nova School. The school will provide a safe space to educate 1,500 local children.

After completion of Vila Nova School, the detail turned its focus to beginning construction on TL20-847 EBC Seical Three Room School, NMCB FOURs priority number one project. On 24 Nov 20, Detail TL received a Technical Direction Letter (TDL) to receive a portion of project funding, enabling the detail to move-in on 30 Nov 20 and begun construction. Original plan was to complete the concrete placement for phase I footers, allowing NMCB FOUR Detail TL to begun construction with the concrete columns and the remainder of the concrete footers. Unfortunately, foul weather delayed the detail's ability to place the concrete footers phase I before TL holiday stand-down period from mid-December to mid-January. During the TL holiday stand-down period, TL contractors and subcontractors shut-down, and it is almost impossible for details to receive material during this time period. Because of this the detail backfilled the excavations to ensure a safe work-site was left during turnover and then de-mobilized from Baucau and returned to Camp Lenhoff on 18 Dec 20. NMCB THREE completed approximately 9% of TL20-847 and will be turning over the remainder for NMCB FOUR to complete.

TIMOR-LESTE LNO

TL LNO arrived on 11 Jul 20 and started the turnover process with NMCB FIVE LNO with a turnover ceremony conducted on 17 Jul 20 at Camp Lenhoff. During the time in TL, the NMCB THREE LNO visited four schools that needed renovation, as well as the Baucau Airfield which will be a location for multiple projects scheduled to start in 2021. The TL LNO provided planning and coordination assistance in support of a variety of different organizations including 554th RED HORSE, NAVFAC PAC, and future NMCB details. Additionally, acting as the primary F-FDTL point of contact for interoperability construction with NMCB THREE on two construction projects, the LNO briefed the Ministry of Education (MoE) of Baucau and Dili on future Seabee projects, and attended ceremonies for Exercise HH20 which took place at the F-FDTL military base on 19 Sep 20 and 29 Oct 20.

Future school projects in TL are located in Baucau and Dili. During the estimate, the MoE of Baucau, and Dili requested, respectively, for three, and one, new three classroom schools. All four locations were determined to be acceptable for Seabee construction, with appropriate road conditions for construction site access. The schools are overcrowded with over 50 students per class and the walls of existing structures are worn down and in need of new roofs, windows, and doors. The suggested schools will meet the mission of the country team and strengthen the educational infrastructure of the host nation while developing relationships the HN military engineers. The three projects are estimated at \$1.2M.

USAF 554th RED HORSE, U.S. Embassy, and LNO have been planning and coordinating the construction of a new PEB and replacement of the perimeter fence of Baucau airfield; with both projects scheduled to start Feb 2021. Additionally, NAVFAC PAC engineers and contractors are working on the design of a new HA/DR warehouse and maintenance facility, a new Emergency Operation Center (EOC), and new Airfield Control Tower (ACT) for Baucau Airfield. The LNO supported both teams by connecting them with U.S. Embassy and local contractors to provide data for the design of the projects.

These projects are estimated to cost over a total of \$10M and will take multiple deployments to complete. Once established, the HA/DR, EOC, and ACT can serve as a joint exercise facility and will provide TL with a location for improved C2 for exercises and emergency management.

During NMCB THREE Detail TL projects in Baucau, the LNO requested construction assistance from HN military engineers through the U.S. Embassy. F-FDTL collaborated on both school projects which allowed for an important exchange of skills between the two forces.

In support of future Seabee construction project in TL, LNO briefed MoE of Baucau and Dili on future Seabee projects and attended Hari'i Hamutuk 2021 exercise planning conference to provide Seabee capabilities for future operations.

The COMREL activities coordinated by TL LNO provided positive benefits and impact to organizations such as UMA Amerika, Casa Vida, Rotarians Helping Timor Office, and Orphanage Beata Paulina Vicuña. The COMRELS helped to grow relationships between Timorese and Seabees.

PROJECT SUMMARY

Project Number	Total Project MDs ¹	Estimate at Completion ₁	Tasked % ²	Final WIP (%) ¹	MDs Expended by Prior NMCBs ¹	MDs Expended This Deployment ¹
TL20-845	575	\$352,453	100%	100%	0	433
TL20-847	593	\$352,970	21%	9%	0	83
Total	1,168	\$709,923			0	516

Notes:

(1) Based off of Biweekly PSR.

(2) Based off of NMCB THREE 100% tasking.

LABOR DISTRIBUTION SUMMARY

Month	Jul 20	Aug 20	Sep 20	Oct 20	Nov 20	Dec 20	Jan 21	Total
Direct Labor MDs ¹	0	63	214	381	119	82	20	879
Indirect Labor MDs ^{1,2}	0	120	120	120	120	120	0	600
Readiness/Training ¹	0	176	176	176	176	176	33	913
Total MDs Exp	0	359	510	677	415	378	53	2,392
# Total Personnel	0	20	20	20	19	19	19	
# Direct Labor	0	12	12	12	12	12	12	
# Workdays ³	0	16	21	21	21	21	9	
% Direct Labor ⁴	0%	63%	63%	63%	63%	63%	63%	
Ideal Capability ⁵	0	216	284	284	284	284	122	
Availability Factor ⁶	0	1.11	1.37	1.96	1.04	0.91	.43	

Notes:

(1) Direct and Readiness/Training MDs are expended MDs, not earned.

(2) Indirect Labor MDs are MDs spent (expended) on indirect activities by DL personnel. This reflects "X" coded time from timecards.

(3) Number of workdays = DL workdays + DL training days.

(4) Percentage of DL (%DL) = 100% * (DL/Total Personnel).

(5) MD Capability = (ME * DL * Workdays) = 1.125 x DL x (# Workdays).

(6) Actual Availability Factor = (DL MDs + Readiness/Training MDs) / (MD Capability).



Project Start



Project Completion

Vila Nova Three Room Schoolhouse TL20-845

Project Purpose: School will provide a space to educate over 1500 local nationals while strengthening the infrastructure of the host nation and maintaining US & Timor-Leste relationship.

Project Data

Project Scope: Construction includes concrete footers, grades beams, concrete pads, sidewalk, and pre-cast concrete columns. Concrete masonry walls with stucco finish and approved paint. Prefabricated metal trusses and corrugated roof sheeting. Aluminum windows with louvers and aluminum door frames with solid core wood doors and ceramic floor tile. Rough and finish electrical.

Personnel:	12	
Duration:	16Aug20 – 30Oct20	
MDs Expended:	NMCB THREE	433
	Prior NMCBs	0
Tasking:	WIP at Deployment Completion	100%
	Total Project MDs	575
Initial Estimate at Completion:	\$354,453	
Current Estimate at Completion:	\$354,453	

Significant Safety Issues: NSTR.

Significant QC Issues: Earth formwork was used for placement of footers due to rocky ground and inability to get consistent cuts with equipment. Finished footers were larger than prints required, resulting in an engineering assessment done on structural integrity. Results proved footers were effective, lesson learned was to ensure formwork built where possible on footer placements.

Significant Design Issues: Due to window placement throughout the entire back wall of the school, electrical panel needed to be moved to the end of the building because print placement had in middle of window opening.

Significant Material Issues: NSTR.

Significant Tool/Equipment Issues: NSTR.



Project Start



Project Turnover

EBC Seical Three Room Schoolhouse
TL20-847

Project Purpose: School will provide a space to educate over 1500 local nationals while strengthening the infrastructure of the host nation and maintaining US & Timor-Leste relationship.

Project Data

Project Scope: Construction includes concrete footers, grades beams, concrete pads, sidewalk, and pre-cast concrete columns. Concrete masonry walls with stucco finish and approved paint. Prefabricated metal trusses and corrugated roof sheeting. Aluminum windows with louvers and aluminum door frames with solid core wood doors and ceramic floor tile. Rough and finish electrical.

Personnel:	12	
Duration:	30Nov2020 – 01May2021	
MDs Expended:	NMCB THREE	83
	Prior NMCBs	0
Tasking:	WIP at Deployment Completion	9%
	Total Project MDs	597

Initial Estimate at Completion: \$352,970

Current Estimate at Completion: \$352,970

- Significant Safety Issues:** N/A
- Significant QC Issues:** N/A
- Significant Design Issues:** N/A
- Significant Material Issues:** N/A
- Significant Tool/Equipment Issues:** N/A

OIC Discretionary Projects

<u>Project Listing</u>	<u>Cost</u>	<u>MDs Expended</u>
Casa Vida Orphanage Paint Renovations	\$0.00	10
Orphanage Picnic Table Development	\$0.00	35
Casa Vida Stone Paving	\$0.00	12
Total	\$0.00	57



Casa Vida Painting – Before.



Casa Vida Painting - After



Seabee working on table for orphanage table donation.



Completed tables for orphanage staged in Camp Lenhoff warehouse.

TIMOR LESTE LESSONS LEARNED

1. Topic: OIC-D

Problem: The country regularly shuts down for holidays which can affect project progression. From 18DEC until 8JAN, the country does not work for the Christmas season.

Recommendation: Identify possible OIC-Ds early and coordinate funds to utilize for down periods between tasked projects. Using the LNO, it is easy to find small projects that are perfect for a day or two of work either in Dili or Baucau. Larger OICDs may be spaced out across the deployment, so early identification is key for fluid progression.

2. Topic: Material and Contract Support

Problem: Nomenclature on BOM and requested lead times need to be flexible.

Recommendation: Material procurement in Timor is location specific. Review RFPs from DynCorp to understand which suppliers placed a bids on items. This information will allow operations and Project leadership to understand that anything sourced from the internet (Tapcons, Dewalt specific saw blades, specific safety items) will have a 3-week lead time. Be flexible with item descriptions on the BOM and realize there are different materials and requirements in Timor. Some items available may be what you need, but not what the description says, so get eyes on your material. Most material can be procured locally, but make sure you are happy with the quality. Be aware that CMU block can be purchased at different quality levels; it is worth it to order the higher quality. Electrical materials can be difficult to acquire parts/pieces that work together; recommend sending a CE with a DynCorp representative to collect all pieces in the store to ensure proper fit before purchase. When requesting material, it's always better to put L/I, nomenclature and amount needed in an email to DynCorp.

3. Topic: Sub-Contracted work i.e. pre-cast columns, pre-fab trusses, tile, windows and doors.

Problem: Fabrication of materials to specifications.

Recommendation: Prior to fabrication discuss with the contractor specifically what you want according to the prints and specs and emphasize to communicate with you if there is a problem with the specifications. Also inspect all contractor material and work daily to identify any deficiencies or deviations according to the prints.

4. Topic: F-FDTL (HN engineering support)

Problem: Language Barrier

Recommendation: F-FDTL are very good workers, but have a difficult time understanding construction methods and U.S. terminology. Partner F-FDTL with patient and experienced Seabees. Time invested to teach them will pay dividends because they are fast learners and will maximize effectiveness of the crew.

5. Topic: Pre-Cast Columns

Problem: Deviance in mold

Recommendation: Pre-cast columns are ideal for project efficiency and to limit QC risk. But, send a QC rep to RMS (supplier) to double check measurements, including level and plumb of formwork.

6. Topic: Project Location

Problem: Un-improved roads and drive times.

Recommendation: Base of operations will be either Dili or Baucau. Most projects in Baucau are between 30-60 minutes away and use unimproved roads with low hanging trees and power lines. Be aware of route and estimate travel time for the crew, but more importantly ease of access to the site for materials and

contractors. Visit the site prior to execution with DynCorp and evaluate logistic plans (concrete being the biggest concern).

7. Topic: Temporary Power

Problem: Temp power and generated power.

Recommendation: Temp power can be contracted out based on location and accessibility to the main grid. Country grid goes down quite a bit, plan for this. Highly recommend to bring your own generators, but account for step downs and adapters for tools and chargers that do not run on US standard outlets.

8. Topic: Terrain

Problem: Timor is very mountainous and soil very rocky.

Recommendation: Encountered delays when excavating for footers and slab due to rocks throughout entire site. Seabees have jack hammer attachment for skid steer, but it only reaches a limited depth. Excavators with jackhammer attachments are available; identify on PDSS and plan accordingly.

9. Topic: Safety PPE

Problem: Gloves and other tailored PPE items are not available in the country.

Recommendation: Have individuals bring multiple pairs of gloves from the US (mechanix, etc.) or Oki. All other PPE available and easy to access, gloves were the most used and demanded due to type of work.

10. Topic: Scaffolding

Problem: Various load outs of scaffolding.

Recommendation: Validate appropriate bracing and ft for scaffolding are in the 20 ft container you load out to the project with. FFDTL will utilize scaffolding as well, ensuring to monitor and advice as they do not fall under our safety program.

11. Topic: Storage for Material

Problem: Make sure you have adequate space and locks at the project site. Load up another Tricon if needed to store concrete mix or anything that will wear under in exposed weather conditions.

Recommendation: Have a means of storage here on camp and at the project site. Separating line items is a lot easier. There is adequate space on camp for material storage.

12. Topic: Repair Parts Availability

Problem: Due to covid-19, shipments to TL have been reduced and delayed by months. Equipment is now down for repairs that would normally be considered minor under normal supply circumstances.

Recommendation: Plan one year out for all parts required for both PM and corrective maintenance.

13. Topic: Number of Maintenance Personnel

Problem: Due to the small number of CESE on detail, Command only sent one CM. With the projects 3+ hours away from the main camp it is very difficult for one person to perform required tasks at the main camp as well as be on site to address mechanical issues. If equipment requires corrective parts, the mechanic will have to spend 6+ hours driving to the main camp for parts / tools.

Recommendation: Having two mechanics on the detail will be extremely beneficial. One mechanic can be on the project site and diagnose equipment failure and request parts and tools to be sent by the main camp mechanic, reducing equipment down time by at least half a work day.

14. Topic: Camp Internet

Problem: Camp Lenhoff has WiFi, but it is slowed down with many simultaneous users.

Recommendation: Purchase personal WiFi pucks from plaza out in town for personal use, benefiting individuals while at the project site or staying in Baucau because the hotel internet is very slow.

15. Topic: Local Medical Capabilities

Problem: Timor-Leste has substandard and inadequate local medical capabilities. There is only one ISOS approved clinic located in Dili with very limited laboratory and Xray service.

Recommendation: Senior Independent Duty Corpsman with significant experience is recommended for Timor-Leste deployment. All troops deploying need to be medically screened to a higher standard, medical conditions that would be easily treated at other detail locations would become significant critical threats to limb and life due to limited ACLS and MEDEVAC capability. No pre-existing conditions of any kind.

16. Topic: Complex location and relationship between Seabees, Embassy, and Timor Leste Medical Facilities

Problem: Due to Timor-Leste's status as a developing nation, it's important for detail Medical to develop a good relationship with local medical assets and community. An emergency MEDEVAC due to a critical patient requires coordination with the American embassy, Australian defense, local medical assets, and Ministry of Health. The coordination requires significant relationship building.

Recommendation: If possible NMCB3 should send the same IDC on multiple deployments. NMCB5 used HMC Lewis three times on back to back Timor-Leste deployments allowing him to develop significant relationships with local assets giving him invaluable aid during a critical Dengue Fever medical evacuation.

17. Topic: Distances between Camp Lenhoff, Baucau Hotel, and project site.

Problem: The distances between Camp Lenhoff, the Posada Hotel in Baucau, and the project sites is significant and not suitable for any sort of rapid medical evacuation. There is no ambulance or air medevac capability that is safe or suitable for troops in case of critical injury.

Recommendation: Independent Duty Corpsman medical asset must remain at the project site during all significant construction. A critical injury without IDC present would lead to serious morbidity or death. IDC must be present or within 10-15 minutes at all time, anything else would be medical negligence due to the nonexistent medical capabilities and difficult roads. If detail IDC is also AOIC/OIC and will require time away from the project site, it's highly recommended that an experienced HM2/HM3 is also deployed in order to be present at project site at all times.

CHAPTER IV: LOGISTICS

SUPPLY

NMCB THREE deployed to Okinawa in Jun 20. On deployment, the Supply Department played a critical role enabling logistics at main body and from main body to remote detail sites. Critical services provided on deployment included procurement and shipment of COVID-19 supplies enabling battalion personnel the proper PPE to combat the pandemic; shipment of tools and repair parts, enabling the project execution throughout the AOR; the shipment of a gym TRICON to Detail Tinian; and the procurement of approximately \$3M worth of construction material.

NON-CESE TABLE OF ALLOWANCE

During turnover, NMCB THREE Supply Department conducted a seal verification of 238 TRICONS for the entirety of the P25 Non-CESE TOA and conducted a 10% sampling inventory of NMCB THREE's P25 Non-CESE and NETC2 TRICONS. Over the course of deployment, the Supply Department executed over 2000 MDs of TOA familiarization and inventory count for 57 TRICONS of SC1/CC and 64 TRICONS of SC2/EM Modules.

DISPOSITION MATERIAL

Although the COVID pandemic temporarily halted DRMO operations for the entire island of Okinawa, NMCB THREE was able to conduct several DRMO runs towards the end of deployment upon the reopening of the DRMO facility. The Supply Department and Alfa Company teamed up to conduct weekly DRMO runs, offloading excess, outdated, expired, and broken materials to free up storage for Camp Shields. A total of eight trips were conducted.

CENTRAL STOREROOM

The Central Storeroom (CSR), the focal point of organic supply distribution, was organized into deliberate sections to streamline support to main body operations and training. CSR inventory sections include: administrative supplies, galley consumables, organizational clothing, COVID supplies, and reserved small arms protective insert (SAPI) plates for MCO response.

POSTAL OPERATIONS

NMCB THREE postal team supported all mail requirements for NMCB THREE main body and nine detail sites. The postal team was a crucial asset for NMCB THREE deployed operations ensuring that official business and quality of life items were delivered timely and accurately. Supply Department provided critical repair parts to remote detail sites to maintain mission essential CESE and tools.

FINANCIALS

Over the course of deployment, NMCB THREE Supply Department managed a combined Operational Target budget (OPTAR) for FY20/21 of approximately \$2.7M. A closer look at the budget revealed that approximately \$1M was obligated for CESE repair parts, maintenance consumables, and POLs. The

remainder supported daily camp operations, self-sustainment supplies, and various service contracts. Funding and support with OPTAR extend to nine detail sites across the USINDOPACOM AOR.

DTS TRAVEL SUPPORT

The Supply Department and Administration Department teamed up together to provide DTS support to NMCB THREE main body and 9 detail sites. The DTS team managed a total travel budget of \$5.2M with supply managing the DTS budget and admin executing the DTS orders.

BARRACKS

NMCB THREE Supply Department managed a total of 432 rooms areas in four separate berthing areas throughout Camp Shields. The barracks team expertly coordinated several main body and detail site deployment ROMs, ensuring that personnel were provided quality living quarters while adhering to COVID-19 regulations. Throughout the deployment, the barracks team coordinated with CFAO to ensure that any broken or damaged items were replaced to improve quality of life for residents.

FOOD SERVICE



NMCB THREE Seabees installed COVID mitigation barriers on galley tables allowing Camp Shields galley return to dine-in services.



Cake prepared by galley staff for Thanksgiving.

NMCB THREE Food Service Team provided top quality meals to over 330 personnel on Camp Shields. Faced with a world-wide pandemic, the food service team executed a "dine-in" plan using plexiglas dividers to provide Camp Shields customers with a safe and healthy dining experience while following COVID-19 social distancing guidelines. The food service team, consisting of six Culinary Specialists (CS), 26 Food Service Administrator's (FSA), and 32 host nation civilians, executed over 13,000 ROM meal preparations and deliveries ensuring that NMCB THREE main body was provided quality meals while in ROM to prevent COVID-19 exposure. The food service team continually improved Camp Shield's dining experience making more grab-n-go items and fruits available to NMCB THREE.

MATERIAL LIAISON OFFICE / CENTRAL TOOL ROOM

NMCB THREE MLO/CTR Staff successfully accounted for 1,556 Class IV construction material and service items valued at \$3M and achieved 99.2% validity of all material for which they were accountable

as well as 242 toolkits and 5,509 shelf tools. Due to the limitations of the COVID-19 pandemic, the turnover period for MLO was limited to 10 days prior to RIP/TOA requiring that 9 of 14 members of the MLO/CTR staff be sent AP to Okinawa in order to take full advantage of the time.

MLO greatly improved the forward planning capabilities of the battalion by adjusting the functions of the Master Estimate at Completion (EAC) report used by 30NCR to track project funding. This was done by including the projected future costs for items and services needed for project completion. The inclusion of these future requirements allowed the MLO and operations team to properly project funding requirements to get ahead in planning for projects.

CTR greatly reduced the amount of partially mission capable toolkits on hand by consolidating kits and backfilling shorts from items available on the shelf. At turnover, 105 kits were at 100% validity and at the end of deployment there were 142. This enables CTR to have more easily accessible kits ready to support projects on island or abroad at any given time. CTR was also able to optimize the layout of the warehouse by placing the most commonly used items on lower shelves together by like kit. This enabled reduced dependence on using a forklift that was not organic to supply.

Crossing the fiscal year during deployment caused lines of accounting to close and unallocated funds to be recouped from projects. This made continuous procurement of contracted equipment difficult and impacted project timelines. To mitigate this, services were prioritized and planned from Sep to Dec and payed in advance before the end of the fiscal year. Ensuring the majority of projects were able to continue work until funds would become available in the estimated Nov and Dec timeframe.

A significant issue that MLO had in procuring materials was caused by project prints requiring electrical and mechanical components that meet U.S. code. Japanese parts available locally do not meet these requirements and the parts therefore have to be sourced from CONUS. This causes a significant delay in material delivery, impacting the project's critical path. MLO was able to save over \$100K using excess materials from closed out projects in place of add-on BOMs that would require additional funds and reduced lead times for procurement.

MAINTENANCE & MATERIAL MANAGEMENT (3M)

NMCB THREE continues to provide efficient uniform maintenance, material, management through the 3-M system. The 3M team accomplished 7,136 preventative maintenance actions, 338 spot checks, and a 99.9% PMS performance rate on deployment. Throughout the deployment, NMCB THREE completed 700 corrective actions and successfully decommissioned AM21 work center in San Clemente Island which included 40 units of CESE and 989 Automotive Part List (APL) items. Update of the Naval Tactical Command Support System (NTCSS) to Version 3.4 was completed which brought new effective features and increased program reliability.

CHAPTER V: TRAINING/ARMORY

READINESS AND TRAINING

During the 2020 USINDOPACOM deployment, NMCB THREE leveraged small unit leadership to accomplish Unit Driven Training (UDT). The focus was to sustain and improve individual and unit technical and tactical skills, maintaining readiness to “Fight Tonight” in support of MCO and HA/DR response tasking. Each month, one Friday or Saturday was designated as an all-hands Battalion training day. The focus of the training Fridays or Saturdays was on preventing degradation of key skill sets. Topics included Rules of Engagement, Escalation of Force, Code of Conduct, Table of Allowance Familiarization, ADR, Embarkation, Crew Served Weapons, Medical triage and MEDEVAC procedures, Navy Wide Advancement Exam familiarization and preparation, and General Military Training. Additional UDT was performed to familiarize the team with the assembly of NETC2, familiarization with radios and communications assets, with the Light Weight Water Purification System (LWWPS), and with expeditionary power generation.

The unit leveraged other military branches co-located in Okinawa in order to take advantage of additional training opportunities. NMCB THREE conducted a joint ADR exercise with the U.S. Air Force’s 18th CES located at Kadena Air Force Base and the ROK Seabees through Detail Chinhae. The battalion also coordinated and planned vertical construction with 9th ESB, experimented on bridging and logistics connectors in exercise Valiant Workhorse, and conducted multiple small arms sustainment ranges with range support through Camp Hansen and ammunition support through NCG1.

In Aug 20, NMCB THREE conducted a combined MOX and CPX, testing their own response to an actual Air Detachment 48 hour mount-out in response to MCO. The Air Detachment staff, CPX staff and OPT staff had no advanced knowledge of the type of mission for the exercise (HA/DR or MCO) and were continually evaluating mission priorities based on round-the-clock scenario injects. To simulate the planning and execution involved in an actual Air Detachment response, NMCB THREE’s White Cell prepared a robust 45 inject playbook consisting of WARNOs, FRAGOs, situational injections, and real-time RFI support, delivered over a two day 48 hour period for MOX and a three day 10 hour period for CPX. Key components of the MOX included experimenting with C2 options and working the embark process from a Unit Movement Control Center (UMCC) vice activating the Mount-out Control Center (MOCC) and expeditiously conducting embarkation operations. Alfa Company’s successful preparation of all required CESE for movement, the Armory’s development of a the load-out package and preparation of all required weapons and visual acuity systems for movement, and the Ordinance Officer’s seamless execution of the service allotment procurement process were also evaluated. All parts of the evolution were treated as if the movement was actual, allowing the unit to test equipment, training, and ordinance readiness. During the MOX, the unit’s Embark crew cleaned, inspected, weighed, marked, and prepared for a Joint Inspection (JI), 26 units of CESE and 24 units of non-CESE staged in 7 chalks. All required deliverables for air movement: Time Phased Force Deployment Data (TPPFD), load plans, and HAZMAT Diplomatic Country Clearance (HAZDIP), were completed and a JI was conducted by NMCB THREE’s White Cell. Finally, an added challenge of this combined MOX/CPX was conducting it in Health Protection Condition (HPCON) Charlie. The Battalion practiced what mitigations would be required and how the process would change if the Air Detachment needed to be mounted out in an elevated HPCON status.

NMCB THREE CPX, conducted in conjunction with the MOX, reinforced C2 proficiency, operational planning, and unit readiness for MCO response. The CPX was conducted within a secret environment,

providing key information security training while identifying, communicating, and strictly enforcing appropriate classification and handling processes. The week prior to the CPX, the unit conducted a two full days of Command Operations Center (CoC) watch stander training that provided a refresh on sentry post responsibilities, tactical watch standing fundamentals, TACSOP familiarization, roles and responsibilities of key positions, information security and classification requirements, emergency action/destruction plans, and mass casualty procedures. The training also contributed toward completion of the unit's watch standing Job Qualification Requirement (JQR), driving towards a highly competent and fully qualified watch floor. The scenario and injects were developed in house and included communication between NMCB ONE THIRTY THREE in real-time, supporting NMCB THREE's familiarization with the NETC2 system and allowing NMCB THREE to test operations of SIPR, NIPR, HF, and MUOS technology. Additionally the in house developed scenario was developed IOT support and prepare the Battalion for the most likely MCO response and took place within the C7F AOR. The situation and injects focused on stressing command and control ability and timely dissemination of information between higher, adjacent, and supporting units while maintaining required operations and deliverables within given time frames. The CPX was conducted over three ten hour days and culminated in several simultaneous injects focusing on both kinetic and information based immediate actions.

In addition to a challenging theater response plan MOX and CPX, NMCB THREE also participated in five other Sustainment Exercises (SUSEX). Three of them were designed to document our technical competencies in construction services, vertical construction, horizontal construction, utilities construction, and camp maintenance. NMCB THREE began these first through utilization of the Seabee Technical Training in homeport to ensure skills were ready after initial timelines were shifted in response to the COVID Pandemic. The second overlapped with the Total Camp Readiness Assessment (TCRA) and the third aligned with the completion of final DFOWs before the last day of WIP. All SUSEXs utilized the TCRA score sheet to create a constant standard for the battalion. From that constant standard the Training Department was able to link the scoresheet to the critical Navy Tactical Tasks (NTA) to ensure the 'Better than Best' Battalion remained ready.

Similar to the SUSEXs conducted to maintain our ability to build, the battalion also conducted two SUSEXs to ensure our ability to communicate. The first was discussed above and ran concurrently with the MOX and CPX. The second involved Over the Horizon (OTH) communications assets where we spoke with NMCB ONE THIRTY THREE in Guam and adjacent Marine units utilizing HF radios and MUOS radios with both data and voice. This exercise maintained our ability to communicate across the entire C7F area of operations and demonstrated a sustained ability to communicate with likely adjacent units during an MCO response.

NMCB THREE conducted a Career Fair on the 29 Oct 20 in order to provide personnel with knowledge about different programs Navy wide in order to give our Sailors different career opportunities and career paths. Career Day categories included Navy college brief, career counselor Q&A, Naval Recruiting, RDC "Boot Camp", State Department, Conversions (MC, MA, RP), and Naval Officer programs. This Career Fair was supported by active duty navy personnel both from within NMCB THREE and local Navy personnel on Okinawa.

SEABEE COMBAT WARFARE (SCW) AND EXPEDITIONARY WARFARE (EXW) TRAINING

NMCB THREE's Officer and Enlisted Seabee Combat Warfare Specialist and Expeditionary Warfare Specialist programs were conducted continuously on a rotating schedule throughout deployment. A total

of 105 personnel qualified or re-qualified as Enlisted and/or Officer SCW while deployed, and 53 Enlisted personnel continued on and earned their EXW qualifications. NMCB THREE's small unit leaders provided continuous SCW and EXW course instruction during their off-hours. SCW and EXW Academies were conducted in the form of hour long courses offered four nights per week as voluntary supplemental training. The academies were provided for the entirety of deployment. Courses focused on both academic and practical application of skills contained in the Common Core and Unit Specific PQS(s) by providing intensive instruction delivered by subject matter experts. The current warfare qualification metrics are as follows (as of 31 Dec 20).

SCW

Paygrade	Number of Personnel Assigned	Previously Qualified	Qualified or Re-qualified on Deployment	Qualified On Board at Deployment Completion	Percent Qualified
E1 - E6	524	177	84	261	34/ 50%
E7 - E9	41	31	7	38	76/ 93%
O1- O5	33	11	11	22	30/ 68%
Total	598	219	102	321	36/ 54%

EXW

Paygrade	Number of Personnel Assigned	Previously Qualified	Qualified or Re-qualified on Deployment	Qualified On Board at Deployment Completion	Percent Qualified
E1 - E6	524	90	49	139	17/ 27%
E7 - E9	41	31	4	35	76/ 85%
Total	565	121	53	174	21/ 31%

WEAPONS TRAINING

NMCB THREE conducted small arms combat kinetics simulator training and four small arms live-fire ranges to support sustainment training, further depth of tactical knowledge and aptitude, provide practical application of SCW skills / requirements, and prevent degradation of existing capabilities. The unit coordinated with Marine Corps Base (MCB) Smedley D. Butler and requested they provide an offering of the Range Safety course required to designate NMCB THREE personnel as MCB Butler Range Safety Officers (RSO), allowing the unit use of the MCB small arms ranges. The unit then conducted four small arms sustainment ranges, raising the overall level of proficiency and knowledge in the unit. M9 and M4 live fire ranges were conducted in Oct 20, Nov 20, resulting in 189 new qualifications, allowing the Battalion to step into the upcoming O-FRP already standing at 82% attainment of Cat I M9 requirements and 40% of Cat II M4 requirements.

MEDICAL TRAINING

During deployment, the NMCB THREE Medical Department conducted Basic Life Saver (BLS) drills to rehearse skills and procedures. The Medical team conducted three BLS classes during Command

Indoctrination and 11 additional classes resulting in 143 personnel qualified with the necessary skills to perform Cardiac Pulmonary Resuscitation (CPR) and effectively use an Automated External Defibrillator (AED) increasing BN attainment in a critical readiness driver. HMs conducted SCW/EXW basic first aid medical training for companies, in order to assist with warfare qualifications. HM's also conducted refresher litter bearer, establishing LZ, mass casualty, and MEDEVAC 9-line training to equip the Battalion for contingency environments in two different BN wide training events as well as periodically through company requested UDT.

SAFETY TRAINING

NMCB THREE's Training and Safety Departments teamed up to ensure our Sailors and Staff were taught best practices through formal and in-house training. Preemptive Safety Stand Downs were utilized to reinforce a deliberate Operational Risk Management (ORM) approach during historically high mishap time frames, including: fire safety, CESE safety, and Holiday safety stand downs to ensure personnel don't get complacent. We utilized these opportunities to deliver PACFLT's Quarterly Safety Topic requirements as well as topics at the discretion of the CO and Safety Officer. All new members of the battalion received comprehensive training in the areas of ORM, Hearing and Sight Conservation, Traffic Safety, Energy Control, Hazardous Material, and proper Personal Protective Equipment (PPE) during Command Indoctrination. Additionally, Nine Sailors Qualified in the Naval Construction Safety Inspector course (B22a) NEC.

PHYSICAL TRAINING

The overall goal of the NMCB THREE Physical Fitness Program is to continue to strengthen a culture of fitness and health throughout the Battalion. While deployed to USINDOPACOM during the COVID-19 pandemic, NMCB THREE implemented a plan to mitigate close contact between Sailors during physical training. Following the mandated instructions from NAVADMIN 193/20, Sailors were given the opportunity to exercise individually. Sailors were tasked with logging their exercise minutes accumulated per week which were managed in a fitness database tracked by the Company Fitness Leader (CFL).

The utilization of gym facilities on MOB sites allowed Sailors easy access to muscular strength, muscular endurance, anaerobic, aerobic and functional fitness training while still incorporating proper stretching and workouts through the use of dynamic exercises and weight training. Evaluating if physical fitness goals were met will not be determined until the Physical Fitness Assessment (PFA) is initiated again.

On 14 Nov 20, NMCB Three Physical Fitness Team facilitated a 1000/500-pound lifting competition to promote physical fitness, encourage fun with fitness, build esprit d' corps, provide context to individual fitness levels, and promote goal setting. Courses increasing knowledge on smoking, alcohol consumption, fitness, and nutrition were taught throughout the deployment to maintain knowledge and awareness of these topics even with significant Sailor turnover. Additionally, a weekly newsletter titled Fitness Friday was distributed to all hands via the Assistant CFL (ACFL) to ensure a regular occurrence of reliable and actionable fitness news was provided to NMCB THREE personnel throughout deployment.

COMMAND INDOCTRINATION TRAINING

NMCB THREE held four command indoctrinations (two at Camp Shields, two at NBVC), encompassed a total 127 newly reported personnel throughout the USINDOPACOM deployment. The main purpose was

to provide new personnel with the appropriate tools necessary for deployment and ultimately prepare them for a successful tour with NMCB THREE. Various topics including Training, Admin, Supply, Safety, Legal, organizational structure, career development utilizing the First Term Success Workshop, Right Start Brief, Navy Pride & Professionalism, Suicide Awareness and Prevention, Stress Management, Sexual Assault Prevention and Response, Alcohol Abuse Prevention and Control, Equal Opportunity/Sexual Harassment/Grievance Procedures, Hazing Policy and Prevention, Personal Financial Management, 3M training, CPR, CFL, Navy Family Readiness, NMCRS, Red Cross, Fleet and Family Services, MWR and JEA/SCPOA/FCPOA associations were covered during a five day evolution. Additionally, this was the opportunity for the new personnel to meet the Commanding Officer, Executive Officer, and Command Master Chief. A Triad virtual video was created for the personnel in NBVC to help establish the CO's intent and how our Seabee's are impacting numerous areas across the INDOPACOM Theater.

ARMORY

The Armory proved to be a critical component of NMCB THREE's posture and readiness in USINDOPACOM. The staff worked tirelessly to maintain 100% operational readiness of the weapons systems and provided readiness enhancing training opportunities to personnel across the Battalion.

NMCB THREE armorers' utilized 3M processes and procedures in the completion of 2236 maintenance actions, gauging of 895 weapons, and validation of 4096 serialized and non-serialized items valued at \$4.2 million dollars for Camp Shields' weapons and visual acuity systems TOA, ensuring accuracy of command readiness in support of MCO. Armory personnel completed a full inventory, corrected over 400 inaccuracies within the 3M program, achieved a 100% Periodic Accomplishment Rating (PAR) in both QTR 3-20 and 4-20, and removed 28 obsolete M122 from the armory compound. The items were included in the Battalion turn over due to disjointed communication between the multiple units involved in DRMO process. Armory personnel and a Supply worked hand in hand to setup an accurate step-by-step plan identifying all logistic requirements and documentation required by the involved parties in order to correct the standing communication and coordination discrepancies and remove the obsolete mounts.

The Armory was a critical component in the seamless execution of the 48 hour Mount Out exercise. Air Detachments Armory Officer bounced back and forth between the Air Detachment Command Post and the Armory, supporting both the planning and execution of the exercise by developing Air Detachments weapons TOA load-out package for the mission order, and then executing the inventory, packing, securing, staging, and embarkation of said package. Armory personnel took immediate temporary corrective action and completed staging of Air Detachments TOA for embarkation in record time.

Armory personnel developed and provided command level training during two all-hands training days in order to support sustainment and further the depth of knowledge and proficiency in three Crew Served Weapons systems; the M2A1, M240b, and MK 19. The intensive, hands-on training improved weapons systems familiarity, defensive plan development and execution proficiency, and increased total readiness capabilities for 376 personnel. Armory personnel also conducted hands-on one-on-one training available to all personnel in support of SCW and EXW qualifications. The armory staff also conducted 4 Combat Kinetics (CK) training days with a throughput of 125 students increasing battalion overall readiness and skills with the safe employment of small arms.

Armory personnel provided support for one M9 and 2 M4 live fire ranges which resulted in the unit achieving 114 new weapons qualifications. Armory personnel coordinated directly with the area Explosives Safety Officer (ESO), NCG1, and Naval Munitions Command (NMC) Kadena in order to

support the logistic requirements involved in the execution of the ranges. While planning the range in accordance with local requirements, Armory personnel uncovered another legacy issue pertinent to requisition, storage, and disposal of Non-Combat Expenditure Allocation (NCEA) ammunition for ranges spanning multiple days. Armory personnel then held several coordination meetings with the ESO and NMC Kadena, spearheading the development of new procedures for requisition, drawing, transportation, sentencing, and disposal of the spent cartridges in accordance with current local explosive safety regulations. The Armory personnel's attention to detail leads them to diligently dig into the standards and bounce them against the standing procedures, avoiding a major violation of the explosive safety regulations on Camp Shields, clearing the way for the safe execution of live-fire small arms ranges and directly increasing total readiness capabilities of the command.

The Armory was inspected by the ESO during an Explosive Safety Inspection (ESI) and following that NMCB THREE participated in the Explosive Safety Technical Assist Visit (ESTAV) that was conducted by the Commander, Navy Region Japan Explosive Safety Program Manager in order to review the effectiveness of the Explosive Safety Program of Commander, Fleet Activities Okinawa (CFAO). This inspection reviewed explosive stowage, handling, policies, procedures, personnel training/qualification/certification programs, explosive safety awareness programs, commands SOPs, and AA&E physical security programs. NMCB THREE received zero hits in regards to these which reflects the professionalism and dedication these armorers have. Over all resulting in a SATISFACTORY score for the region. On top of those two inspection the Armory also performed a virtual TCRA due to COVID restrictions and while one discrepancy was noted the problem was corrected same day. Again, due to the quick response of dedicated armorers TCRA for the armory ended with an ABOVE AVRAGE score.

CHAPTER VI: EXECUTIVE STAFF

COMMAND RELIGIOUS MINISTRIES

The Command Religious Ministry Team (RMT) of Command Chaplain LT Andrew Forester and RP2 Nickolas Falk based out of Main Body Detail, Okinawa, Japan facilitated religious ministry support at main body and all detail sites. Supported by RP2 Falk, Chaplain Forester conducted weekly services in the Seabee Chapel on Sundays, held Tuesday night bible study, and hosted "Tool Time" leadership and communication seminars on Thursdays. During Suicide Prevention and Awareness month, they organized and hosted a meaningful silent candlelight vigil. They facilitated for other faith groups through Camp Foster and Kadena AB chapels while sailors in Diego Garcia, Chinhae, Iwakuni, Sasebo and Guam had access to worship through services provided by Commander Navy Installation Command (CNIC) Chaplains and two details had religious lay leaders. Chaplain Forester coordinated with deployment support organizations to provide morale boosting care packages.



Candlelight Vigil supporting Suicide Prevention and Awareness Month.



Delivering morale boosting care packages from Operation Deployed.

In addition to providing religious ministry, RP2 Falk was front and center in the life of the command while Chaplain Forester provided confidential counseling and emotional support to sailors of every rate and rank. Chaplain Forester provided USINDOPACOM Religious and Cultural Awareness training to the wardroom and the RMT was highly involved in battalion wide trainings for resiliency, spiritual fitness and Operational Stress Control. Through coordination with CREDO Okinawa, the RST provided one ASIST workshop and two SafeTALK suicide awareness trainings. They coordinated with Marine Corps Community Services,



Camp Shields Chapel.



Delivering morale boosting care packages.

American Red Cross, Ombudsman, Family Readiness Group and CREDO Southwest to provide Warrior Transition Training for the entire battalion and facilitated the smoothest possible return to homeport. As the Library Supervisor and Manager, Chaplain Forester and RP2 Falk managed a 5,000+ book library that allowed Sailors to enlighten their mind and engage new ideas. Due to travel restrictions, the BTB RMT was not able to visit the detail sites, but provided frequent spiritual support through virtual means and by telephone. On Okinawa, they were able to visit the workspaces and participate in projects around Camp Shields, regularly providing encouragement and enhancing esprit de corps. During Thanksgiving and other holiday celebrations, Chaplain Forester's prayers inspired others and provided uplifting moments while the battalion was separated from their loved ones.



Seabees in Okinawa, JP participate in a local beach clean-up.



Chaplain and Assistant Supply Officer serve food at Camp Shields galley Thanksgiving dinner.

As the Community Relations Supervisor, Chaplain Forester and RP2 Falk created opportunities for Sailors to engage with host nations all over the Pacific. As the saying goes, it is more blessed to give than to receive; multiple relationships were established and a positive view of the Navy was enhanced. In this way, the Seabees continued a proud tradition of international partnership building, while increasing sailors' cultural understanding of the world around them.



Bad Santa.



Chaplain delivering fresh coffee to troops.

DENTAL

The Dental Department of NMCB THREE maintained an overall dental readiness (ODR) above 98%, surpassing the Navy garrison standard of 95%. The COVID-19 pandemic limited our ability to provide routine dental care during the first three months; however, we experienced negligent impacts to readiness due to Navy-wide extensions granted to annual examinations and the forward-planning on the dental team. In alliance with 3d Dental Battalion, routine care resumed in October with heightened personal protective equipment and disinfecting procedures, and continued throughout the deployment. Our dental health index (DHI) suffered due to the initial restrictions on routine care, including dental prophylaxis. We were able to raise the DHI from a low of 35% to 45%, still short of the target goal of 65%.

All capital equipment remained in good working order. The chairs, radiology units, air compressor, suction unit, and central sterilization equipment functioned properly and was serviced by US Naval Hospital Okinawa (USNHO) Biomed staff in October. Enabled by a Memorandum of Understanding finalized in Jul 17 between Camp Shields (30NCR) and USNHO, we are now able to utilize their Biomed assets for preventative and corrective maintenance, effective from 23 Jul 17 through 22 Jul 22. This arrangement with the Biomed department agrees to track all medical/dental equipment through the USNHO DMLSS program to avoid the battalion 3M requirements, and the BAS has since been removed as a 3M work center.

An exhaustive inventory and organization of the instrument and supply rooms conducted during this deployment will improve daily operations and reordering procedures for follow-on battalions. HM3 Silva authored standard operating procedures for the proper handling, disinfecting, and sterilization of dental equipment in the Camp Shields BAS. We also purchased new slow speed operative and hygiene hand pieces which had become critically short in supply. Lastly, discussions are ongoing between 30th NCR Camp Czar UCCM Steven Harvey, Adec Dental Cabinet representative Brian Kline, and myself regarding a remodel package for the medical and dental treatment rooms to include new flooring and storage cabinets. Adec will be on island for a site visit in Jan 21.

During NMCB THREE's deployment, procedures performed included: oral diagnosis and treatment planning, oral prophylaxis, operative dentistry, endodontics, and oral surgery. Support for specialty treatment was provided by 3D Dental Battalion, located on Camp Hansen and Camp Foster, and included: endodontics and complex oral surgery.

MEDICAL

NMCB THREE'S Medical Department supported the battalion's operations across seven countries. The main body site at Okinawa, Japan was staffed with a Medical Officer, HMC (IDC), and six general duty Hospital Corpsmen. Main body medical was responsible for the medical care of NMCB THREE members as well as physician oversight for Corpsmen providing medical coverage and care to adjacent subordinate units and detail sites.

During the duration of deployment, NMCB THREE completed influenza vaccination of over 350 service members to account for 73% of the total battalion, conducted multiple health promotion and wellness efforts, and maintained medical readiness above 93%. The Medical Department was actively involved in the creation of COVID-19 action plan that aimed to create a battalion wide guideline on necessary steps required to isolate and quarantine exposed service members as a mitigation effort.

MEDICAL READINESS

The BAS maintained medical readiness throughout the deployment by providing immunizations, exams, lab work, and Periodic Health Assessments (PHAs). These efforts ensured good health and wellness in support of the Battalion's operational efforts. Periodic declines in readiness was attributed to personnel working at remote detail sites without organic medical support. Medical personnel facilitated instruction of numerous training evolutions and qualifications to include Basic First Aid, Seabee Combat Warfare, and Basic Life Support with Automated External Defibrillator training.

Medical Readiness

Jul	Aug	Sep	Oct	Nov	Dec	Jan
91%	95.5%	95%	94%	94.8%	93.3%	85.0%

BATTALION AID STATION OPERATIONS

Patient care was conducted daily for injuries and illnesses sustained by personnel via appointments and detailed triage. Medical care at detail sites was rendered by the on-site Corpsmen and patients were referred to local medical facilities if deemed necessary.

Laboratory tests, radiologic studies and other diagnostic modalities were performed at their respective local MTFs and host nation clinics. The Battalion Aid Station (BAS) staff conducted weekly medical training on various diseases and medical skills to enhance the staff's knowledge.

DETAIL SITES

Papua New Guinea

Detail Papua New Guinea was supported by HM1 Bui, an Independent Duty Corpsman (IDC). HM1 was responsible for the medical care and treatment of 14 NMCB THREE troops from 16 Sep 20-23 Jan 21. HM1 Gooch was responsible for the medical care and treatment of 14 NMCB THREE troops. HM1 provided medical guidance on occupational, preventive, force health protection measures, basic and emergency sick call as needed.

Detail Tinian

From Jun 20 to Jan 21, Detail Tinian was supported by HM1 Gooch, an IDC. HM1 Gooch was responsible for the medical care and treatment of 48 NMCB THREE troops. He provided medical guidance on occupational, preventive, force health protection measures, basic and emergency sick call as needed.

Detail Timor-Leste

Detail Tinian was supported by HM1 Gooch, an IDC. HM1 Gooch was responsible for the medical care and treatment of 19 NMCB THREE troops. He provided medical guidance on occupational, preventive, force health protection measures, basic and emergency sick call as needed.

PUBLIC AFFAIRS

The Battalion's Public Affairs Officer, Mass Communication Specialist Second Class Michael Lopez, and 16 public affairs representatives produced and released over 600 operationally-focused photos and 23 news

stories. The Public Affairs Office drove timely, consistent and accurate releases to ensure the Battalion was putting forth high quality products to be used by DoD and civilian outlets. NMCB THREE media products were frequently published by host nation outlets, communicating the Seabee impact to local officials and their citizens. Likewise, NMCB THREE media products could be found on DoD websites and pages including U.S. Indo-Pacific Command, U.S. 7th Fleet, Joint Region Marianas, U.S. Embassy Dili, Armed Forces Network (AFN) Pacific, and AFN Iwakuni.

The training and caliber of public affairs representatives allowed NMCB THREE's Public Affairs Office to ensure robust coverage of both routine operations and high-visibility events that were of great importance to DoD and Navy objectives throughout the AOR. NMCB THREE's public affairs representative in Tinian, CNMI provided priority coverage of a ground breaking ceremony attended by Navy and local distinguished visitors to kick off infrastructure improvement projects on the island. The public affairs team worked closely with CTF 75 to release constant images and three news stories covering construction of Camp Tinian and Marpo Heights Road G construction as part of a DoD IRT mission, highlighting DoD efforts to produce mission-ready forces and civil-military partnerships. The public affairs team highlighted the U.S. and Timor-Leste partnership by releasing weekly images of Seabees and Timor-Leste service members constructing a three room school house. The team wrapped up its coverage with a news story covering the completion of the school house and its place as a lasting symbol of the two country's partnership. The public affairs team worked with 30NCR and the U.S. Embassy in Timor-Leste to ensure the materials were translated into the local language to be used by local publications to home in the Seabee engineering contributions to the region and national partnerships.

Outside of high-visibility events, NMCB THREE's Public Affairs Office built off lessons learned from previous deployments and sister Battalions to continue elevating the NCF's media presence and strategic communications, making visible the presence and impact of U.S. Navy Seabees in the AOR. The program was on par with its previous volume of released imagery, but with increased quality even with COVID-19 mitigations raising the bar for release approval criteria. Additionally, the program increased its news releases by two-fold over the Battalion's 2018-2019 deployment.

Mixing media priorities in the AOR with an internal and homeport audience, the NMCB THREE Public Affairs Office's constant social media presence kept a DoD, homeport, and civilian audience abreast of the Battalion's operations and impact. Near-daily descriptive posts grew the reach of the Battalion's social media by an average of 20%, boosting the unit's messaging reach, increasing the morale of Seabees featured in content, publicizing the praise the Battalion has received and helping its audience understand and support the Seabee mission.

SAFETY

NMCB THREE has continued sustained safety excellence during FY20 deployment to the USINDOPACOM AOR with the idea that safety aligns with Navy Core Values and a Command Philosophy of "Willingly Sharing Successes and Failures". Extreme ownership and proactive leadership of Safety was incorporated into everything on and off duty. While mission accomplishment was always the first priority, ORM was present in all planning and execution to minimize risks to acceptable levels. Being aggressive about the welfare of its 589 Sailors and accountability of their resources, NMCB THREE's in-depth risk analysis on all tactical evolutions and superb project safety plans set the bar at an unmatched level. NMCB THREE's robust program went above and beyond to develop effective controls aimed at building an operational culture that genuinely weighs and balances mission accomplishments against the personnel

safety resulting in a 20% reduction of reportable mishaps while executing 9,800 MDs of safe, quality construction. NMCB THREE set a superlative example in ensuring a safe working environment and so that risk to mission and risk to force was minimized. The following focus areas led to the battalion's success:

ORM

Operational Risk Management was fully integrated into all evolutions, taught to all hands, and used as the basis for the development of project Safety Plans and Deliberate Risk Assessments.

LEADERSHIP

Building on the successes of homeport and the various measures implemented to improve the safety climate, NMCB THREE continued in the development of an authentic culture of safety on deployment. NMCB THREE committed to not only achieving a mishap-free environment, we were dedicated to a process that went beyond simple metrics with a focal point of leading behavior and the involvement of every individual as they continued enforcing a comprehensive safety program. Rather than looking at lagging indicators of safety (mishaps, good catches, etc.), a refocus on leading indicators (safety plans, spot checks, safety meetings, etc.), comprehensive risk reduction, and continual training and awareness (versus a once or twice a year flood) enhanced safety performance; we owe our Sailors nothing less!

SUPERVISION

Upon arrival to main body and all detail sites, Safety Petty Officers conducted a thorough baseline shop/facility inspection to ensure a safe working environment for our Sailors. Inspections were documented and assessed thereafter. Mishap Review Boards were conducted throughout deployment as needed to review any possible developing trends and allow for the timely implementation of necessary corrective procedures to mitigate any hazards. In addition, a newsletter designed to highlight bi-weekly good catches was development to share lessons learned, throughout all Detail sights.

SAFETY MEETINGS

Weekly Enlisted Safety Committee meetings with all Company and Detail Safety Representatives were held to discuss training, review safety programs and policies, discuss any current safety issues or questions with regards to new construction methods or non-work related Recreational Off duty Safety (RODS) activities. Moreover, the monthly Occupational Safety, Health, and Risk Oversight Council (OSHROC) meetings enabled our staff to review concerns that arose during the Enlisted Safety Council meetings and were then addressed to the command, discussed and reviewed.

REPORTING

Mishap reports were reported via chain of command as prescribed and as they occurred in a timely manner. Weekly updates were recorded and disseminated in the CO's Dashboard. All Class D and above, to include all Good Catches, were recorded into ESAMS and now the Risk Management Information (RMI) initiative. Additionally, Health and Tone of the Battalion metrics were kept current to identify trends early and mitigate risk.

SAFETY SUMMARY

	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
Fatalities	0	0	0	0	0	0	0	0
# Lost Work Days	0	0	9	0	14	0	0	0
# Lost Work Day Cases	0	0	1	0	1	0	0	0
# Light Duty Days	49	16	0	0	14	27	16	0
# Light Duty Days Cases	3	3	0	0	2	5	2	3
# Good Catches (Near Mishaps)	0	0	0	1	7	11	6	0
Total Reportable Mishaps	3	6	6	4	9	9	5	0

ON-DUTY MISHAPS

	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
Fatalities	0	0	0	0	0	0	0	0
# Lost Work Days	0	0	9	0	0	0	0	0
# Lost Work Day Cases	0	0	1	0	0	0	0	0
# Light Duty Days	32	14	0	0	14	1	0	0
# Light Duty Days Cases	2	2	0	0	2	1	0	1
# Good Catches (Near Mishaps)	0	0	0	1	7	10	5	0

OFF-DUTY MISHAPS

	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
Fatalities	0	0	0	0	0	0	0	0
# Lost Work Days	0	0	0	0	14	0	0	0
# Lost Work Day Cases	0	0	0	0	1	0	0	0
# Light Duty Days	17	2	0	0	0	26	16	0
# Light Duty Days Cases	1	1	0	0	0	4	2	2
# Good Catches (Near Mishaps)	0	0	0	0	0	1	1	0