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CONSTRUCTION BATTALION MAINTENANCE UNIT 202
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3121
Ser 00/038
1 Mar 13

From: Commanding Officer, Construction Battalion Maintenance
Unit TWO ZERO TWO

To: Distribution

Subj: SUBMISSION OF AFTER ACTION REPORT

Ref: (a) COMFIRSTNCDINST 3121.1
(b) Fragmentary Order 041

Encl: (1) CBMU202 Operation Hurricane Sandy Relief After Action
Report

1. Enclosure (1) is forwarded per reference (a).
2. Per reference (b), CBMU202 deployed to Sandy Hook, NJ from
31 October 2012 to 13 November 2012.

A handwritten signature in black ink that reads "R P Bates".

R. P. BATES

Distribution:
COMFIRSTNCD PACIFIC
U.S. Navy Seabee Museum



31 OCT – 13 NOV 2012
OPERATION HURRICANE SANDY RELIEF
AFTER ACTION REPORT

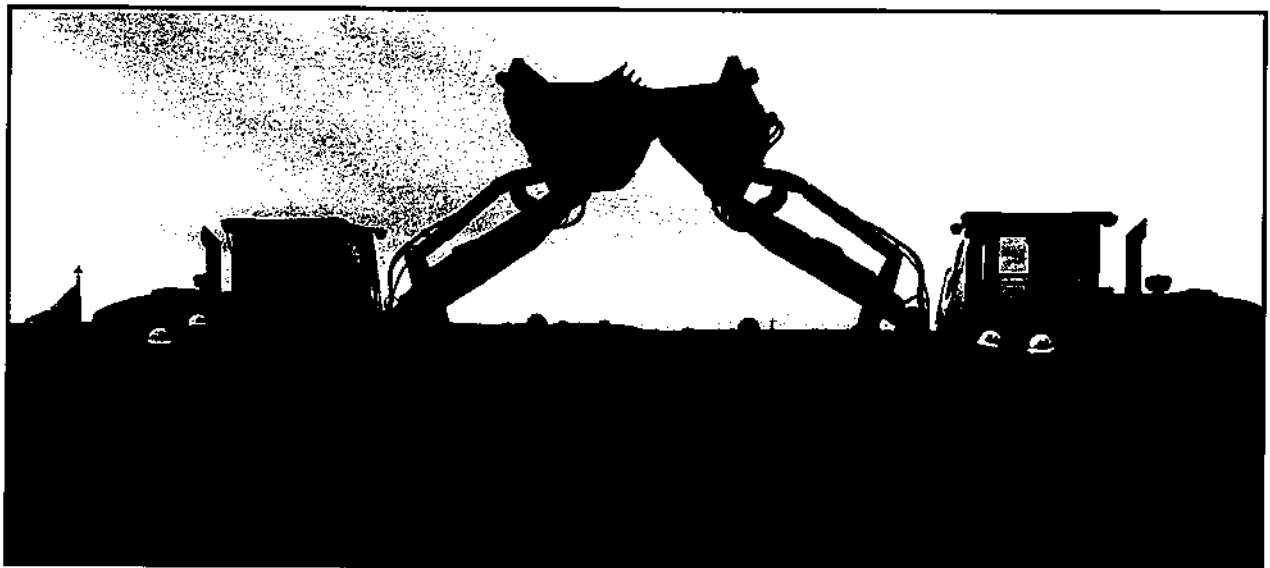


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CHAPTER I

EXECUTIVE SUMMARY

INTRODUCTION

Construction Battalion Maintenance Unit TWO ZERO TWO (CBMU202) received Fragmentary Order 041 on 26 October 2012, directing the unit to prepare to deploy a detachment of approximately 36 personnel within 96 hours of notification in support of (ISO) Defense Support of Civil Authorities (DSCA) operations, in response to Hurricane Sandy. On 30 October 2012, CBMU 202 received the order to deploy its Disaster Recovery Team (DRT) Detachment via the USS SAN ANTONIO (LPD-17) under operational control of Combined Task Force 86 (CTF-86). 33 personnel and 15 pieces of Civil Engineer Support Equipment (CESE) from CBMU 202, located at Joint Expeditionary Base Little Creek-Fort Story (JEBLC-FS), deployed onboard the USS SAN ANTONIO via a Landing Craft Air Cushion (LCAC) from JEBLC-FS. The DRT Detachment offloaded at U.S. Coast Guard (USCG) station Sandy Hook, NJ on 04 November 2012 in order to (IOT) conduct disaster recovery operations as directed by the onsite USCG Civil Engineer with the objective of assisting the USCG in returning to Partial Mission Capable status. CBMU 202 conducted DRT operations onboard the station from 5-8 November 2012. CBMU 202 Detachment Washington D.C. added eight personnel and five pieces of CESE on 06 November, IOT complete the tasking, bringing the total personnel to 41, and 20 pieces of CESE. The Detachment redeployed to JEBLC-FS and Washington D.C. via convoy and backload to the USS SAN ANTONIO from 09-13 November 2012.

OPERATIONS

CBMU 202's standing DRT organization consists of three DRT squads and a support squad. Capabilities were general clearing lines of communication, specifically, cutting and removing trees and debris. CESE configuration required tractor and trailer assets to move each squad's assigned loader from location to location. The DRT squads were confined to a limited span of operations due the requirement of deploying via Navy vessel. Tractor and trailers are not designed to be loaded to LCACs and amphibious vessels, because of this problem; those resources could not be used and were retained at JEBLC-FS. With the limited range of operations, all three squads operated simultaneously at USCG Sandy Hook, NJ. The combined capabilities of all three squads enabled remarkably quick completion of all USCG requested support. Tasking included 54,000 square feet of beach restoration, removal of 125 trees, demolition and removal of a damaged structure, and general debris clearing to include the relocation of 32 dislocated storage sheds. The Detachment completed 140 man-days of work from 05-08 November 2012.

SUPPLY

CBMU 202's DRT organization is configured to self-sustain for 30 days. Class I resupply is required in seven days and Class III in three days, depending on the specific operation. Due to the short duration of the mission, supplies were not an issue. Class I and III resupply was provided once during the operation via the NECC Adaptive Force Package (AFP) headquartered at NMCB 21 facilities in Lakehurst, NJ. Additionally, the DRT Detachment deployed with one

Logistics Specialist as the Government Purchase Card Holder. No purchases were required. The DRT also received minor Class I and Class III support from the USCG. The DRT deployed with an ample supply of MREs. However, the USCG station offered additional contracted hot meals whenever there were some available. In addition, USCG also offered Class III when the need arose. Cold temperatures created a berthing challenge; considering the ECUs were left at JEBLC-FS due to limitations created by sea deployment. The DRT Detachment OIC coordinated berthing for the detachment in the evacuated USCG berthing spaces. The facility was powered by generator and was suitable for expeditionary berthing.

EQUIPMENT

The DRT Detachment contained 20 pieces of CESE, three GSA trucks, and three generators. All R1 checks were completed during the mission. Extensive use of the loaders required frequent greasing. CESE availability was maintained at 100% for duration of the mission. The most significant note is that NCF CESE TOA is not designed for deployment via amphibious vessels. The inability of having tractors, trailers, and ECUs significantly limited the detachments range of operations. Additionally, the LSSVs and GSA trucks did not perform well in the soft sand in NJ after offloading via LCU. The trucks were pulled across the beach by the MTRVs and loaders. Permission was granted to redeploy the LSSVs and GSA trucks via convoy to prevent damage by again pulling the trucks through the sand to the LCUs to backload the USS SAN ANTONIO.

MAINTENANCE MATERIAL MANAGEMENT (3M) SYSTEM

The integrity of the 3M program was not sacrificed during the operation. All required checks and maintenance was performed. Time for R1 checks was scheduled in the daily routine. Maintaining the maintenance program proved critical considering the endless use of the loaders which required frequent greasing. Additional grease was provided by CBMU202 Detachment DC.

COMMUNICATIONS

Twelve STX 5000's were issued by CBMU 202's S6 Department for internal communications. External communication was accomplished by computer assets while onboard the USS SAN ANTONIO. Personnel cell phone voice and e-mail was used for reporting and communicating requirements while operating onboard the USCG station and during redeployment.

MEDICAL

The detachment deployed with three CLS bags. Additionally, the USCG had an IDC on station around the clock. Local hospitals were identified if the need arose. No injuries occurred during mission.

CHAPTER II
ADMINISTRATIVE

(SECTION OMITTED. NSTR)

CHAPTER III

TRAINING/ARMORY/COMMUNICATIONS

TRAINING

The CBMU 202 DRT organization provides chainsaw safety and operation training to all DRT personnel at the beginning of each hurricane season. Screening for applicable licenses is completed prior to assigning Equipment Operators to the DRT. The Operations Department ensures that there are multiple personnel in each DRT squad with EKMS and CLS qualifications.

ARMORY

N/A

COMMUNICATIONS

Government communication assets to include Iridium phones and wireless internet capable computer assets should be considered for the P05 TOA to eliminate any need to use personal assets.

CHAPTER IV OPERATIONS

SAFETY SUMMARY

Clear communication to the detachment regarding safety priorities was key for this operation. “The damage has already been done”, and “slow is smooth and smooth is fast” were constantly stated by the OIC. Keeping Safety at the forefront of minds of all involved was the cornerstone to ensuring ORM was implemented prior to execution of each task. Effective leadership and oversight by the Chief’s and First Class Petty Officers ensured that no mishaps occurred during the mission. The only damage to any assets was a chain damaged by pulling the trucks across the soft sand. Additional damage was eliminated by redeploying light equipment via ground convoy.

ON-DUTY MISHAPS

	OCT12	NOV12	Total
Lost Work Days	0	0	0
Lost Work Day Cases	0	0	0
Light Duty Cases	0	0	0
Light Duty Days	0	0	0
First Aid Mishaps	0	0	0
Fatalities	0	0	0

OFF-DUTY MISHAPS

	OCT12	NOV12	Total
Lost Work Days	0	0	0
Lost Work Day Cases	0	0	0
Light Duty Cases	0	0	0
Light Duty Days	0	0	0
First Aid Mishaps	0	0	0
Fatalities	0	0	0

SAFETY SUMMARY

	OCT12	NOV12	Total
Lost Work Days	0	0	0
Lost Day Cases	0	0	0
Light Duty Days	0	0	0
Light Duty Cases	0	0	0
First Aid Mishaps	0	0	0
GOV Mishaps	0	0	0
GOV Repair Costs	0	0	0

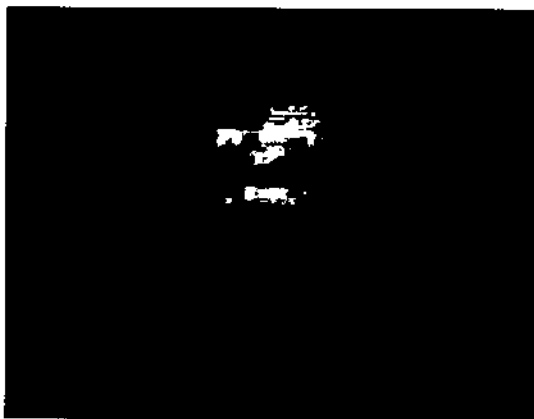
OPERATIONS SUMMARY

The CBMU 202 DRT Detachment of 41 personnel successfully completed all assigned tasking ISO Hurricane Sandy relief efforts from 31 October 2012 to 13 November 2012. Although CBMU 202 was not originally written into the mission, the unit was added to the NECC AFP after demonstrating impressive response to the prepare to deploy order.



Original CBMU 202 DRT configuration

Prepared to deploy by ground convoy, the detachment adapted to the order to deploy via Navy vessel onboard the USS SAN ANTONIO. The ramp angles of the LCACs and USS SAN ANTONIO, limited the cargo holding space and did not permit the detachment to take a tractor, two trailers and three ECUs that were planned for the mission. Boarding the USS SAN ANTONIO via LCACs from JEBLC-FS on the evening of 31 October 2012, the detachment spent the next several days transiting to the coast of New Jersey and awaiting tasking.



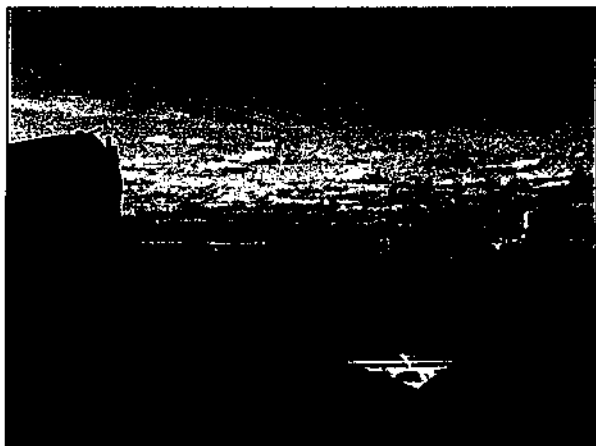
LCAC approach to the USS SAN ANTONIO



Tight USS SAN ANTONIO Cargo Hold

Legal limitations regarding the use of military personnel for CONUS civil operations delayed the detachment's response for several days. However, on 04 November 2012, the detachment received tasking to support recovery operations at USCG station Sandy Hook, NJ. The station

was badly damaged by the hurricane and superstorm to include complete loss of power, structural damage, extensive flooding, beach erosion, downed trees, and significant debris. The detachment went ashore via several LCUs. The soft sand on the beach proved to be challenging for the LSSVs and GSA trucks. The vehicles had to be pulled across the beach by MTRVs, loaders and Beachmaster heavy equipment.

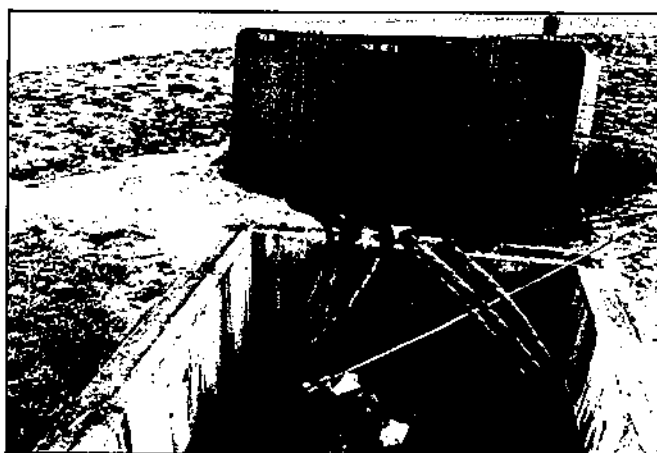


LCU approach to beach at Sandy Hook, NJ



CBMU 202 DRT ashore at Sandy Hook, NJ

Orders were to coordinate with the onsite USCG Civil Engineer to execute priorities of work to enable Partial Mission Capable attainment. Restoration of power distribution was well beyond the capabilities of any military engineering unit and was not an assigned task. The entire electrical infrastructure system was destroyed and would require a complete rebuild.



USCG Station Electrical Infrastructure Damage

The DRT Detachment OIC quickly conducted an assessment of the damage and coordinated priorities of work with the USCG Civil Engineer. The remainder of the first day consisted of staging equipment at the USCG station and preparing for a convoy to NSA Lakehurst which was the planned berthing location. The two and half hour one-way convoy was not conducive to efficient and safe mission execution. Upon arrival at Lakehurst, the OIC requested permission to berth at the USCG station headquarters. Sandy Hook was the authorized berthing facility for the remainder of the mission. The station headquarters had evacuated permanently assigned

personnel but the facility was partially operational with generator power. Although the facility had no running water, it was still suitable for expeditionary berthing and a base of operations. With ample space and flood damaged furniture and materials removed, the USCG allowed the detachment to use the facilities. This enabled mission success considering the detachment had left the ECUs at JEBLC-FS and the temperatures were below freezing at night. Additionally, the USCG offered leftover hot chow that was catered daily to the USCG clean-up crew.



USCG station Sandy Hook berthing



USCG provided hot chow

On 05 November 2012, the detachment began executing beach restoration and tree removal. Other priorities included demolition of a badly damaged 20'x 40' recreational facility and general debris clearing to include the relocation of 32 storage sheds that had been scattered by the storm.

Beach restoration was critical due to the erosion under roads and sidewalks. The detachment was initially able to redistribute existing sand but was also required to reach back to CBMU 202 Detachment DC to deliver three MTRV dumps and operators for transferring sand that washed ashore near the site. The detachments speed and flexibility in providing the support was the driving factor for successful completion of the project. CBMU202 Detachment DC also provided a tractor and trailer to support line haul that would have been required for pending follow on missions. 54,000 square feet of beach was restored from 05-08 November 2012.

125 trees were downed or partially downed during the hurricane. Most of the trees were in the base housing area. The USCG had no organic means to efficiently cut down and remove the trees. Perfectly matched to CBMU 202's DRT skill sets, the detachment impressed the USCG by making quick work of the project, removing all 125 trees from 05-08 November 2012. Hard work of the chainsaw crews and precision operation of the loaders were critical contributors to the completion of this project.

The 20' x 40' recreational facility was damaged beyond repair by the beach erosion. Demolition and removal of the facility was accomplished by the skillful loader operators from 08-09 November 2012.

32 storage sheds resembled a scene of tumble weed from an old western film. The sheds were blown from the housing area and scattered across the station. The loader operators simply

switched out buckets for forks and quickly relocated the sheds to a central staging area on 09 November. Additionally, upon the completion of the priorities, the DRT squads assisted with general debris removal while awaiting follow on missions in New York.

On 07 November 2012, the OIC received orders to conduct a PDSS to Staten Island and Brooklyn, NY. For both locations the mission would have been general debris clearing operations. As the detachment prepared to redeploy to Brooklyn on 08 November 2012, the order was given to stand-down. Clearing operations by military units in civilian locations was coming to close. Mission completion was declared on 09 November 2012.

The detachment redeployed select pieces equipment and 30 personnel via ground convoy on 09 November 2012. The OIC and 1NCD convinced the AFP C2 element that back loading the USS SAN ANTONIO was not worth the risk of damaging the equipment by pulling it across the soft beach.



Unidentified unit's equipment stuck in the soft sand

Frustrations mounted as the remaining 11 personnel and heavy equipment spent two days waiting on the beach for LCU transport to backload the USS SAN ANTONIO. LCU scheduling conflicts left the 11 personnel returning to the USCG station each night. On 10 November 2012, they received transport to the ship and arrived in JEBLC-FS on 13 November 2012.



USCG Sandy Hook, NJ Beach before restoration



USCG Sandy Hook, NJ Beach after restoration

USCG Station Sandy Hook, NJ Beach Restoration

Project Purpose: Restore 54,000 square feet of beach IOT prevent further damage to roads, sidewalks, and electrical infrastructure.

Project Data

Project Scope: Utilizing loaders and MTRV dumps, restore 54,000 square feet of beach by redistribution of existing sand and depositing sand from adjacent areas.

Personnel:	8 Direct labor	
Duration:	05-08 November 12	
Mandays Expended:	Beach Restoration:	32
	CBMU 202 Cumulative:	140
Tasking:	WIP at turnover:	0%
	WIP at completion:	100%
	MD Tasked to CBMU 202:	32
	Total Project MD:	32

Material Cost: \$ 0
Cost Savings: N/A

Significant Safety Issues: CESE operations. Utilized ground guides for MTRV dump operations near the beach and operated station provided light plants for evening operations.

Significant QC Issues: None.

Significant Design Issues: None.

Significant Material Issues: None



USCG Station Sandy Hook, NJ Tree Removal before



USCG Station Sandy Hook, NJ Tree Removal after

USCG Station Sandy Hook, NJ Tree Removal

Project Purpose: Remove trees to eliminate safety hazards and clear the site.

Project Data

Project Scope: Cut and remove 125 trees.

Personnel:	20 Direct labor	
Duration:	05-08 November 12	
Mandays Expended:	Tree Removal:	80
	CBMU 202 Cumulative:	140
Tasking:	WIP at turnover:	0%
	WIP at completion:	100%
	MD Tasked to CBMU 202:	80
	Total Project MD:	80
Material Cost:	\$ 0	
Cost Savings:	N/A	

Significant Safety Issues: Chainsaw operations. Wear all applicable PPE and evaluate the potential safety issues with each individual tree being cut. CESE operations. Utilize back-up guides and keep personnel ample distance from operations while moving trees.

Significant QC Issues: None

Significant Design Issues: None.

Significant Material Issues: None



USCG Station Sandy Hook structure demo before



USCG Station Sandy Hook structure demo after

USCG Station Sandy Hook, NJ Structure Demolition

Project Purpose: Demolish and remove unsafe 20' x 40' recreational facility.

Project Data

Project Scope: Utilize two loaders and MTRV dumps to demolish and remove 20' x 40' recreational facility damaged by beach erosion caused by Hurricane Sandy.

Personnel:	6 Direct labor	
Duration:	08-09 November 12	
Mandays Expended:	Damage structure demo:	12
	CBMU 202 Cumulative:	140
Tasking:	WIP at turnover:	0%
	WIP at completion:	100%
	MD Tasked to CBMU 202:	12
	Total Project MD:	12
Material Cost:	\$ 0	
Cost Savings:	N/A	

Significant Safety Issues: Demolition operations and CESE operations. Evaluate approach to structure prior to demo operations. Maintain safe distance during operation.

Significant QC Issues: None.

Significant Design Issues: None.

Significant Material Issues: None



NO PHOTO OF GENERAL DEBRIS
REMOVAL AVAILABLE

USCG Station Sandy Hook, NJ Shed Relocation and General Debris Removal

Project Purpose: Relocate 32 storage sheds and conduct general debris removal.

Project Data

Project Scope: Utilize loaders with fork attachments to relocate 32 storage sheds. Assist USCG personnel with general debris removal.

Personnel:	16 Direct labor	
Duration:	09 November 12	
Mandays Expended:	Shed Relocation and debris removal:	16
	CBMU 202 Cumulative:	140
Tasking:	WIP at turnover:	0%
	WIP at completion:	100%
	MD Tasked to CBMU 202:	16
	Total Project MD:	16
Material Cost:	\$ 0	
Cost Savings:	N/A	

Significant Safety Issues: CESE operations. Utilize ground guides.

Significant QC Issues: None.

Significant Design Issues: None.

Significant Material Issues: None

CHAPTER VI
INTELLEGEENCE

(SECTION OMITTED. NSTR)

CHAPTER VI

LOGISTICS

SUPPLY SUMMARY

Travel Orders: Supply assisted with the completion of all orders and vouchers for all detail personnel.

CLASS I (Subsistence): MRE's provided by Supply Dept. Personnel ate galley will onboard the USS San Antonio. USCG offered leftover catered hot meals when available. Potable water was taken in three organic water trailers. Bottled water was also provided by USCG.

CLASS II (Clothing and Individual Equipment): Members packed uniform items in accordance with published gear list. PPE applicable to chainsaw operations available in the kits.

CLASS III (POL): Diesel and MOGAS available at USCG station. Additionally, NECC AFP established mobile refueling capability. Grease delivered by CBMU 202 Detachment DC.

CLASS IV (Construction Materials): N/A.

CLASS V (Ammunition): N/A.

CLASS VI (Personal Demand Items): All hands packed one week supply. A resupply run to a local Target was made available to all hands.

CLASS VII (Major End Items): All CESE and CEEI organic to CBMU 202.

CLASS VIII (Medical and Dental Supplies): Detachment deployed with three CLS bags. USCG IDC was onsite around the clock while the detachment was ashore.

CLASS IX (Repair Parts): Organic CMs packed common items. No repair parts required during mission.

CLASS X (Non-military Programs): N/A.

CESE SUMMARY

The detachment deployed with three MTRV Cargos, three Loaders, three LSSV Maintenance trucks, three GSA trucks and three water trailers. Detachment Washington DC provided three MTRV dumps and one Tractor and trailer. Mainbody moved two additional tractor and trailers, and three ECUs to DC in preparation for follow on tasking to New York. The additional equipment was not pushed forward. Preparations for follow on missions to Staten Island and Brooklyn ceased on 08 November upon receiving the mission completion notification and the order to redeploy and retrograde. No significant issues with the CESE arose.