

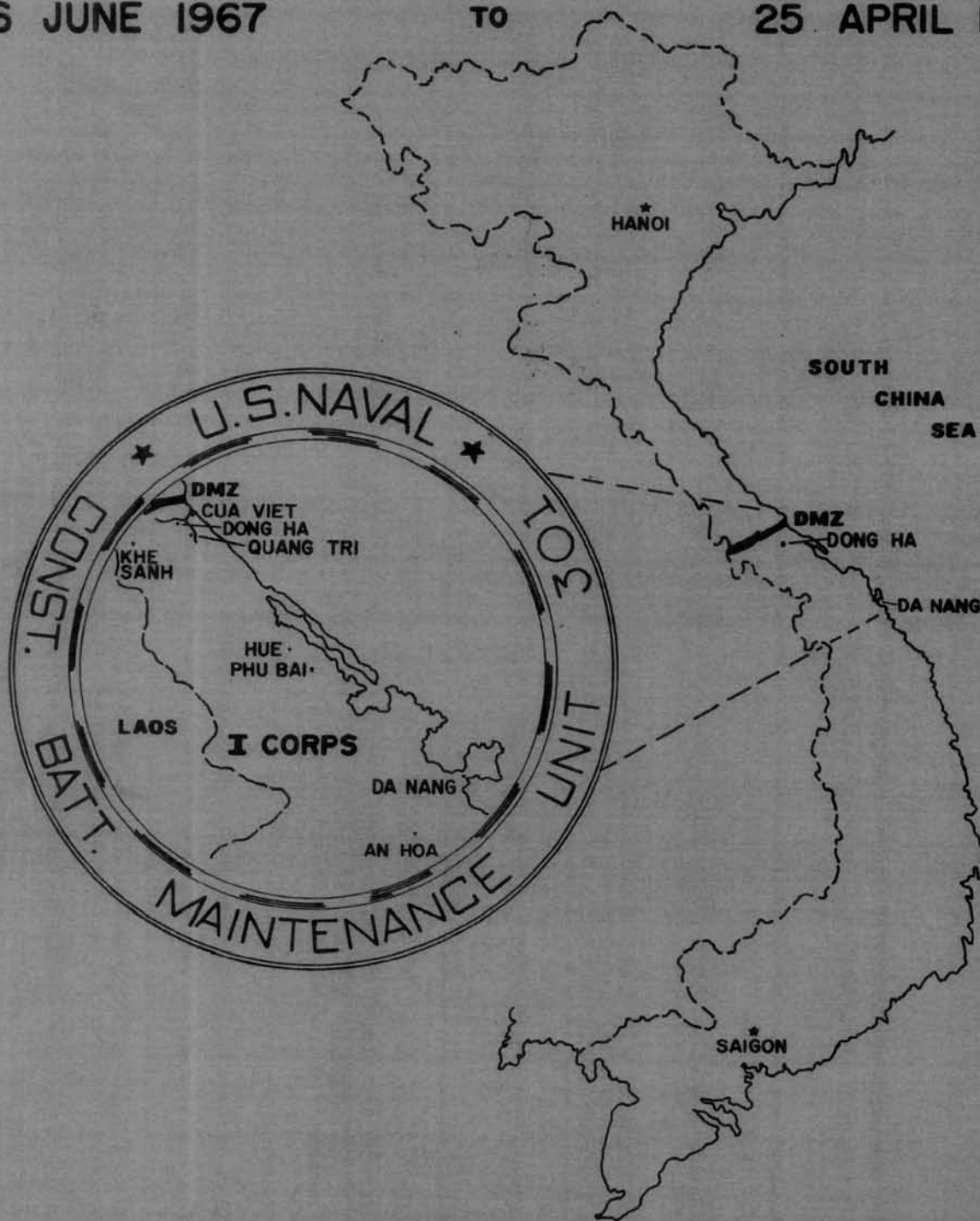
# ANNUAL OPERATIONS REPORT

173  
COPY

26 JUNE 1967

TO

25 APRIL 1968



U. S. NAVAL CONSTRUCTION BATTALION  
MAINTENANCE UNIT 301  
DONG HA R.V.N.

U. S. NAVAL CONSTRUCTION BATTALION MAINTENANCE UNIT 301  
C/O FLEET POST OFFICE  
SAN FRANCISCO, CALIFORNIA 96601

IN REPLY REFER TO  
CBMU301/TBM:cft  
5213

2 JUN 1968

From: Commanding Officer, U. S. Naval Construction Battalion  
Maintenance Unit THREE ZERO ONE  
To: Commander, U. S. Naval Construction Battalions, Pacific  
Subj: Annual Operations Report for the period of 26 June 1967 to  
25 April 1968; submission of  
Ref: (a) COMCBPACINST 5213.1D  
Encl: (1) Annual Operations Report

1. Enclosure (1), summarizing the activities of Construction Battalion Maintenance Unit THREE ZERO ONE, headquartered at Dong Ha, Republic of Viet Nam, from 26 June 1967 to 25 April 1968, is forwarded in accordance with reference (a).

*H. A. Holmes*

H. A. HOLMES  
LCDR CEC, USN

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DIRECTOR OF NAVAL HISTORY	1
CO CBMU 302	1

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DEPARTMENT OF THE NAVY  
Office of the Chief of Naval Operations  
Washington, D. C. 20350

In Reply Refer To:  
Op-4G1E2/lv  
Ser 285P401  
28 Mar 1967

From: Chief of Naval Operations  
To: Commander in Chief, U. S. Pacific Fleet

Subj: Establishment of U. S. Naval Construction Battalion  
Maintenance Unit THREE HUNDRED ONE (CBMU 301) and  
U. S. Naval Construction Battalion Maintenance Unit  
THREE HUNDRED TWO (CBMU 302)

Ref: (a) CNO msg 232207Z Jan 67  
(b) Movement Report Instructions, Supplement to  
NWIP 10-1 (A)

1. In accordance with reference (a), it is requested that the Commander in Chief, U. S. Pacific Fleet, establish U. S. Naval Construction Battalion Maintenance Unit Three Hundred One and U. S. Naval Construction Battalion Maintenance Unit Three Hundred Two on or about 7 April 1967 and direct the Commanding Officers to:

a. Report upon establishment to the Commander Thirty-First Naval Construction Regiment at the Construction Battalion Center, Port Hueneme, California, for organizing, outfitting and training.

b. Report a change of status to "in service" in accordance with reference (b).

c. Report by message to Commander in Chief, U. S. Pacific Fleet, when operationally ready.

/s/ LOT ENSEY  
LOT ENSEY  
Deputy Chief of Naval Operations  
(Logistics)

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  c/o 31st NAV CONST REGIMENT  
PCO CBMU-302  
  c/o 31st NAV CONST REGIMENT

NZ:COMCBPAC  
3120  
Ser: CB31B-082  
23 May 1967

UNCLASSIFIED - "For Official Use Only"  
upon arrival of CBMU THREE HUNDRED ONE

From: Commander Naval Construction Battalions, Pacific  
To: Commanding Officer, U. S. Naval Construction Battalion  
Maintenance Unit THREE HUNDRED ONE

Subj: COMCBPAC Operation Order 8-67 for CBMU THREE HUNDRED ONE, RVN  
Employment; promulgation of

1. Commander Naval Construction Battalions, Pacific, Operation Order 8-67 (Short title COMCBPAC OPORD 8-67) forwarded herewith is classified CONFIDENTIAL. Upon arrival of CBMU THREE HUNDRED ONE at the employment site this OPORD shall be declassified and retain marking "FOR OFFICIAL USE ONLY".

2. COMCBPAC OPORD 8-67 is effective upon receipt.

BY COMMAND OF RADM HEAMAN

R. H. MILLER  
Chief of Staff  
Acting

Copy to:  
ANNEX Y

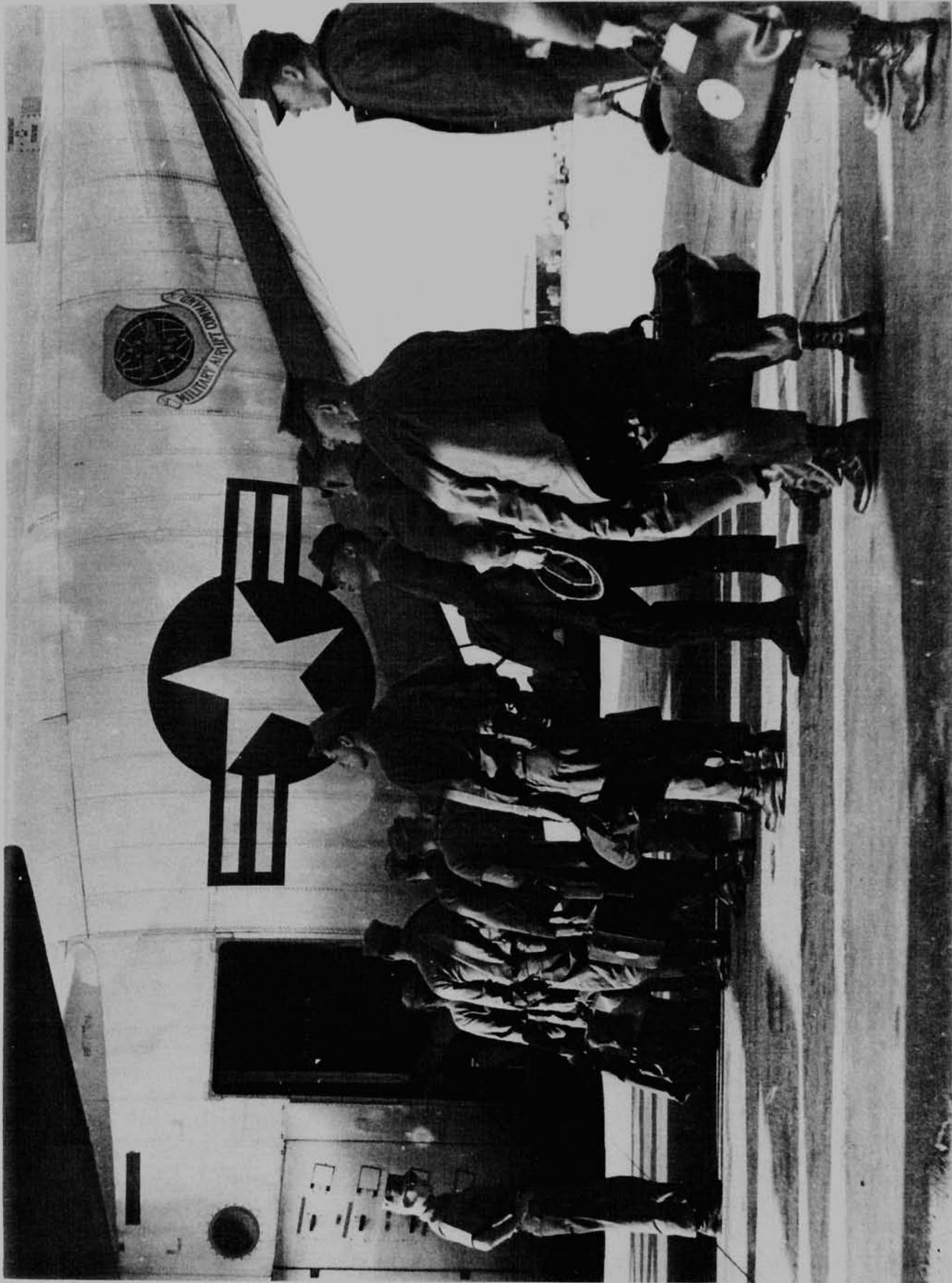




I. SIGNIFICANT EVENTS

B. EMPLOYMENT STATUS.

1. Late in December 1966, detailing of personnel to the THIRTY-FIRST Naval Construction Regiment, Port Hueneme, California, was begun for the formation of U. S. Naval Construction Battalion Maintenance Unit THREE ZERO ONE. The Unit was established on March 31, 1967 at CBC, Port Hueneme, California. Formal commissioning ceremonies were held on April 7, 1967, with LCDR H. A. HOLMES, CEC USN, the first Commanding Officer, standing on the right and about to receive the unit flag from RADM E. T. REICH, Director, Logistics Plans Division, Office of the Chief of Naval Operations, the Commissioning Officer.



2. CBMU THREE ZERO ONE Advance Party departed CONUS on May 17, 1967 for NSA, Da Nang, Republic of Vietnam. A cargo flight departed CONUS on May 22, with four personnel. Rolling stock and cargo departed CONUS on May 23 via SS SEATRAN PUERTO RICO with three personnel aboard as watch standers on equipment.

3. In accordance with COMCENAC OP-ORD 8-67, CBMU THREE ZERO ONE deployed to Dong Ha, Republic of Vietnam. Beginning June 20 and ending June 24, 1967, CBMU THREE ZERO ONE's main body personnel and gear departed Fort Hueneke in five increments to establish the new camp in Dong Ha.

4. The primary mission of this Command is the maintenance and operation of public works and utilities at Marine Corps and Naval shore facilities located at Forward Combat Bases in the I Corps Tactical Zone, Republic of Viet Nam, with primary emphasis placed on airfields. CBMU THREE ZERO ONE has three (3) permanent details which are employed at other locations as follows:

(a) Detail ALPHA is located at An Hoa, Republic of Vietnam. Its primary mission is that of airfield maintenance. Their secondary mission is that of maintenance support of Marine Corps and Naval shore units based there. This detail is composed of thirty (30) men.

(b) Detail BRAVO, located at Khe Sanh, Republic of Vietnam, also has as its primary mission the maintenance of the airfield located there. Their secondary mission is that of maintenance support of Marine Corps and Naval shore units on that base. This detail is made up of thirty-five (35) men.

(c) Detail CHARLIE is located at Cua Viet, Republic of Vietnam, with a normal complement of sixteen (16) men. Its primary mission is to maintain the landing craft ramp, material handling equipment and crane operation, with a secondary mission of operating and maintaining the water and electrical system and perform cantonment maintenance.

(d) A fourth permanent detail of one hundred (100) men is scheduled for Quang Tri, Republic of Vietnam. Here also, the primary mission will be the maintenance of the airfield, with the secondary mission of cantonment maintenance for the Marine Corps and Naval shore units located at the base. The advance party of sixteen (16) men is on site to construct CBMU THREE ZERO ONE's cantonment.

(e) During the past year, several temporary details were sent to various areas to effect repairs of cantonments, airfields, etc. These repairs were, in most cases, of a one time nature and when completed, the personnel and equipment were returned to the main body at Dong Ha. The details were deployed at the following sites:

(1) Khe Sanh: From 21 August through 12 December, twenty-eight men did major repairs to the runway.

(2) Phu Bai: On 21 February 1968, twenty-one men were sent to Phu Bai to repair the airfield located there.

(3) Hue: On 26 March 1968, twenty men were sent to repair the MACV Compound in Hue City.

(4) Cua Viet: On 11 March 1968, forty-three men were sent to Cua Viet to perform major cantonment repairs.

### C. UNIT MOVEMENTS

1. During this period, unit movements were as follows:

- (a) Advance Party personnel departed CONUS on 17 May 1967.
- (b) Main Body personnel departed CONUS between 20 June and 27 June 1967.
- (c) Detail ALPHA, consisting of thirty (30) men, deployed to An Hoa on 22 June 1967.
- (d) Detail BRAVO, consisting of thirty-five (35) men, deployed to Khe Sanh on 12 July 1967.
- (e) Twenty-eight (28) additional men were sent to Khe Sanh between 21 August and 5 September 1967 for major runway repairs and remained there until 12 December 1967.
- (f) A seven (7) man detail was sent to Trieu Phong in November 1967, to make cantonment repairs. This detail returned to Dong Ha within three weeks.
- (g) A detail of twenty-one (21) men was sent to Phu Bai on 21 February 1968, to repair the runway located there.
- (h) On 11 March 1968, forty-three (43) additional men were dispatched to Cua Viet to repair and/or rebuild the ramp and huts damaged by enemy action.
- (i) On 26 March 1968, a twenty (20) man detail was sent to Hue' to repair huts and other structures in the MACV Advisory Compound which were damaged during the 1968 TET offensive.

### D. CHRONOLOGY OF EVENTS

#### SIGNIFICANT DATES

21 Mar 1967	CBMU THREE ZERO ONE was established.
7 Apr 1967	CBMU THREE ZERO ONE was formally commissioned in a ceremony conducted at CBC, Port Hueneme, California. RADM E. T. REICH, Logistics Plans Division, Officer of Chief of Naval Operations, served as Commissioning Officer.
17 May 1967	The Advance Party left CONUS for NSA Da Nang, RVN.
1 Jun 1967	Camp construction at Dong Ha began.
15 Jun 1967	The Advance Party moved into SEA huts.
22 Jun 1967	Detail ALPHA with thirty (30) men assigned, deployed to An Hoa with LTJG C. J. MONTI as Officer-in-Charge.
20 Jun thru 27 Jun 1967	CBMU THREE ZERO ONE Main Body left CONUS and arrived at Dong Ha, RVN.
12 Jul 1967	Detail BRAVO, with thirty-five (35) men assigned, was deployed to Khe Sanh with ENS M. J. KUX as Officer-in-Charge.
1 Aug 1967	CBMU THREE ZERO ONE sent a sixteen (16) man detail to Cua Viet.

27 Aug 1967 The Enlisted Men's Club was completed and opened for the relaxation and enjoyment of personnel and their guests.

22 Sep 1967 The laundry building was completed and ready for operation.

10 Sep thru  
2 Dec 1967 Repairs to Khe Sanh's 2900 foot runway was completed by CBMU THREE ZERO ONE's detail with additional help of men and equipment from NSA, Da Nang.

1 Oct 1967 "A" Company Shop, a 40' x 100' Pasco building, was completed.

30 Nov 1967 GSK/CTR supply warehouse, a 40' x 100' Pasco building, was completed.

1 Dec 1967 Detail ALPHA at An Hoa completed repairs to the 1500 foot feet of M8A1 matting which had failed due to metal fatigue.

1 Feb 1968 RADM OSBORN, Commander, NSA Da Nang, visited CBMU THREE ZERO ONE area.

18 Feb 1968 CBPAC Team of LCDR MATHEWS, LCDR NEWCOMB and MAJ TYSON made a visit to CBMU THREE ZERO ONE to discuss personnel, equipment, camp construction, planning and problems.

21 Feb 1968 BUI CHARLES O. SPILLMAN was killed in Khe Sanh when the helicopter in which he was a passenger was shot down.

11 Mar 1968 A forty three (43) man detail was dispatched to Cua Viet to repair and/or rebuild the landing craft ramp and huts damaged by enemy actions. ENS B. A. ROEN was the Officer-in-Charge of this detail.

26 Mar 1968 A twenty (20) man detail was sent to Hue' to repair and rebuild the MACV Compound, damaged by enemy action. LTJG W. A. ANDERSON was the Officer-in-Charge of this detail.

31 Mar 1968 First anniversary of CBMU THREE ZERO ONE was celebrated. Anniversary cake was cut by LCDR H. A. HOLMES, CEC, the first Commanding Officer of the Unit.

22 Apr 1968 "B" and "C" Company Shop, a 40' x 100' Pasco, modified, pre-engineered, steel-framed building was completed.

16 Apr 1968 SWF2 EDWARD C. ADAMS was killed at Khe Sanh.

17 Apr 1968 CBMU THREE ZERO ONE's Quang Tri cantonment construction began.

D. CHRONOLOGY OF EVENTS (continued)

ENEMY ACTION

21 May 1967 One nighttime mortar attack on Dong Ha.  
6 Jun 1967 One nighttime rocket attack on Khe Sanh.  
12 Jun 1967 One nighttime rocket attack on Cua Viet.  
27 Jun 1967 Two nighttime rocket attacks on Khe Sanh.  
3 Jul 1967 One early morning rocket attack on Dong Ha.  
4 Jul 1967 One nighttime and first daylight artillery attack on Dong Ha.  
5 Jul 1967 Three artillery attacks on Dong Ha.  
Two nighttime and two daylight artillery attacks on Cua Viet.  
6 Jul 1967 Four nighttime artillery attacks on Dong Ha.  
8 Jul 1967 Two daylight artillery attacks on Dong Ha.  
10 Jul 1967 One nighttime artillery attack on Dong Ha.  
12 Jul 1967 One nighttime artillery attack on Dong Ha.  
18 Jul 1967 One nighttime rocket attack on Cua Viet.  
26 Jul 1967 One daytime artillery attack on Dong Ha.  
27 Jul 1967 Three daytime and one nighttime artillery attacks on Dong Ha.  
28 Jul 1967 Two daytime artillery attacks on Dong Ha.  
26 Aug 1967 One daytime rocket attack on Cua Viet.  
28 Aug 1967 Three daytime rocket attacks on Dong Ha. Over 200 rounds during day. Daytime rocket attack on Cua Viet.  
29 Aug 1967 One nighttime rocket attack on Cua Viet.  
31 Aug 1967 Two daytime artillery attacks on Dong Ha.  
1 Sep 1967 One nighttime artillery attack on Dong Ha.  
2 Sep 1967 Three daylight artillery attacks on Dong Ha.  
3 Sep 1967 Three daylight artillery attacks on Dong Ha. The second attack hit the ammunition dump, exploding 20,000 tons of ammunition over an eight-hour period. Four men were wounded during this attack.  
4 Sep 1967 One daytime artillery attack on Dong Ha.  
5 Sep 1967 Four daytime artillery attacks on Dong Ha. The Operations Office was destroyed by enemy artillery. Many files, records and publications were lost or destroyed.  
6 Sep 1967 Four daytime artillery attacks on Dong Ha.  
7 Sep 1967 One early evening artillery attack on Dong Ha.  
10 Sep 1967 One daytime and one evening artillery attacks on Dong Ha.  
12 Sep 1967 Two daytime artillery attacks on Dong Ha.  
13 Sep 1967 One early morning artillery attack on Dong Ha.  
14 Sep 1967 One daytime artillery attack on Cua Viet.  
16 Sep 1967 One early morning artillery attack on Dong Ha.  
21 Sep 1967 Three daytime artillery attacks on Dong Ha.  
22 Sep 1967 Six daytime artillery attacks on Dong Ha.

22 Sep 1967 One nighttime artillery attack on Cua Viet.  
 23 Sep 1967 Three daytime artillery attacks on Dong Ha.  
 26 Sep 1967 Five daytime or early evening artillery attacks on Dong Ha.  
 27 Sep 1967 One daytime artillery attack on Dong Ha.  
 28 Sep 1967 Two daytime and early evening artillery attacks on Dong Ha.  
 2 Oct 1967 Two daytime artillery attacks on Dong Ha.  
 30 Oct 1967 Three daytime artillery attacks on Dong Ha.  
 2 Nov 1967 One daytime rocket attack on Cua Viet.  
 6 Nov 1967 Four nighttime artillery attacks on Cua Viet.  
 12 Dec 1967 Two artillery attacks on Dong Ha.  
 18 Nov 1967 Two daytime artillery attacks on Dong Ha.  
 21 Jan 1968 The seige of Khe Sanh Combat Base began.  
 22 Jan 1968 One evening artillery attack on Dong Ha.  
 31 Jan 1968 Two daytime artillery attacks on Dong Ha.  
 2 Feb 1968 One early morning and one daytime artillery attacks on Dong Ha.  
 5 Feb 1968 One artillery attack on Dong Ha.  
 19 Feb 1968 Four artillery attacks on Dong Ha.  
 20 Feb 1968 Three artillery attacks on Dong Ha.  
 22 Feb 1968 Three artillery attacks on Dong Ha.  
 23 Feb 1968 Two artillery attacks on Dong Ha.  
 24 Feb 1968 Two artillery attacks on Dong Ha.  
 25 Feb 1968 Six artillery attacks on Dong Ha.  
 26 Feb 1968 Six artillery attacks on Dong Ha, Three rounds impacted in CBMU THREE ZERO ONE's shop area. One supply tent was destroyed, B & C Company shops sustained shrapnel holes. Some equipment in "A" Company area sustained minor damage. No casualties.  
 27 Feb 1968 One artillery attack on Dong Ha.  
 28 Feb 1968 Three artillery attacks on Dong Ha.  
 29 Feb 1968 One artillery attack on Dong Ha.  
 2 Mar 1968 Two artillery attacks on Dong Ha.  
 3 Mar 1968 One artillery attack on Dong Ha.  
 5 Mar 1968 Two artillery attacks on Dong Ha.  
 6 Mar 1968 One artillery attack on Dong Ha.  
 8 Mar 1968 Perimeter took incoming rounds  
 9 Mar 1968 One artillery attack on Dong Ha.  
 10 Mar 1968 Four artillery attacks on Dong Ha. One rocket, mortar, and artillery attack on Cua Viet resulting in major damage to ramp and cantonment area.  
 11 Mar 1968 One artillery attack on Dong Ha.  
 13 Mar 1968 One artillery attack on Dong Ha.  
 16 Mar 1968 One artillery attack on Dong Ha. Three rounds impacted in CBMU THREE ZERO ONE's living area. Eight men were wounded. Two of which were Medevac'd. One hut heavily damaged and two huts moderately damaged.  
 24 Mar 1968 Two artillery attacks on Dong Ha.



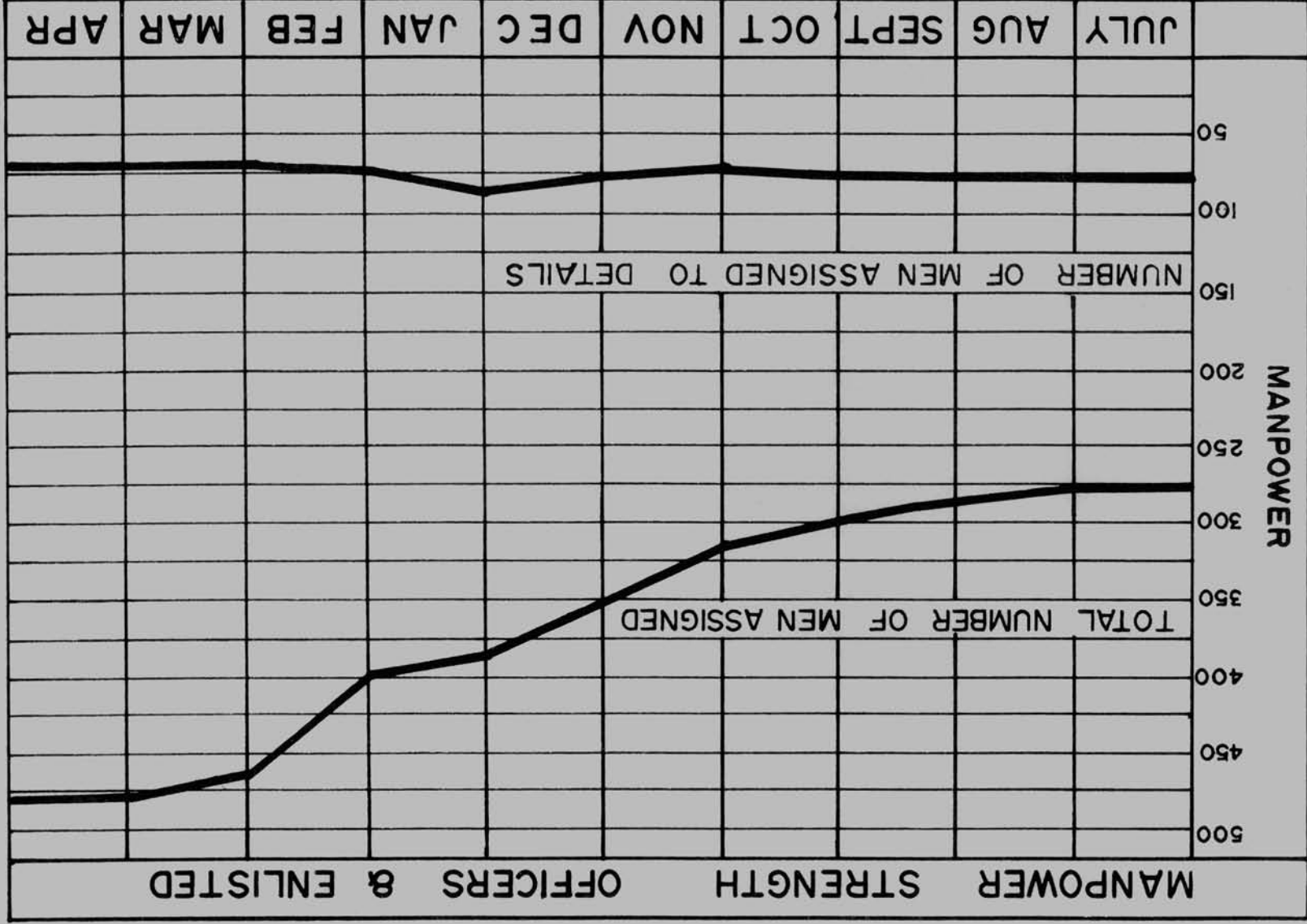
25 Mar 1968 One artillery attack on Dong Ha.  
 15 Apr 1968 The seige of Khe Sanh Combat Base was lifted.  
 22 Apr 1968 One artillery attack on Dong Ha.  
 25 Apr 1968 One artillery attack on Dong Ha.

E. ENEMY ATTACKS ON DONG HA

<u>MONTH</u>	<u>NO. OF CONDITION BLUE</u>	<u>MANDAYS LOST</u>	<u>WIA</u>
June	2	N/A	0
July	21	376	0
August	5	115	0
September	44	202	1
October	5	152	0
November	2	211	0
December	2	384	0
January	3	449	0
February	34	599	0
March	18	403	10
April	2	8	0
	<hr/>	<hr/>	<hr/>
TOTAL	158	2899	11

Khe Sanh was under seige from 21 January to 15 April 1968. 9,891 rounds of incoming rockets, mortars and artillery impacted in the forward combat base. The seige was lifted 15 April 1968. During this period, CBMU THREE ZERO ONE lost two men killed in action: BU1 CHARLES O. SPILLMAN, on 28 February 1968, and SGT2 EDWARD C. ADAMS, on 16 April 1968. All units attached to the 26th Marines, including CBMU THREE ZERO ONE, were recommended for the Presidential Unit Citation. This has subsequently been approved by Marine Corps Bulletin 232010Z of May 1968.

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II. ADMINISTRATIVE SUMMARY

A. PERSONNEL STATISTICS

	Average On Board At Deployment Site	Actual Changes During Period		Average Total Personnel Assigned
		<u>Receipts</u>	<u>Transfers</u>	
E - 9	00	00	00	00
E - 8	03	00	00	03
E - 7	12	10	03	12
E - 6	27	17	11	27
E - 5	75	30	27	75
E - 4	114	122	26	114
NON-RATED	<u>133</u>	<u>117</u>	<u>18</u>	<u>133</u>
TOTAL: ENLISTED	364	296	95	364
OFFICERS	9	6	1	9

Breakdown of personnel attached but not at deployment site.

	<u>Details</u>	<u>Schools</u>	<u>Hosp</u>	<u>Brig</u>	<u>Leave</u>
OFFICERS	4	0	0	0	0
ENLISTED	75	0	4	1	5

B. REENLISTMENT SUMMARY

Following is a tabulation of the reenlistments at CBMU THREE ZERO ONE.

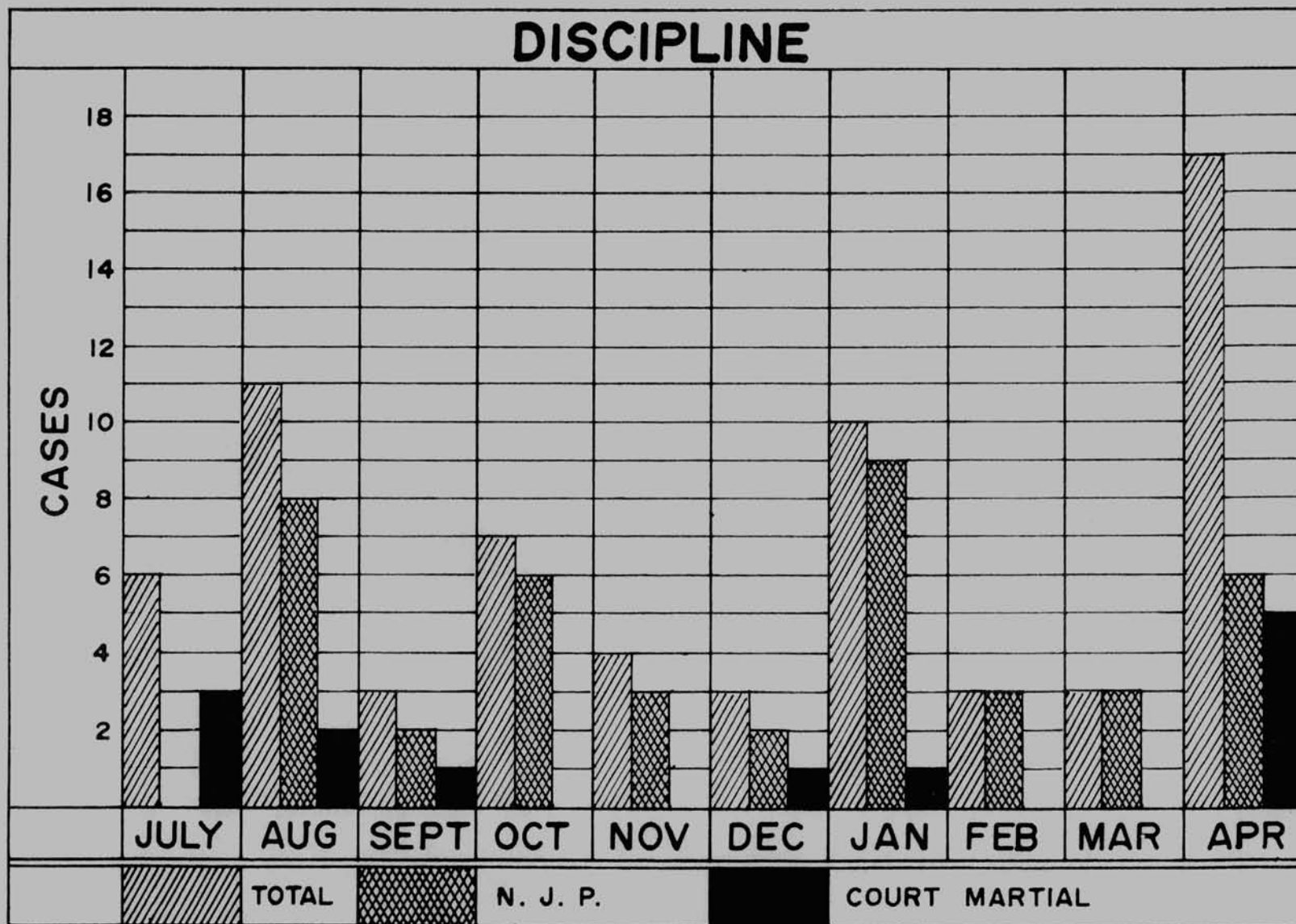
	<u>Career</u>	<u>Non-Career</u>	<u>Total</u>
(a) Separations eligible for reenlistment	11	16	27
(b) Reenlistments	9	3	12
(c) Not recommended for reenlistment	0	0	0

In spite of isolated duty and enemy artillery attacks, 16 % of those men eligible to extend in-country with CBMU THREE ZERO ONE did so. There was a total of thirty men who executed agreements to extend their tour with CBMU THREE ZERO ONE six months. Four extensions of 12 months were executed for another duty station in Vietnam.

C. SAFETY - ACCIDENTS

The most frequent industrial first aid cases involved eye injuries due to flash burns (arc welders) and because personnel were reluctant to wear safety goggles or face shields. This problem has been minimized by the construction of welding partitions and by having crew leaders stress the use of eye protection.

# DISCIPLINE



To date, our largest problem is not having the proper safety reference materials to help crew leaders in their standup safety lectures and for advertising safety within the Unit. These deficiencies are being overcome.

(a) Accident Summary

<u>TYPE</u>	<u>ON DUTY</u>	<u>OFF DUTY</u>	<u>MANDAYS LOST</u>	<u>\$ DAMAGE</u>
First Aid	32	2	98	
Vehicle	9	0		\$ 965.00

(b) Stand-up Safety Meetings 95 .

D. DISCIPLINE

During the ten month period covering this report, the number of disciplinary cases heard are broken down as follows:

(a) Captain's Mast	67
(b) Awarded Non-judicial Punishments	42
(c) Awarded Courts-Martial	13

The majority of mast cases involved specifications of Art. 86, ABSENCE WITHOUT LEAVE, of the Uniform Code of Military Justice.

There was one administrative discharge for reason of unfitness.

E. MORALE

Morale was considered to be extremely high throughout this period, although it obviously varied from site to site and from situation to situation. The high spirits of the men of this unit is considered to be the most valuable asset possessed by CBMU THREE ZERO ONE. Some of the variables that have affected morale are as follows:

1. CAMP LIFE

At the time CBMU THREE ZERO ONE's Advance Party came into country, no camp facilities whatsoever were available. As a matter of fact, the campsite which was occupied at that time was actually outside of the Dong Ha Combat Base perimeter. Living at the start was extremely crude at best, since the only shelters available were poor quality tents. From that time to the present, continual efforts have been made to improve all camp facilities and living conditions. The men assigned were aware of this program and were normally content to accept less than austere conditions with the knowledge that their situation was constantly being improved.

The move into South East Asia huts was the first major step and provided more suitable living spaces. The next step included the completion of a more permanent shower and lavatory facility. Shortly

thereafter the Enlisted Mens Club was opened, the laundry was completed in September, and in succeeding months the library, recreation building, and Acey-Deucey Club were opened. Working conditions were also improved with the completion of the Butler type buildings for supply storage and Alpha Company shops in October and November. The new Bravo and Charlie Company shops have just recently been completed.

## 2. CAMP CLEANLINESS AND UPKEEP

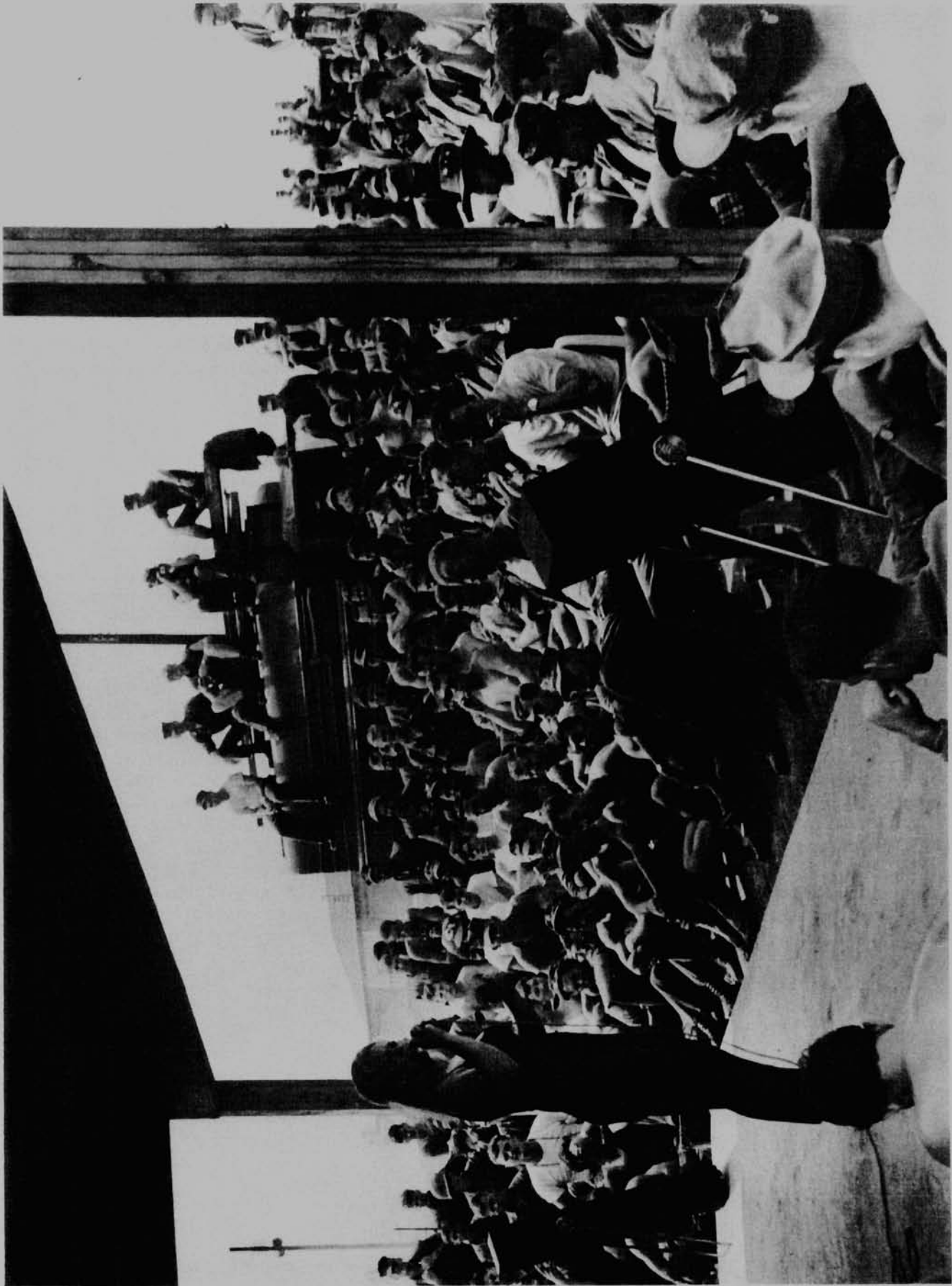
The atmosphere and manner in which the men live have a great deal to do with their attitude and spirit. It was found that the Command was actually happier and morale higher when the camp was properly maintained, policed and generally clean even though it required the extra effort of all hands. This was considered to be a matter of continual Command attention. The program met with excellent success through weekly zone inspections, held each Sunday morning. The camp was divided into three zones and the Commanding Officer, the Executive Officer, and one Staff Officer inspected each zone.

## 3. WORK WEEK

CBMU THREE ZERO ONE has normally worked a minimum six and one half day (65 hours) week, workload permitting. Normal daily routine has been 0645 to 1745 with one hour for lunch. On Sundays, the working hours are 0645 to 1145 and regular recurring administrative functions such as weapons inspection, zone inspection and training are performed. Afternoons are generally observed with organized athletics, USO shows, or for those who desire, just plain relaxation. This one day a week serves as a genuine change of pace and all hands seem to enjoy it.

## 4. BACKLOG OF WORK

The ability to keep all the men assigned busy at their work, has proven to be a definite boost to morale. A CBMU's mission of primarily maintenance work is certainly not as inspirational as the primary new construction tasks assigned to an NMCB. However, the assurance to each individual member of this Command that his job is important and necessary has been a spark to the overall performance of CBMU THREE ZERO ONE. A variety of work as well as some pressure to get jobs completed has been an incentive that has kept morale high. The assignment of a few minor new construction projects has also added to the mens spirits. During the 1968 TET Offensive, the capability to ship construction materials to the Dong Ha Combat Base slowed to a trickle. From the first of February to mid-April, very few materials arrived for the Main Body at Dong Ha. In many cases, low priority work which required little or no materials were assigned to keep the men busy. Due to this, and the many cases where our men were only marginally busy, morale suffered to some extent. Many solutions were attempted to alleviate this condition. One of the major being temporary assignment of about 50 men to NSA Da Nang for short periods of time. This did serve to keep more men busy, but it tended to effect a loss of some *Espirit de Corps* for 301.





## 5. RECREATION ACTIVITIES

The various recreation facilities and activities inaugurated at CBMU THREE ZERO ONE definitely improved the spirit of all camps. USO shows on Sunday afternoons, which average about three a month, has improved morale. Organized athletics, baseball, volley ball, football, as well as informal games, such as pool, weight lifting, ping pong, horseshoes, and badmitton, have proven to be a real change of pace from the normal requirements of the work week. The library, stereo-sound rooms and hobby shop, have received excellent reception. The EM Club and Acey-Deucey Club have provided a place where the men can get out of the dust and dirt of RVN and relax in air conditioned comfort. Evening movies are shown regularly and the availability of popcorn and beer at the movies has been enjoyed by all hands. A good recreation program will certainly contribute to good morale, but it alone will not make morale high.

## 6. R & R

The R & R program at CBMU THREE ZERO ONE has generally been good. While several more quotas were required to give every man an out-of-country R & R, not all men wish to spend their money to leave RVN. All men were given an opportunity to take two in-country R & R's (Da Nang) and this program was utilized by a higher percentage than the out-of-country program. The men who took advantage of this program, by and large, reaped the full intent of their R & R's and fully enjoyed them. For the most part, they were anticipated with as much pleasure as the period of free leave itself. Here again, however, R & R contributed to good morale, but did not make it high in itself.

## 7. ROTATION OF PERSONNEL

It was found that the rotation of personnel to the various sites assigned to CBMU THREE ZERO ONE also helped improve morale. The ability to give a man two or three different assignments during his twelve month deployment to RVN improved his spirits and attitude. The change of atmosphere due to new assignments and challenges seemed to inspire the men to higher performance of duty and capability. These changes apparently made the time pass more swiftly for the individual.

## 8. DETAIL SITES

Undoubtedly, the highest morale experienced within this Command was at the detail sites. Apparently many factors contributed to this, but particularly the details were relatively small (normally, thirty-five was the largest) and all the men knew each other very well. Consequently, they all knew of each other's achievements and progress, and they were proud of it. In addition, they had a better chance to demonstrate their particular skills and methods of accomplishing tasks in a minimal time frame. Their leadership and military ability was particularly evident at all details. Even the morale at Khe Sanh remained high throughout the entire siege due to the facts pointed out above and in the following paragraph.

## 9. ENEMY ACTIVITY

CBMU THREE ZERO ONE can probably claim to be the Seabee unit that has remained at forward combat bases the longest during the Vietnam conflict. Most all the men have withstood the pressure extremely well and in many cases, performed meritoriously and even heroically. The job has always been done in the true "CAN DO" spirit of the Seabees, no matter what the circumstances. In almost all cases, there seems to be an additional pride taken by the men that they have gotten the job done under such trying circumstances. Less than one percent of the men assigned to CBMU THREE ZERO ONE have failed to meet the hostile conditions they have faced at Dong Ha, Khe Sanh, Cua Viet and An Hoa.

### F. MEDICAL AND DENTAL

#### 1. MEDICAL

Since January, 1968, the unit has been operating its own dispensary with an allowance of four hospital corpsmen. Prior to this, medical care for the men at Dong Ha was furnished by NMCB ELEVEN and NMCB FIVE, with the CBMU THREE ZERO ONE corpsmen being assigned to their dispensary. Men at the detail sites received their care from local Marine Corps medical units. At present, one hospital corpsman is assigned to the detachments at An Hoa and Quang Tri.

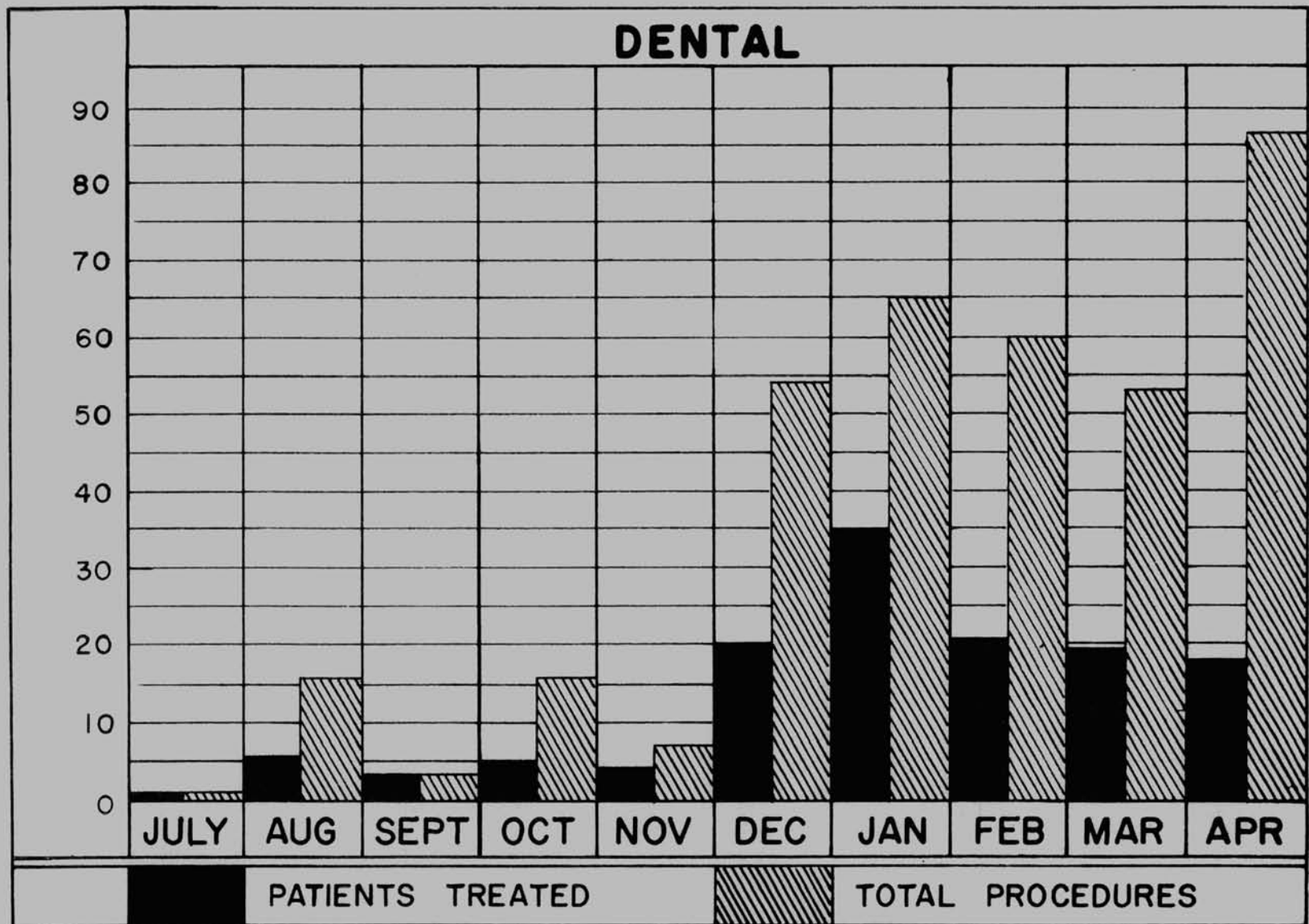
Sick call is held daily at 0700 and again at 1830. Cases that cannot be treated by a corpsman are referred to the Medical Officer at NMCB FIVE. Referral cases average about three men per week. CBMU THREE ZERO ONE averages about 175 men at sick call per month, a total of 1,750 sick calls for this ten month period.

No major problems have been noted in the area of camp sanitation. A sanitation inspection of the area is held weekly by the Medical Department. Water chlorination is checked twice daily and bacteriological studies are performed weekly. An all hands effort and zone inspections have contributed greatly to the excellent sanitary conditions in the camp.

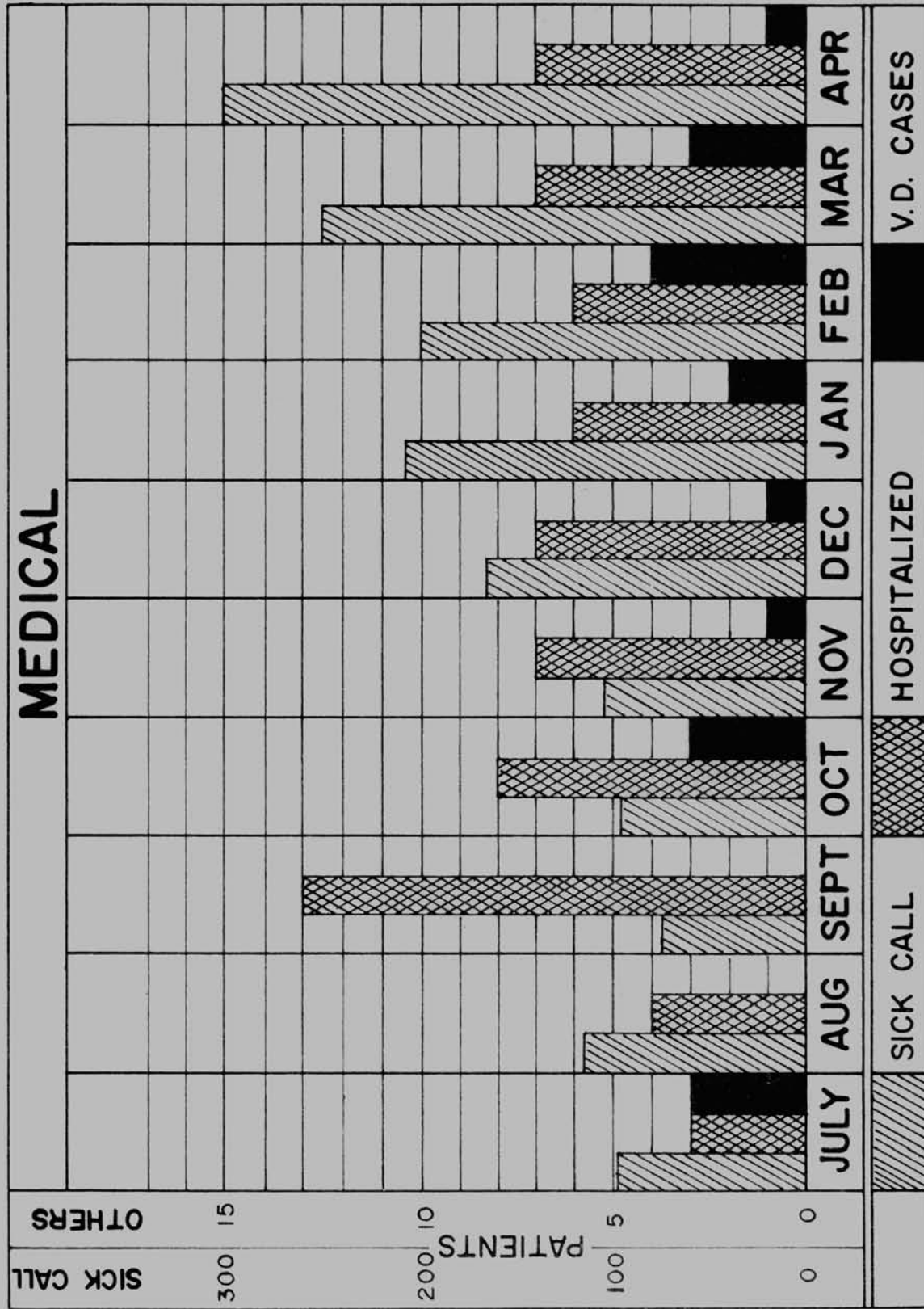
Frequent spraying with Malathion is done for insect and rodent control. Additional spraying is done as needed. Rodents have been controlled by caging.

This unit has not participated in a Medical Civic Action Program due to the tactical situation in this area.

The Medical Department is participating in the battalion training program with lectures in "Buddy" aid, venereal disease, and diseases contracted in this area.



# MEDICAL



Medical supplies are obtained through U. S. Naval Support Activity, Da Nang, and Force Logistic Command Unit Bravo, Dong Ha. The availability of medical supplies is considered good.

## 2. DENTAL

CBMU THREE ZERO ONE does not have dental facilities, nor billets for dental officers and dental technicians. Dental services are provided by the NMCB currently deployed at Dong Ha. The dental treatment provided by NMCB FIVE was considered outstanding.

## G. CHAPLAIN'S ACTIVITIES

CBMU THREE ZERO ONE does not have a chaplain. However, Catholic Mass and Protestant services are provided on Sundays and holidays at NMCB FIVE and nearby Army chapels. Counseling service is available. The men are excused from normal Sunday activities and are encouraged to attend church services if they so desire.

## H. PUBLIC AFFAIRS

CBMU THREE ZERO ONE released the following P.A.O. publications:

### (a) Paper Dragon.

The Paper Dragon is a Unit newspaper of ten pages, published twice a month. It covers news articles from each company and departments of general interest and is intended for distribution among the men of 301. The first two issues, called the CBMU 301 Newsletter, were published on the 15th and 30th of August 1967. Subsequent issues took the name Paper Dragon for the letterhead.

### (b) Family-Gram

The Family-Gram is a ten page picture story magazine depicting certain aspects of life in CBMU THREE ZERO ONE. This magazine is sent to families and parents of the men in CBMU THREE ZERO ONE to show them what their sons or husbands are doing in Dong Ha and detail sites. It is issued every other month and is printed in Okinawa.

### (c) Commanding Officer's Letter to Parents and Wives

This is the CO's letter to wives and parents of new men reporting aboard. This letter, in a specially prepared Flexowriter letter, is ordered through the Office Services Division, CBC, Port Hueneme, California. Since November 1967, 561 copies of these letters to wives or parents were mailed out. Recipients of these letters have expressed appreciation that the Commanding Officer gives special attention to new men reporting aboard.

### (d) Cruise Book

The first Cruise Book for CBMU THREE ZERO ONE was assembled in the latter part of March 1968. This first issue is now being printed in Tokyo and it will be ready by the second week of June 1968.



CBMU THREE ZERO ONE does not have its own photographic laboratory and had to use the laboratory of the neighboring battalion on an "as available" basis. This caused many problems when work had to be done against a deadline. In some cases, CBMU THREE ZERO ONE could not meet schedules because of non-availability of laboratory time.

#### I. CIVIC ACTION

##### 1. Dong Ha

A group of men from CBMU THREE ZERO ONE teamed up with men from the U. S. Army (1/44 Artillery), distributed candy, games, Kool-Aid, etc. Under the cognizance of an Army Chaplain, a party was held at a local Catholic orphanage in Dong Ha, RVN. See photograph opposite.

##### 2. My Son

In the month of July 1967, the men of Detail ALPHA, located at An Hoa, RVN, helped the people of the village of My Son by digging drainage ditches and trenches for water pipe throughout the village. The ditches were used to drain stagnant water from various areas of the village.

##### 3. Dai An

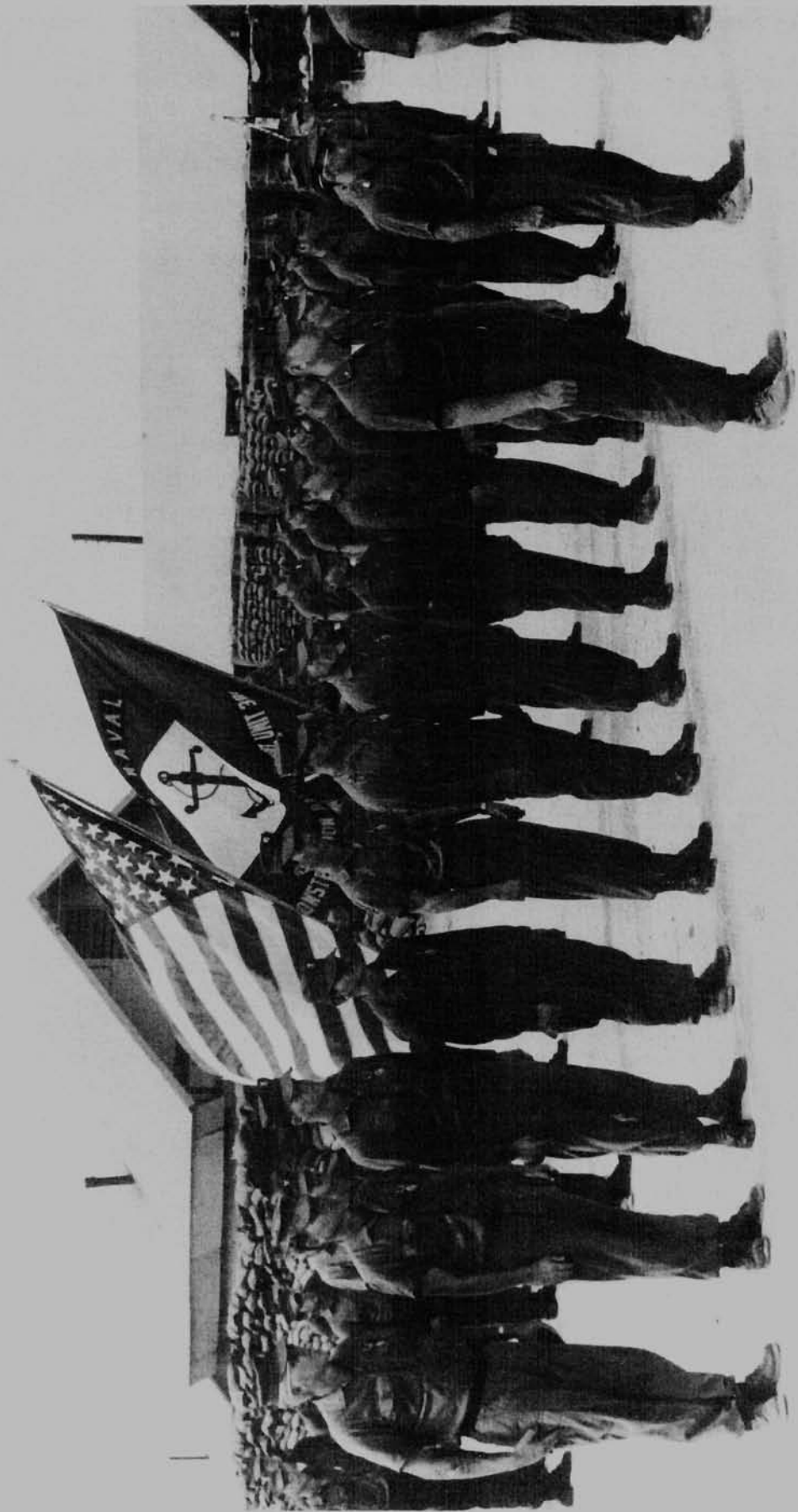
Men and equipment from CBMU THREE ZERO ONE helped construct a 50' x 120' concrete pad for livestock in the Dai An village.

##### 4. Dong Ha

Men from CBMU THREE ZERO ONE dug mortar trenches for two schools located in the village of Dong Ha.

#### J. AWARDS AND PROMOTIONS

1. Letters of Commendation and Appreciation	117
2. Medals and Awards	
(a) Bronze Star	1
EOH2 BENJAMIN F. SHEMBROOKS	
(b) Navy Achievement Medal	2
EOCS G. F. BARBER	
UTC H. F. MC LAUGHLIN	
(c) NAVY COMMENDATION MEDAL	1
CE1 H. CANN	
(d) Good Conduct Medal	4
SWF2 L. D. JONES	
UTW2 C. G. BECTON	
ETN2 J. R. SMART	
EC1 D. L. NALL	
(e) Republic of Vietnam Campaign Medal	452
(f) Vietnam Service Medal	589





## (g) Purple Hearts

BU1 CHARLES O. SPILLMAN (KIA)  
 SWF2 EDWARD C. ADAMS (KIA)  
 YN1 GERALD F. KOLB (2)  
 EOCN WILLIAM H. GUSTAFSON  
 BMC ROY A. BIFFLE  
 CEW2 CHARLES L. RICHMOND  
 BUH2 JIMMY W. JONES  
 BUL3 MOSS W. LATHAM  
 CN WERNER F. MUEHLER  
 UTL ROBERT R. EVANS  
 EOH3 DAVID M. LATHAM  
 EOH2 TOM W. VICE  
 EOH2 BENJAMIN F. SHEWBROOKS (2)  
 CE1 JACKIE W. SEEDS  
 CEP3 MICHAEL T. ROBACK  
 CEW2 DAVID W. MEEKS  
 LTJG CARL J. MONTI  
 UTACN YANCEY M. BROWN  
 BULCN JERRY L. HAHN  
 EON3 JOHN L. MOORE  
 EON3 EMIL J. LEBLANC (2)  
 EAS2 RONNIE D. FRYE  
 EONCN LEWIS S. MESSER  
 EONCN JAMES E. POST, JR. (2)  
 SWE3 JAMES L. SLAUGHTER  
 CN CHARLES L. JACKSON  
 CMH3 ROBERT E. TUCKER  
 CEP3 DONALD A. NEWELL

The photograph opposite shows the presentation of Purple Hearts ceremony.

## 3. PROMOTIONS

<u>ENLISTED</u>			<u>OFFICERS</u>	
E - 2 to E - 3	49		O - 1 to O - 2	2
E - 3 to E - 4	70	99%	O - 2 to O - 3	∅
E - 4 to E - 5	59	65%	O - 3 to O - 4	1
E - 5 to E - 6	11	75%		
E - 6 to E - 7	2			
E - 7 to E - 8	∅			

4. Commendatory correspondence received appears on the following pages.

PUBLIC WORKS DEPARTMENT  
U. S. Naval Support Activity  
TPO San Francisco, 96695

14 December 1967

From: Public Works Officer  
To: Commanding Officer, CBMU-301

Subj: Khe Sanh Runway Repairs

1. I have recently had the pleasure of passing to you and your men the congratulations of the Commanding General, Third Marine Amphibious Force on the successful completion of the upgrading of our remotest airstrip at Khe Sanh near the DMZ. While termed repair, the work amounted to a change in the basic design by removing the natural earth subgrade which had failed replacing it with compacted rock and providing for increased drainage. This work was necessary to permit continuing use of the runway by the C-130 aircraft which are vital to the resupply of the base.

2. The scope of this work exceeded the type assignment envisioned when CBMU-301 was formed and was complicated by bad weather, and by the fact that all equipment had to be transported to the site by air so that it was impossible to use the heavy gear normally associated with this type work. Once started, the project resulted in such an obvious improvement that the original 1500 foot portion was extended to 2900 feet, almost doubling the effort involved, and making the equipment problem even more critical.

3. The size of this project necessitated a cooperative effort by both your unit and Seabees from our Public Works shops in DaNang. Due in no small part to your efforts and to the energy and cooperative spirit you instilled in your personnel this effort succeeded and is an excellent example of teamwork to get a difficult job accomplished. You and all your personnel who were involved are congratulated for an outstanding performance.

/s/ C. J. MIRDINGER  
C. J. MIRDINGER  
CAPT, CSC USN

Company D  
3rd Medical Battalion  
3rd Marine Division (Rein), FMF  
FPO, San Francisco, Calif. 96602

MEC:EIW:ltw  
1650  
11 March 1968

From: Commanding Officer  
To: Commanding Officer, Construction Battalion Maintenance Unit  
Three Zero One (CBMU-301)

Subj: Letter of Commendation

1. It is my sincere pleasure to take this opportunity to commend the men of CBMU-301 for their outstanding performance of duty during my tenure as Commanding Officer of this Unit.
2. Your performance of duty has been outstanding in all respects. You have worked long, hard hours, and on many occasions, from the break of day continuously through until sunset, until the job beforehand has been accomplished. You have performed these functions under the most severest and trying conditions, even at times when D Medical Company was receiving incoming enemy rounds of fire. You have never hesitated, upon being called upon, to perform the many tasks asked of you to keep this Medical Company functioning at its utmost. You have never complained of the long hours or unfavorable conditions of which you have been asked to perform under.
3. Your effectiveness and application of the knowledge of your job has been displayed time and time again. It is currently reflected by the fact that this Medical Company is able to perform under the most unfavorable conditions, due to your outstanding performance of duty and foresight in the application of your work and work techniques, and with your attitude of "CAN DO".
4. Your efforts have been greatly appreciated and your devotion to duty has been in keeping with the highest traditions of the "SEABEES" and the United States Navy; and as such, you are highly deserving of the traditional "WELL DONE".

/s/ M. E. COMPTON  
M. E. COMPTON

Copy to:  
COMNAVSUPPACT DaNang

HEADQUARTERS 15TH MEDICAL BATTALION  
1st Cavalry Division (Airmobile)  
APO San Francisco 96490

AVDADC-MB

18 March 1968

SUBJECT: Letter of Appreciation

THRU: Commanding Officer  
CBU 301 (Main Body)  
FPO San Francisco 96601

TO: Donald C Van Middendorp  
UTA-3 5982210  
CBU 301 (Main Body)  
FPO San Francisco 96601

I want to express my personal gratitude for the extremely valuable aid which you rendered to this unit. The refrigerators which you so expertly repaired are vital for the preservation of blood, biologicals, and medical supplies which are essential to the mission of this unit.

Your willingness to assist and your desire to further instruct this unit's medical equipment repair man further assured that our equipment will remain operational.

Again, thank you and your battalion for your willing and expert assistance. The cooperation rendered has certainly furthered the effort of our Armed Forces in Vietnam and has proven again the excellent reputation of the "Sea Bees".

W. REX DAVIS  
LTC, MC  
Commanding

CBMU301/TBM:gs  
1650  
Ser 416  
29 Mar 1968

FIRST ENDORSEMENT on HQ's 15th Medical Battalion FIRST Cavalry Div (Airmobile)  
ltr of 18 Mar 1968

From: Commanding Officer, U. S. Naval Construction Battalion Maintenance  
Unit THREE ZERO ONE

To: UTA3 Donald D. VAN MIDDENDORP, USN, 598 22 10

Subj: Letter of Appreciation

1. Forwarded with pleasure.
2. You have performed in the true "Can Do" spirit of the Seabees and I add my personal Well Done.

H. A. HOLMES

Copy to:  
COMNAVSUPPACT, DaNang

COMPANY A  
3d Amphibian Tractor Battalion, FMF  
1st Marine Division (Rein), FMF  
FPO, San Francisco, California 96602

RDD:kmw  
15Sep67

From: Commanding Officer  
To: Commanding Officer, CBM Unit 301  
Via: Commanding Officer, 3d Amphibian Tractor Battalion, FMF

Subj: Letter of Appreciation

1. As commanding officer of Company A, I wish to express my sincere appreciation for the assistance rendered elements of this company by your personnel in An Hoa. Our 3d platoon, under the command of 2d Lt. K. A. ELMENDORF, was attached to the 2d Battalion 5th Marines and, due to the distances involved, logistic support was our continuing problem. Throughout their stay in An Hoa, however, they had no difficulty in maintaining a high degree of operational readiness and efficiency. This was due to the continued outstanding support and assistance rendered them by Lieutenant (junior grade) C. MONTI, Senior Chief G. BARBAR, and the men of Detachment Alfa, CBM Unit 301. This officer and these men, time and again, willingly and enthusiastically lent the invaluable support of their equipment, knowledge and skills to assist the men and vehicles of this command. This cooperation, I feel, went far beyond that expected of neighboring units. Through their enthusiasm, desire, and ability, Lt. (J.G.) MONTI and the men of Detachment Alfa demonstrated not only an outstanding inter-service cooperation and friendliness, but a basic unity and sense of duty of men working together under the most difficult and dangerous of combat conditions. Without their assistance, accomplishment of our mission would have been a difficult thing, at best. It was, and continues to be, a pleasure to serve beside the men of Detachment Alfa and CBM Unit 301.

/s/ R. D. DASCH  
R. D. DASCH

1 :FAL:fjm  
1650  
18 SEP 1967

FIRST ENDORSEMENT on CO CoA 3dAmTracBn ltr RDD:kmw of 15Sep67

From: Commanding Officer, 3d Amphibian Tractor Battalion  
To: Commanding Officer, CBM Unit 301

Subj: Letter of Appreciation

1. Forwarded concurring in the comments of the Commanding Officer, Company A, 3dAmTracBn.
2. In addition I desire to add my personal thanks to Lieutenant (junior grade C. MONTE, Senior Chief G. BARBAR and their detachment for their outstanding, and willing camaraderie.

/s/ ROBERT L. SHUFORD  
ROBERT L. SHUFORD

### III. TRAINING

#### A. GENERAL

Military and technical training was conducted on the Unit level prior to the time CBMU THREE ZERO ONE deployed to Vietnam in June 1967. Since CBMU THREE ZERO ONE is permanently deployed in the Republic of Vietnam, training of individuals must now be done prior to reporting aboard at the deployment site. Locally within the Command, a training program has been set up with the objective of improving operational capability and effectiveness and maintaining a high degree of military readiness.

#### B. TECHNICAL TRAINING

Prior to deploying to Vietnam, the majority of the men received technical training at NAVSCON. This consisted of refresher courses in the Seabee rates. Once deployed, the majority of the training has consisted of on-the-job training, although some departments conducted formal training sessions. The Unit is sending two men at two week intervals to attend generator repair school conducted by U. S. Naval Support Activity, Da Nang.

#### C. MILITARY TRAINING

Prior to deployment, all men attached to the Unit received three weeks of military training, conducted by the 31st NCR at Port Hueneme, California. Each man reporting to the Unit after it deployed has been programmed into this course.

At the deployment site, a program has been set up to provide each man with weapon firing and familiarization. This is conducted by the Unit at Dong Ha and was set up to allow approximately twenty to thirty men from each company to spend an hour on the weapons range each week. The response to this program has been excellent. Although the range is not equipped to allow for qualification, it does afford the opportunity for each man to familiarize himself with each weapon.

Each Sunday morning, training lectures are held in the camp. This has consisted of an Officer or Chief Petty Officer giving a 45-minute lecture on various military topics to a class of approximately twenty men. The schedule is arranged so that each man in the Unit will receive one 45-minute lecture every Sunday morning. Typical subjects are as follows: Safety, Code of Conduct, Communications, Small Unit Tactics, Disaster Recovery, Defensive Positions, Counter-Insurgency, and weapons training lectures on the M-79 Grenade Launcher, the .45 Cal. Automatic Pistol, the M-60 Machine Gun and the M-16 Rifle.



III. TRAINING

PAGE

A. GENERAL

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B. TECHNICAL TRAINING

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C. MILITARY TRAINING

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D. INDOCTRINATION TRAINING

III - 2

E. CORRESPONDENCE AND EXTENSION COURSES

III - 3

F. TRAINING GRAPH

III - 4

E. CORRESPONDENCE AND EXTENSION COURSES

	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR
Officers Courses	1/0*	1/0	6/0	7/1	5/0	3/0	3/0	3/0	0/0	0/0
Enlisted Men's Courses	15/8	27/14	15/0	20/0	10/25	12/10	12/19	12/19	6/3	2/0
USAFI	3/1	8/1	0/0	11/5	7/0	6/0	6/0	6/0	8/0	56/0

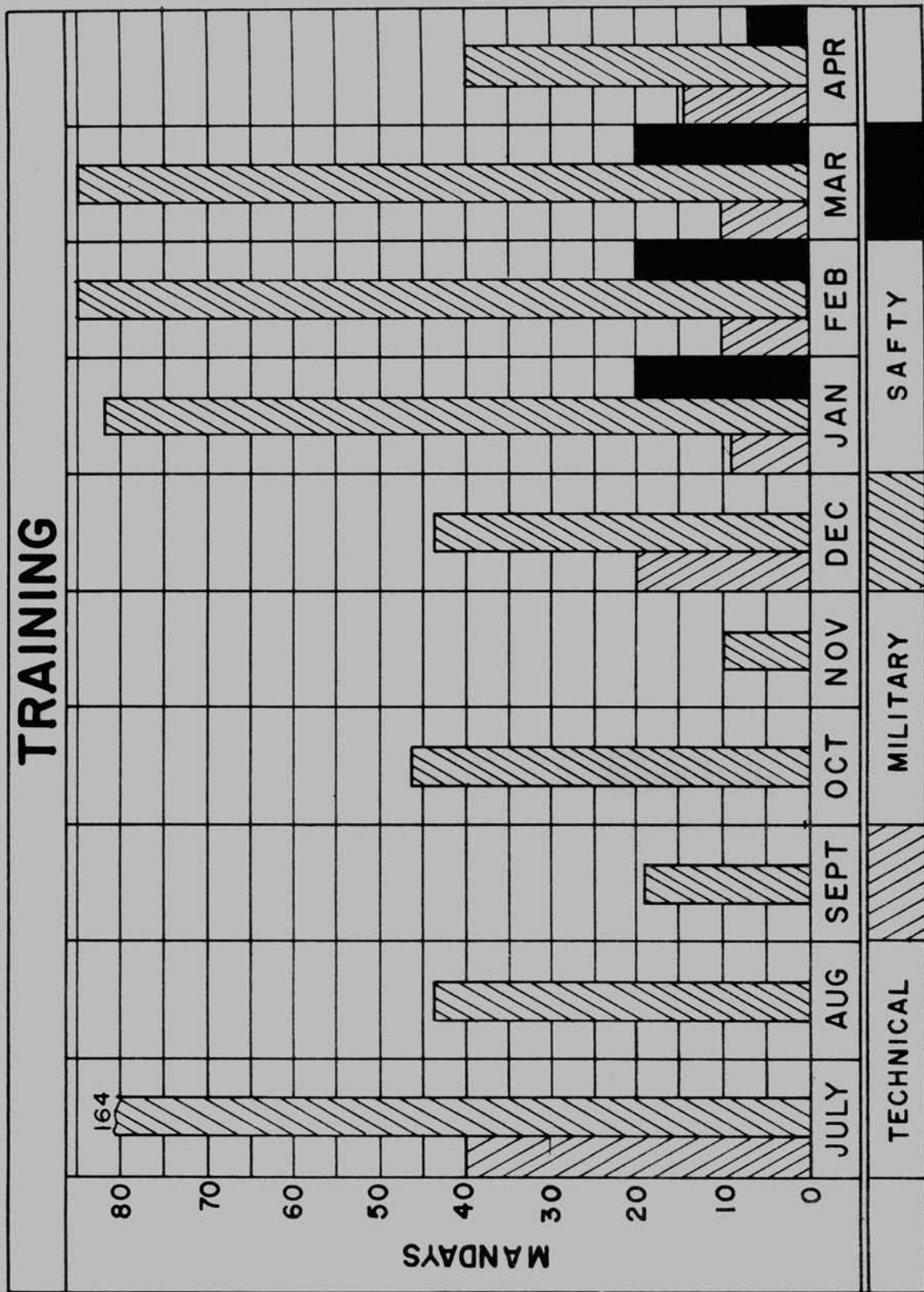
\*ENROLLED/COMPLETED

#### D. INDOCTRINATION TRAINING

New men reporting aboard the Unit attend an orientation session in which they are welcomed by the Commanding Officer. A brief discussion of the mission and tasks of the Unit are presented. The men are then given a short history of the Unit and of the sites where 301 personnel are now engaged in maintaining and repairing facilities. Familiarization with the regulations and various base procedures are carried out individually by the platoon leaders.

	<u>PAGE</u>
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A. MOUNT-OUT EQUIPMENT	IV - 1
B. P25A KITS	IV - 1
C. MATERIAL	IV - 2
D. AUTOMOTIVE PARTS	IV - 2
E. FISCAL	IV - 4
F. FOOD SERVICE	IV - 6
G. DISBURSING	IV - 6
H. EXCHANGES	IV - 6
I. LAUNDRY	IV - 6

# TRAINING



#### IV. LOGISTICS

##### A. MOUNT-OUT EQUIPMENT

CBMU THREE ZERO ONE's original equipment allowance was planned for deployment at a single location. When it was learned that CBMU THREE ZERO ONE would be split up into three sites, the allowance was increased somewhat, but with increased experience it became evident that the allowance was not sufficient. The equipment was distributed over three, and at times, up to five sites, consequently, in some cases, there was only one piece of some types of equipment at each site. When one of these one-of-a-type pieces of equipment was down for repair, operations involving other equipment were affected. For example, repair of the runway sub-surface usually requires a forklift, front-end loader, dump truck, grader and bull-dozer. If one of these pieces of equipment becomes inoperative without replacement, operations were seriously hampered. With equipment spread over three sites, difficulties of this nature were not uncommon.

Spare parts, such as filters, spark plugs, tires, lug wrenches, jack, etc., ("O" kits) were not included in the original mount-out equipment. All the equipment was new and needed little repair or replacement parts initially, but as time went on, these "O" kits were very much needed.

##### B. P25A KITS

Mount-out boxes were set up at Port Hueneme, but time did not permit an orderly arrangement nor the setting up of an effective locator system. Items were packed in boxes without markings and shipped to Dong Ha in the fastest manner possible. When the shipping tickets were compared with the Unit Load Lists, only 65% of CBMU THREE ZERO ONE's allowance material was shipped or on the docks waiting to be shipped, when the Unit departed CONUS.

The lack of an adequate inventory proved very costly, because upon our arrival in the Republic of Vietnam, a complete inventory of all material was required immediately in order to set up an effective operation. To complicate matters, all receipts had to be segregated into AO3 (material for the Main Body), AO4 (material for Khe Sanh) and AO5 (material for An Hoa).

Upon arrival in the field, spare parts, publications and other items were arriving by the truck load daily and had to be stacked in temporary tents or under tarps, until it could also be separated into AO3, AO4 and AO5. A complete inventory without shelter was impossible with the prevailing weather conditions. A random search method had to be utilized initially to find materials that were required. Every tent in the unit allowance was erected. The tents, however, proved to be dry rotted. Tags on the renting fabric indicated manufacture in 1942, and many were torn apart by strong winds.

A pre-engineered steel building was constructed and supplies were initially relocated in the first part of December. The supply building now includes GSK, Greens Issue and CTR under one roof with the MLO storage area adjacent.

An annual supply inspection was conducted in early December and a grade of satisfactory was assigned. Many discrepancies were noted and were corrected as early as possible. A comment that insufficient storekeepers were assigned was made on the inspection report. This contributed greatly to the many other discrepancies noted. The fact that the supply inspection occurred during the time that material was being moved from temporary storage into the supply building also contributed to many inventory and record errors.

#### C. MATERIAL

The primary problems associated with general maintenance materials were: periodic difficulties in surface shipment from Da Nang to Dong Ha due to enemy activity, lack of available shipping, and higher priority cargo. The situation was particularly serious during the months of February, March and April due to the TET Offensive and associated problems. Secondly, the quality of locally available mineral products, in most cases, was poor. Laterite was the only road material available on the base and it is generally a poor material for all weather road construction. The Laterite roads turned to soft mud in the monsoon season, and during the dry season, it turned to a fine, powdery, dust. Sand and rock both had to be procured locally through Vietnamese contractors. The quality of the rock was generally poor, the supply was not dependable, and the price was high.

#### D. AUTOMOTIVE PARTS

Upon the arrival of the main body and equipment at Dong Ha, RVN, in June 1967, an equipment preventive maintenance and repair program was established. This was done under extremely adverse conditions. CBMU THREE ZERO ONE had no repair shop or repair parts room. The dust conditions were very bad. A shop stores for repair parts was set up in a thirty (30) foot semi-van trailer, which was too small to accommodate all the parts in the mount-out boxes. The remainder of the mount-out boxes were stored outside, covered by tarps. The mount-out boxes arrived at Dong Ha in a water soaked condition. Most of the parts were not water damaged, but the soaked cardboard boxes presented a storage problem. This was overcome by building temporary shelves in a van trailer and unpacking the mount-out boxes. This temporary arrangement served as the parts room for the first four months CBMU THREE ZERO ONE was in Vietnam.

A team of parts expeditors was established and based at Da Nang. Their mission, in part, was to procure NC (Not Carried) and NIS (Not in Stock) shop store items and arrange transportation for all items to Dong Ha. This proved to be a valuable service. All NC and NIS requests are

FISCAL SUMMARY

26 JULY 1967 to 25 APRIL 1968

	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>	<u>NOV</u>	<u>DEC</u>	<u>JAN</u>	<u>FEB</u>	<u>MAR</u>	<u>APR</u>
1. NSA PROJECT FUNDS									
Total Funds Received To Date	\$600,000	\$600,000	\$600,000	\$700,000	\$700,000	\$700,000	\$700,000	\$700,000	\$700,000
Total Obligated	220,461	204,200	302,037	330,037	412,024	450,194	509,019	547,684	600,891
Available Balance	379,539	395,800	297,634	369,963	287,976	249,806	190,981	152,316	99,109
2. OPTAR SUB COST CENTER 01 - OPS									
Total Funds Received To Date	10,000	10,000	20,000	25,000	25,000	43,190	60,690	60,690	88,190
Total Obligated	6,902	9,823	14,166	20,904	23,591	38,683	44,587	57,046	68,278
Available Balance	3,098	1,177	5,834	4,096	1,409	4,507	16,108	3,644	19,919
3. OPTAR SUB COST CENTER 02 - Equip. O&M									
Total Funds Received To Date	35,000	35,000	45,000	45,000	45,000	55,000	70,000	70,000	95,000
Total Obligated	4,416	9,619	22,064	37,120	43,145	48,373	52,214	64,600	73,465
Available Balance	30,584	25,381	22,936	7,880	1,855	6,627	17,786	5,400	21,535
4. OPTAR SUB COST CENTER 03 - Camp Maint.									
Total Funds Received To Date	17,300	23,500	28,500	30,500	30,500	70,600	70,600	77,950	82,950
Total Obligated	12,364	13,848	17,306	26,102	27,691	30,913	34,454	56,788	79,161
Available Balance	4,936	9,651	11,194	4,198	2,809	39,687	36,146	21,162	3,789



screened by this team regardless of priority.

In some cases prescribed levels of stocked items have had to be increased to meet expanding demands on the repair shop. This is especially true in the case of 6,000 pound rough terrain (R/T) forklifts and generators. CBMU THREE ZERO ONE's equipment allowance for the main body at Dong Ha Combat Base contains one 6,000 pound rough terrain forklift. However, twelve additional customer (NSA) forklifts are presently being maintained by CBMU THREE ZERO ONE mechanics and supported by the shop stores. CBMU THREE ZERO ONE has an allowance of four 100 KW generators at Dong Ha, and in addition, provides maintenance support for a total of twenty-two (22) customer generators, ranging in size from 30 KW to 150 KW. In October 1967, the Alpha Company shop and shop stores building was completed by NMCB ELEVEN. Permanent shelves were installed in the new building by CBMU THREE ZERO ONE. The location of all shop store items, except large items such as transmission assemblies, differential assemblies, conveyor beltdts, etc., were then recorded on stock records, and complete inventory was held in an effort to track down items misplaced in the moving process. The inventory revealed that a majority of the missing items were never received. A study of NIS items was then made. Results of this study indicated the primary reasons for NIS items was that the stocking levels were set too low and the amount of lead time required for stock replenishment was under estimated. In most cases, items were NIS because of the long lead times on parts shipped from CONUS. In order to speed up the delivery of essential repair parts in country, a courier team was established to escort parts and other material between Da Nang, Dong Ha, Cua Viet and Khe Sanh. The team was very beneficial and practically eliminated parts loss in shipment between main body and detail sites.

#### E. FISCAL

Since the arrival of CBMU THREE ZERO ONE in Vietnam in June 1967, until April 1968, this unit has spent \$68,278.98 for normal operations, \$73,465.87 for automotive equipment maintenance and repair, and \$79,161.87 for construction and maintenance of the camp. These funds were supplied by COMCBPAC. In addition, NSA Da Nang supplied project funds in the amount of \$600,891.80. This money has been spent fulfilling the Unit's primary maintenance mission. It should be pointed out that the two individual items having relatively high expenditure rates under Operations Sub-Cost Center O2 are: travel payments for emergency leaves, and Vietnam extension leaves. If expenditure copies of travel payments made could be furnished to this Command, these costs could be estimated more accurately for future budgeting. The tabulation on Page IV-3 shows a Fiscal Summary of funds utilized by CBMU THREE ZERO ONE.



#### F. FOOD SERVICE

CBMU THREE ZERO ONE does not have messing facilities. The Main Body messes with the NMCB situated adjacent to the CBMU THREE ZERO ONE camp site. CBMU THREE ZERO ONE contributes to the mess by sending cooks and mess-cooks TAD to the NMCB deployed at Dong Ha Combat Base. Mess equipment has been provided by CBMU THREE ZERO ONE from time to time. This arrangement has worked well and the food service has been very good. Details are dependent upon the local command at each site for messing. The officers and chiefs of CBMU THREE ZERO ONE used the Officers' and Chiefs' messes of NMCB ELEVEN and later, NMCB FIVE at Dong Ha. The messing throughout the period was considered excellent. There are plans to build a 500 man galley in the CBMU THREE ZERO ONE camp site. Although messing had been satisfactory, NMCB FIVE's galley is feeding 1200 - 1500 men and the facilities are over taxed. In addition, the danger of incoming artillery damaging the galley is a serious threat. CBMU THREE ZERO ONE's galley would relieve the congestion and provide a back-up facility in the event of enemy damage.

#### G. DISBURSING

From arrival in-country in June 1967 until April 1968, disbursing for CBMU THREE ZERO ONE was handled by NSA Da Nang. During March 1968, the decision was made to transfer disbursing to the adjacent NMCB (NMCB FIVE) in order to improve disbursing service and morale. Disbursing Clerks assigned to CBMU THREE ZERO ONE were sent TAD to NMCB FIVE and are also used as a traveling team to pay CBMU THREE ZERO ONE personnel at the detail sites. Individual problems occurred initially, however, the disbursing service is now considered good.

#### H. EXCHANGES

Existing exchange facilities at the Dong Ha Combat Base utilized by CBMU THREE ZERO ONE personnel. These consist of Marine and Army exchanges and the NMCB exchange. They provide most of the basic requirements. The exchanges at Dong Ha, however, have a very minimal selection. Personnel traveling to and from Da Nang on R & R and various duties provide a secondary source whereby hard to get items can be procured.

#### I. LAUNDRY

In September 1967, CBMU THREE ZERO ONE constructed a 16' x 32' wood frame building with concrete slab for use as a laundry. By late September, the installation of seven household washers and seven household dryers was completed. Hot water has been supplied by two fifty-five (55) gallon drums equipped with copper coils and an immersion heater. An oil fired boiler for hot water was installed recently. Two men have been permanently assigned to the operation and maintenance of the laundry to avoid mis-use of the equipment. This has worked out extremely well with very little maintenance being needed to this date.

Laundry hours are from 1700 to 0700 and each hut is assigned a laundry day to bring in their laundry for washing. It was found that spare parts are extremely difficult to obtain, and if a similar installation is constructed and equipped, it is suggested that spare parts for the equipment be obtained at the time the machines are purchased. Suggested items for the washing machines are belts, timers, mixing valves and one spare motor for every eight machines. The photograph on Page IV-5 shows the interior of the laundry building.

V. EQUIPMENT REPORT

PAGE

A. OPERATING CONDITIONS

V - 1

B. EQUIPMENT COMMENTS AND RECOMMENDATIONS

V - 1

C. EQUIPMENT DEADLINE STATUS REPORT

V - 2

D. EQUIPMENT DEADLINE GRAPH

V - 3

## V. EQUIPMENT

### A. OPERATING CONDITIONS

One hundred seventy (170) pieces of equipment were included in the original P25A allowance. This equipment arrived in Da Nang 15 June 1967 on the SEATRAN PUERTO RICO and was shipped to Dong Ha by LST and LCU boats.

Since June 1967, CBMU THREE ZERO ONE has experienced both a dry season and a monsoon season. During the dry season, which lasted from June to November 1967, the dust problem was very serious and significantly affected all equipment. Replacement filters were very difficult to obtain and usually had long lead times. This meant that many pieces of equipment had to operate with dirty filters or no filters at all. Remedial action was initiated to order filters in excess of prescribed limits. Also, there was a problem of dust entrainment in fuel tanks. Presently, a dust control program is being undertaken by CBMU THREE ZERO ONE on the roads in the Dong Ha Combat Base complex. In the forthcoming dry season, equipment damage from heavy dust should be lessened.

During the monsoon season, heavy rains, deep mud and slush also had detrimental effects on equipment maintenance.

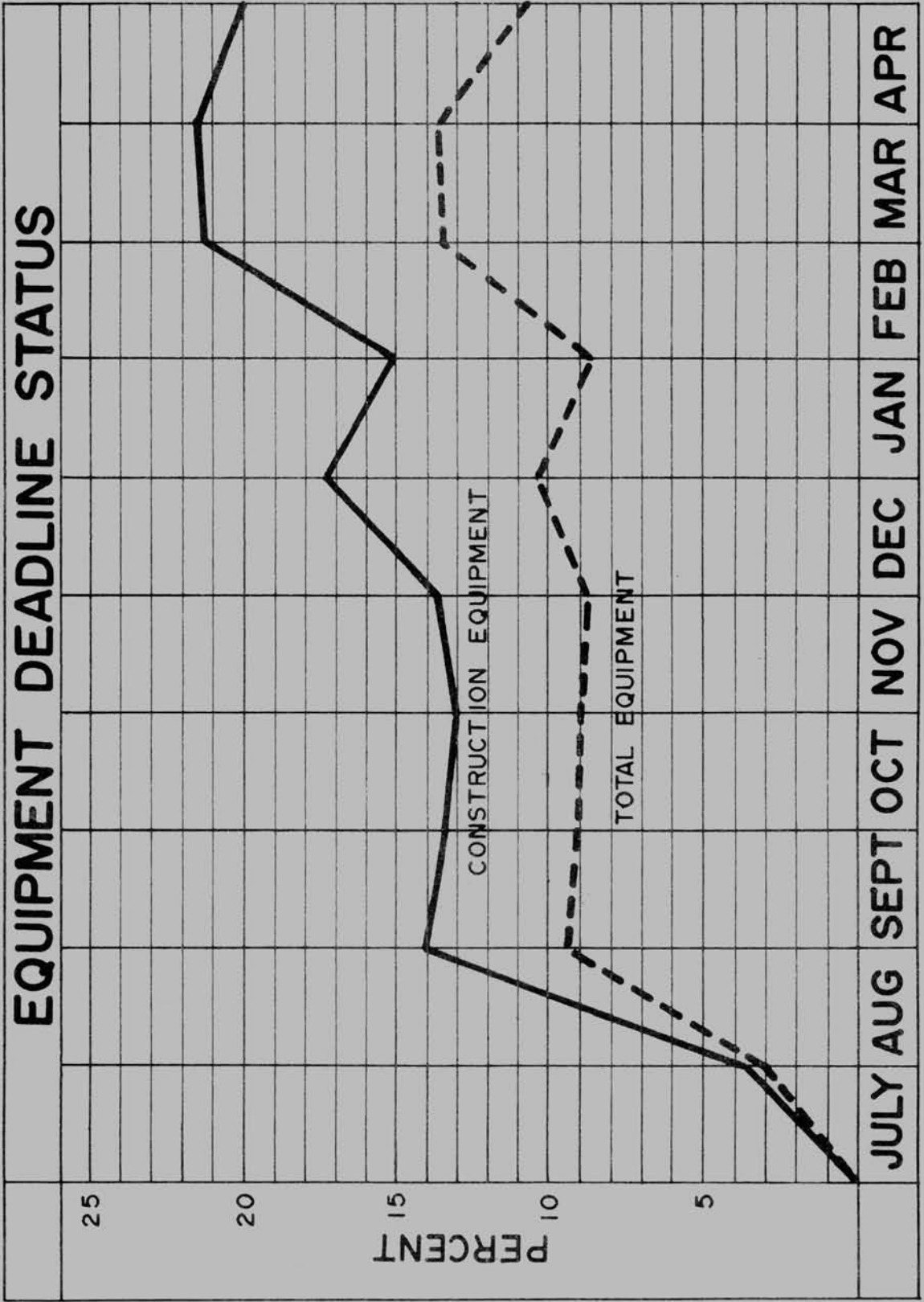
### B. EQUIPMENT COMMENTS AND RECOMMENDATIONS

When CBMU THREE ZERO ONE was mounted out with equipment, it was apparently assumed that the maintenance functions of the unit would not require heavy duty construction equipment capable of travel over rough terrain. This assumption proved to be invalid as assigned maintenance missions required heavy duty equipment. At Khe Sanh, roads are very primitive. At Dong Ha, during the rainy season, problems with deep mud was encountered even on the main roads. Vehicles without four wheel drive could not operate in many areas. At Cua Viet, a problem was encountered with very soft sand. All vehicles needed four wheel and even some light weight, commercial four wheel drive vehicles did not operate satisfactorily in the sand. In the case of CBMU THREE ZERO ONE, it is highly desirable to have all tactical equipment.

C. EQUIPMENT STATUS & DEADLINE REPORT

26 June 1967 to 25 April 1968

TYPE OF EQUIPMENT	AVE. NO. ASSIGNED	AVE. NO. RENTED/ BORROWED	AVE. TOTAL ON HAND	PREVENTIVE MAINT.				INTERIM REPAIRS		DEADLINE		AVE. TOTAL NO. OPERATING
				A	B	C	D	A	B	A	B	
<u>AUTOMOTIVE</u>												
ORGANIC	80	1	81	395	106	46	0	0	0	0	33	80
<u>CONSTRUCTION</u>												
ORGANIC	85	2	87	318	130	35	0	0	0	0	13	74
<u>MHE</u>												
ORGANIC	6	0	5	28	14	4	0	0	0	0	0	5





VI. LABOR DISTRIBUTION

PAGE

A. LABOR DISTRIBUTION REPORT

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B. LABOR DISTRIBUTION GRAPH

VI - 3

LABOR DISTRIBUTION REPORT

26 June 1967 to 25 April 1968

WORK DAYS: 304

AVG. ON BOARD: 373 MEN

<u>DIRECT LABOR</u>	<u>MANDAYS TOTAL</u>	<u>% TOTAL UNIT LABOR AVAILABLE</u>
TOTAL CI DIRECT	51,219	
TOTAL FILL IN	- 0 -	
TOTAL DIRECT	<u>51,219</u>	47.0
 <u>INDIRECT LABOR</u>		
X01 CONST EQUIP MAINT REPAIR AND RECORDS	8,816	
X02 OPERATIONS AND ENGINEERING	3,464	
X03 PROJECT SUPERVISION	5,745	
X04 PROJECT EXPEDITING (SHOP PLANNER)	929	
X05 LOCATION MOVING	97	
X06 PROJECT MATERIAL	1,868	
X07 TOOL/SPARE PARTS ISSUE	2,014	
X08 MOTOR POOL	2,804	
TOTAL INDIRECT LABOR	<u>25,737</u>	23.7
 <u>MILITARY OPERATIONS AND READINESS</u>		
M01 MILITARY OPERATIONS	2,899	
M02 MILITARY SECURITY	555	
M03 EMBARKATION	210	
M04 UNIT MOVEMENT	372	
M05 MOBILITY PREPARATION	202	
M06 CONTINGENCY MATERIAL READINESS	285	
M07 MILITARY ADMIN FUNCTIONS	1,021	
M08 MOBILITY & DEFENSE EXERCISES	83	
M09 OTHER	- 0 -	
TOTAL MILITARY OPERATIONS AND READINESS	<u>5,627</u>	5.2
 <u>DISASTER RECOVERY OPERATIONS</u>		
DO1 DISASTER RECOVERY OPS	- 0 -	
DO2 DISASTER RECOVERY EXERCISES	- 0 -	
TOTAL DISASTER RECOVERY OPS	<u>- 0 -</u>	- 0 -

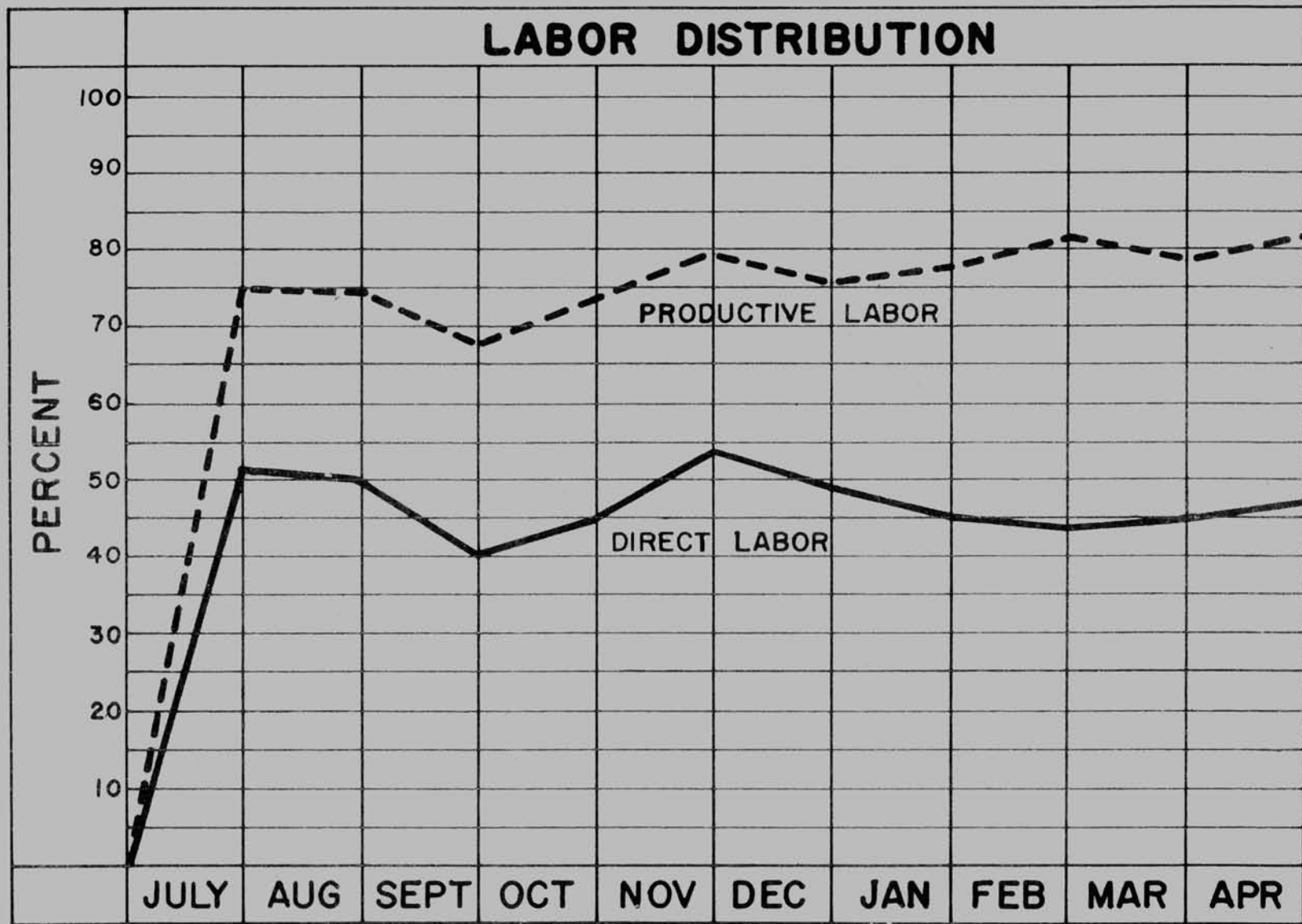
TRAININGMANDAYS  
TOTAL% TOTAL UNIT  
LABOR AVAILABLE

TO1	TECHNICAL TRAINING	133	
TO2	MILITARY	572	
TO3	DISASTER RECOVERY	- 0 -	
TO4	LEADERSHIP	- 0 -	
TO5	SAFETY	107	
TO6	TRAINING ADMINISTRATION	3	
	TOTAL TRAINING	<u>815</u>	<u>7</u>
	TOTAL PRODUCTIVE LABOR	<u>83,398</u>	<u>76.6</u>

OVERHEAD LABOR

Y01	ADMIN & PERSONNEL	4,827	
Y02	MEDICAL & DENTAL DEPT.	1,059	
Y03	NAVY EXCHANGE & SPECIAL SERVICES	324	
Y04	SUPPLY & DISBURSING	734	
Y05	COMMISSARY	2,175	
Y06	CAMP UPKEEP & REPAIR	2,821	
Y07	SECURITY	1,779	
Y08	LEAVE, LIBERTY & RECREATION	5,048	
Y09	SICK CALL, DENTAL, HOSP	1,521	
Y10	PERSONAL AFFAIRS	462	
Y11	LOST TIME	22	
Y12	TAD NOT FOR UNIT	4,520*	
Y13	OTHER	186	
	TOTAL OVERHEAD LABOR	<u>25,478</u>	<u>23.4</u>
	TOTAL LABOR AVAILABLE	<u>108,876</u>	<u>100.0</u>

\* TAD TO NSA DA NANG SHOPS



VII. MAINTENANCE PROJECT REPORTS	<u>PAGE</u>
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## VII. MAINTENANCE PROJECT REPORTS

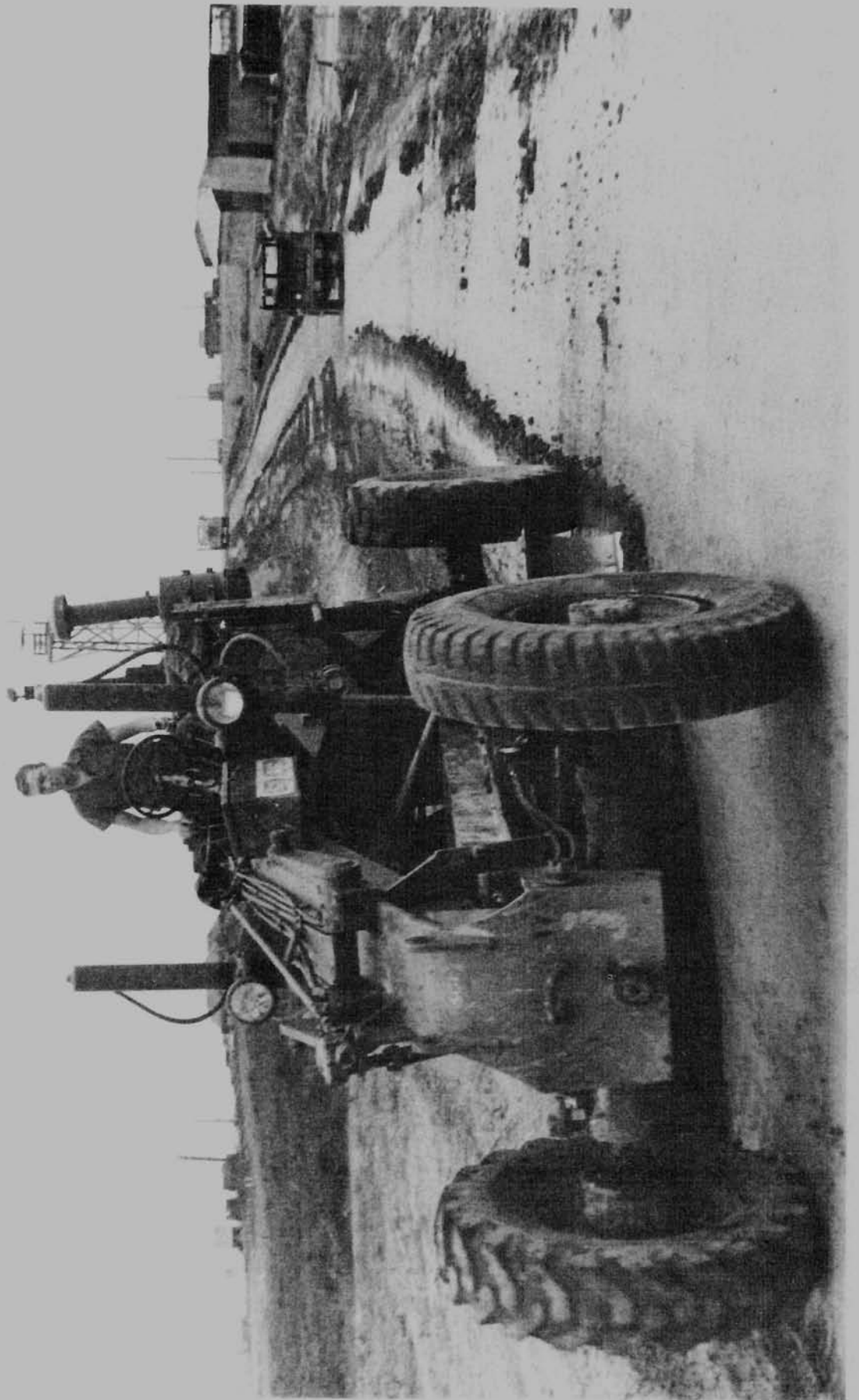
### A. MAJOR MAINTENANCE PROJECTS

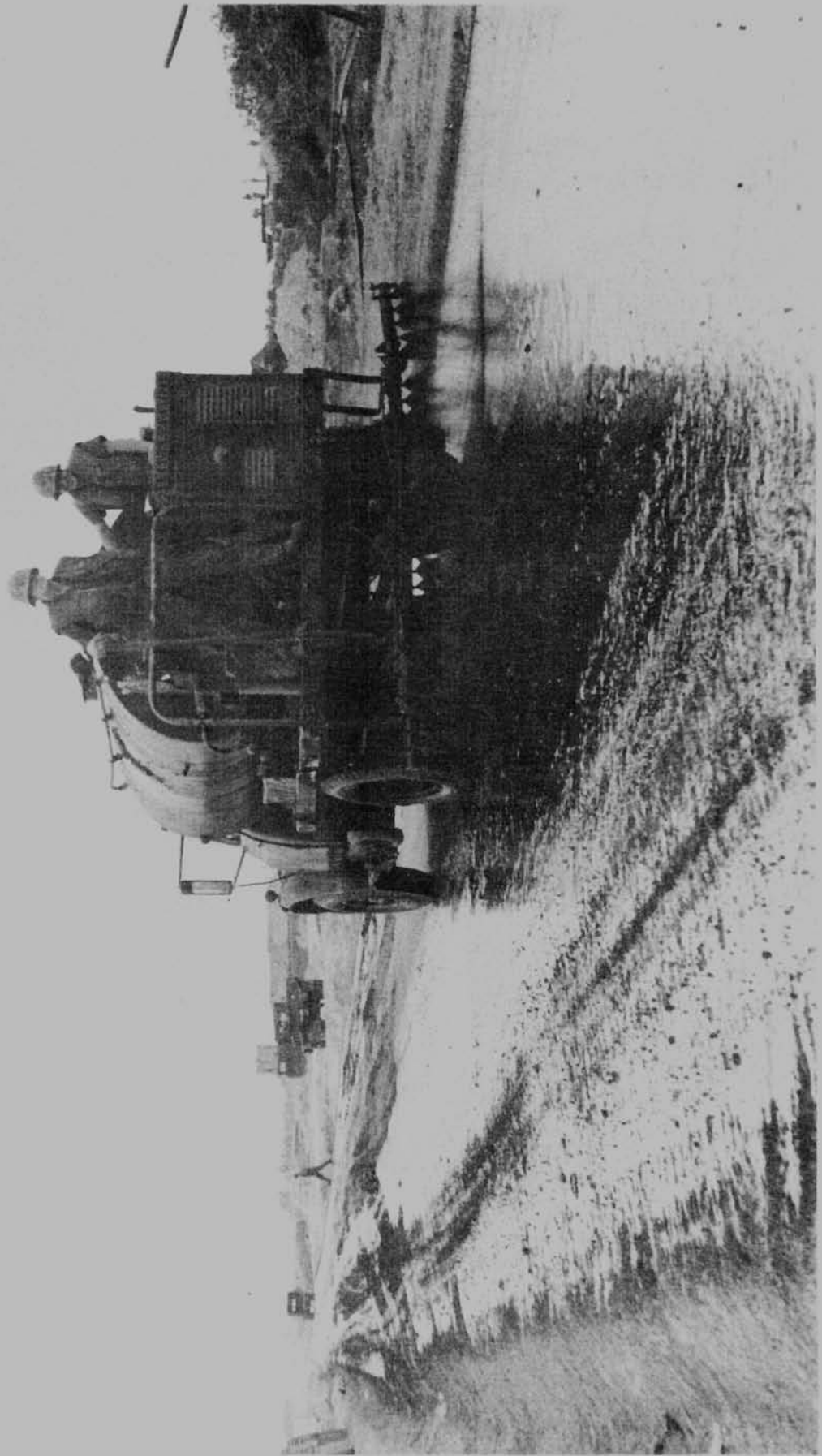
#### 1. SANITARY LAND FILL

In August 1967, work was started on a Sanitary Land Fill operation for the Dong Ha Combat Base. In September 1967, the first site was abandoned since it had reached its capacity. A new site was selected near the CBMU 301 camp site. In January 1968, this site also had reached its capacity and the dump operation was relocated outside the Dong Ha Combat Base perimeter. The dumping operation runs from 0700 to 1630 daily. After dumping has stopped, the day's accumulation is set on fire and permitted to burn overnight. The following morning, the residue is covered over with six to eight inches of earth fill. Two EO's along with a bulldozer are assigned to this operation. The dump supports a population of over 11,000 men. One problem encountered is that of security to deter indigenous personnel from entering the dump during daily operations, exposing themselves to injury or death from vehicular traffic. Secondly, indigenous personnel were subjected to danger from discarded ammunition exploding when the dump is burned. Regulations prohibit dumping of ammunition, however, in spite of careful screening, some quantities were not discovered. On two occasions, indigenous personnel were severely injured when they entered the burning trash dump after hours of darkness.









## 2. GENERAL ROAD MAINTENANCE

CBMU THREE ZERO ONE is tasked with the maintenance of the approximately twenty miles of road at the Dong Ha Combat Base. All roads are unpaved laterite. The primary problems associated with the road system are:

(a) The traffic is very heavy and includes tracked vehicles such as tanks, amtracks and LVT's,

(b) a combination of heavy rains during the monsoon season and inadequate drainage causes ruts, pot holes, and general surface deterioration.

During the last monsoon season, maximum use was made of the lull in the rains to construct much needed culverts. During the dry season, dust control is a major problem. The dust suppression program is primarily one of spraying the roads with an asphalt-diesel fuel mixture. The spraying is done at night when the traffic is relatively light, thus allowing the asphalt/diesel oil mixture a longer time to soak in and cure.



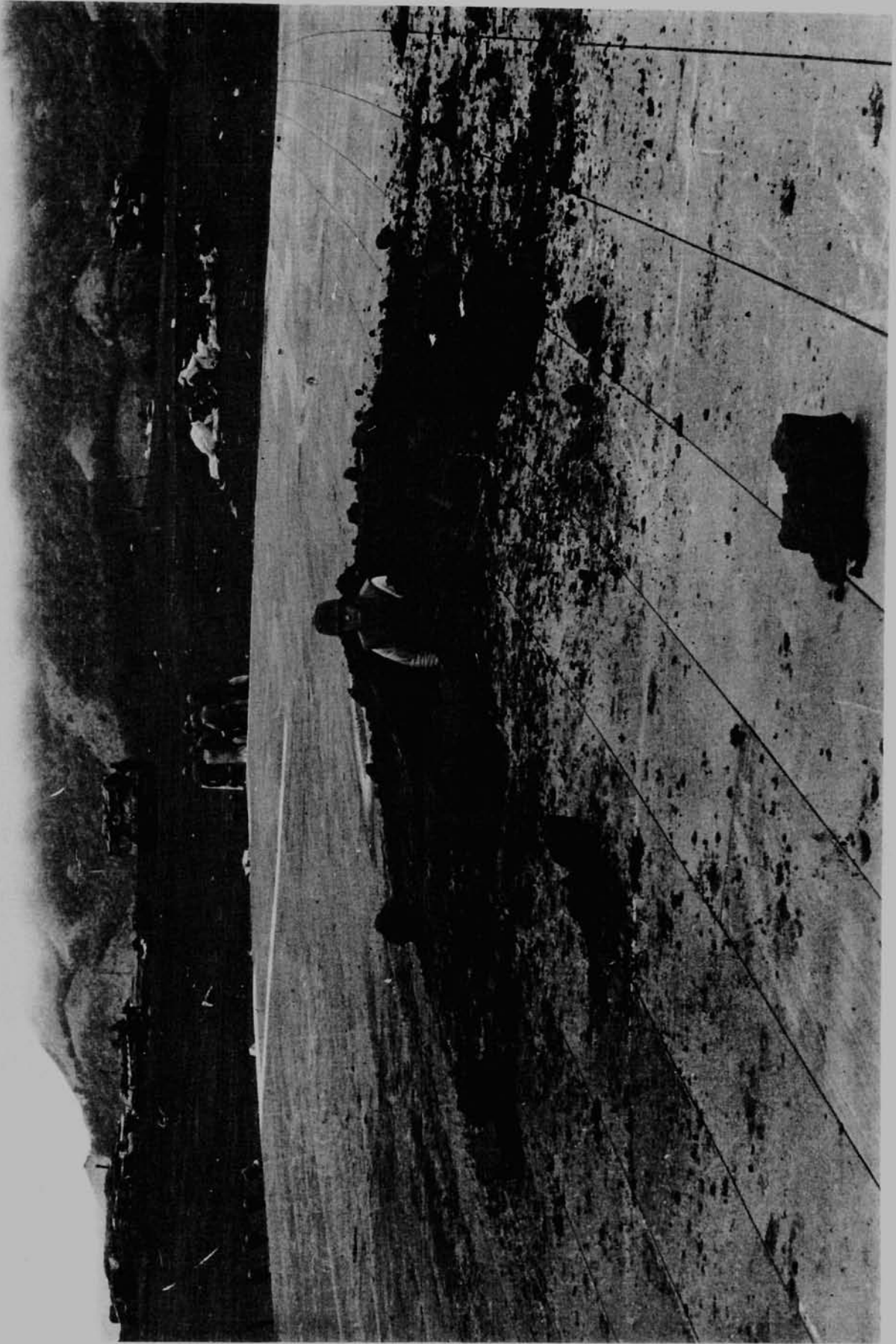
### 3. WATER DELIVERIES

CBMU THREE ZERO ONE is tasked with the delivery of potable water to various units on the Dong Ha Combat Base. Water deliveries were made to eight (8) permanent units, plus various other units which were in a transient status. Fifteen to forty thousand (15,000 to 40,000) gallons of potable water are delivered daily. Deliveries are made with a 5,500 gallon tanker equipped with a gasoline driven pump. Water for all deliveries is obtained from a water point located on the base and operated by a Marine Engineer Battalion. At the end of the day's deliveries, the tanker is parked in the CBMU 301 camp area to serve as a fire truck in case of emergency.



#### 4. ELECTRICAL DISTRIBUTION MAINTENANCE

Another area that required a significant amount of effort was maintenance of the electrical distribution systems, both interior and exterior. Interior electrical work consisted of rewiring living huts, bunkers and various other buildings to correct improper or hazardous wiring and overloaded circuits. In some cases complete areas had to be rewired due to unauthorized installation of equipment, fans and appliances without apparent regard concerning capability of generators or wire size. Exterior electrical work consisted of installing larger size wire to carry the required loads, resagging of power lines, installing insulators, and repair of battle damage.





## 5. AIRFIELD MAINTENANCE

CBMU THREE ZERO ONE's primary mission at the Dong Ha, Khe Sanh and An Hoa sites is the maintenance and repair of the airfields located at these sites. Maintenance consisted of repairs to the runway matting of the AM-2 and M8A1 types. Maintenance and repairs were also performed on the parking areas as well as the drainage and lighting systems. The runways at the Dong Ha and Khe Sanh airfields were damaged on numerous occasions due to enemy artillery and/or rocket attacks. During the 21 January to 15 April 1968, seige at Khe Sanh, CBMU THREE ZERO ONE performed all runway repairs under threat of attack, and even during the most intense periods of shelling, the runway was closed to fixed wing aircraft operation for only short periods of time.

## 6. GENERATOR OPERATION AND MAINTENANCE

Recently CBMU THREE ZERO ONE has assumed the operation and maintenance of non-organic allowance generators for other units. The generator parts support and generator pool is provided by U. S. Naval Support Activity, Da Nang, and CBMU THREE ZERO ONE is acting as Naval Support Activity, Da Nang's generator support organization at Dong Ha and Cua Viet. At present, the manpower requirement for operation and maintenance is approximately 260 - 300 man hours per month. It is expected that the manpower requirement will increase significantly in the future due to expansion of generation facilities at Dong Ha and the anticipated construction of new facilities at Quang Tri.

VII. A.7 TABULATION

STANDING JOB ORDERS

26 JUNE 1967 TO 25 APRIL 1968

JOB ORDER NO.	DESCRIPTION	MANDAYS												TOTAL
		JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR			
6Y7 PF 1001	Elect. Dist. Maint.	0	0	0	75	129	180	139	71	46	85	725		
6Y7 PF 1002	Elect. Bldg. Maint.	0	0	0	3	41	67	31	25	7	5	179		
6Z7 PF 1003	Water Haul (Dong Ha)	0	0	0	21	57	115	59	65	62	67	446		
6Y9 PF 1004	Delta Med. Maint.	25	69	43	73	77	122	36	13	117	15	590		
6Y3 IP 1005	Road Maint. (French Roads)	0	37	58	60	65	0	160	93	2	40	515		
6Y3 PF 1007A	Runway Emergency Repairs	0	0	205	55	15	0	82	1	41	15	414		
6Y3 PF 1007B	Repair of Runway Matting	0	0	0	4	42	0	54	3	0	5	108		
6Y3 PF 1007C	Runway Grading	0	0	0	1	7	10	0	0	0	0	17		
6Y3 PF 1007H	Airfield Assoc. Area	0	0	0	0	0	79	22	7	0	42	150		
6Y2 PF 1008	LCU Ramp Maint.	0	0	0	4	6	27	0	0	0	0	37		
6Y4 PF 1010	Sanitary Land Fill	0	0	133	61	106	214	120	62	57	67	820		
6Y3 PF 1011	General Road Maint.	0	0	0	16	102	280	225	324	136	293	1376		
6Z9 PF 1012	Delta Med. Fueling	0	0	0	6	12	27	11	11	15	17	99		
6Z9 PF 1014	Fueling LCU Ramp Equip.	0	0	0	3	13	30	10	12	15	17	100		
6Y6 PF 1016	Utility Maint. (Water)	0	0	0	2	2	0	29	32	43	0	108		
6Y4 PF 1017	Defense Facilities	0	0	0	0	2	12	7	51	73	77	222		
6Y9 PF 1019	Maint. Other Facilities	0	0	0	0	0	6	0	61	0	2	69		
6Y9 PF 1020	Galley Maint.	0	0	0	0	0	0	0	2	0	23	25		

JOB ORDER NO.	DESCRIPTION	HOLIDAYS												TOTAL		
		JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR					
6Y9 FP 1022	Maint. of POL Pipeline	0	0	0	0	0	0	0	0	0	0	0	0	13	0	13
6Y7 FP 1024	Maint. of Generators	0	0	0	0	0	0	0	0	0	0	0	0	0	259	259
6Y9 00 1026	Camp Bldg. Repair	0	0	891	146	408	1016	523	361	306	190	3841				
6Y10 00 1027	Trash & Refuse Collection	0	0	0	17	51	135	44	41	80	115	483				
6Y10 00 10273	Pest Control	0	0	0	0	2	0	0	0	28	19	49				
6Y10 00 1028	Laundry Operation	0	0	86	17	530	0	180	64	45	67	512				
6Y9 00 1030	Fuel Distribution	0	0	0	0	5	0	10	18	29	28	90				
6Y6 00 1031	Water Dist. & Treatment	0	0	154	21	87	175	26	0	14	44	521				
6Y7 00 1032	Generator Watch	0	0	0	8	83	164	83	92	101	32	563				
6Y9 00 1033	Reefer Watch	0	0	0	98	90	179	0	70	89	95	611				
6Y7 00 1034	Communication Watch	0	0	0	25	32	101	26	34	179	95	492				
6Y7 00 1035	Communication Repair	0	0	0	12	32	74	26	34	24	42	244				
6Y7 00 1036	Electrical Distribution	0	0	0	59	73	0	128	24	0	12	366				
6Y7 00 1037	Elect. log. Maint.	0	0	0	14	31	0	78	16	0	0	139				
6Y6 00 1038	Plumbing Maintenance	0	0	115	0	65	108	109	145	200	270	1012				
6Y4 00 1039	Grounds	0	0	75	43	55	0	237	131	157	161	859				
6Z10 00 1040	Drafting	0	0	0	41	93	122	78	65	0	0	399				
6Z10 00 1041	Surveying	0	0	0	39	66	0	64	30	0	0	199				
6Z7 00 1042	Const./Weight Handling	0	0	0	13	28	151	101	139	143	191	766				
6Y6 00 1043	Heating Maintenance	0	0	0	7	4	55	1	40	0	4	111				

JOB ORDER NO.	DESCRIPTION	MANDAYS												TOTAL		
		JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR					
6Y4 00 1044	Defense Facilities	0	0	7	0	0	0	0	0	0	0	71	329	410	316	1133
X11 00 1045	Charlie Co. Shops	0	0	0	0	0	0	0	0	0	0	92	195	86	74	447
X11 00 1046	Bravo Co. Shops	0	0	0	0	0	0	0	0	0	0	60	40	9	7	116
6Z9 00 1047	Taxi Service	0	0	0	0	0	0	0	0	0	0	0	87	15	35	137
6Y9 00 1048	Direct Support To NSA	0	0	0	0	0	0	0	0	0	0	0	0	1803	269	2072
	CBMU-301 Camp Const.	2624	1	200	0	0	0	0	0	0	0	0	0	0	0	2825
	Emergency Service Calls	0	0	0	0	9	0	0	0	0	0	0	374	61	83	527
	SUB TOTAL - DONG HA	2649	107	1967	944	1943	3449	2992	3162	406	3178	24786				
	DETAIL ALPHA - AN HCA															
6Y4 ZP 401	Base Drainage	10	58	0	35	9	73	31	3	0	0	10	229			
6Y5 ZP 402	Base Forklift Support	0	0	11	9	22	8	17	6	1	1	1	75			
6Y5 ZP 403	Refuel Tracked Equipment	0	0	0	4	2	4	8	8	7	0	0	33			
6Y4 ZP 404	Airfield Drainage	0	0	25	3	67	0	5	13	83	62	258				
6Y7 ZP 405	Runway Elect. System	0	0	8	14	28	17	11	23	9	19	129				
6Y7 ZP 406	Interior Wiring	0	0	0	0	25	19	25	6	11	11	97				
6Y7 ZP 407	Base Power System	0	0	23	36	36	36	57	41	29	24	282				
6Y7 ZP 408	Base Maintenance (UT)	0	0	0	0	0	38	51	12	17	31	149				
6Y1 ZP 409	Base Maint. Misc. Const.	0	0	0	0	15	39	67	16	11	10	158				
6Y1 ZP 410	Hut Repair Base Maint.	0	0	0	0	8	6	1	1	38	45	99				
6Y9 ZP 411	Base Support Activity	0	0	0	0	22	34	34	34	28	28	182				
6Y5 ZP 412	Repair Runway Matting	8	12	0	28	76	92	24	4	44	57	345				
6Y1 ZP 413	Galley Maintenance	0	0	20	16	18	5	27	15	25	8	134				

JOB ORDER NO.	DESCRIPTION	MANDAYS										
		JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	TOTAL
8HF607 414	Camp Maint. Detail ALPHA	0	0	0	55	47	50	75	72	31	25	355
6Y9 ZP 415	Realignment of Base Fac.	0	0	0	0	0	0	63	69	7	0	139
	SUB TOTAL - DETAIL ALPHA	18	70	87	200	375	421	496	323	343	331	2664
	<u>DETAIL BRAVO - KHE SANH</u>											
CM111	Camp Maint. & Repair	0	0	503	239	0	555	198	417	326	165	2403
CC111	Camp Construction	0	0	0	0	0	0	0	0	0	95	95
C3333	Airstrip Const. & Maint.	10	0	666	649	569	1441	255	74	29	61	3754
C7777	Elect. Const. & Maint.	0	0	0	7	0	110	0	109	142	154	522
C8888	Miscellaneous Support	0	0	0	0	0	0	19	53	36	7	115
	SUB TOTAL - DETAIL BRAVO	10	0	1169	895	569	2106	472	653	533	482	6889
	<u>DETAIL CHARLIE - CUA VIET</u>											
6Y9 CC 1025	Maint. & Repair of MHE	0	0	0	0	0	0	0	0	0	38	38
6Y9 CC 1025A	Maint. of Cantonment Area	0	0	0	0	89	179	159	159	0	26	612
6Y6 CC 1025B	Maint. of Utilities	0	0	0	0	42	88	55	55	0	0	240
6Y8 CC 7019	Rehab. of NCAD Facilities	0	0	0	0	0	0	0	0	0	1927	1927
	SUB TOTAL - DETAIL CHARLIE	0	0	0	0	131	267	214	214	0	1991	2817
	<u>DETAIL PHU BAI</u>											
6Y9 PD 1023	Maintenance of Runway	0	0	0	0	0	0	0	0	0	1184	1184
	SUB TOTAL - DETAIL PHU BAI	0	0	0	0	0	0	0	0	0	1184	1184

JOB ORDER NO.	DESCRIPTION	MANDAYS													
		JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	TOTAL			
	DETAIL HUE*														
6Y9 PP 1023A	Rehab. of MACV Compound	0	0	0	0	0	0	0	0	0	0	0	0	869	869
	SUB TOTAL -- DETAIL HUE*	0	0	0	0	0	0	0	0	0	0	0	0	869	869
	GRAND TOTAL ALL STANDING JOB ORDERS	2677	177	3223	2039	3018	6243	4174	4352	5282	8035	39209			





## B. MAJOR REPAIR PROJECTS

### 1. KHE SANH RUNWAY REPAIRS

Major repairs to the Khe Sanh runway was undertaken by CBMU THREE ZERO ONE's Detail BRAVO during the period of 28 August to 2 December 1967. Repairs to the 1500 feet of runway consisted of the removal of all runway matting, sub-grade shaping, laying of an eight inch rock bed with an asphalt seal, drainage improvement and replacement of matting. Augment equipment and personnel were provided by Public Works, NSA, Da Nang and CBMU THREE ZERO ONE's Main Body located at Dong Ha. The augment equipment and personnel from NSA were transported from Da Nang to Dong Ha and then airlifted to Khe Sanh utilizing Marine CH-53 and Army CH-54 helicopters. On 2 September, a rock crushing operation was placed in operation. From the period of 6 to 9 September, repair materials were staged. C-130 aircraft delivered 3,000 pieces of AM-2 matting via LAPES drops and over 1,000 barrels of asphalt via conventional high altitude drops. Actual repair work commenced on the 10th of September. Despite setbacks caused by inclement weather conditions and the crash of a USAF C-130 aircraft in October, which destroyed approximately 250 barrels of asphalt and damaged the sub-grade, detail personnel were able to complete repairs in a timely manner. By 24 October 1967, the laying of the matting on the original 1500 foot section was completed. The original scope of the project called for rehabilitation of only 1500 feet of the airfield, but later was increased to 2900 feet. This project was completed on 2 December 1967.

## 2. AN HOA RUNWAY REPAIR

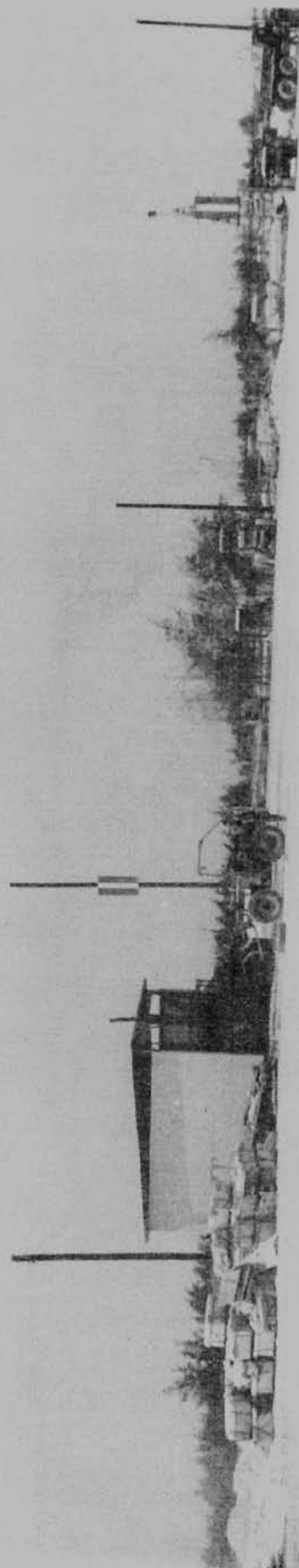
The runway at the An Hoa site was closed three times to fixed wing aircraft due to extreme metal fatigue in the M8A1 matting. During November 1967, replacement of 1500 feet of the 3500 foot strip was completed. On 1 December and 15 December, the runway was again closed for a short period in order to effect emergency repairs to a major buckled area in the matting. Buckling of the matting was caused by aircraft braking excessively hard in order for the pilots to make the turnoff at the terminal, instead of utilizing the full length of the runway. The M8A1 matting has experienced repeated structural fatigue failure and in some locations, complete replacement of the matting has been required. It is considered that M8A1 matting is greatly inferior to AM-2 matting as a runway material for C-130 aircraft. The advantage of M8A1 matting is its relatively low cost (approximately one third that of the AM-2 material).

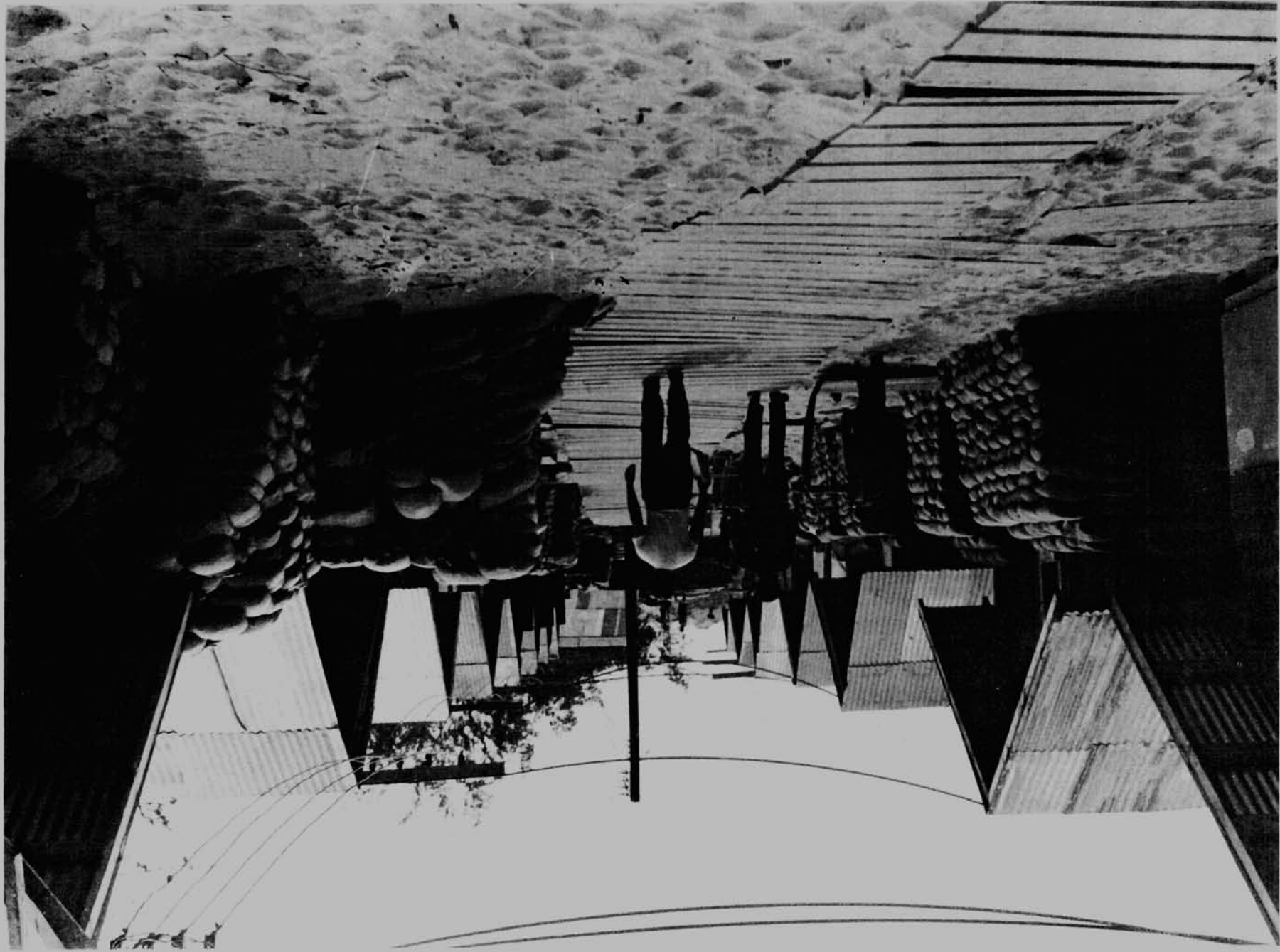
## 3. DONG HA RUNWAY REPAIR

The Dong Ha Airfield has AM-2 matting on the runway and turn around areas, and M8A1 matting on the taxiways. Considering that the runway is heavily used, it has presented relatively few maintenance problems. The majority of the maintenance work concerned failures of the runway sub-grade near the west end. The runway was repaired on several occasions in this area, and it became evident that the sub-grade would have to be improved in order to eliminate the need for repetitive repairs. On 10 April, a 150 lineal foot section of the runway matting was removed, the sub-grade was excavated to a depth of approximately three feet, replaced with dry laterite, and covered with a layer of rock. The surface was sprayed with liquid asphalt and the AM-2 matting relaid. The runway has since accommodated heavy traffic with no further repairs required.



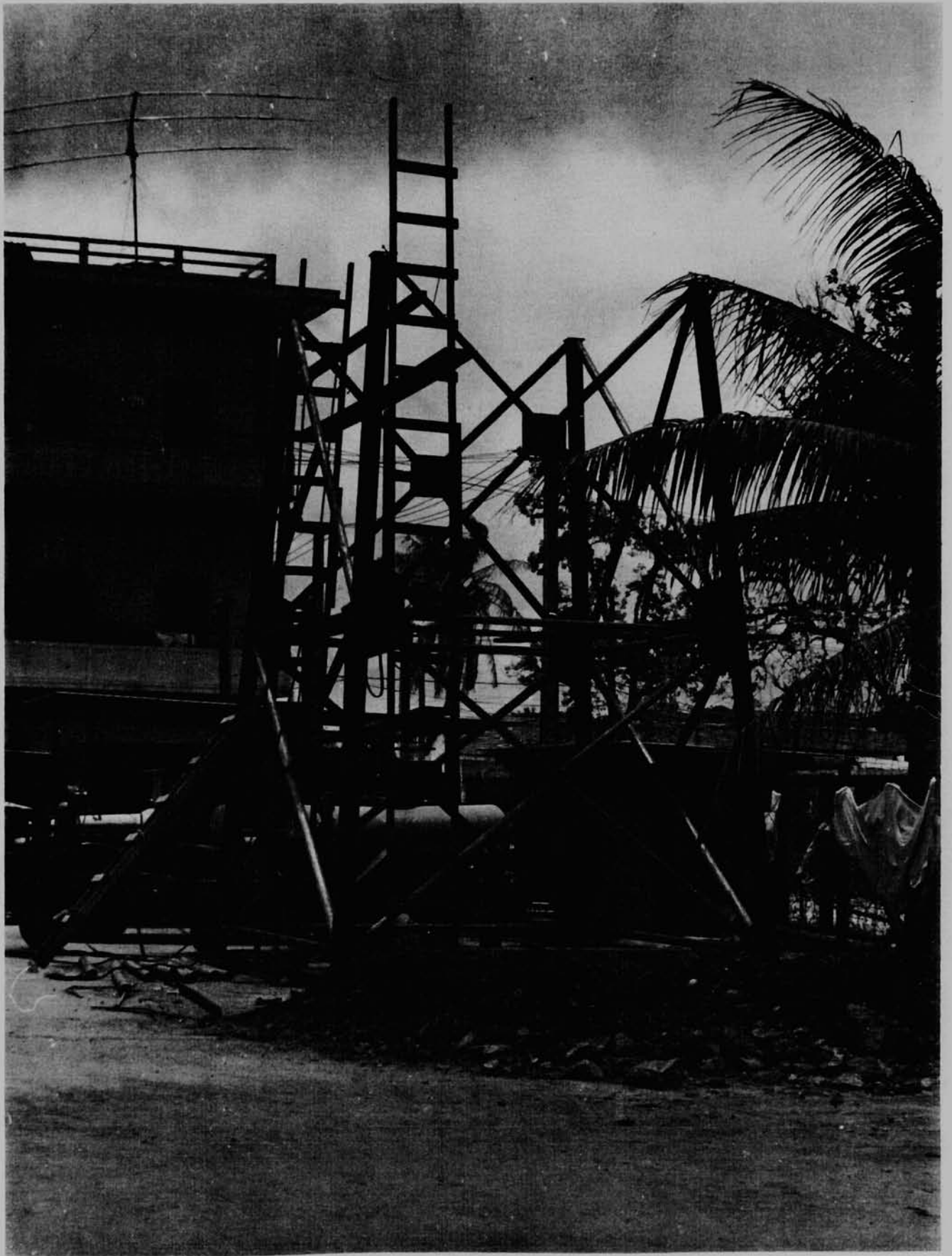






#### 4. REPAIR AND EXPANSION OF NSAD FACILITIES, CUA VIET, RVN

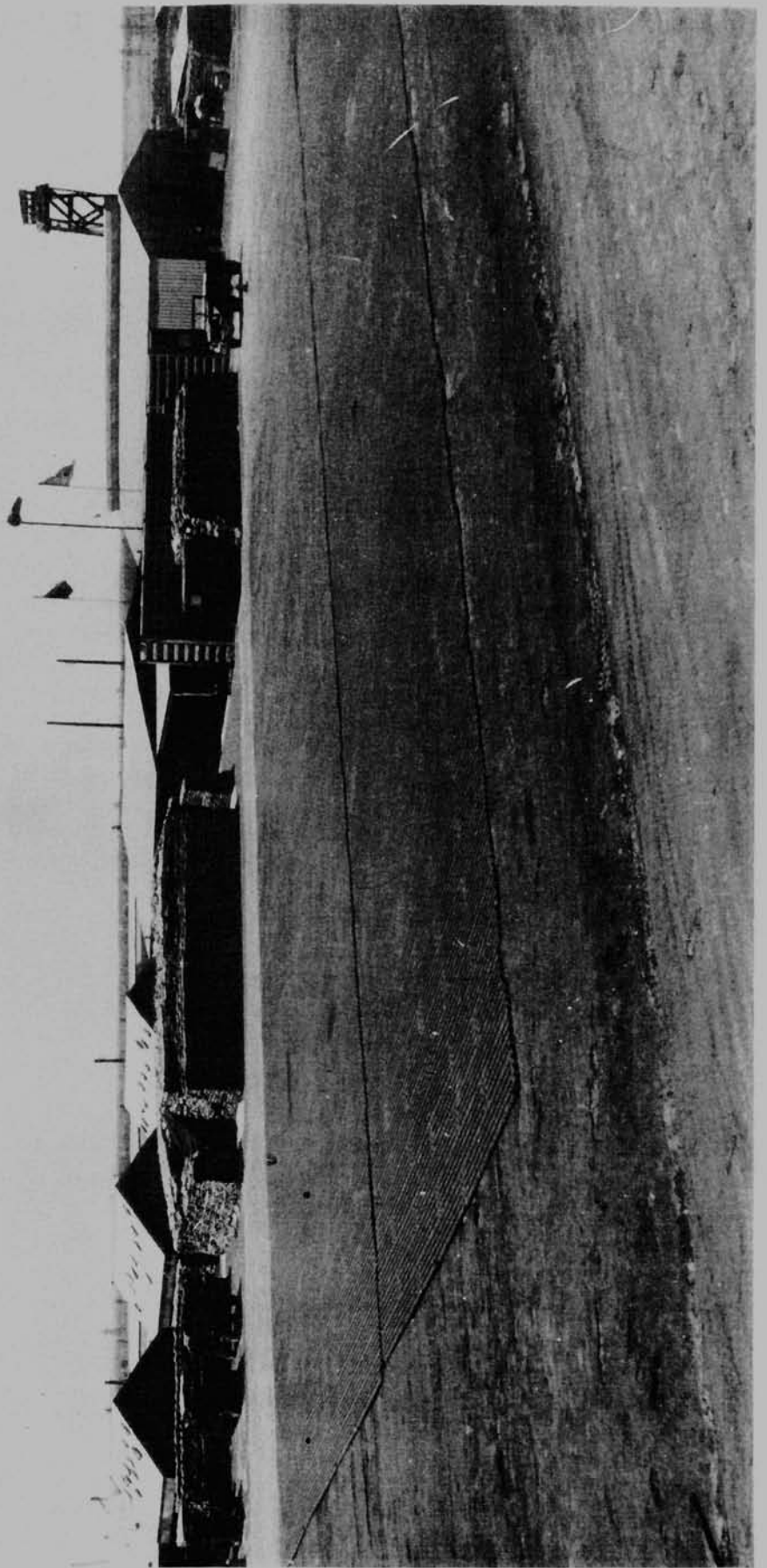
On 10 March 1968, the Navy-Marine Corps cantonment at Cua Viet came under heavy rocket, mortar and artillery attack. One of the incoming rounds detonated ammunition staged on the ramp, causing a series of secondary explosions which scattered unexploded ordnance throughout the camp. The administrative, messing, communication and berthing areas suffered heavy damage, and in many cases, the buildings were completely destroyed. Several large craters were blasted into the LST ramp. Photograph VII - 22 and VII - 23 shows Cua Viet after the explosions. On 11 March, a detail of forty-three (43) men were sent from CBMU THREE ZERO ONE's Main Body at Dong Ha to Cua Viet to augment the fourteen (14) men CBMU THREE ZERO ONE personnel assigned to Detail CHARLIE located at the Cua Viet site. Immediate clearing operations were commenced by utilizing CBMU THREE ZERO ONE equipment augmented by equipment from NMCB FIVE, NSA Da Nang, and Marine Corps units located in the area. High priority was assigned to the clearing of the ramp in order to re-establish loading/unloading operations as the main logistic channel for the Dong Ha/Northern I Corps area had to be re-opened quickly. The ramp was opened for reduced operations by 1300 on 11 March. Upon completion of clearing operations on the ramp, repair work was initiated on the cantonment area. Work consisted of rehabilitation or replacement of approximately thirty-five (35) buildings which were either damaged or completely destroyed. By 18 March, the ramp was back in full operation, and repairs to the cantonment area were completed by 25 March. NSA Da Nang, requested construction of additional facilities due to an increase in personnel. Additional facilities requested included living huts, bunkers, improvements to the water and electrical distribution systems, head facilities and construction of a 500 man messhall. Work on the additional facilities is continuing and it is anticipated that all work will be completed in June 1968. Photographs VII - 24 and VII - 25 show the cleared ramp and reconstructed cantonment area.





5. REPAIR TO MACV COMPOUND, HUE', RVN

On 26 March, a detail of twenty (20) men were sent from the Main Body to Hue' to repair extensive damage to the MACV Compound caused by enemy action during the TET Offensive. Many of the buildings sustained major structural damage. Repairs were made to the buildings as well as the water and power distribution systems within the compound. A water tower and tank were constructed in addition to three South East Asia Huts. Extensive re-roofing work was performed and four personnel bunkers were constructed. The detail returned to the Main Body in May 1968.



6. DELTA COMPANY, THIRD MEDICAL BATTALION, DONG HA

Delta Med is the main medical treatment facility for the extreme Northern I Corps area. All maintenance, repair and alteration work for this facility is given a high priority. The facility has been shelled on numerous occasions requiring extensive emergency repairs. In addition, several alteration projects were accomplished for improved medical service, sanitation or to expand the facility. CBMU THREE ZERO ONE also provides all water and electric service to this facility. The photograph shows the Delta Med helicopter pad with M8A1 matting installed by CBMU THREE ZERO ONE. This work was done to reduce the problem of blowing dust due to helicopter down wash.



## C. CONSTRUCTION

### 1. POT SHACKS AND GARBAGE HOUSES

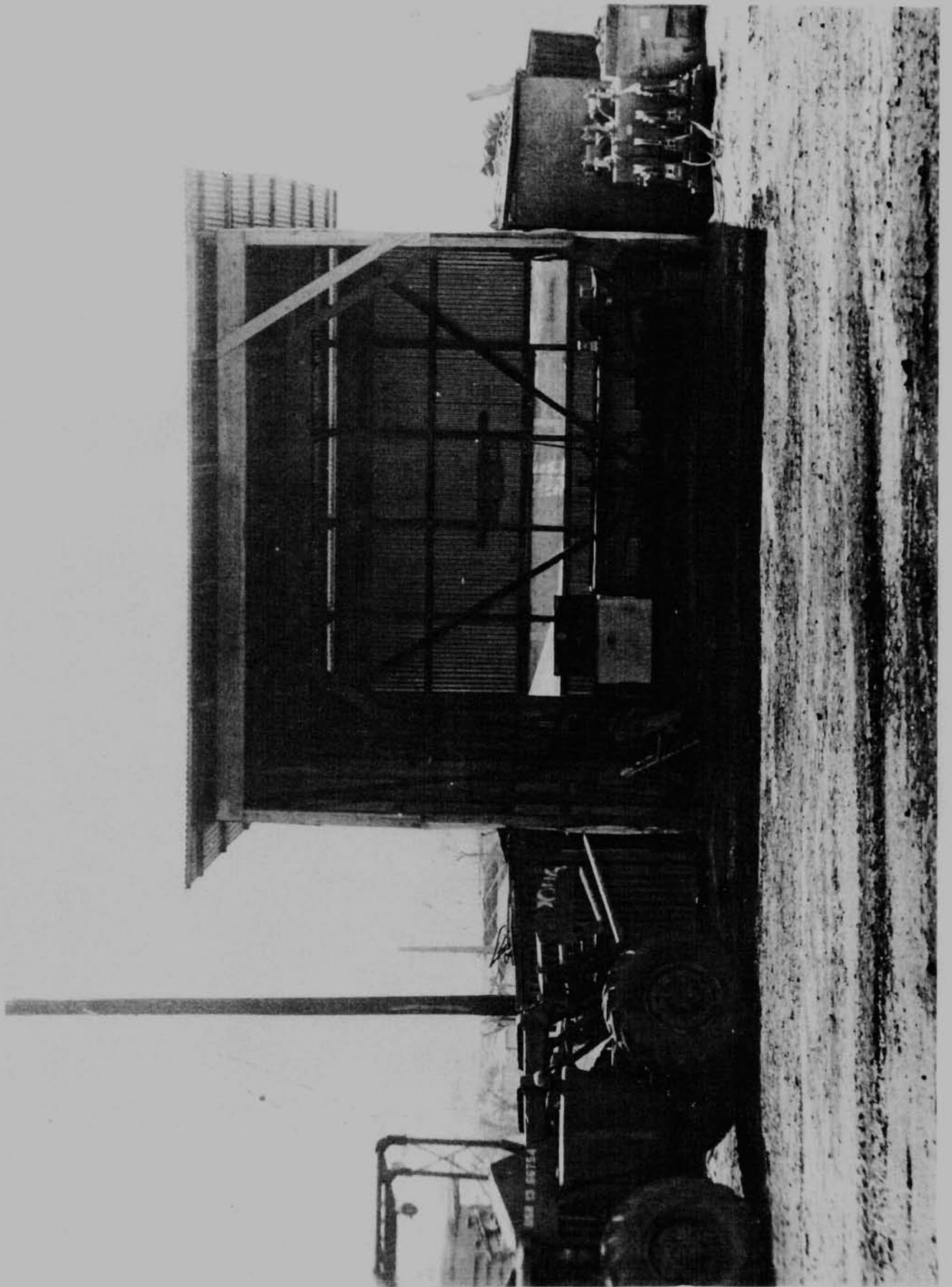
Throughout the reporting period, CBMU THREE ZERO ONE has constructed numerous pot shacks and garbage houses for galleys of various units aboard the Dong Ha Combat Base. Construction of these facilities is part of a continuing program to correct health or sanitation problems. Along with the construction of these facilities, various other improvements were made to the sanitation facilities, such as construction of grease traps, extension of drainage lines, screening of galley and messing spaces, and construction of leaching fields. The photograph shows a typical garbage house constructed by CBMU THREE ZERO ONE.

VII-33



## 2. GENERATOR SHEDS

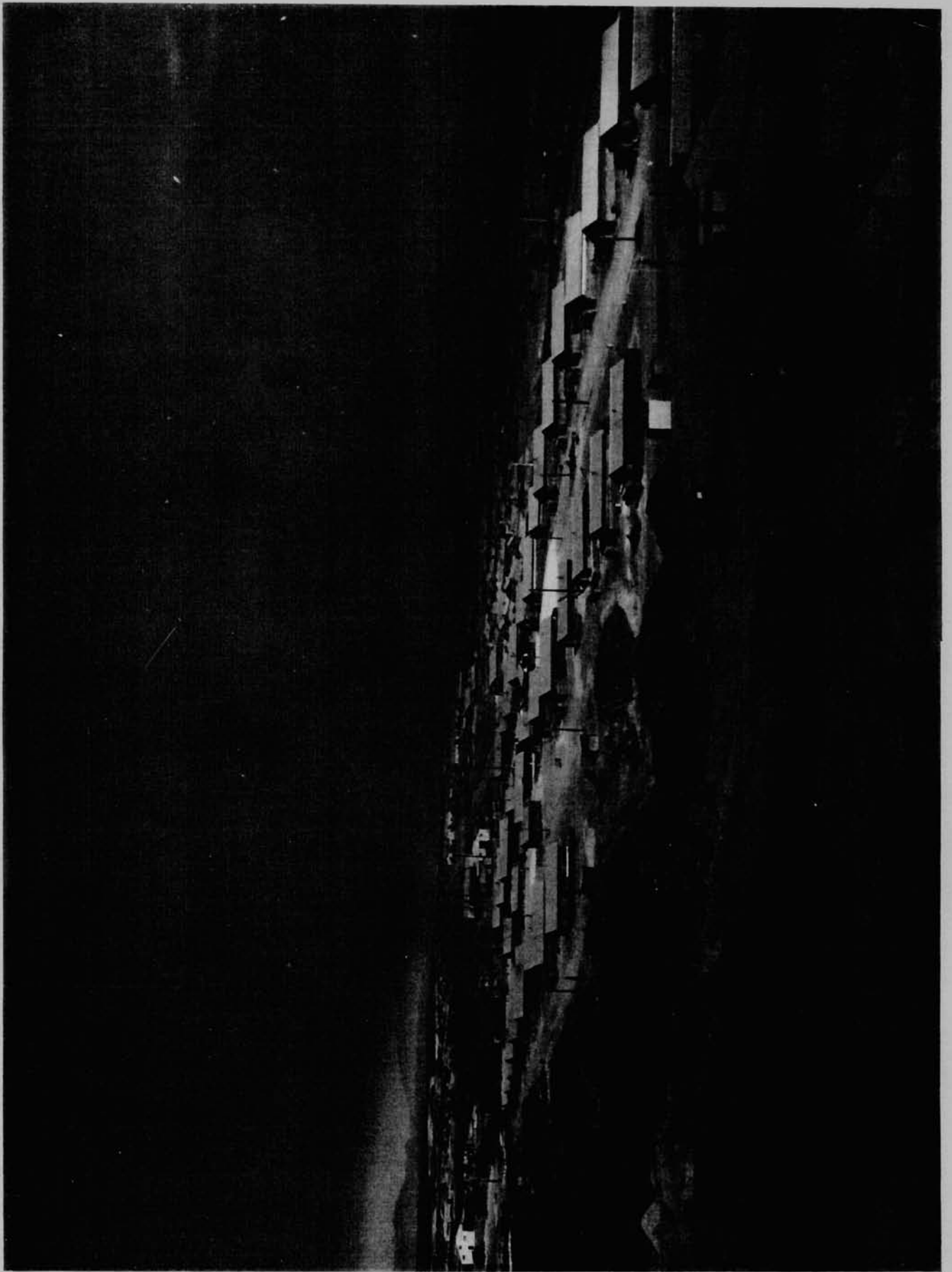
Construction of generator sheds for customer generators was another CBMU THREE ZERO ONE improvement program. Construction of these facilities was deemed necessary to minimize the detrimental effect of having generators exposed to the monsoon rains and the summer dust.





### 3. ROUGH TERRAIN FORKLIFT REPAIR SHOPS

Approximately midway through the reporting period, it was found that covered work areas were required in order to provide adequate repair support for the customer forklifts maintained by CBMU THREE ZERO ONE. An R/T Forklift Repair Shop was constructed at the LCU ramps at Dong Ha and at Cua Viet. With the completion of these facilities, a more efficient preventive maintenance and upkeep program could be undertaken by CBMU THREE ZERO ONE with minimum disruption due to adverse weather conditions. The facilities also provided for storage space for repair parts which had previously been exposed to the weather.



VII-37

#### 4. CBMU THREE ZERO ONE CANTONMENT CONSTRUCTION

CBMU THREE ZERO ONE's camp is located on the Dong Ha Combat Base, approximately three quarters of a mile south of the Dong Ha Runway, within nine miles of the DMZ. Construction of the camp facilities commenced with the arrival of the Advance Party in May 1967. Initial construction consisted of standard 16' x 48' SEA HUTS, office spaces, shower facilities and a temporary Command Post. As construction progressed, additional living and office huts were constructed, along with recreation buildings, industrial shops (by Naval Construction Forces), permanent Command Post, Enlisted Men's Club, Laundry, Dispensary, library, water and electrical system. The camp was planned in two areas. One area includes the industrial facilities and the other area includes the administrative, community support and personnel berthing areas. The camp now has three rigid steel frame 40' x 100' buildings with lean-to's, and fifty-two (52) administrative buildings, living huts and other personnel support facilities. The photograph shows a view of the camp looking west.

VIII. LESSONS LEARNED	<u>PAGE</u>
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## VIII. LESSONS LEARNED

### A. LOGISTICS

#### 1. GENERAL COMMENTS

It should be noted that CBMU THREE ZERO ONE was a new Command which was commissioned on 31 March 1967, and deployed on 20 June 1967. The initial task of setting up the organization, initial training of personnel, gearing up for the logistic effort required in moving to the Republic of Vietnam, and establishing a camp and operations were of a one time nature. The majority of the logistics problems stemmed from three causes:

(a) There was insufficient time to procure, organize, inventory and properly pack all equipment and material at Port Hueneme in order for it to be on hand in Vietnam when required.

(b) There was little or no covered space available at Dong Ha to sort and store tools and materiel when the main body and equipment arrived.

(c) Lead times for spare parts was much longer than generally expected. Surface shipment time seriously delayed receipt of repair parts and materials.

If an additional CBMU is commissioned and deployed, it is recommended that at least five months be allowed between the Unit Commissioning and the deployment date of the main body. This will allow more time to organize and stage materials, and the advance party could construct more of the essential structures needed to set up operations prior to the arrival of the main body.

#### 2. VEHICLES AND HEAVY EQUIPMENT

The placing of spare parts ("O" kits) on all assigned vehicles was a lesson that was learned by this unit. Upon receipt of the equipment, many pieces did not have the "O" kits attached, which later contributed to repair difficulties. It is recommended, if possible, that the "O" kits be banded to the respective pieces of equipment to which it belongs, and be located in a suitable place to insure against pilferage and loss during shipment. Upon receipt of a vehicle, the unit personnel could remove the "O" kits and place them in the spare parts room for later issue as needed.

The need to establish a complete technical library was another lesson considered worthy of mention. Upon leaving Port Hueneme, it was considered that the technical library was complete and up to date. However, upon arrival in Vietnam, it was discovered that the technical library was incomplete in several areas. A contributing factor was the dispersion of equipment to three separate maintenance sites. In future mount-outs, it is recommended that a minimum of one complete manual be programmed for each type of equipment at each site.

It appears that there may be some valid arguments for the use of the heavy duty tactical series vehicles as mount-out equipment for units at combat bases. The use of commercial type vehicles caused some problems because they did not stand up well under hard usage in the field, and also because spare parts were at times, difficult to obtain. The overall costs involved in using "M" series vehicles versus commercial vehicles in areas similar to Dong Ha should be reviewed. It is possible that the extra repairs required, the time spent by supply personnel and parts expeditors trying to locate scarce parts, plus an unknown but significant amount of manpower expended by operators or crews because of marginal equipment performance, could balance out the difference in the initial procurement cost between commercial and tactical series vehicles.

## B. OPERATIONS AND MAINTENANCE

### 1. GENERATORS

In May 1967, CBMU THREE ZERO ONE undertook the construction of the main body camp at Dong Ha. Power was supplied by one 30 KW generator and one 100 KW generator with a 15 KW generator for emergency use. By October 1967, the camp was sufficiently developed to require two 100 KW generators. A permanent distribution system was installed and generator pads and sheds were built. In addition, approximately twenty non-allowance generators were operated and maintained for other units as an item of Public Works support. Following are some problems encountered:

(a) Not enough trained personnel were available to operate and maintain the non-allowance generators. It is considered that the CBMU THREE ZERO ONE personnel should be revised to provide a higher percentage of OE's and CM's in CBMU's. Action is in progress on this.

(b) During the windy summer months, dust caused clogging of the ventilation ducts in generator housings, malfunctioning of breaker panels and fouling of the filtering systems for the engines. In many cases, it is difficult to prevent blowing dust from affecting the generators. However, the ingestion of dust can be minimized in the future if the generators are located away from heavily traveled roads.

(c) During monsoon season, moisture caused insulation to break down in the electrical systems. It is recommended that generators being sent to South East Asia be provided with an electrical system protected against fungus growth.

(d) It was not uncommon to receive diesel and MoGas fuel with water and solids in it. This condition may be explained by the fact that the fuel is handled a minimum of five times prior to arrival on board. This contamination caused numerous fuel injector pump and fuel transfer pump problems. It was necessary to construct fuel tanks separate from the tanks mounted on the generators. These tanks had to be piped so they would settle out solids and water and could be drained regularly.

## 2. POWER DISTRIBUTION SYSTEM

Following are the conditions and problems encountered concerning electrical power distribution systems at advance combat bases:

(a) The distribution systems used are low voltage installations, 110 - 220 volts. As cantonments expanded in area and the loads increased, a problem of low voltage was encountered due to line losses on the longer electrical runs.

(b) Artillery and rocket fire has caused extensive damage to overhead distribution lines. It is suggested that construction forces, when installing distribution systems, consider the installation of sectionalizing switches to permit the lines to be repaired without closing down essential areas such as reefers or hospitals.

(c) Areas where floodlights are installed that have incoming artillery or rocket fire and/or heavy ground vibration, should have lights that are resistant to vibration. At the LCU ramp at Dong Ha, the consumption of incandescent floodlight bulbs was very high, due primarily to concussion and ground vibration. Perhaps fluorescent or mercury vapor lamps would provide better vibration resistance.

(d) Experience has shown the non-technical people are not aware of the problems involved in making unauthorized or improper connections into electric lines. This is being stressed at the field level. However, education and support at higher command levels would be very profitable. It was found in many cases that critical power users, such as communications, water plants, and hospitals suffered undue because unauthorized connections overloaded a circuit or generator.

## 3. WATER SUPPLY

The present water supply for the Dong Ha Combat Base is supplied by wells and a small stream reservoir. Most wells are drilled to a depth of about one hundred and forty feet. The majority of the water from both sources required settling due to high turbidity and all water is being chlorinated to 5 PPM. Filtration is also being performed at some wells. The majority of the problems encountered are:

(a) The number of trained personnel available to Marine Corps units for well operation was limited.

(b) In-line chlorinators are difficult to obtain, thus causing slower batch chlorination of the tanks in most cases.

(c) Pumping of wells beyond practical capacity was done by the cognizant Marine Corps operating personnel. This situation was precipitated by excessive numbers of personnel requiring water from a given well source.

(d) Low voltage to well pump motors (See Comment (1), Section 2) caused the electrical motors to burn out.

#### 4. RUNWAY REPAIRS

Numerous repair projects were accomplished by this Command on runways both with AM-2 and M8A1 matting. The runways were at the following locations: Dong Ha, 3700 feet, AM-2 matting; An Hoa, 3500 feet, M8A1 matting; Khe Sanh, 3895 feet, AM-2 matting. Work was done on both routine maintenance and repair of battle damage. Routine matting failures could be attributed generally to two causes:

(a) First was the abuse of the matting by the pilots through excessively hard braking with the aircraft wheels and,

(b) secondly, numerous failures were experienced due to the failure of the runway sub-grade.

In the first case, the problem of hard braking could usually be solved by alerting the pilots to the problem and requesting that they use wheel brakes sparingly and utilize the full length of the runway for their slow down. In the second case, the only satisfactory method of correcting a poor sub-grade is to excavate to a depth of two to four feet and replace the excavated material with a more suitable dry material, cover it with a layer of rock, and then attempt to water proof the area by application of asphalt. Repair of damage due to enemy artillery is essentially the same type evolution as repairs due to sub-grade failures with the added problem of filling in deep holes in the sub-grade and the replacement of damaged sheets of matting.

#### 5. SAND BAGS

In an advanced base area, such as Dong Ha, Khe Sanh, or Cua Viet, protection against enemy artillery is essential. The most common method of providing protection for personnel and equipment, is to construct sand bag revetments around living huts, offices and bunkers. It has been found that sand bags are a very temporary type revetment construction material. The sand bags at Dong Ha were filled with locally available materials, either laterite or sand, and some of the bags rotted through as early as nine months after they were filled. It appears that 50 - 70 percent of the bags presently in place will fail within 12 to 15 months and that none of the bags will last beyond 18 months. In the case of SEA huts, the cost of sand bags and the labor involved in filling and placing the sand bags, far exceeds the material cost and labor required to construct the hut itself. If a facility is to be used for 18 months or more, it is suggested that some alternate method of revetment construction be considered, such as double wood retaining walls filled with dirt or sand.



## 6. PERIOD OF DEPLOYMENT TO RVN

CBMU THREE ZERO ONE, unlike an NMCB, is permanently homeported in the Republic of Vietnam. The men assigned rotate as individuals into RVN and consequently spend 12 months in-country. It is considered probable that CBMU THREE ZERO ONE has spent a longer continual period at Forward Combat Bases in RVN than any other Seabee unit. This Command has stood up extremely well under extremely arduous circumstances. In spite of numerous enemy artillery and rocket attacks, overall, the men of CBMU THREE ZERO ONE have maintained a positive spirit. It has been learned that judicious rotation of personnel among the various CBMU THREE ZERO ONE deployment sites has been a contributing factor toward the existing high Command morale. It would appear that a change of scenery is welcomed by most men even though the environment in all areas is essentially the same.