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AUTHORITY

AGO, d/a ltr, 29 Apr 1980

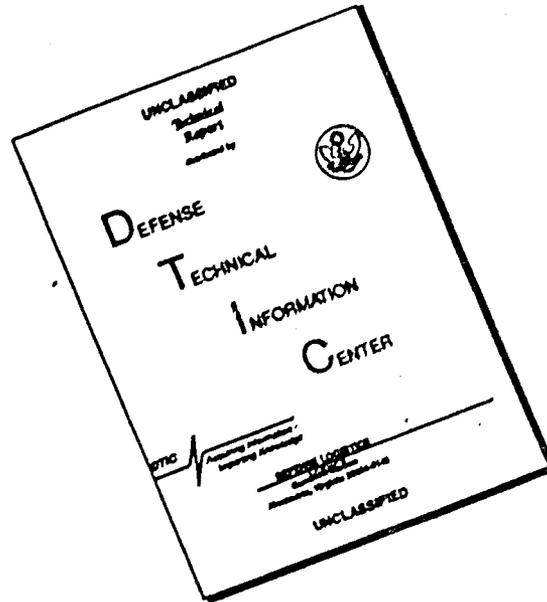
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DEPARTMENT OF THE ARMY  
OFFICE OF THE ADJUTANT GENERAL  
WASHINGTON, D.C. 20310

IN REPLY REFER TO  
AGAM-P (M) (27 Dec 67) FOR OT RD 670580 4 January 1968

SUBJECT: Operational Report - Lessons Learned, Headquarters, 92d  
Engineer Battalion (Const), Period Ending 31 July 1967

TO: SEE DISTRIBUTION

AD825398

1. Subject report is forwarded for review and evaluation by USACDC in accordance with paragraph 6f, AR 1-19 and by USCONARC in accordance with paragraph 6c and d, AR 1-19. Evaluations and corrective actions should be reported to ACSFOR OT within 90 days of receipt of covering letter.

2. Information contained in this report is provided to insure appropriate benefits in the future from Lessons Learned during current operations, and may be adapted for use in developing training material.

BY ORDER OF THE SECRETARY OF THE ARMY:

*Kenneth G. Wickham*

KENNETH G. WICKHAM  
Major General, USA  
The Adjutant General

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92d Engineer Battalion (Construction)

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DEPARTMENT OF THE ARMY  
HEADQUARTERS, 92D ENGINEER BATTALION (CONSTRUCTION)  
APO San Francisco 96491

EGBD-0

13 August 1967

SUBJECT: Operational Report - Lessons Learned (RCS CSFOR-65) for  
Quarterly Period Ending 31 July 1967.

THRU: Commanding Officer  
159th Engineer Group (Construction)  
ATTN: EGB-3  
APO 96491

Commanding General  
United States Army Engineer Command Vietnam (Provisional)  
ATTN: AVCC-P&O  
APO 96491

Commanding General  
United States Army, Vietnam  
ATTN: AVHGC-DH  
APO 96375

Commander-in-Chief  
United States Army, Pacific  
ATTN: GPOP-OT  
APO 96558

TO: Assistant Chief of Staff for Force Development  
Department of the Army (ACSFOR DA)  
Washington, D.C. 20310

Section 1, Significant Organization or Unit Activities:

1. Command:

a. This report covers the following headquarters and units  
with arrival and operational dates in the theater as indicated:

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*Atttn: FOR-OT-RD Wash, D.C. 20310*

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13 August 1967

SUBJECT: Operational Report - Lessons Learned (RCS CSFOR-65) for  
Quarterly Period Ending 31 July 1967.

| <u>UNIT</u>                     | <u>ARRIVAL</u> | <u>OPERATIONAL</u> |
|---------------------------------|----------------|--------------------|
| Company D, 92d Engr Bn (Const)  | 21 Feb 67      | 25 Feb 67          |
| 92d Engr Bn (Const) (less Co D) | 23 May 67      | 30 May 67          |

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b. This report also includes the After Action Report for the deployment of the 92d Engineer Battalion (Construction), less Company D, from Fort Bragg, North Carolina, to the Republic of Vietnam, during the period 17 May 1966 through 23 May 1967. The After Action Report is attached as Appendix 1 to this report and the Lessons Learned for the alert/deployment phase are also included in Appendix 1.

c. Mission: The mission of the 92d Engineer Battalion (Construction) is to construct and rehabilitate roads, airfields, pipeline systems, structures, and utilities.

d. Assignment: The 92d Engineer Battalion (Construction) is assigned to the 159th Engineer Group (Construction), located at Long Binh, Republic of Vietnam, and is a subordinate element of U.S. Army Engineer Command Vietnam (Provisional). All elements of the battalion are located at Long Binh.

e. Movements, Attachments, and Detachments:

(1) The 92d Engineer Battalion (Construction), less Company D, which was already in theater, departed from Fort Bragg, North Carolina on 1 May 1967 and was assigned to 159th Engineer Group upon departure from home station.

(2) Company D, 92d Engineer Battalion (Construction) was reassigned to the battalion on 5 June 1967.

f. Visitors and Awards:

(1) Visitors: The following visitors were given an official briefing and tour of 92d Engineer Battalion (Construction) projects during the reporting period:

24 May 67: BG C. H. Duke, Acting CG, USAECV (F).

4 Jun 67: MG R. R. Floger, CG, USAECV (F).

29 Jun 67: COL R. E. McConnell and Staff, 159th Engr Gp

25 Jul 67: COL R. H. Groves, CO, 159th Engr Gp

23 Jul 67: BG C. H. Chapman, CG, 20th Engr Bde.

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13 August 1967

SUBJECT: Operational Report - Lessons Learned (RCS CSFOR-65) for  
Quarterly Period Ending 31 July 1967.

(2) Awards: Two Army Commendation Medals were awarded to members of the battalion during the reporting period.

## 2. Personnel, Administration, Morale, and Discipline:

a. Personnel: The battalion is organized under TO&E 5-115E. The consolidated strength figures for the reporting period are as follows:

(1) 31 May 1967:

|             | <u>OFF</u> | <u>WO</u> | <u>EN</u> | <u>TOTAL</u> |
|-------------|------------|-----------|-----------|--------------|
| Authorized: | 31         | 7         | 867       | 905          |
| Assigned:   | 30         | 7         | 879       | 916          |

(2) 30 June 1967:

|             |    |   |     |     |
|-------------|----|---|-----|-----|
| Authorized: | 31 | 7 | 867 | 905 |
| Assigned:   | 28 | 7 | 887 | 922 |

(3) 31 July 1967:

|             |    |   |     |     |
|-------------|----|---|-----|-----|
| Authorized: | 31 | 7 | 867 | 905 |
| Assigned:   | 25 | 7 | 897 | 929 |

(4) The over strength of enlisted men presently assigned to the battalion will be more than absorbed by a large rotational period in the next three months, particularly September and October.

b. Administration: The Battalion prepares 26 recurring reports for submission to higher headquarters: 1 quarterly, 17 monthly, 2 weekly, and 6 daily. Throughout the reporting period a large number of "one-time" administrative reports have been prepared.

## c. Morale:

(1) Morale within the Battalion is high. Although the unit arrived in country in May and worked long hours, the pride of personnel in their work and in their accomplishments keep the morale high.

(2) The R&R program was not utilized as much during this period as it will be in the future, due to the recent arrival of the battalion in country. 43 men, mostly from Company D, took the R&R program during the reporting period.

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SUBJECT: Operational Report - Lessons learned (RCS CSFOR-65) for  
Quarterly Period Ending 31 July 1967.

(3) Recreational facilities within the Battalion Area have steadily grown since arrival in country and with the acquisition of additional athletic and recreational equipment, the Battalion has been able to provide a variety of recreational opportunities for the men. Each company within the Battalion has a well-stocked library from which personnel may obtain reading material.

d. Discipline: Disciplinary problems within the Battalion have been minimal. During the three month reporting period, one man has been tried by General Court Martial, there have been seven Special Courts Martial, and no Summary Courts Martial.

### 3. Intelligence and Counterintelligence:

a. Intelligence: The combat intelligence functions of the Battalion have been negligible due to the primary emphasis of construction on Long Binh Post, a relatively secure area. Reconnaissance activities have been limited to initial reconnaissance of work sites and surveys for construction material, notably sand and laterite. Intelligence information on the enemy is obtained on a daily basis from 159th Engineer Group and Long Binh Post Headquarters.

b. Counterintelligence: There have been no active counter-intelligence assignments for the 92d Engineer Battalion other than routine reporting significant or unusual activities.

### 4. Operations and Training:

a. Combat Support Operations: During the reporting period, this Battalion has participated in no combat support operations.

#### b. Construction Operations:

(1) General: During the period, the primary construction effort by the 92d Engineer Battalion has been construction of facilities on Long Binh Post. This has consisted of construction of administrative facilities, motor pools, and assistance with "self-help" troop billet construction for tenant units on Long Binh Post. The Battalion supported Project MOOSE, which was to move Headquarters, U. S. Army Vietnam (USARV), from Saigon to Long Binh, by construction of temporary water purification facilities, by construction of a road network connecting to USARV Headquarters, and by construction of vehicle motor parks.

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13 August 1967

SUBJECT: Operational Report - Lessons Learned (RCS CSFOR-65) for  
Quarterly Period Ending 31 July 1967.

(2) Weather: The weather during the period was characterized by heavy rain as the monsoon season commenced in May and became very heavy during June and July. This weather, with daily heavy showers, made all earthmoving and concrete placement extremely difficult. Work continued by anticipating the showers and insuring all work was adequately sealed or covered, and drained. During the month of July, approximately 40 percent of all available earthmoving shifts were lost due to weather. Vertical construction was less affected by the weather but exterior work was curtailed during the storms.

## (3) Projects and Related Activities:

### (a) Projects Completed this Period (All at Long Binh):

1 Construction of a 265,000 square foot motor pool for the 36th Signal Battalion. The project consisted of placement of approximately 20,000 cubic yards of laterite topped with a penepriime surface. The project was started on 28 May 1967 and completed on 17 June 1967, with the expenditure of 5,121 manhours of effort.

2 Construction of a temporary water treatment plant for Headquarters, USARV. The project consisted of construction of a concrete pad, framed shed, and installation of two 3,000 gallon per hour skid mounted water purification units and two 3,000 gallon water storage tanks. The project was started on 28 May 1967 and completed on 22 June 1967, with the expenditure of 1,061 manhours of effort.

3 Construction of a 20 foot by 60 foot tropical frame maintenance building for the 266th Supply and Service Battalion. This project was started on 24 June 1967 and was completed on 4 July 1967.

4 Construction of a 30 foot by 76 foot tropical frame maintenance building for the 68th Medical Group. This project was started on 28 June 1967 and completed on 26 July 1967 with the expenditure of 6140 manhours of effort.

(5) Construction of two 500 man messhalls for the 1st Signal Brigade. This project consisted of two 57 foot by 140 foot tropical frame buildings to be utilized as messhalls for the USARV Signal School and for the Stratcom Facility. The project was started on 4 June 1967 and was completed on 24 July 1967, with the expenditure of 15,038 manhours of effort.

(b) Projects Under Construction (at Long Binh unless otherwise noted):

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13 August 1967

SUBJECT: Operational Report - Lessons Learned (RCS CSFOR-65) for  
Quarterly Period Ending 31 July 1967.

1 Construction of a complex of 37 motor parks for vehicles of Headquarters, USAFV, and supporting elements. The project was started on 20 June 1967. This project was greatly hindered by severe rains during the reporting period.

2 Construction of approximately 1.5 miles of roadway designated as Industrial Drive and Patton Lane, on Long Binh Post. The project started on 30 May 1967 and consists of upgrading two existing roads to a standard 22 foot travelled way with 5 foot shoulders on each side. Also included were 12 corrugated metal pipe drainage structures.

3 Construction of two 500 man messhalls for USAFV Special Troops. Each messhall is 57 foot by 140 foot tropical frame building. Work commenced on 25 July 1967.

4 Earthwork for construction of the Long Binh FOL Storage Farm. This project consists of construction of a road network, earth safety berms for 11 storage tanks, and necessary vertical construction for the distribution system. Erection of the tanks and installation of the distribution system is being performed by the 643d Engineer Company (Pipeline).

5 Placement of concrete slabs for 16 each 20 foot by 48 foot pre-engineered steel administration buildings and a 50 foot by 140 foot concrete parking apron, to provide operations facilities for the 1st Signal Brigade Signal School. Erection of the buildings was performed by using unit.

6 Minimum Essential Requirements (MER) Construction, consisting primarily of placement of laterite pads for incoming units of the 40th Ordnance Company, the 36th Signal Battalion, and the 266th Supply and Service Battalion.

7 During the entire period, the Battalion has been conducting a series of field evaluation tests of UCAR - 131, an experimental dust palliative produced by Union Carbide. The material, a water emulsion poly-vinyl acetate, was applied utilizing an asphalt distributor modified to allow external lubrication of the asphalt pump.

8 On 17 July 1967, the Battalion commenced evaluation testing of 21 water wells in the Long Binh Area to determine the production rate, drawdown characteristics and quality of water produced. Tests had been completed on two wells during the period and testing had commenced on a third well.

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Quarterly Period Ending 31 July 1967.

(c) Engineering: The Battalion maintains a design and quality control capability within the Operations Section and designed all horizontal construction projects assigned to the battalion during this period. Most vertical construction was based on standard designs by higher headquarters but additional engineering is generally required to fit elements of the design to the terrain. In addition, a seven man survey section provides both preliminary and construction surveys on all projects and a three man soils survey section maintain quality control on all construction materials and earthwork.

## 5. Logistics.

### a. Supply.

(1) The Battalion encountered considerable difficulty in receiving notification of the receipt of equipment on FOM requisition. The Battalion received one major piece of equipment from the holding depot at Long Binh, had two sets of non-mechanical equipment delivered to the Battalion at Long Binh, and picked up five boxes of a ten box non-mechanical set at the Saigon Post. The Battalion received no notification of the arrival of any of these items and in two cases, it was accidental that the pieces of equipment were discovered. The source of receipt of all remaining items on FOM requisition is extremely vague.

(2) Upon arrival of this unit in country in May, 1967, considerable difficulty was encountered in locating the various sources of supply. As each requirement developed, it became necessary to locate the source for each item. This proved to be both time consuming and confusing. Requisitioning procedures vary with each source and much time and effort on the part of the Supply Section personnel was wasted in pursuing unproductive leads.

(3) The principal shortages of construction materials are primarily items of electrical supplies. Most lighting fixtures, electrical outlets, switches, and circuit breakers of 30 ampere capacity and larger are in short supply. The demand for these materials has been great with the construction of messhalls, administrative buildings and maintenance buildings for tenant units of Long Binh Post.

(4) Materials handling equipment is in short supply, due to the requirement to operate a Battalion Class IV construction materials yard. The Battalion must rely on use of TO&M 20 ton truck-mounted cranes to handle all bulky construction materials and has been unsuccessful in obtaining rough terrain forklifts to relieve the requirements for the cranes, which also are required on most vertical construction projects.

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Quarterly Period Ending 31 July 1967.

## b. Maintenance.

(1) A command motor stable is conducted during the first hour of each construction shift, to insure that all first echelon maintenance and operator services are accomplished. Supervisors of all levels are present during the motor stable periods to supervise and insure that correct and timely maintenance is completed. This has been effective in maintaining low deadline rates and high productivity from all equipment.

(2) Close liaison was established between Battalion maintenance sections and support maintenance activities which has resulted in timely and efficient support of all equipment evacuated for repair by higher maintenance echelons.

(3) During this period, considerable difficulty was experienced with the Joy Model RPV 250, 250 cubic feet per minute, trailer mounted air compressors. Foreign material was entering the oil cooling system through the blower vanes, which in turn plugged valves and filters. A Modification Work Order to correct this problem has been published but the unit was unable to obtain the necessary conversion kits prior to departure from CONUS. As a result, a 70 percent deadline rate was experienced with the piece of equipment during the first month of construction operations in country. The MWO kits are now being received and improved start-stop procedures by operators has helped to alleviate the problem.

6. Force Development: Not Applicable.

7. Command Management: Not Applicable.

8. Inspector General: An Acting Inspector General (AIG) has been appointed at Battalion level for the purpose of receiving and processing complaints. During the period, no complaints were received. No units of the Battalion received their Annual General Inspection during the period.

9. Information: Information activities are primarily oriented on the Dirt Mover, the battalion weekly newspaper, and the Laterite Lantern, published by 159th Engineer Group. Hometown news releases submitted along with feature stories of construction activities were also emphasized. Daily information items are solicited from each company and at least one item daily is forwarded to 159th Engineer Group. The Battalion Photographer is active in covering construction projects, personnel activities such as promotions and assumption of new assignments, and coverage of visitors to the Battalion.

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Quarterly Period Ending 31 July 1967.

10. Civic Affairs. The Battalion participated in two civic action projects during the reporting period, as follows:

a. Assistance to Cao Thai Refugee Village (Population 1,500).

(1) Medical assistance was provided to the village once each week by the Battalion Surgeon and the Medical Section. This consisted of a "sick call" during which 50 to 75 patients per week were treated for various medical disorders. The Medical Section further gave instruction on personal hygiene and, in conjunction with the Chaplain, distributed soap contributed by members of the Battalion.

(2) Technical assistance and advice was provided to members of the village to assist in construction of a school, the drilling of 17 shallow water wells, and the installation of expedient culverts. All labor was provided by members of the village.

(3) Scrap material in the form of scrap lumber and shell casings were contributed to the village.

b. Assistance to the Nu-Tu-Dominich Dominican Sisters Convent, Honai:

(1) Some minor earthwork was contributed to prepare the site for a new chapel and a new classroom. Some labor was provided by members of the Battalion on a voluntary off-duty basis to repair rotten supporting columns in a dormitory occupied by 200 nuns and novices. All materials for this project were provided by the convent.

(2) The Battalion Chaplain's Assistant teaches English classes at the convent for two hours per week.

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SUBJECT: Operational Report - Lessons Learned (RCS CSFOR-65) for  
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Section 2, Part I, Observations (Lessons Learned)

NOTE: All observations (Lessons Learned), pertaining to preparation of the unit for deployment and deployment of the unit from the Continental United States to Vietnam, are contained in Appendix 1, After Action Report, to this report.

1. Personnel: Five deployment observations are contained in Section VI of Appendix 1 to this report.

2. Operations: Two deployment observations are contained in Section VI of Appendix 1 to this report.

a. ITEM: Application of UCAR 131 Dust Fallative with an Asphalt Distributor.

DISCUSSION: A military standard asphalt distributor was utilized to apply UCAR 131, an experimental dust pallative. UCAR 131 is a water emulsion with a polyvinyl acetate base which commences to cure within 30 minutes after contact with the air. This action caused the valves of the distributor, the spray nozzles, and the intake screens to become clogged rapidly, thereby rendering the distributor inoperative until all orifices were cleaned with strong solvents.

OBSERVATION: The military standard asphalt distributor is not a satisfactory item of equipment for applying UCAR 131.

b. ITEM: Modification of the Asphalt Pump of a Military Standard Asphalt Distributor for Application of UCAR 131.

DISCUSSION: In order to apply UCAR 131, an experimental water emulsion dust pallative, it was necessary to modify the asphalt pump of a military standard asphalt distributor by adding external grease fittings for lubrication of the pump. In normal operation, the asphalt pump is lubricated by the asphalt flowing through it, but in the case of a water emulsion, the pump receives no such lubrication.

OBSERVATION: The addition of external grease fittings to the asphalt pump allow the pump to dispense non-lubricating liquids without damage to the pump.

3. Training and Organization: None.

4. Intelligence: None.

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SUBJECT: Operational Report - Lessons Learned (RCS CSFOR-65) for  
Quarterly Period Ending 31 July 1967.

5. Logistics: Six deployment observations are contained in  
Section VI of Appendix 1 to this report.

a. ITEM: Receipt of Equipment on FOM Requisition.

DISCUSSION: All equipment shortages for this unit were placed on FOM requisition upon departure of the unit from CONUS. Several items of equipment on these requisitions have arrived in country, marked with this unit's project code, but the unit has never been notified of the arrival of any of the equipment. That which has been received has been the result of periodic checks of all supply depots by Battalion personnel.

OBSERVATION: A system should be established to notify a unit when an item arrives in theater, thereby eliminating the necessity for all units to check all depots personally.

b. ITEM: Location of Supply Issue and Turn-In Points.

DISCUSSION: A newly arrived unit in Vietnam encounters a bewildering variety of depots and procedures for issue and turn-in of supplies and equipment. Generally, each supply requirement for a new unit involves dealing with a separate depot which is usually unmarked and which requires a different variety of documents and number of copies than any other depot. The result is a large amount of lost time and unnecessary travel to solve each problem as it develops.

OBSERVATION: A central issue/turn-in point or at least a list of depots, instructions on their location, and documentation required, would simplify the supply problems of a newly arrived unit in Vietnam.

Section 2, Part II, Recommendations: None.

1 Appendix  
After Action Report for  
Unit Deployment

  
HARRY W. LOMBARD  
LTC, CE  
Commanding

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15  
GB-3 (13 Aug 67) 1st Ind  
SUBJECT: Operational Report - Lessons Learned (RMS CSFOR-65) for  
Quarterly Period Ending 31 July 1967

DA, HQ, 159th Engineer Group (Const), APO 96491 22 August 1967

THRU: Commanding General, 20th Engineer Brigade, APO 96491

TO: Commanding General, United States Army Engineer Command Vietnam (Prov),  
ATTN: AVCC-P&G, APO 96491  
Assistant Chief of Staff for Force Development, Department of the Army  
(ACSFOR-D.), Washington, D.C. 20310

1. The subject report, submitted by the 92nd Engineer Battalion (Const) has been reviewed by this headquarters and is considered comprehensive and of value for documentation and review of the reporting units activities and experiences.

2. This headquarters concurs with the submitted report, with the following comments:

a. Section 2, Part I, Item: Location of Supply Issue and Turn-in Points: The need for guidance to new units in supply procedures and supply installations is very valid. Considerable difficulty and delay would be avoided if such information was available.

b. After Action Report for Unit Deployment: This detailed report of the battalions preparations for and movement to Vietnam is well prepared and contains many useful observations. The value of the liaison visit prior to the units arrival in Long Binh was also apparent at the Group level due to the relative ease by which this unit commenced its operations after arrival.

FOR THE COMMANDER:

  
JOHN L. PEET  
1LT, CE  
Asst Adjutant

Copy furnished:  
CO, 92nd Engr Bn

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AVBI-OPN (13 Aug 67) 2nd Ind  
SUBJECT: Operational Report - Lessons Learned (RCS CSFOR-65) for Quarterly  
Period Ending 31 July 1967

DA, Headquarters, 20th Engineer Brigade, APO 96491, 1 September 1967

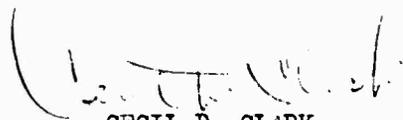
TO: Commanding General, USAECV(P), Attn: AVCC-P&O, APO 96491

1. The subject report, submitted by the 92nd Engineer Battalion, 159th Engineer Group, has been reviewed by this headquarters, and is considered to be a comprehensive and accurate documentation of the units activities during the reporting period.

2. This headquarters concurs with the submitted report as modified by the 1st indorsement.

FOR THE COMMANDER:

Info copy:  
CO, 159th  
Engr Gp

  
CECIL D. CLARK  
Major, CE  
Adjutant

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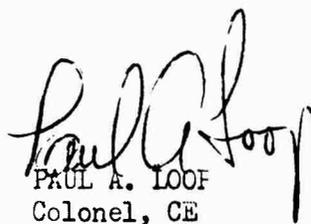
*17*  
HEADQUARTERS, UNITED STATES ARMY ENGINEER COMMAND  
VIETNAM (PROV), APO 96491

TO: Commanding General, United States Army Vietnam, ATTN: AVHCC-DH,  
APO 96375

This headquarters concurs with the 92nd Engineer Battalion's COM and previous indorsements as written, subject to the following comments:

1. Reference Section 1, paragraph 5a(4), page 7: Concur. An emergency MPOE has been submitted to USARIAC requesting authorization for rough terrain, 10,000 lb, fork lifts. Authorization was for two per construction battalion and one per combat battalion. As these assets become available, 1st Logistical Command will issue the fork lifts to units of the Engineer Command on sixty day temporary loan pending approval of the emergency MPOE.

FOR THE COMMANDER:

  
PAUL A. LOOF  
Colonel, CE  
Chief of Staff

Info Cys Furn:  
CG, 8th US Army, ATTN: Engr  
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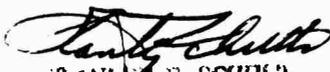
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31 July 1967 (RCS CSFOR-65) (U)

HEADQUARTERS, UNITED STATES ARMY VIETNAM, APO San Francisco 96375 2 NOV 1967

TO: Commander in Chief, United States Army, Pacific, ATTN: GPOP-OT,  
APO 96558

1. (U) This headquarters has reviewed the Operational Report-Lessons Learned for the period ending 31 July 1967 from Headquarters, 92d Engineer Battalion (Construction) (BAHA) as indorsed.
2. (U) Concur with report as indorsed. Report is considered adequate.

FOR THE COMMANDER:

  
STANLEY B. SCHULER  
Major General  
United States Army

c.c. HQ, 92d Engr Bn (Const)  
HQ, US Army Engr Comd VN (PROV)

GPOP-DT (13 Aug 67) 5th Ind  
SUBJECT: Operational Report for the Quarterly Period Ending 31 July 1967  
from HQ, 92d Engr Bn (Const) (UIC: WBAHAA) (RCS CSFOR-65)

19 HQ, US ARMY, PACIFIC, APO San Francisco 96558

30 NOV 1967

TO: Assistant Chief of Staff for Force Development, Department of the  
Army, Washington, D. C. 20310

This headquarters has evaluated subject report and forwarding  
indorsements and concurs in the report as indorsed.

FOR THE COMMANDER IN CHIEF:



HEAVRIN SNYDER  
CPT, AGC  
Asst AG

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Department of the Army  
Headquarters  
92d Engineer Battalion (Const)  
APO San Francisco, 96491

APPENDIX 1 (After Action Report) to Operational Report - Lessons Learned  
(RCS - CSFCR - 65) for Quarterly Period ending 31 July 1967

TABS

- A - Personnel Status Summary as of 20 May 1966
- B - Personnel Status Summary as of 2 June 1966
- C - Personnel Status Summary as of 19 January 1967
- D - SOP - Preparation for Overseas Movement Incl 2-8 and Hqs DA
- E - TOE Equipment Status
- F - PLL Status
- G - PLL for Grader, Road Motorized, Cat 12
- ~~H - Personnel Status Summary as of 1 May 1967~~, withdrawn, Hqs, DA
- I - ~~Family Separation Allowance~~
- J - ASL (Construction Materials)
- K - TAT

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## AFTER ACTION REPORT

### SECTION I - PURPOSE AND SCOPE

This report discusses the status of the Battalion upon its notification of designation as a D-1 unit and explains actions taken from that time forward, until arrival of the unit in the theater of operations. The scope of this report includes matters connected with requirements for personnel, training, logistics, problems encountered, lessons learned, and other preparations for overseas movement (PC).

### SECTION II - NOTIFICATION OF DESIGNATION AS A D-1 UNIT

A. The 92d Engineer Battalion (Construction) was alerted for overseas movement by message DA 756214, subject: "Activation/Warning Order (U)" dated 171242Z May 1966. When alerted, the Battalion was heavily overstrength and engaged generally in post support activities at Fort Bragg, North Carolina. At the time, D Company of this Battalion was located at Fort Rucker, Alabama, where it had been stationed (PCS) since June 1965 supporting Post Engineer activities. D Company deployed from Fort Rucker in January 1967 and rejoined the Battalion in May 1967 upon arrival of the battalion (-) in the theater. The status of the Battalion upon alert notification, in significant areas of importance, follows:

#### 1. Personnel (All data reflected excludes D Company)

a. The Battalion was organized under TO 5-115D, when alerted. Authorized strength and shortages by grade and MOS, listed on Tab 1, are associated with the Delta series TO and are compared with total assigned and total assigned deployable personnel as of mid May 1966.

b. Preliminary FOR qualification was initiated, by screening personnel records primarily to determine which personnel were qualified for deployment.

c. Overstrength in the Battalion upon alert notification was attributed to:

(1) An Advanced Individual Training (AIT) program was under way by virtue of an assigned supplemental mission of the battalion to function as a Rotational Training Base Unit for the purpose of training and providing individual filler personnel to Southeast Asia. Due to the existence of this program the battalion was tremendously overstrength, but soon leveled off as numerous AIT's were reassigned after completion of their training. These personnel also provided the majority of lower grade personnel to fill out the battalion.

(2) Another supplemental mission of the battalion to host four additional deploying units contributed to the overstrength posture, since excesses in the hosted units were absorbed by this battalion.

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2. Equipment: Since designation of the unit to a D-1 status required conversion from the Delta Series TOE to the Echo Series TOE, much of the equipment on hand was either obsolete or no longer authorized. The Echo Series TOE authorizes 287 major lines of equipment. Only portions of 108 lines were on hand, initially. 24

3. Prescribed Load List (PLL): Approximately 980 line items of PLL were on hand compared to approximately 1140 lines authorized. While the on hand quantity appeared favorable in the early stages, this quantity on hand proved to be totally invalid because of significant changes in major items of Engineer and Ordnance equipment which subsequently took place.

4. Training: At the time of receipt of D-1 designation, the battalion was in the Basic Unit Training phase of ATP 5-114. Training at the time consisted of four hours per week of the mandatory training subjects as prescribed by Headquarters, U.S. Continental Army Command. During the months of January through March 1966, the battalion had been engaged in conducting Advance Individual Training for approximately 300 AIT trainees assigned to the battalion on a "train and retain" basis. Some of these trained AIT's were reassigned as individual fillers to this theater upon completion of their training.

5. Functions:

a. Construction: At the time of receipt of alert for deployment, the battalion was engaged in one major construction project which was to construct a three mile perimeter road around Pope Air Force Base, North Carolina. In addition, several minor projects were under construction, including construction of a concrete patio for Womack Army Hospital, Fort Bragg, North Carolina; construction of sidewalks around Headquarters, 12th Support Brigade; modification of known distance rifle ranges to be used as trainfire ranges; and construction of two bayonet assault courses, these two latter projects for support of the Army Basic Training Center at Fort Bragg.

b. Post Support: The battalion provided an average of 150 men and 30 vehicles daily to support the various staff agencies and organizations under Headquarters, XVIII Airborne and Fort Bragg. This number included men on a quarterly manpower augmentation voucher and an average of 55 men on daily commitments.

B. Initial requirements upon notification, included release from existing commitments, a TOE conversion which generated personnel and equipment changes, new training requirements, and the establishment of a PCR and PCM qualification program.

1. Changed Commitments: Upon receipt of the deployment warning order, the battalion commenced to phase out all construction projects and post support commitments. This was accomplished by higher headquarters curtailing assignment of new construction work to the battalion. All

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previously assigned projects were carried to completion, with the last project being completed on 1 September 1966. The post support commitments were phased out through 31 August 1967, with these commitments being reassigned to various non-deploying units at Fort Bragg.

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2. General Order Number 222, dated 2 June 1966, Headquarters, Third United States Army (TUSA) created a reorganization with an effective date of 1 July 1966. This change deleted 67 major lines of equipment and added 83 new lines of equipment. Personnel grade structure and LOS changes were minimal.

3. Initial requirements for requisitioning equipment, PLL, and personnel were reviewed.

a. That equipment, deleted as a result of the TOE change, which was on hand at the time of alert notification was given a technical inspection and turned in, over an extended period of 4 to 6 months. Requirements under the new TOE were specifically identified and requisitioning was initiated on 1 June 1966. Total requirements were relatively high. A major contributing factor was the effect of C Company's return earlier in the year from the Dominican Republic Operation. This company departed for the Dominican Republic on 6 June 1965, remaining there until 8 February 1966, when it was returned (on paper) to Fort Bragg. All equipment in the Dominican Republic belonging to C Company was transferred to other units in that theater. Accordingly, it was necessary in February 1966 to completely reconstitute the company's equipment. Much of this equipment had not yet arrived when the battalion was alerted. Thus the initial requisitions, including numerous resubmissions, provided for 179 major lines and 49 components to these and other major lines already on hand at that time.

b. PLL on hand for excess equipment was turned in. The remainder, while it represented 86 percent fill based on a 15 day level, is misleading because it pertained only to that authorized equipment on hand. PLL for equipment not on hand could not be ordered until the make and model of the major end item was known. Nevertheless, known PLL requirements were established, outstanding requisitions were cancelled and the total requirement was requisitioned using an urgency of need designation of "A". A computation was necessary based on DA Message 775393, dated 29 July 1966, which authorized a 90 day and 15 day FLL stockage levels for engineer and all other equipment, respectively.

c. Subsequent to publication of General Order Number 222, a complete and comprehensive review of the personnel status of the battalion, less D Company, resulted in the situation reflected on TAB E.

4. The training status of the battalion was analyzed in light of deployment to Southeast Asia and a three phase training program was developed to prepare personnel for overseas movement as follows:

a. Advanced Unit Training (AUT): A modified Advanced Unit Training program was prepared, based upon ATP 5-114. This program was

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modified to concentrate upon skills required for Southeast Asia, while elements of training that had recently been presented to the battalion were deleted. The program was scheduled from 15 August 1966 through 10 October 1966 and generally was to be conducted four hours daily, five days per week. The Advanced Unit Training was culminated with an Army Training Test to be conducted on 10 through 14 October 1966.

b. Mandatory POM Training: A 16 hour block of mandatory subjects required for assignment to Southeast Asia was to be presented separately from the AUT. This block of instruction was to be presented as many times as necessary to insure all battalion personnel received the training prior to deployment.

c. Weapons Qualification: A program of weapons qualification was prepared to insure all personnel were qualified on their assigned weapon and all crew-served weapons teams were qualified on their weapons. This program provided two days preliminary instructions on individual weapons, followed by firing the trainfire qualification course. One day of preliminary instruction on each type of crew-served weapon would be followed by firing on a trainfire familiarization course. In addition, weapons familiarization was programmed for the M-79 grenade launcher and the 81mm mortar, which were not TO&E weapons of the battalion.

5. An initial POR and POM qualification check for personnel was conducted to determine the requirements for establishing a central battalion processing system.

### SECTION III - PREPARATIONS FOR OVERSEAS MOVEMENT

A. Close coordination and follow-up action with higher headquarters was the key to acquiring those personnel authorized to fill out the battalion during the preparatory stages. Problems encountered are discussed in Section VI para D of this report. As the battalion approached the initial Personnel Readiness Date (PRD) of 19 December, almost 100 percent strength was obtained. In early December 1966 higher headquarters advanced the PRD to 15 April 1967, thus creating the need for further review of the potential losses of personnel created by the delayed shipping date. A recapitulation of the battalion strength, following this review in December, is shown on T.B C. In anticipation of a great deal of personnel turbulence, procedures were developed for processing and qualifying all personnel assigned or those to be assigned, and an extremely effective program (Refer to T.B D) was implemented with the following results:

1. Continuity was provided in processing personnel records through the preparation of work sheets which greatly reduced processing time, thus assuring a high degree of accuracy by those administering the program.

2. The processing system permitted elements of the battalion to resume mission requirements with a minimum of interruption generated by POR processing.

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3. Generally, the program allowed for the determination of each individual's requirements for POR Qualification. All requirements were either completed on the spot or were immediately scheduled for future completion.

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B. Conduct of General and Specific Training:

1. Training for overseas movement was composed of modified Advanced Unit Training, based upon ATP 5-114, weapons qualification, and the 16 hours mandatory training for Southeast Asia.

a. Advanced Unit Training: A total of 108 hours of instruction was presented to the enlisted members of the battalion between 15 August and 9 October 1966.

b. Weapons Qualification:

(1) All members of the battalion were qualified with the M-16 Rifle with the exception of Company D which qualified with the M-14 Rifle. The trainfire Record Qualification Course was utilized for this qualification.

(2) A minimum of two teams per crew-served weapon were qualified on each crew-served weapon in the battalion. This included the M-60 machine gun and the 3.5 rocket launcher.

(3) All members of the battalion received hand-grenade training, including participation in a live hand-grenade throwing exercise.

(4) Selected members of the battalion fired the M-79 grenade launcher and the 81mm mortar, for familiarization.

c. 16 hours of mandatory Southeast Asia Training: All members of the battalion received 16 hours of mandatory training on Southeast Asia. Four hours of this training was integrated in the Advance Unit Training block and twelve hours were presented as a separate block. All members of the battalion also received an orientation on a mockup of a typical Vietnamese village.

2. Special Training was presented to the battalion construction supervisors on Construction scheduling, blueprint reading, elements of surveying, and elements of soil mechanics.

3. The battalion received special orientations on personal affairs, venereal disease, and emergency medical treatment.

4. Forward Observer Training: Selected Platoon Leaders and Platoon Sergeants of the battalion received two days training from XVIII Airborne Corps Artillery on adjustment of artillery fire. The training was conducted at the request of the Battalion Commander who felt we should have such a capability in case one of our work parties should come under attack. The training proved interesting and successful, and included a

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practical exercise using a sub-caliber firing device and a terrain board.

5. Power Distribution Training: 18 enlisted men received special training in construction of electrical power distribution systems from the Nuclear Power Field Office, Fort Belvoir, Virginia. The men received two weeks of both classroom and practical exercise training. All men who attended the course were assigned in TCE positions as electricians. The course provided them with additional training which they normally do not receive in their MOS training, but which could prove useful in Vietnam. 28

6. A training program for on-board-ship training was prepared and presented, in accordance with ATP 21-113. The training Program provided 36 hours of training during overseas movement.

### C. Army Training Test:

1. An Army Training Test (ATT) and Operational Readiness Test (ORT) was drafted by the Battalion Operations Section and approved by the Engineer, XVIII Airborne Corps, who administered the test. The elements of the test were as follows:

- a. Alert and movement to training area by motor convoy.
- b. Establishment of bivouac and defensive positions.
- c. Engineer operations from a base camp, to include patrolling, engineer reconnaissance, and counter-ambush actions.
- d. Defense of bivouac against guerrilla attack, both during daylight and darkness.
- e. Close-out of bivouac and movement to garrison by motor convoy.

2. The battalion was tested during the period 10 through 14 October 1966, by the Engineer, XVIII Airborne Corps. A rating of "Combat Ready" was judged upon completion of the test.

3. In addition to the elements of the ATT and ORT, classes were presented to all elements of the battalion on camouflage, field sanitation, rigging, and counter-ambush actions, utilizing the field conditions as training devices for the instruction.

4. A similar Army Training Test was administered to Company D, by the Assistant Chief of Staff, G3, U.S. Army Aviation Center, Fort Rucker, Alabama, on 1 through 3 November 1966. A rating of "Excellent" was received by Company D.

D. Equipment Build-Up: On 1 November 1966 the Battalion commenced to exert extensive follow-up action with higher headquarters to insure timely delivery of numerous shortage items of TOL equipment which were considered essential to accomplishment of its mission overseas. Many of

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the shortages, particularly heavy engineer equipment, still existed around 1 December 1966 and were still considered essential to the battalion's overall mission. Since RFI's were received indicating expected delivery dates beyond the scheduled deployment date, it did not seem possible that the battalion would deploy as scheduled. Nevertheless, the installation proceeded to earmark equipment locally for lateral transfer, with the objective of conforming to the originally scheduled deployment date. This effort proved unsuccessful because much of the needed equipment was not locally available. Much of the equipment which was available did not meet servicability standards set forth for deployment. Communications between the installation and various NICF's, to expedite delivery of equipment, were to no avail, and thus the unit's deployment date was delayed. A graphic representation of equipment build-up through the adjusted equipment readiness date (ARD) is provided on TAB E.

E. PLL Build-Up: PLL continually fluctuated as specific makes and models of equipment were received, and obsolete models were turned in. New PLL requirements, as they were made known, were computed and requisitioned expeditiously in accordance with levels of stockage established by D. Message 775395, dated 29 July 1966, for deploying units. A graphic representation of PLL build-up through the adjusted ARD is provided on TAB F.

F. Advance Coordination with U.S. Army Engineer Command, Vietnam (Prov) (USARECV) (F)).

1. An exchange of correspondence between the battalion and USARECV (F) was initiated in mid October 1966 by the Battalion Commander per advice of representatives from the Office, Chief of Engineers. The status of the battalion at that time was presented. Subsequent correspondence was received from USARECV (F) and our host battalion provided information of interest which was used in preparing the battalion for deployment to Vietnam.

2. A liaison team from this battalion visited its anticipated destination in Vietnam during the month of February 1967 to ascertain anticipated operational requirements for the battalion and to present the latest readiness status in all categories. The team's findings were incorporated into administrative, training, logistical, and maintenance requirements to the maximum extent possible in making final preparations prior to deployment of the battalion. Copies of the trip report were furnished to interested agencies including: Department of the Army, DCSCOP (Readiness Division); and Office of the Chief of Engineers, Director of Topography and Military Engineering (Military Engineering Division). Further discussion on this subject is presented in Section VI, para H, below.

G. Deferment of Deployment Date: A final Unit Readiness Inspection of the battalion, less D Company, was conducted on 1 December 1966 by a TUSA team. The unit was considered not ready to perform its TOC mission at that time due to shortage of a considerable number of essential items of equipment, the shortage of 105 lines of component parts to major end items, and numerous pieces of equipment not considered servicable due to lack of repair parts. Although the scheduled Equipment Readiness Date was

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5 December, DA Message 791723 dated 25 November 1966, from DCSCOF/OD-TO, subject: "Engineer Units ERD's", stated that the validity of ERD's was under study, and until completion of the study, the previously scheduled ERD's were for planning purposes only and no action would be taken to move equipment from home station. The team's findings complied with the substance of the foregoing reference and ultimately resulted in a new ERD of 30 March 1967.

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### H. Assistance and Guidance Furnished by Higher Headquarters.

1. In the operations and training areas, minimal guidance was provided by XVIII Airborne Corps and 12th Support Brigade. Most information was obtained from TUSA and XVIII Airborne Corps Regulations. Verbal guidance was provided during POM Inspections.

2. The Fort Bragg Transportation Office was extremely helpful in providing guidance for marking equipment, packing and crating, and preparations of shipping documents. Almost daily communications were maintained between the battalion and the Unit Movements Section of the Transportation Office on any problem areas that developed. Very satisfactory guidance was received.

3. U.S. Army Engineer Command, Vietnam (Provisional), Headquarters, 159th Engineer Group (Construction), and the 169th Engineer Battalion (Construction) provided valuable information concerning special training that was desirable for operations in Vietnam.

4. Personnel assistance was rendered by higher headquarters through continued liaison. This liaison resulted in the following:

a. Determining requirements and methods essential for satisfying such requirements.

b. Inspections to insure proper and adequate action was taken by higher headquarters and the battalion.

c. Guidance, by disseminating on a continuing basis, the "lessons learned" from other units heretofore deployed from Fort Bragg, North Carolina. Effectiveness of such guidance was enhanced through various publications, directives, and cooperation on timely action regarding a multitude of varied personnel actions.

5. Considering the magnitude of effort devoted simultaneously to equipping numerous units prior to deployment, guidance from higher headquarters was generally acceptable in the field of logistics. Logistics was a constant source of problems and represents the single cause for delayed deployment of this battalion. Further discussion of this subject will be presented in Section VI, para C, of this report.

### I. Confusion regarding authorized stockage list (ASL):

1. During the final POM Inspection of this unit, conducted by TUSA in March 1967, the subject of ASL was discussed.

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2. By way of background, the battalion maintained in each unit motor pool a 15 day PLL in accordance with the provisions of Section VI, AR 735-35, for those items of equipment on hand within the unit. In addition to these stocks, a 15 day third echelon PLL for engineer equipment on hand in the battalion was maintained in the Repair Parts Section of the Equipment and Maintenance Company for use by the Engineer Direct Support Maintenance Section of the Equipment and Maintenance Company. In August 1966, a question arose regarding the lack of a battalion level repair parts stock. Because of this the TUSA CMI Team, the XVIII Airborne Corps and Fort Bragg Command Maintenance Readiness Inspection (CMRI) Team, and a Post G4 representative were all queried on the feasibility of establishing a battalion level stock (ASL). All agencies queried felt that the establishment of a battalion-level stock would be, in effect, a pyramiding of PLL's, which was expressly forbidden by XVIII Airborne Corps and Fort Bragg Regulation 735-35. Thus, no attempt was made to constitute an ASL under the provisions of AR 711-16, para 1-2(3), 1-7j, and 5-5a, as it was not felt that the Equipment and Maintenance Company qualified as a direct support unit under this regulation, nor did it qualify as a direct support unit under the provisions of FM 5-162, para 6-20a.

3. Also in August 1966, action was initiated to implement DA Message 775393, dated 29 July 1966, which required Engineer Battalions deploying to Vietnam to establish two fifteen day PLL's to support all items other than engineer equipment and a ninety day PLL to support engineer equipment on hand. Demand, experience was to be used with appropriate T's, plus "judgment" was to be used where no demand experience existed, to "insure sufficient supply of high mortality items".

4. The Battalion Liaison Team visiting Vietnam in February was advised by representatives of 159th Engineer Group that all construction battalions in Vietnam stocked ASL.

5. During the final POI Inspection of the battalion, which was conducted by TUSA in March 1967, the Team Chief questioned why an ASL was not being maintained. He was advised that in view of the local restrictions, coupled with limited time remaining prior to deployment date, it was decided to initiate the ASL under provisions of AR 735-35 upon arrival in the theater of operations. Upon arrival in Vietnam, 159th Engineer Group assisted the battalion in conforming to local regulations and directives. Major guidance rendered in the repair parts area was that stockage should be on a thirty day level and that a battalion ASL should be established in accordance with AR 711-16. Accordingly, a complete ASL was placed on requisition within one month after arrival of the unit in the theater. It is anticipated that the two 15 day and one 90 day levels of PLL will provide a sufficient cushion until the ASL becomes a reality. Further discussion on ASL is presented in Section VI, para B, of this report.

### J. POI Inspection:

1. General: The Battalion was subjected to three installation POI Inspections, continuing CMRI's and two final POI Inspections by TUSA.

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a. The POM Inspections inquired into all functional areas of the organization to determine its effectiveness, and problems in meeting current and projected responsibilities. The status of the unit and the adequacy of support and effectiveness of the existing procedures for achieving a high state of readiness were matters of primary interest.

b. CRI's merely served as TOC equipment inspections.

c. Battalion Commander's briefings were provided to all POM inspection teams covering subjects, information, and functions outlined in para 2 below. In addition, a brochure was prepared for each member of the team, for each briefing, covering these subjects.

2. The scope of the inspections, and information provided for the brochure type briefings, included the following:

a. General:

(1) Brief history of organization including source of activation, reorganization, General Order and designated TOC.

(2) TOC Mission

(3) Brief summary of directives issued by higher headquarters pertaining to current and projected missions.

(4) Submission dates of Unit Readiness Reports (RCS CSGPC-266 (R1)) with reports available.

(5) Date and rating of last Annual General Inspection, with reports available.

b. Personnel and Administration:

(1) Personnel authorized, assigned-deployable, assigned not joined, and short-deployable.

(2) Critical personnel shortages by quantity, grade, MOS, job title and current action-headquarters responsible for filling the personnel shortages.

(3) Status of DA Forms 613 (Check List for Preparation of Replacements for Overseas Movement) which included an inventory of PCR qualification and processing, completed and pending completion. The unit's schedules and planned dates for completing individual PCR processing, including special training for RVN, were available, as were DA Forms 613 and personnel records.

c. Training:

(1) Report of latest Army Training Test and/or comparable training test.

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(2) Brief summary of participation in major exercises within the last year.

(3) Unit's schedule for training aboard transport.

(4) Current contingency plan requirements.

### d. Logistics:

(1) POM Equipment Status Record (DA Form 413), with an extracted list of items and quantity on requisition (due in), but not received.

(2) List of critical equipment shortages by quantity, nomenclature and supply status (i.e. local purchase, lateral transfer, RDD from supply system, or POM requisition, or any other pertinent explanation).

(3) Status of Unit Loads.

(4) Status of PLL by technical service, lines authorized, lines on hand, percent on hand, and supply status of shortages.

(5) Status of supply or conversion of current stocks of OG underwear, handkerchiefs and towels for individuals of the unit.

(6) Status of administrative, supply and technical publications required for the unit.

### e. Maintenance:

(1) Summary of latest CMRI Report, with report available.

(2) Status of corrective action on equipment deficiencies/shortcomings found by the Installation CMRI Team. The results of an inspection in October 1966 indicated 25 pieces of equipment considered non-deployable due to less than ten percent rebuild criteria remaining or excess mileage. Replacement items were laterally transferred from installation resources.

f. Security Procedures: Status of compliance with/or planned security measures required by Chapter 4, AR 220-10.

g. Unit Funds: Status of disposition of Unit Funds (cash assets, property and trophies).

### K. Conflict Concerning Equipment Required "To Accompany Troops" (T.T)

1. AR 220-10 specifies the items of equipment required "To Accompany Troops (T.T)". This is distinguished as Yellow Disc T.T and Red Circle T.T.

2. A conflict arose when the battalion was allocated insufficient cargo space on the troop ship to carry all equipment specified by AR 220-10. This unit estimated that approximately 500 measurement tons of cargo were required to comply with AR 220-10, while only approximately 200 measurement tons of space were allotted on the ship.

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3. Based upon guidance from the Fort Bragg Transportation Office, Red Circle TAT was cut drastically, and over half of it was shipped with the regular equipment shipment. Based upon the shipping schedule, it was anticipated that the regular shipment would arrive at destination before the main body of troops, and that no hardships would result from the split R.D TAT shipment. This, in fact, did happen. 24

4. The final R.D TAT shipment contained only half the mess equipment, half the troop tentage, and none of the MABTCC cots, authorized by AR 220-10. Actually, the regular equipment arrived four days ahead of the main body, while the equipment that was shipped R.D TAT was not available until four days after arrival of the main body.

5. Further discussion on the subject of TAT is provided in Section VI, para F, of this report.

### L. Packing, Crating, Marking, and Documentation of Shipment.

1. Staff Supervision: The Battalion Operations Section was assigned primary staff responsibility for preparation of all equipment for shipment and for supervision of the shipment. This is normally a function of the S-4 section, but was assigned to the S-3 in order to free the S-4 to pursue the important supply actions required in preparation for overseas movement. The actions were assigned to companies on a task assignment basis to support the entire battalion as follows:

a. Preparation of Rolling Stock: Company A (Equipment and Maintenance) was assigned the mission to prepare all battalion wheeled and tracked equipment for shipment, including inspection of the equipment and correction of deficiencies noted; servicing of the equipment and the necessary crating or taping of external devices, such as mirrors, headlights, windshields, and troop seats. This also included packing of the Cn Equipment Material (tools), which were packed in small crates and banded to the equipment.

b. Marking and Stencilling: Company B (Construction) was assigned the task of marking and stencilling all equipment and containers to be shipped. This included weighing the equipment and determining the cubic volume of the equipment. These data, plus the unit identification code, project code, and the transportation control number, were stencilled on each piece shipped.

c. Packing and Crating: Company C (Construction) was assigned the mission of packing and crating all equipment, less the rolling stock. The Post Engineer, Fort Bragg, provided all material for packing and crating, and pre-cut and assembled most of the crates. Company C packed the equipment in cardboard boxes, and/or wooden crates. A representative from each unit or section was present as the equipment was packed, to inventory the material for preparation of packing lists.

2. Packing Lists: All packing lists were prepared by the unit or staff section to whom the equipment belonged, based upon the inventory taken during packing. The packing lists were checked by the S-3 section prior to forwarding the list to the transportation agency.

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3. Transportation Control and Movement Documents: The Battalion Engineer Equipment Maintenance Officer (EMEO) prepared all Transportation Control and Movement Documents (TCMD's), DD Form 1384-2. This data were coordinated with Company B for the assignment of Transportation Control Numbers and determination of the weight and cube of each piece. Most constant liaison was maintained between the EMEO and the Fort Bragg Transportation Office, to insure correctness of format and to resolve any questions that arose.

4. Special Marking of CONEX Containers: All CONEX containers were marked with four large orange stripes on the front and top of each container, in addition to the normal markings, to assist in rapid identification of the CONEXES upon arrival at the overseas port of debarkation.

5. Statistics: Following is a recapitulation of the number of items shipped:

a. Total Number of Pieces Shipped Category Z: 707 (Including CONEX S listed in para d below).

b. Total Number of Pieces Shipped R D T T: 93 (Including CONEXLS listed in para e below).

c. Total Pieces of Rolling Stock Shipped: 391

d. Total Number of CONEX Containers Shipped, Category "7": 138 (136 large, 2 small).

e. Total Number of CONEX Containers Shipped R D T T: 14 (10 large, and 4 small).

### SECTION IV - CONDUCT OF OVERSEAS MOVEMENT

#### A. Rail Loading of Equipment.

1. The heavy equipment of the battalion, all CONEX containers, and all other bulky crates of equipment were shipped by rail from Fort Bragg, North Carolina, to the Charleston Outport, South Carolina. This shipment included:

a. 10 - Tracked Bulldozers

b. 7 - Scoop Loaders

c. 8 - 290M Wheeled Tractors with 18 cubic yard Scrapers

d. 6 - 290M Wheeled Tractors

e. 6 - Motor Graders

f. 2 - Wheeled Intranching Machines

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- g. 1 - 10 ton Crawler Crane-Shovel
- h. 4 - 20 ton Truck-Mounted Cranes
- i. 1 - 5 ton Truck-Mounted Machine Shop
- j. 1 - Semi-Trailer Machine Shop
- k. 3 - Semi-Trailer Mounted Parts Vans
- l. 1 - Stake and Platform Cargo Semi-Trailer
- m. 2 - Rock Crusher Units
- n. 2 - Conveyors
- o. 4 - 16S Concrete Mixers
- p. 1 - 5 to 8 ton Tandem Steel-Wheeled Roller
- q. 2 - 10 ton 3 Wheeled Steel Rollers
- r. 2 - 50 ton Pneumatic Rollers
- s. 2 - 13 Wheel Pneumatic Rollers
- t. 4 - Dual Drum Sheepsfoot Rollers
- u. 4 - Aggregate Spreaders
- v. 1 - Asphalt Melter
- w. 1 - Towed Rotary Sweeper
- x. 2 - Wagon Drills
- y. 5 - 10 ton Crane-Attachment Trailers
- z. 2 - 8 ton Lowbed Trailers with 100KW Generators Mounted.
- aa. 1 - Aggregate Bin
- bb. 138 COMEX Containers
- cc. Miscellaneous Crates - totalling 2½ gondola car loads

2. The rail-loading mission was assigned to Company C for all loading, blocking, and tying down of equipment. Additional operators from Company A were provided to handle specialized equipment from Company A, such as the rock crushers, intrenching machines, parts vans, and other sophisticated equipment. Assistance, technical advice, and all blocking and tiedown materials were provided by the Fort Bragg Post Engineer.

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3. Rail-loading commenced at 0700 hours, 27 March 1967 at the Honeycutt Marshalling Yard, Fort Bragg, North Carolina. Loading progressed on an eighteen (18) hour shift until 1200 hours, 29 March 1967, when all equipment was loaded. An average of three officers, six non-commissioned officers, and fifty-seven enlisted men constituted the work force. The Post Engineer had a force of eight men and the Transportation Officer provided two NCO yardmasters.

4. A total of fifty flat cars, three "piggyback" cars, and nineteen gondola cars were required for the shipment. The flat cars were utilized for all rolling stock and several heavy skid-mounted pieces of equipment. The "piggyback" cars were utilized to transport the five semi-trailers and were ordered specifically for that purpose. The nineteen gondola cars were utilized to transport the CONEX containers and the crated equipment (16½ gondola cars were required for the CONEX containers and the remaining 2½ gondola cars contained the crated equipment).

5. The equipment was moved directly to the Charleston Army Terminal by a special train over the Cape Fear Railway, the Aberdeen and Rockfish Railroad, and Seaboard Rail Line. Upon arrival at the port, the equipment was unloaded utilizing a gantry-crane at the Charleston State Docks, and the unloading ramps of the Charleston Army Terminal. All equipment was marshalled in two vehicle parks at the Charleston State Docks, preparatory to outloading on the cargo ships. All equipment was unloaded by 3 April 1967. A work force of two Warrant Officers and sixteen NCO's and enlisted men unloaded the equipment, assisted by stevedores provided by the port. No problems were encountered with the rail movement, and virtually no damage was sustained by the equipment.

### B. Equipment Movement to Port by Convoy.

1. The battalion rolling stock, less the heavy equipment shipped by rail, was convoyed from Fort Bragg, North Carolina, to Charleston Army Terminal, South Carolina, on 29 and 30 March 1967.

2. The convoy was organized in two serials. The first serial consisting of 80 vehicles moved to port on 29 March 1967 and the second 79 vehicles moved to port on 30 March 1967. Each serial was segregated into four march units, with a maximum of 20 vehicles per march unit. The march units departed Fort Bragg on 30 minute intervals, which allowed approximately 23 minutes between the last vehicle of the preceding march unit and the first vehicle of the succeeding march unit. Each march unit was commanded by an officer, either a lieutenant or Warrant Officer. The first serial was commanded by the Commanding Officer, Company A, and the second serial was commanded by the Commanding Officer, Company B.

3. Each march unit required approximately eight hours to travel from Fort Bragg to Charleston, a distance of approximately 210 miles. Three rest stops were provided to allow the drivers to rest, and to allow for inspection of the vehicles. Box lunches were provided at the second rest stop and all 3/4 ton vehicles were refueled at this stop. All other vehicles made the trip without refueling. Upon arrival at the Charleston

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outport, the vehicles were parked in a vehicle storage area at the Charleston State Docks. Chartered commercial busses were provided to return the drivers to Fort Bragg. A total of four busses were required each day. The noon meal was provided by the bus company as part of their contract.

4. The first march unit of each serial departed Fort Bragg at 0400 hours each morning, with the last march unit departing at 0530 hours. All march units closed in Charleston by 1330 hours and the drivers had returned to Fort Bragg by 1700 hours, daily. No drivers were required to make the trip both days.

5. No serious incidents resulted from the convoy. One traffic accident caused damage to a civilian vehicle, with virtually no damage sustained by the military vehicle. No one was injured in the accident. Two vehicles were disabled during the move and were towed to Charleston. Four 5 ton truck-tractors, without trailers, and two 5 ton wreckers were included in the convoy to tow any disabled vehicles. In addition, mechanics in 3/4 ton contact maintenance trucks were included in the last march unit of each serial to repair vehicles as required.

### C. Equipment Movement by Sea

1. All battalion equipment, less Red T.T, Yellow T.T, and Advance Party equipment, was transported from Charleston, South Carolina, to Saigon, Republic of Vietnam, aboard two cargo vessels.

a. The USNS Durango Victory, a Victory ship operated for the Military Sea Transport Service (MSTS) by a civilian contract crew, transported primarily ordnance wheeled vehicles, COM X containers, and all crated cargo.

b. The S.S. Seatrain Maryland, operated by the Seatrain Lines, Incorporated, under contract to MSTS, transported heavy engineer equipment, some ordnance wheeled vehicles, and COM X containers.

2. The USNS Durango Victory was loaded at Charleston State Docks, utilizing two gantry cranes on the dock. The gantry cranes were utilized in lieu of the ship's booms since they could effect more rapid loading than the on-board equipment. Loading commenced on Sunday, 9 April 1967 and was completed Tuesday, 11 April 1967. The vessel departed Charleston Port on Wednesday, 12 April 1967. One warrant officer and two enlisted men escorted the equipment aboard this vessel.

3. The S.S. Seatrain Maryland was loaded at the Charleston State Docks, utilizing two electric cranes on board ship. This vessel is specially designed to transport rolling stock and is equipped with drive-through cargo holds running the full length of the cargo area. A single, 75 foot hatch is located amidships, to provide access to all holds. This type vessel was specially requested by the Transportation Officer, Charleston Outport, to transport the heavy engineer equipment of the battalion and proved to be most satisfactory. Heavy tractor-scraper units were lifted aboard, while still connected as a unit, and driven into position in the lower hold.

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Rock crushers, semi-trailer trucks, and bulldozers were also easily handled on this vessel while they would have been difficult to handle on a conventional cargo ship. Loading commenced on Monday, 10 April 1967 and was completed on Wednesday, 12 April 1967. The vessel departed Charleston Port on 12 April 1967. An equipment escort party of one warrant officer and six enlisted men accompanied the equipment aboard the vessel.

4. All operation of battalion equipment on the docks and aboard the ship was done by an eighteen man equipment escort party of the battalion. All tie-downs were placed by stevedores and all supervision of the loading was accomplished by transportation personnel and the ship's staff.

5. The USNS Durango Victory arrived at the Saigon Army Post at 1400 hours, 14 May 1967. The equipment was unloaded around the clock, utilizing the ship's booms. Unloading was completed at 1200 hours, 18 May 1967, and the ship sailed at 1400 hours the same day. This unloading operation was quite impressive and is a credit to the organization of the U.S. Army port in Saigon. The equipment was unloaded on the dock and transported directly to the battalion cantonment area, approximately 25 miles away, by Army trucks from Company D of this battalion and from the 169th Engineer Battalion, and by commercial trucks chartered by the Army Terminal.

6. The S.S. Seatrain Maryland arrived at the Saigon Port at 1600 hours, 19 May 1967. The vessel was moored in the Saigon River and not tied up at a dock. All equipment had to be unloaded from the ship into Landing Craft, Utility (LCU) and transported up the river to the Army Terminal at Newport, on the outskirts of Saigon, where it was unloaded. As opposed to the efficiency of unloading the USNS Durango Victory, the unloading of the Seatrain Maryland was singularly unimpressive. Three days were required to unload the vessel. This vessel could have been docked and the operation would have been much faster, with probably less damage to equipment than was actually inflicted. The one advantage of the lightering of the equipment from the ship to Newport was that the heavy equipment did not have to be driven through downtown Saigon, which has very heavy traffic. The crane operators aboard the ship were unable to handle the tractor-scraper as a unit, when off-loading into the landing craft. The units had to be disconnected on board ship, lifted on to the landing craft separately, and reconnected in the landing craft. The unloading was completed on 22 May 1967 and all equipment closed into the cantonment area on the same day. Further discussion concerning off-loading of tractor-scraper units is presented in Section VI, para D, of this report.

### D. R.D T.T Shipment.

1. The battalion equipment designated "to accompany troops" in the cargo hold of the troop ship is referred to as "Red Circle T.T" or "R D T.T" within this report, and is discussed further in Section VI, paragraphs F and G, below.

2. The battalion R.D T.T consisted of the following cargo:

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- a. Personal equipment packed in individual wooden boxes and palletized with nine boxes per pallet for a total of 78 pallets: 98 measurement tons.
- b. 10 large CONEX containers containing organizational equipment: 60 measurement tons.
- c. 4 small CONEX containers containing the unit basic load of ammunition: 12 measurement tons.
- d. Crates containing outsized equipment, mostly tent poles, which would not fit the CONEX containers: 32 measurement tons.

3. The R&D T&T equipment was shipped by rail from Fort Bragg, North Carolina, on 13 April 1967, to arrive at the Oakland Army Terminal not later than 28 April 1967, in order that it could be loaded on the troop transport carrying the main body of the battalion.

4. One large double door boxcar and two gondola cars were required to ship the R&D T&T.

5. The personal equipment boxes ("B" boxes) were each marked so that the pallets could be broken apart during storage of the equipment aboard ship, if more efficient utilization of the ship's cargo space resulted upon arrival at the port. In practice, this was not required. Section VI, paragraph G, of this report, further discusses "B" boxes.

6. Upon arrival in Vietnam, the R&D T&T was unloaded from the troop ship onto two barges and the equipment was transported by barge to the Newport Army Terminal at Saigon. Unit trucks picked up the R&D T&T at Newport and transported it to the battalion cantonment area. The R&D T&T arrived at the cantonment on 27 May 1967, four days after the main body arrived.

### E. Shipment of W.B.TOC (when authorized by overseas commander) Packages.

1. The special W.B.TOC package of construction materials, refrigerators, and generators for the unit cantonment area was port-called from Sierra Depot, Nevada to Oakland Army Terminal to arrive concurrently with the main body of the battalion. Due to the size and quantities of materials, these packages were shipped separately to the theater aboard an MSTC cargo vessel.

2. To insure that the W.B.TOC package was delivered to the battalion and not diverted elsewhere, two enlisted men of the battalion escorted the shipment aboard the cargo vessel. The two men were placed on TDY orders to the Military Ocean Terminal, Bay Area (MOTB) with special instructions in their orders allowing them to be transported to Vietnam as directed by the Commanding General, MOTB. The purpose for the special instructions was to allow MOTB to request that they be shipped aboard the cargo vessel carrying the W.B.TOC package on a space-available basis. This was satisfactory, and the two men were allowed to accompany the shipment. Had there been insufficient space aboard the cargo vessel, the orders would have allowed MOTB

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2. The main body departed Pope Air Force Base on 1 May 1967 through 0200 hours 2 May 1967, aboard three commercial airliners, a Frontier Airlines 727, a United Airlines DC-8, and a Trans-World Airline 707 Intercontinental. In addition, an additional 17 men were routed over commercial scheduled airline routes from Fayetteville, North Carolina, to Georgia, San Francisco, California, and thence by bus to Oakland Army Terminal.

3. The procedures for outloading the chartered aircraft were similar for all departures. The personnel manifested on each aircraft were first mustered in the battalion area at Fort Bragg. Their baggage, plus the unit Yellow T.T. equipment, was loaded aboard trucks and transported to Pope Air Force Base, a distance of approximately five miles. The baggage and equipment was weighed at Pope Air Force Base by baggage handlers provided by the airlines. The baggage was then loaded aboard baggage carts for loading on the aircraft when it arrived. The personnel were transported by military bus from the battalion area to Pope Air Force Base, 30 minutes prior to arrival of the aircraft. The aircraft remained on the ground for one to one and one-half hours for refueling and cargo loading. The personnel were then moved to the aircraft by bus and boarded the aircraft in manifest order. The entire loading process was very orderly and well organized by Transportation and Air Force personnel.

### H. Main Body Movement by Sea and Conduct of Voyage.

1. At the port of embarkation, personnel were aligned in passenger list order and were checked on the ship carrying their personal baggage. Personnel were assigned to compartments, maintaining unit integrity in so far as possible. All personnel in pay grade E-6 and above travelled as cabin class passengers. The ship departed Oakland Army Terminal on 2 May 1967.

2. Ship duties were performed daily and at a minimum, every three (3) days. These duties consisted of: Kitchen police, mess teams, police and sanitation, guard, medical support, laundry, and administration.

3. In addition to the conduct of scheduled religious services, recreational activities were offered including movies, ship's radio station, bingo, tours of the ship and game tournaments.

4. Each unit conducted the mandatory ship-board classes as a minimum. Due to a lack of space, non-mission essential classes were kept to an absolute minimum.

5. A twenty-four hour shore liberty was granted at Subic Bay, Philippines. A rotational skeleton crew maintained order and discipline on board ship. 100 shore patrol personnel from the units aboard ship maintained order and discipline during liberty. Problems associated with army liberty are discussed in Section VI paragraph K, of this report.

6. In anticipation of receiving the debarkation order, strapping drills were conducted to insure a smooth operation. Units cleaned their respective troop compartments before they debarked. Personnel debarked on LCM's and were conveyed to the airport at Vung Tau, Vietnam, for air

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to manifest the two men aboard Military Airlift Command passenger aircraft.

3. The WABTOC package, and the two escorts, arrived in Vietnam two weeks after arrival of the main body. All equipment and material arrived in good condition and the escort party proved to be a valuable asset in expediting the material to the final destination of the battalion.

### F. Liaison to Port in Advance of Main Body Movement.

1. The Battalion Commander was designated the senior unit commander aboard the USNS General Gordon for the sea voyage. The voyage staff consisted entirely of officers and non-commissioned officers from within this battalion, whose initial responsibility it was to prepare the ship for receipt of the troops. Upon receipt of written guidance and ship regulations from MSTS two weeks in advance of embarkation, duty assignments were made and the voyage staff was completely organized prior to departing Fort Bragg.

2. The assigned voyage staff, with the balance of the ship's party (composed of B Company reinforced), embarked two days prior to the main body. This advance element, upon arrival at the port, proceeded to:

a. Make final adjustments with the voyage staff to cope with last minute changes.

b. Accomplish final coordination with the Naval Military Department aboard ship.

c. Clean-up the ship prior to arrival of the main body and other embarking units.

d. Organize resources to satisfy initial requirements for kitchen police and other mess personnel.

e. Prepare all personnel berths.

f. Prepare, at embarkation time to receive, organize, and check all embarking personnel.

3. The functions of the voyage staff demanded that they, and a work party totalling 250 men, depart for Oakland Army Terminal prior to departure of the main body. Accordingly, the advance ship's party departed Pope Air Force Base aboard two commercial airliners on 30 April 1967. The first aircraft, a Boeing 727 from Frontier Airlines, carried 106 men. The second aircraft, a Douglas DC-8 from Trans-International Airlines, transported 144 men, plus all Yellow T T equipment of the advance ship's party.

### G. Main Body Movement by Air.

1. The balance of the main body was moved by chartered commercial aircraft from Pope Air Force Base, North Carolina, to Oakland, California, where they boarded the USNS General Gordon for the voyage to Vietnam.

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transportation by C-130 to Bien Hoa Air Force Base, thence by truck convoy to final destination at Long Binh on 23 May 1967.

### I. Composition of Advance Party and Its Movement

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1. The advance party was composed of 26 members, including the Battalion Executive Officer as the party chief. Other members included: The Battalion Operations Officer; The Battalion S-4; One (1) officer from each A, B, and C Companies; The Battalion Property Book Officer; The Battalion Operations Sergeant; Company Mess and Supply Sergeants; a Field Medical Assistant; one clerk each for the S-1, S-3, and S-4; and a Construction Squad Leader from C Company with three carpenters, a plumber, and a electrician.

2. Generally, the equipment of the advance party was minimal, consisting of such items as: tentage; a 25 outlet lighting set w/generator; field phones; Coleman lanterns; folding tables, chairs and cots; typewriters; an automatic weapon; lensatic compasses, binoculars, and flashlights; an engineer squad tool set; a basic load of ammunition; and personal baggage. All accompanying equipment totaled 155 cubic feet, weighing approximately 10,000 lbs.

3. Following departure of the last element of the main body from Fort Bragg, the advance party functioned as the rear detachment clearing the post and relieving the battalion of installation property and other facilities.

4. The advance party departed Fort Bragg, North Carolina, (Fope Air Force Base) 10 May 1967 aboard a C-130 aircraft number 7890. While enroute to Travis Air Force Base on the first leg of the flight, extreme difficulties were encountered with respect to a malfunctioning pressurization system. The aircraft commander elected to land at Tinker Air Force Base in Oklahoma City to make repairs. Since the proper repair parts were not available, the home base at McGuire Air Force Base was requested to deliver the necessary parts. In view of an anticipated delay, it was decided to remain overnight at Tinker Air Force Base. In the process of repairing the pressurization system, other mechanical faults appeared which necessitated remaining at Tinker Air Force Base a second night. The advance party proceeded to Travis Air Force Base, arriving early in the evening, and encountered another twelve hour delay for further repairs to the pressurization system. Subsequent legs of the flight to Midway Island, Guam, and the Philippines proceeded without major difficulty, the trip culminating by arrival at Bien Hoa Airfield, Vietnam, on the morning of 15 May 1967.

5. Problems encountered by the advance party are discussed in Section VI, para L, of this report.

### SECTION V - ARRIVAL AT OVERSEAS DESTINATION

#### A. Activities of Advance Party.

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1. The advance party arrived in-country eight days prior to the main body. In coordination with the host unit, the 169th Engineer Battalion, plans were reviewed for preparing the base camp site to accommodate the main body. Much of the work was either completed or underway by the host unit and members of the advance party augmented the work force to achieve minimum essential requirements and facilities. In addition, other tasks and administrative requirements were satisfied jointly by the advance party and the host unit. These activities are as follows:

a. Arrival of the Battalion's TOE equipment by ship almost simultaneously with arrival of the advance party resulted in an augmentation to the party of those ten personnel acting as equipment escorts aboard their respective ships. The Battalion Operations Officer coordinated the arrival and subsequent off loading of the equipment ships with Saigon Army Fort. Within a few days all the equipment was brought from the port to its final destination at Long Binh. Additionally, S-3 representatives made initial contact with their counterparts in 159th Engineer Group and 169th Engineer Battalion (the host unit). Further liaison was effected with the S-3, Long Binh Post, to coordinate the security requirements for the Battalion cantonment area, in anticipation of arrival of the main body.

b. Activities of the Battalion S-4, the supply sergeants, and the mess sergeants varied. Ration accounts were established and mess equipment was prepared for use. Coordination was established with Support Maintenance units and various Technical Supply Units and appropriate accounts were established. Requisitions were initiated for stockage of a Construction Materials ASL (discussed further in Section VI, para H, below) and preliminary plans were developed for organizing a functional supply storage yard. Action was initiated to draw certain items of station property. Additionally, a majority of these personnel assisted in developing minimum essential requirements in the base camp.

c. Much of the administration connected with functions of the S-1 was initiated by the sponsoring unit prior to arrival of the battalion. In other areas, guidance was rendered with respect to establishing an account with Special Services for Motion Pictures and automatic distribution of pay rucks, books and magazines. Sufficient forms, regulations, signature cards, and general guidance were secured to enable company commanders to establish their unit funds in Saigon shortly after arrival in the theater. Initial planning and hiring of a civilian labor force nucleus was accomplished. Further discussion of civilian labor is covered in Section VI, para L, of this report.

### B. Minimum Essential Requirements Construction at Base Camp.

1. Upon arrival of the advance party, most of the Minimum Essential Requirements (MER) construction was already underway by the host unit, the 169th Engineer Battalion. This construction consisted of the following:

a. Land clearing and road construction: All jungle vegetation had been cleared and the internal road network was nearing completion.

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This was a joint effort of the 169th Engineer Battalion, the 62d Engineer Battalion, and Company D of the 92d Engineer Battalion.

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b. Mess Hall: One 200 man mess hall was nearing completion by Company D, 92d Engineer Battalion. A second mess hall was commenced by the construction squad of the advance party, augmented by personnel from Company D.

c. Showers and latrines: Two enlisted showers, two enlisted latrines, and two officers showers/latrines were nearing completion by Company D, 169th Engineer Battalion. In addition, work was underway on two additional showers and two additional latrines. The battalion assumed responsibility for completing the remaining showers and latrines, after arrival of the main body.

d. Tentage: Erection of 100 tents, primarily for troop billets, was accomplished by Company C, 169th Engineer Battalion. This tentage consisted of wooden floor sections leveled on wooden blocks and erection of General Purpose Medium tents provided by 159th Engineer Group.

2. The main body was able, upon arrival, to move into tentage already erected; to eat in one completed mess hall and one partially finished mess hall; and had access to shower and latrine facilities. These minimal facilities distinctly enhanced the morale of the unit.

### C. Preparations of Main Body for Becoming Operational.

1. Upon arrival of the main body on 23 May 1967, all company commanders were taken on an orientation tour of the battalion cantonment area and then were briefed on the facilities and services available. Some initial task assignments on further development of the base camp were given to the company commanders during that briefing.

2. All equipment was inspected and deprocessed during the week following arrival of the main body.

3. COMEX containers were segregated by units. Unpacking and inventorying of equipment commenced on the same day the unit arrived.

4. The battalion did not assume responsibility for perimeter security until eight days after arrival of the unit. This period was utilized to familiarize personnel with the defensive requirements and to prepare initial defensive plans, while security was provided by members of a Military Police Battalion.

### D. Initial Project Assignments.

1. The battalion received an initial packet of nine construction directives from 159th Engineer Group, on 25 May 1967.

2. The majority of the projects required survey and design work prior to implementing construction. Two projects could be commenced immediately, one being upgrading of a motor pool and the second being improvement of an existing roadway.

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3. In order to gain time while conducting the necessary preliminary surveys and design of the new projects, considerable vertic. construction effort was concentrated in the battalion cantonment, with a view to completing the remaining showers, latrines, and mess halls.

### SECTION VI - PROBLEMS ENCOUNTERED AND LESSONS LEARNED

#### A. Item: PLL

Discussion: One of the early problems encountered in FOM processing of the battalion was the identification and acquisition of PLL items. This is, of course, a constant and continuing problem area for all units and one that requires constant emphasis and supervision.

#### Observation:

1. The major area of concern for Engineer units is engineer PLL and it appears that better guidance could be developed for units being deployed. Supply regulations makes frequent references to "issue and demand experience plus commander judgement" as a basis upon which PLL levels should be set. It would seem that the actual overseas theater demand data is a better basis on which to set such levels than the CONUS demand experience, plus a commanders estimate of theater peculiar conditions. CONUS units are not, in general, fully occupied on significant construction projects and are not facing the peculiar conditions of weather, road trafficability, etc., which will characterize their eventual overseas utilization. T&G is a comparison of these PLL items authorized by the manual for stockage to actual usage for a motorized grader operating in the theater for approximately one (1) year. The variable quantities are based on records of demand created by the environmental conditions and nature of the work performed in this theater.

2. Actual machine listings of typical PLL levels being used in the probable theater of employment should be furnished to engineer units being readied for overseas movement. Such listings should not be directive in nature, but rather should be provided as guides to be modified by commanders as more and more details relative to probable employment and specific area conditions become available from various sources.

#### B. Item: ASL

Discussion: Section III, para I, discusses in some detail, the controversy over ASL which did not arise until shortly before deployment. As a result, time limitations precluded the establishment of an ASL until after arrival of the unit in the theater.

Observation: In view of conflicting guidance and directives from installations in CONUS, Department of the Army should establish firm guidance regarding authorization for Engineer units to stock ASL.

#### C. Item: Equipment Build-Up

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Discussion: Delay in shipment of the battalion was caused generally by untimely reaction of the Army Supply System. While this single factor is not difficult to understand, in view of the total requirements for supporting this entire theater of operations, it would appear that delays could be minimized by implementing some basic controls with respect to lateral transfers, dissemination of follow-up information, and local procurements.

### Observations:

1. The initial Final Readiness Report submitted by this battalion in November 1966 included a shortage list of major items and components. Subsequently, preparations were initiated by the installation to transfer laterally the needed equipment, which was available from local resources. Many of these shortages were earmarked for transfer no sooner than 10 days prior to LRD, but very few transfers were effected.

2. An untold number of small tools and other components to fill out major end items sets were continually reflected in reports as shortages. Many such items, normally stocked in the Self Service Supply Store, were very rarely available. On the other hand, these items or adequate substitutes were readily available on the local economy in such places as Sears Roebuck. Yet, installation authority was not granted for local procurement of TOE line items or components to sets.

3. Continuous follow-up action was pursued by the unit in an attempt to obtain firm expected delivery dates (EDD's). In spite of the local Army Materiel Command (AMC) representative, whose assistance was invaluable, accurate EDD's were virtually impossible to obtain from the various supply depots. It is felt that this problem, as it prevailed at Fort Bragg, is attributable to the tremendous number of D-1 units at Fort Bragg. However, consideration might be given to designating one local AMC representative to assist a minimum number of related deploying units simultaneously, rather than arbitrarily servicing numerous units. Further, it may be advisable to provide a technician from the Engineer Commodity Branch in St. Louis, to visit units immediately following their designation as a D-1 unit for the purpose of determining, on the scene, their status on equipment, and to advise the unit commander in equipment areas which could cause a delay in deployment.

4. Another factor for consideration prior to deployment is that of equipment on hand approaching less than ten percent rebuild criteria. Identification of such items which will exceed the rebuild criteria within one year after arrival in the theater, and plans for their replacement, should be initiated prior to deployment. Such action would prevent delay in receipt of replacement items through normal supply channels once it has been determined that a piece of equipment is uneconomically repairable.

### D. Item: Personnel Acquisition

Discussion: It is important to impress upon each individual soldier the necessity for early submission of applications for transfers or

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compassionate reassignments, deferments and the like, so that proper administrative action can be initiated to obtain replacements. Personnel administrators should treat each vacancy as though it were absolutely essential that it be filled prior to deployment of the unit. Such action insures minimal shortages prior to deployment. 42

Observation: This personnel strength of the battalion and shortages by MOS on deployment date are reflected in TAB 3.

### I. Item: Personal Financial Problems Resulting from Delayed Deployment.

Discussion (Allotments): Approximately 400 allotments of various types were prepared. These allotments were prepared as a result of individual interview. They were processed, and in some cases established only three weeks prior to the originally scheduled deployment date. They were projected in most cases, to commence in January 1967.

Observation (Allotment): These allotments had to be cancelled or rerode when the deployment date was set back. Allotments processed by the Finance Officer, caused approximately 150 individual soldiers excessive financial difficulties. Also during the same month, a change of the allotment forms (DA Form 1341) went into effect. All previous allotments had to be reverified and retyped, rather than amended.

Discussion (Advance Pay): Numerous personnel received advance pay. They drew this advance in anticipation of being able to live on \$55.00 per month, that they would draw supplemental pay and allowance such as Hostile Fire Pay and Foreign Duty Pay, and in anticipation of the income exception.

Observation (Advance Pay): The delay caused repayment deduction, which started in most cases the following month. As much as five months repayment had to be made prior to deployment. Based upon anticipated expenditures and income, this did, in some cases cause extreme financial hardships.

Discussion (Family Separation Hardship and Financial Problems): Subsequent to the unit being delayed, personnel were encouraged to relocate their dependents to avoid last minute personal and financial difficulties. For the most part, members of this command met their responsibilities by relocating their dependents to a designated home. The last minute delay in unit deployment then caused these persons to be dislocated from their dependents in excess of six (6) months.

Observation (Family Separation Hardship and Financial Problems): Return of their dependents was precluded as the unit movement orders were simply amended, rather than revoked. On 23 January 1967 a decision rendered by COMARC in a letter dated 3 January 1967, subject: "Movement of Dependents", essentially stated that the return of dependents could be authorized. However, based upon a number of factors such as required

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procedures for prior approval of TUSA, availability of housing, cost of movement (dislocation allowance not payable), and shipment of household goods, it was not economically feasible nor considered practical to return families to Fort Bragg. The late decision authorizing return of families, and the untimely decision to delay shipment of the unit, caused major personal and financial problems.

Discussion (Family Separation Allowance (FSA-II)): In an attempt to alleviate some of the excessive financial burdens, a request for determination and clarification as to eligibility for family separation allowance payment was submitted.

Observation (Family Separation Allowance (FSA-II)): Correspondence on this subject is provided in T.B I. It is the intention of this command to resubmit the facts as outlined in T.B I for a separate decision of the Comptroller General, primarily because it is felt that the separations were "enforced" due to administrative systems deficiencies.

F. Item: Equipment to Accompany Troops (T.T)

Discussion: AR 220-10 defines Red Circle T.T as that equipment which is to accompany troops during overseas movement but is not available to troops until debarkation. The list of items which AR 220-10 identifies as being Red Circle T.T is quite long and no discretion as to relative need is left to the deploying unit commander. In addition, certain baggage allowances are established in AR 220-10 for enlisted men and officers, and this personal baggage is in the R.D T.T category. These baggage allowances are maximum figures and greatly exceed the minimum personal baggage (R.D T.T) criteria established in AR 220-10.

Observation: The required R.D T.T for this unit as it deployed, totalled close to 500 measurement tons of cargo space, while the authorized personal baggage allowances for assigned personnel would add a requirement for an additional 200 measurement tons. If all this equipment were racked in COMEX containers, approximately 90 such containers would be required.

1. Cargo limitations aboard ship were such that this unit was permitted a total of only 200 measurement tons of cargo space. This, in turn, required the unit to decide which of the Department of Army directed and authorized items were of most importance, without any further guidance on this point coming from higher headquarters. It appears that units of battalion size or larger are thus limited to less than 50 percent of the D. required Red Circle T.T, while smaller units normally can manage to carry 100% of their R.D T.T equipment.

2. A major portion of our large cargo space requirements resulted from published directives concerning mess gear, cots, tents, and ammunition. A careful re-evaluation of these criteria would go far toward eliminating the disparity between R.D T.T which must or should be taken, and R.D T.T which can be taken by a large deploying unit.

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(a). MESS EQUIPMENT: A company size unit deploying by itself certainly needs its mess equipment. There is some question as to whether a battalion size unit, having four or five company size units in it, needs to take all of the mess equipment specified in AR 220-10. Also, some of the quantities of bulky mess equipment items, such as garbage cans, which are actually to accompany troops can be reduced safely for the short time which should result between unit arrival and arrival of the unit's general cargo.

(b). COTS: RLD TAT criteria includes a canvas cot per man. This item could just as well be issued on arrival overseas, thus permitting its overseas movement as a general cargo and normal stockage item.

(c). TENTAGE: RLD TAT for this unit included one general purpose, medium tent per sixteen (16) men or fraction thereof. It appears that tents could be issued upon arrival and removed completely from RLD TAT. If not, surely one (1) GP medium tent per thirty (30) men is adequate for the short time such crowded conditions would obtain. RLD TAT should be reduced as much as possible, since cargo space is always going to be short on a fully loaded troop transport of fixed and known dimensions.

(d). AMMUNITION: This unit was equipped with M-16 rifles prior to deployment and each M-16 was issued with a bipod. The basic load of ammunition for the M-16 without bipod is 140 rounds, but with bipod, the figure jumps to 740 rounds per weapon. The additional 600 rounds per weapon becomes significant when 658 weapons are involved. For an engineer unit such as this, it seems that 60-80 rounds is quite sufficient to accompany troops making an administrative move overseas, and that the remainder of the unit's basic load could just as well be issued upon arrival overseas, having been shipped aboard ammunition vessels.

3. The designation of RLD TAT in AR 220-10 becomes meaningless when such wide disparity exists between the D. directed and MSIS permitted accompanying cargo. Although a Battalion Commander can make any decisions required by him, such an approach in this case is a poor substitute for positive and definitive D. guidance which is developed in full recognition and appreciation of all the actual limitations and restraints which exist. Some consistency and uniformity could thus be introduced into what is now left to separate and individual decision, often based on partial and inadequate data as to the relative priorities of various RLD TAT items. As a final note in this regard, units sailing on the USNS Gordon were permitted a total of less than 8,500 measurement tons (MT) of cargo space, although the vessel can carry 22,500 MT. Actually, 14,000 MT of space were unused on this vessel and the largest cargo hold aboard came almost empty.

### G. Item: "B" Bags

Discussion: AR 220-10 specifies that an enlisted man is authorized 200 pounds of RLD TAT baggage allowance when deploying overseas by water movement. At the same time, it is normal that inadequate cargo space is available to permit the full use of this authorization. In order to insure

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51 that each man received a fair share of limited available cargo space for his personal gear and possessions, this unit constructed wooden boxes of standard dimensions, each of which provided about 5 cubic feet of storage space. This meant that the total volume was controlled at the same time that several other important objectives were realized. These were as follows:

1. Equitable distribution of limited cargo space available.
2. Reasonable freedom of action for individual EM to carry personal possessions.
3. Adequate space for each man to carry required equipment items.
4. Conservation of limited number of allotted CONEX containers by avoidance of need to use CONEX containers for personal R&L T.T baggage.
5. Protection of personal possessions against pilferage and damage.
6. Ease of handling through use of easily palletized boxes.
7. Reduction of total volume of personal baggage taken to approximately 80 pounds per man by provision of limited but standard packing volume.
8. Provision of means by which possessions can be safeguarded until arrival overseas.

### Observations:

1. All of the foregoing desirable objectives could better be accomplished by providing each soldier with an appropriate number of standard steel foot lockers. These items are now considered as station property however, and this course of action was denied to this unit. It would seem reasonable to authorize the issue of such footlockers, with the assumption that each would be packed with no more than 100 pounds of equipment, including the weight of the footlocker. This would then lead to the following authorization levels for members of this unit:

| <u>GRADE</u>        | <u>POUNDS AUTHORIZED</u> | <u>FOOTLOCKERS REQ'D</u> |
|---------------------|--------------------------|--------------------------|
| EM                  | 200                      | 2                        |
| WO's, O-1, O-2, O-3 | 400                      | 4                        |
| O4, O5              | 600                      | 6                        |

2. The above schedule of authorizations would mean that this unit would be authorized a maximum of about 1470 footlockers, as it deployed, and a total of 1860 if Company D had deployed with the battalion. In actual practice, it is felt that this battalion would have deployed with about 1000 such footlockers since most men would not use their entire authorization.

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3. Consideration should be given to providing footlockers to units deploying into areas where these items are not readily available. Further consideration should be given to extending this concept to the issue of two steel footlockers to each soldier upon his entrance on active duty, which items would then accompany the soldier throughout his military service as items of personal equipment rather than remaining in the category of station property.

### H. Item: Construction Materials

Discussion: Upon arrival in the theater, an authorized stockage list for construction materials was established. Using a machine listing of materials available in the theater, requirements were established on the basis of an indication of future construction project assignments for this unit. The quantities established were sufficient only to initiate projects. Indications are that stocks are replenished readily as needed, if available. TAB J represents those items initially requisitioned. The requisitions were submitted by the advance party, five working days prior to arrival of the main body. Forty percent of the requisitions were filled within three working days after arrival of the main body.

Observation: Even though reaction time in the theater was relatively short in terms of making needed materials available, machine listings for construction materials should be provided to deploying units in sufficient time to permit development of this ASL and preparation of DA Form 2765. Accordingly, supply representatives can immediately expedite submission of the requisitions and devote attention to other important functions of the advance party.

### I. Item: Medical Supplies

Discussion: Those items of medical supply authorized by TOC were readily available, but totally inadequate and insufficient to operate a field battalion aid station properly in the situations prevailing in this theater of operations.

Observation: Prior to departure from CONUS it was determined that medical supply was inadequate in three respects. First, quantities prescribed are not sufficient to last one month until regular resupply is effected in country. Secondly, supplies are limited especially in areas of definite difficulties or conditions which were anticipated as being encountered in this type of overseas movement and area; particularly drugs for diarrheal disorders and skin problems. Third, the TOC does not provide for certain types of medicines and supplies, which in the professional opinion of the Battalion Surgeon would make the aid station practically self-sufficient. Among these materials are plaster, gcasts, various chemicals, tropical ear and eye medicines, sterile supplies and suture sets. Since much of the foregoing was anticipated, much of the problem was eliminated by ordering and procuring adequate supplies through proper channels prior to departure overseas.

### J. Item: Voyage Staff

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Discussion: Since the Battalion Commander was designated the senior unit commander he was responsible for selecting and organizing the voyage staff. Although resources were available from other units travelling on the ship, the staff was comprised of members of this battalion, well in advance of movement. Battalion personnel representing key members of the staff included: Troop Adjutant, Troop Executive Officer, Troop Sergeant Major, Mess Officer, Police and Sanitation Officer, Compartment Coordinator, Compartment Commander, Provost Marshal, Personnel Officer, Laundry Officer, and M&R Officer. In addition, non-commissioned officers were assigned to each staff agency as assistants.

Observation: This permitted extremely effective control from the outset and resulted in a smooth and efficient voyage in every respect.

### K. Item: Army Liberty

Discussion: Difficulty was encountered when the basic instructions essential to proper Army planning for liberty at Subic Bay, in the Philippines, incidental to a refueling stop, were not received by the USNS Gordon until after docking was complete. Consequently, upon docking, the requirement for provisions of a 100 man shore patrol had not been satisfied.

Observation: It was asserted that some initial planning data was dispatched to the ship two days prior to landing, but this data was never received. There was a resultant delay of several hours before liberty was started, in order to organize a shore patrol. An after action report of the incident, prepared by the Senior Unit Commander, was forwarded to the Commander United States Naval Base, Subic Bay, Luzon, Republic of Philippines. The report basically asserted that accurate advance information to embarked Army personnel will permit detailed planning to preclude most incidents, and that therefore every effort should be made to insure that such planning data is sent to, and received by, an incoming vessel carrying Army personnel.

### L. Item: Advance Party

Discussion: Generally, the composition of the advance party with its accompanying equipment, was entirely adequate for accomplishing its mission, with one exception discussed in para 3 below.

#### Observations:

1. The two day delay at Tinker Air Force Base was unforeseen and there were no provisions in the group travel order for reimbursement of billeting fees. While quarters provided for the officers were entirely adequate, the fees rendered were not reimbursable. At the time the advance party was delayed at Tinker Air Force Base, a World Wide Bowling Tournament was in progress. Consequently, suitable billets for enlisted men were at a premium. Rather than accept certificates of non-availability and burden the enlisted members of the party with added non-reimbursable expenses, the Base gymnasium was furnished with canvas cots to accommodate them. The arrangements were entirely unsatisfactory.

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2. The C-130 aircraft is ideal for a battalion size advance party with its accompanying equipment. At the request of the battalion, the aircraft was rigged with litters for sleeping. Military Airlift Command at McGuire Air Force Base accommodated the request prior to dispatching the aircraft to Pope Air Force Base, thereby providing additional comfort to what could have been a grueling trip.

3. The complexity of the Civilian Labor program is sufficient basis for including, as a member of the advance party, an officer whose full time duty after arrival in-country will consist of administering to this program. It is a difficult function to transfer, with numerous ramifications. It would be to the unit's advantage, prior to departure from COMUS, to obtain all available data from the theater on the subject with a view to developing a program which could be easily implemented by the advance party.

### M. Item: Liaison Trip

Discussion: The Liaison team gathered a wealth of information which proved extremely beneficial to this organization in planning, coordinating, and completing final preparations for movement. Presentations of their findings to the battalion gave each member of the battalion an invaluable insight to the conditions peculiar to our actual location in-country and plans at that time for our employment. This definitely had a beneficial effect on the battalion by bolstering the morale of all personnel who anxiously wanted to assume their responsibilities overseas. The liaison visit enabled us to develop a better understanding of the specific problems we could expect to encounter, and gave the battalion the distinct advantage of establishing personal contact with many activities which now support this unit.

Observation: Such liaison visits should be made a standard procedure for battalion and larger size units preparing to deploy to Southeast Asia. Optimum benefit from such liaison visits would result from their being scheduled from 60-90 days prior to deployment to permit the deploying unit to integrate specific mission oriented training into their final deployment preparations.

### N. Rail Loading:

1. Item: The requirements for blocking and tying equipment on rail cars are not readily available.

Discussion: During out-loading of the unit at Fort Bragg, North Carolina, varied opinions prevailed on the correct methods of blocking and tying heavy engineer equipment on rail cars. The unit attempted to obtain manuals relating to correct procedures and was instructed by the Fort Bragg Transportation Office that existing manuals were out of date and to adhere to advice of Post Engineer Supervisors during the outloading. While the outloading was in progress, a liaison team of Transportation Corps personnel from Fort Rustis, Virginia, inspected the outloading and suggested numerous good changes in methods of blocking and tying the equipment, which varied.

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considerably from the advice received from the Post Engineer Supervisors. Corrections were made but approximately one-half day was lost in making such corrections.

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Observation: The technical manual on rail loading procedures should be up dated and distributed to all units involved in rail movement, as soon as possible.

2. Item: 1½ inch steel banding proved unsatisfactory as a tiedown material for loads transported by rail.

Discussion: A number of vehicles loaded with equipment, such as crane attachments, pile driver lead sections, and steel loading ramps, were tied down on the vehicle with 1½ inch steel banding. The banding either loosened or broke during rail movement from Fort Bragg, North Carolina to Charleston, South Carolina.

Observation: Steel cable, secured by U clamps, is the most satisfactory tiedown material for rail movement.

3. Item: Truck-mounted cranes should be loaded on flatcars with the cab reversed and counter weights over the center of the vehicle.

Discussion: This unit loaded all 20 ton truck-mounted cranes with the cab facing forward and all counter weights removed. Upon arrival at the Charleston Outport, port supervisors requested that the cabs be reversed and the counter weights remounted in their normal position on the rear of the cab.

Observation: Loading cranes on rail cars with cabs reversed and counter-weights in place, will eliminate additional work at the port of embarkation.

### 0. Sea Loading

1. Item: 18 cubic yard tractor-scraper units pose unique problems during sea loading.

Discussion: Clark 290M wheeled tractors, equipped with Letourneau-Westinghouse CT-4 Scrapers, are not issued with dollies to move the scrapers separately from the tractor. The units must either be loaded with the tractor and scraper connected as a unit, which is not possible on a conventional cargo vessel, or the scrapers must be disconnected from the tractors, loaded separately, and reconnected in the cargo hold of the ship. The average time required to disconnect each unit, load the items separately, and reconnect the unit is four hours with eight such units being unloaded. By utilizing a sea train cargo vessel, with a long cargo hatch, the units can be loaded with the tractor and scraper connected as a unit.

Observation: Special cargo vessels of the "sea train" type should be used to transport tractor-scraper units overseas. Utilization of conventional cargo vessels further requires the use of special dollies from

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the old Curtiss-Wright CWT-18 scraper units, in order to move tractors and scrapers separately,

2. Item: A vessel of the "seatrain" type cannot be efficiently unloaded while anchored off shore as opposed to being tied up at a dock.

Discussion: The heavy engineer equipment of this battalion was transported to Vietnam aboard the S.S. Seatrain Maryland. Upon arrival at the Saigon Army Port, the equipment was off-loaded onto Landing Craft, Utility, while the vessel was anchored in the Saigon River. Considerable body damage was sustained by the equipment during the off-loading onto the landing craft which could have been prevented if the vessel had been tied up at the dock. The river depth at the docks is sufficient to allow the vessel to be tied up at the Army docks.

Observation: Vessels of the seatrain type, carrying heavy equipment, should be tied at a dock for off-loading whenever such facilities are available.

3. Item: The three conveyors of the battalion rock crushing and screening plant can easily be damaged by excessive tightening of tie-downs, during sea movement.

Discussion: The rock crushing and screening plant in Company A of an Engineer Construction Battalion includes three belt conveyor units. The alignment of the side rails on these conveyors is extremely critical in terms of insuring that the conveyor belt tracks are properly seated on the rollers. During loading aboard a cargo vessel for shipment to Vietnam, stevedores tied the three conveyor units down very tightly aboard the ship. During the sea voyage, the movement of the ship caused all three conveyor frames to bend in the middle, which limited effective use of this equipment.

Observation: Conveyors should be tied to the deck only at the axles, running through the center of the unit. The ends of the conveyor should be left free to flex with the movement of the ship thereby eliminating damage to the side rails of the conveyor.

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TAB A (Personnel Status Summary as of 20 May 1966) to Appendix 1 (After Action Report) to Operational Report - Lessons Learned (HCS-C&FOR 65) for Quarterly Report ending 31 July 1967.

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PERSONNEL STATUS SUMMARY AS OF 20 MAY 1966

| <u>AUTHORIZED</u>    | <u>ASSIGNED</u>      | <u>*DEPLOYABLE</u>   |
|----------------------|----------------------|----------------------|
| OFFICERS - 26        | OFFICERS - 21        | OFFICERS - 14        |
| WARRANT OFFICERS - 6 | WARRANT OFFICERS - 4 | WARRANT OFFICERS - 0 |
| ENLISTED MEN - 673   | ENLISTED MEN - 976   | ENLISTED MEN - 558   |

\*NOTE: Assigned deployable does not include personnel who were declared excess by reasons of EIS, Overage in MOS, Compassionate, pending Warrant Officer and OCS Appointments, and personnel on Overseas Levies.

INITIAL PERSONNEL AND MOS SHORTAGES

|                  | <u>NUMBER</u> | <u>GRADE</u> | <u>MOS</u> |
|------------------|---------------|--------------|------------|
| OFFICERS         | 1             | CPT          | 0663       |
|                  | 1             | CPT          | 1328       |
|                  | 2             | LT           | 1328       |
|                  | 1             | CPT          | 2110       |
|                  | 1             | CPT          | 2900       |
|                  | 1             | CPT          | 4010       |
|                  | 1             | CPT          | 4860       |
|                  | 1             | LT           | 4880       |
|                  | 1             | CPT          | 7900       |
|                  | 1             | CPT          | 7932       |
|                  | 1             | CPT          | 3100       |
| WARRANT OFFICERS | 3             | WO           | 621A0      |
|                  | 1             | WO           | 631A0      |
|                  | 1             | WO           | 711A0      |
|                  | 1             | WO           | 761A0      |
| ENLISTED MEN     | 3             | E4           | 05B20      |
|                  | 4             | E3           | 05B20      |
|                  | 2             | E4           | 31B20      |
|                  | 2             | E4           | 51C30      |
|                  | 1             | E5           | 51G20      |
|                  | 1             | E7           | 51H40      |
|                  | 19            | E4           | 51K20      |
|                  | 1             | E4           | 51L20      |
|                  | 1             | E6           | 51Q20      |
|                  | 2             | E5           | 52B30      |
|                  | 7             | E4           | 52B30      |
|                  | 3             | E4           | 52F20      |
|                  | 1             | E5           | 56D40      |
|                  | 1             | E5           | 62B20      |

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INITIAL PERSONNEL AND LOS SHORTAGE

|              | <u>NUMBER</u> | <u>GRADE</u> | <u>LOS</u> |
|--------------|---------------|--------------|------------|
| EMULSTEL MEN | 4             | E4           | 62J20      |
|              | 1             | E5           | 62B30      |
|              | 2             | E4           | 62B30      |
|              | 10            | E5           | 62E30      |
|              | 6             | E5           | 62F30      |
|              | 10            | E3           | 63A10      |
|              | 3             | E5           | 63B20      |
|              | 12            | E4           | 63B20      |
|              | 2             | E3           | 64A10      |
|              | 1             | E4           | 71B20      |
|              | 1             | E4           | 71B30      |
|              | 1             | E4           | 71J20      |
|              | 2             | E4           | 72B20      |
|              | 1             | E3           | 76A10      |
|              | 2             | E4           | 76K30      |
|              | 1             | E6           | 76L40      |
|              | 1             | E4           | 81C20      |
|              | 6             | E4           | 91B20      |
|              | 1             | E5           | 91B30      |
|              | 1             | E6           | 91L40      |
|              | 1             | E5           | 94B20      |
|              | 1             | E4           | 94B20      |

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TAB B (Personnel Status Summary as of 2 June 1966) To Appendix 1 (After Action Report) to Operational Report-Lessons Learned (OCS-CSFOR 65) for Quarterly Report ending 31 July 1967

PERSONNEL TRENDS JULY AS OF 2 JUNE 1966

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| <u>AUTHORIZED</u>    | <u>ASSIGNED</u>      | <u>*DEPLOYABLE</u>   |
|----------------------|----------------------|----------------------|
| OFFICERS - 26        | OFFICERS - 21        | OFFICERS - 14        |
| WARRANT OFFICERS - 6 | WARRANT OFFICERS - 4 | WARRANT OFFICERS - 0 |
| ENLISTED MEN - 673   | ENLISTED MEN - 976   | ENLISTED MEN - 622   |

\* NOTE: Assigned deployable does not include personnel who were declared excess by reasons of ETS, Overage in IOB, Compassionate, pending Warrant Officer and OCS Appointments, and personnel on Overseas Levies.

PERSONNEL AND MOB SHORTAGES

|                   | <u>NUMBER</u> | <u>GRADE</u> | <u>MOS</u> |
|-------------------|---------------|--------------|------------|
| OFFICERS:         | 1             | CPT          | 0663       |
|                   | 1             | CPT          | 1320       |
|                   | 2             | LT           | 1320       |
|                   | 1             | CPT          | 2110       |
|                   | 1             | CPT          | 2200       |
|                   | 1             | CPT          | 4010       |
|                   | 1             | CPT          | 4800       |
|                   | 1             | LT           | 4800       |
|                   | 1             | CPT          | 7900       |
|                   | 1             | CPT          | 7932       |
|                   | 1             | CPT          | 3100       |
| WARRANT OFFICERS: | 3             | O            | 621A0      |
|                   | 1             | WO           | 631A0      |
|                   | 1             | WO           | 711A0      |
|                   | 1             | WO           | 761A0      |
| ENLISTED MEN:     | 1             | E4           | 05B20      |
|                   | 3             | E3           | 05B20      |
|                   | 1             | E4           | 31B20      |
|                   | 1             | E5           | 51B20      |
|                   | 11            | E4           | 51B20      |
|                   | 1             | E6           | 51020      |
|                   | 1             | E5           | 52B30      |
|                   | 6             | E4           | 52B30      |
|                   | 1             | E5           | 62B30      |
|                   | 9             | E3           | 63B10      |
|                   | 1             | E5           | 63B20      |
|                   | 2             | E4           | 63B20      |
|                   | 1             | E4           | 71B20      |

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PERSONNEL STAFF SALARY AS OF 2 JUNE 1965

PERSONNEL AND LOS SHORTAGES

|               | <u>NUMBER</u> | <u>GRADE</u> | <u>LOS</u> |
|---------------|---------------|--------------|------------|
| ENLISTED MEN: | 2             | E4           | 72B20      |
|               | 1             | E6           | 76A40      |
|               | 1             | E4           | 81C20      |
|               | 6             | E4           | 91B20      |
|               | 1             | E5           | 91B30      |
|               | 1             | E6           | 91A40      |

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TAB C (Personnel Status Summary as of 19 January 1967) to Appendix 1 (After Action Report) to Operational Report-Lessons Learned (RCS-CSFOR 65) for Quarterly Report Ending 31 July 1967

PERSONNEL STATUS SUMMARY AS OF 19 JANUARY 1967

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| <u>AUTHORIZED</u>    | <u>ASSIGNED</u>      | <u>*DEPLOYABLE</u>   |
|----------------------|----------------------|----------------------|
| OFFICERS - 26        | OFFICERS - 25        | OFFICERS - 22        |
| WARRANT OFFICERS - 6 | WARRANT OFFICERS - 6 | WARRANT OFFICERS - 5 |
| ENLISTED MEN - 673   | ENLISTED MEN - 670   | ENLISTED MEN - 641   |

\*NOTE: Assigned deployable does not include personnel who were declared excess by reasons of ETS, Overage in MOS, Compassionate, pending Warrant Officer and OCS Appointments, and personnel on Overseas Levies.

PERSONNEL AND MOS SHORTAGES

|                   | <u>NUMBER</u> | <u>GRADE</u> | <u>MOS</u> |
|-------------------|---------------|--------------|------------|
| OFFICERS:         | 3             | LT           | 1328       |
|                   | 1             | LT           | 0663       |
| WARRANT OFFICERS: | 1             | WO           | 631A0      |
| ENLISTED MEN:     | 1             | E3           | 44A10      |
|                   | 3             | E3           | 51A10      |
|                   | 1             | E3           | 51N20      |
|                   | 2             | E4           | 52B20      |
|                   | 2             | E4           | 52F20      |
|                   | 8             | E3           | 62A10      |
|                   | 1             | E5           | 62E20      |
|                   | 3             | E5           | 62F30      |
|                   | 2             | E3           | 63A10      |
|                   | 1             | E4           | 63B20      |
|                   | 1             | E4           | 70A10      |
|                   | 1             | E5           | 71D20      |
|                   | 4             | E3           | 76A10      |
|                   | 1             | E6           | 76C40      |
|                   | 1             | E4           | 76K30      |

TAB D (SOP-Preparation For Overseas Movement) to Appendix 1 (After Action Report) to Operational Report - Lessons Learned (RCS - CS-FOR 65) for Quarterly Report Ending 31 July 1967

DEPARTMENT OF THE ARMY  
HEADQUARTERS, 92D ENGINEER BATTALION (CONSTRUCTION)  
Fort Bragg, North Carolina 28307

AJBLC-TP

3 October 1966

STANDING OPERATING PROCEDURES

SECTION I

PREPARATION FOR OVERSEAS MOVEMENT

1. PURPOSE: The purpose of this SOP is to establish procedures for processing personnel for unit movement overseas.

2. RESPONSIBILITIES: It is the responsibility of the Battalion Personnel Officer to initiate and process DA Form 613 (Checklist for Preparation of Replacements for Overseas Movement) and Personnel Affairs processing. The Personnel Officer will act as Project Officer. Company Commanders and Staff Sections will render support and initiate action upon the request of the Project Officer (Personnel Officer).

SECTION II

POR CHECK

3. POR CHECK SCHEDULE: A central personnel processing station will be established in the Battalion Classroom (4048) during the period of 17 Oct 66 thru 21 Oct 66. Company personnel will be processed on the following schedules. Personnel will be lined up in alphabetical order without regard to grade.

|                               |            |           |
|-------------------------------|------------|-----------|
| a. Headquarters Company       | 0730 hours | 17 Oct 66 |
| b. Company A                  | 0730 hours | 18 Oct 66 |
| c. Company B                  | 0730 hours | 19 Oct 66 |
| d. Company C                  | 0730 hours | 20 Oct 66 |
| e. Battalion Officers         | 0730 hours | 21 Oct 66 |
| f. Properly excused personnel | 1230 hours | 21 Oct 66 |

4. FUNCTIONS: The POR station will be established based upon Enclosure #1. Personnel and functions to operate the station will be provided as follows:

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PRECEDING  
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3 October 1966

## STANDING OPERATING PROCEDURES (CONT'D)

- a. The Battalion S-3 will provide personnel to check items 1 thru 8 and items 14 thru 16, DA Form 613. Company Commanders will supply the S-3 with unit training cards by issuing such cards to each individual prior to reporting to the POR station.
- b. The Battalion Medical Section will provide personnel to check items 10, 11, 19, 20, 42 and 43, DA Form 613. Immunizations required will be administered at the time of POR check.
- c. Company Commanders will schedule a show-down inspection of all individual clothing and equipment for all personnel in pay grade E-6 and below prior to 10 Nov 66. All shortages will be in the possession of the individual prior to 10 Nov 66. The Personnel Officer will have each E-7 in pay grade E-7 and above sign a statement as provided by para 13 AR 612-35 at the time of POR check (Incl 3). Unit Commanders will insure that each man has in his possession his Dog Tags and current ID card (DD Form 2A) at the time of POR check. Personnel will be lined up for processing in alphabetical order (see para 3 above). All personnel must have their personal copy of immunization record with them at time of POR check.
- d. The Battalion Postal Officer will insure that Locator Cards (DD Form 1175) are procured in three (3) copies from the 3d Army MRU one (1) month prior to deployment (para 50c AR 220-10). Sufficient numbers of DD Form 1175 are required to be on-hand (para 31b, AR 220-10). A survey of the number required will be accomplished by the Battalion Postal Clerk at the time of POR check. Distribution will be accomplished by the Battalion Postal Clerk one (1) week prior to deployment.
- e. The Battalion Personnel Officer will provide personnel to check and complete items 9, 12, 17, 21, 23, 25, 30 thru 39, and 37 thru 41, DA Form 613. In addition, the Personnel Officer will cause the Personnel Readiness folders to be checked to insure that all required forms are contained therein (TUSA Reg 600-13 and XVIII Abn Corps Reg 600-14).

## SECTION III

PERSONAL AFFAIRS

5. PERSONAL AFFAIRS PROCESSING: Processing will be accomplished by the Battalion Personnel Officer as follows:

a. Personal Affairs Orientation: A Personal Affairs Orientation will be accomplished during the Field Training Exercise on the following schedule:

1. Headquarters Company and Company A 0730 hours 12 Oct 66.
2. Company B 0730 hours 13 Oct 66 and Company C 1230 hours 13 Oct 66.

3 October 1966

## STANDING OPERATING PROCEDURES (CONT'D)

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b. Pay: A POR worksheet for Pay Action will be distributed to each person assigned to the Battalion for completion (Inclosure #2). The worksheet will be completed and returned to the Personnel Officer at the time of POR check. After the POR check to insure that all individuals have a worksheet, Pay actions will be accomplished by the Personnel Officer.

c. Emergency Data Cards: Emergency Data Card Worksheet will be distributed to each man for completion (Inclosure 4). The worksheet will be completed and returned to the Personnel Officer at the time of POR check by each individual. Typing of new DA Forms 41 will be accomplished in the personnel office.

d. Household Goods/Shipment of Dependents and Dislocation Allowance/Dependent Travel Pay:

(1) Household Goods: Applications for shipment and/or storage of household goods (Incl 5 thru 8) will be completed as soon as possible after orientation by the Post Transportation Office. Orientation will be accomplished immediately upon receipt of the Unit Movement Orders. All married personnel should have their wives attend this orientation when scheduled. Unit Commanders will be notified as to scheduled time and date of the orientation.

(2) Shipment of Dependents: Shipment either via government transportation or via private transportation and reimbursement for such travel will be accomplished after the Transportation orientation. Worksheet forms to accomplish this action or final forms will be accomplished by the Personnel Section. Pay actions concurrent with the movement of dependents will be provided also, ie., Dislocation allowance and Quarters allowance.

e. Privately Owned Vehicle Storage: The personnel section will provide information regarding temporary or non-temporary storage of privately owned vehicles upon request. It is not advisable that military storage of vehicles be provided unless essential.

FOR THE COMMANDER:

/S/ Harry P. Herbst  
/T/ HARRY P. HERBST  
WOL, USA  
Asst Adjutant

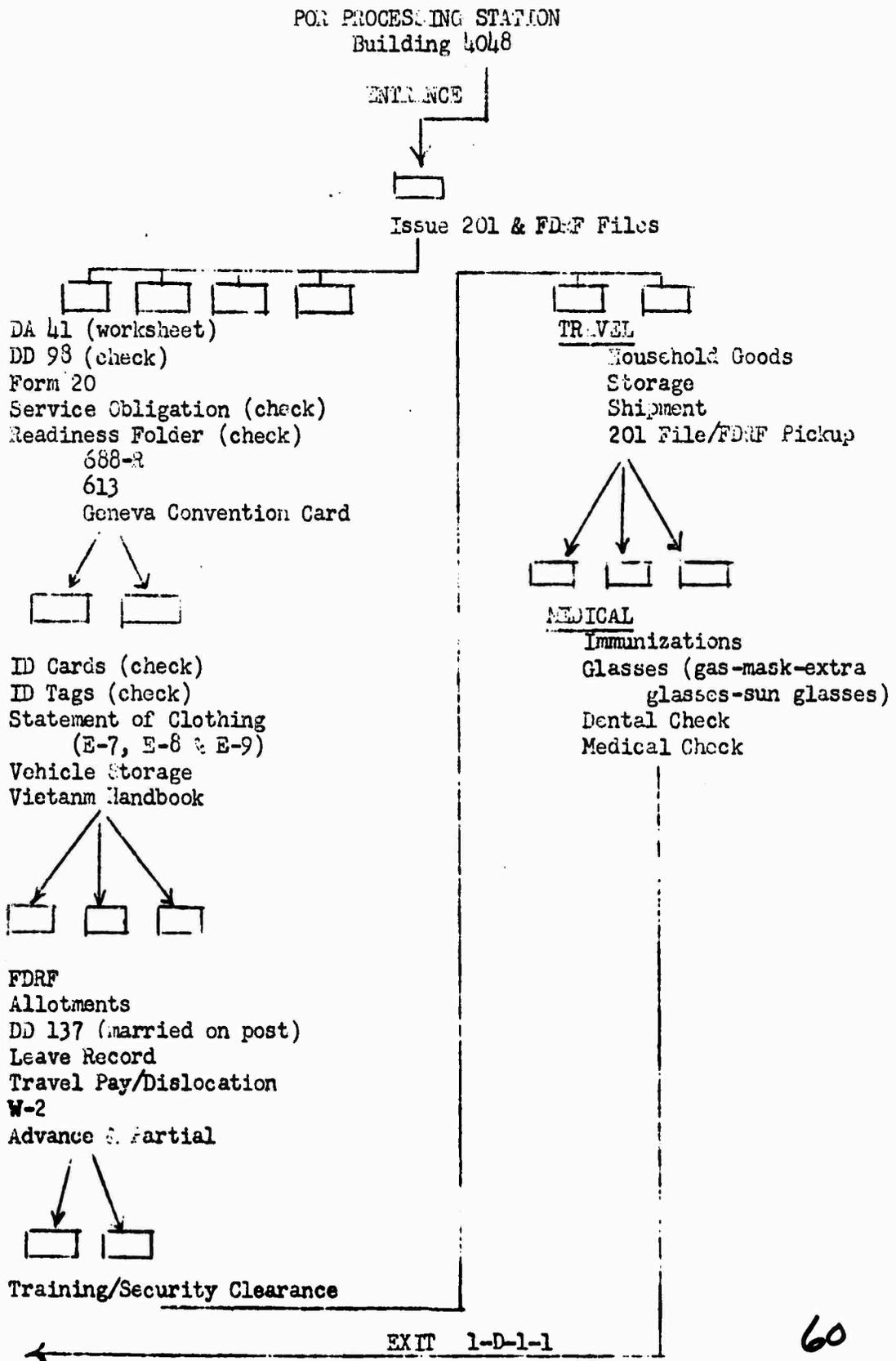
Inclosures: 1. POR Processing Station 2. POM Worksheet For Pay Action  
3. Clothing Statement 4. Emergency Data Card Worksheet  
5. Shipment of Household Goods Worksheet 6. Household Goods Storage Worksheet  
7. Dependent Travel Worksheet 8. Community Service Worksheet

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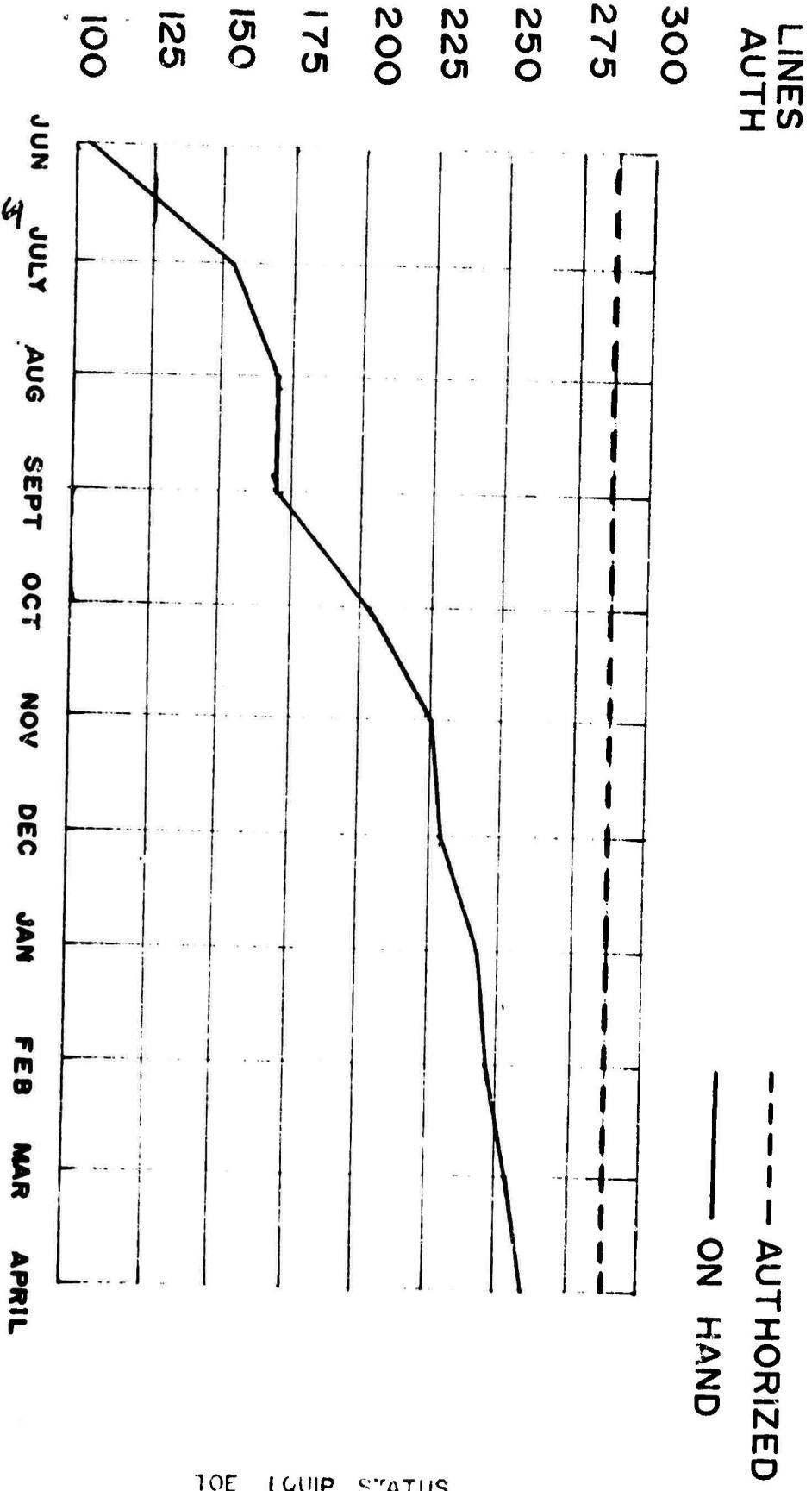
Incl 1 (POR Processing Station) to TAB D (SOP-Preparation For Overseas Movement) to Appendix 1 (After Action Report) to Operational Report - Lessons Learned (RCS -CSFOR 65) for Quarterly Report Ending 31 July 1967

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TAB E (TOE EQUIPMENT STATUS) TO APPENDIX I (AFTER ACTION REPORT) TO OPERATIONAL REPORT LESSONS LEARNED (RCS-CS FOR 65) FOR QUARTERLY REPORT ENDING 31 JULY 1967

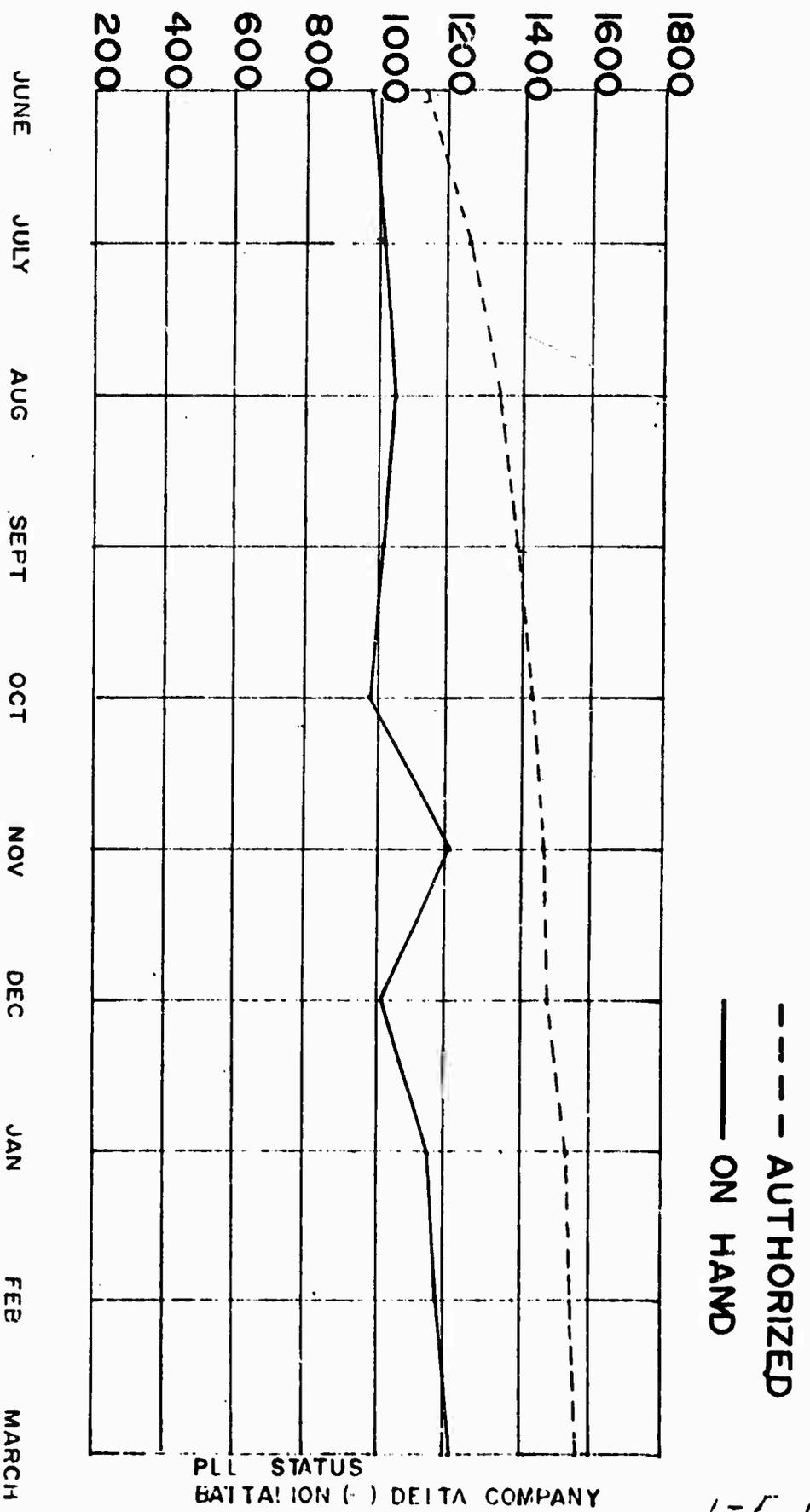


TOE EQUIP STATUS  
BATTALION (--) DELTA COMPANY

1-1-1

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TAB F (PLL STATUS) TO APPENDIX I (AFTER ACTION REPORT)  
 TO OPERATION REPORT-LESSONS LEARNED (RCS-CS FOR 65)  
 FOR QUARTERLY REPORT ENDING 31 JULY 1967



PLL STATUS  
 BATTALION (-) DELTA COMPANY

----- AUTHORIZED  
 \_\_\_\_\_ ON HAND

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 TAB G (PLL For Grader, Road Motorized, Cat 12) to Appendix 1 (After Action Report) to Operational Report - Lessons Learned (RCS - CSFO# 65) for Quarterly Report ending 31 July 1967.

PLL FOR GRADER, ROAD, MOTORIZED, CAT 12

|               |                | <u>TM 5-3805-209-20P</u> | <u>ACTUAL USAGE</u> |
|---------------|----------------|--------------------------|---------------------|
| 2520-081-7076 | Gasket         | 1                        | 2                   |
| 2520-084-8238 | Gasket         | 1                        | 0                   |
| 2520-164-2401 | Gasket         | 1                        | 2                   |
| 2520-423-8283 | Gasket         | 1                        | 0                   |
| 2520-853-6545 | Gasket         | 1                        | 0                   |
| 2530-081-7675 | Gasket         | 1                        | 0                   |
| 2530-863-5549 | Ring, Pump     | 1                        | 0                   |
| 2815-895-7036 | Gasket         | 30                       | 32                  |
| 2815-991-6518 | Gasket Kit     | 1                        | 0                   |
| 2910-084-7503 | Gasket         | 3                        | 4                   |
| 2910-377-5548 | Filter Element | 3                        | 2                   |
| 2910-858-6190 | Spring         | 1                        | 0                   |
| 2910-858-6200 | Spring         | 1                        | 0                   |
| 2910-859-2313 | Parts Kit      | 1                        | 2                   |
| 2910-898-6696 | Gasket         | 1                        | 2                   |
| 2920-555-2813 | Regulator      | 1                        | 0                   |
| 2920-712-1259 | Parts Kit      | 1                        | 2                   |
| 2930-599-2190 | Packing        | 1                        | 0                   |
| 2940-084-7533 | Element        | 1                        | 0                   |
| 2940-378-9148 | Filter Element | 4                        | 4                   |
| 2940-580-6304 | Filter Element | 60                       | 64                  |
| 3030-048-7483 | Belt "V"       | 1                        | 2                   |
| 3030-084-7482 | Belt "V"       | 1                        | 2                   |
| 3805-084-7481 | Tooth          | 5                        | 0                   |
| 3805-127-6893 | End Bit        | 6                        | 8                   |
| 3805-227-0490 | Cutting Edge   | 6                        | 8                   |
| 3805-345-7865 | Spide Assy     | 1                        | 0                   |
| 3805-957-4983 | Hose Assy      | 1                        | 0                   |
| 3805-958-1889 | Hose Assy      | 1                        | 0                   |
| 3830-076-1827 | Shank          | 2                        | 2                   |
| 3830-076-1828 | Tooth          | 5                        | 6                   |
| 3830-532-4504 | Shank          | 2                        | 0                   |
| 4720-289-9624 | Hose           | 1                        | 0                   |
| 5306-263-3533 | Bolt           | 78                       | 8                   |
| 5310-266-0389 | Nut            | 78                       | 8                   |
| 5330-081-9705 | Washer         | 1                        | 2                   |
| 5330-196-5382 | Packing        | 1                        | 2                   |
| 5330-297-6548 | Gasket         | 1                        | 0                   |
| 5330-339-6224 | Packing        | 2                        | 10                  |
| 5330-527-9105 | Seal           | 1                        | 0                   |

|               |            |   |     |    |
|---------------|------------|---|-----|----|
| 5330-605-1031 | Packing    | 1 | 104 | 74 |
| 5330-815-4046 | Packing    | 1 | 2   |    |
| 5330-858-6277 | Felt       | 1 | 2   |    |
| 5330-995-0247 | Gasket     | 1 | 0   |    |
| 5340-466-9576 | Ring, snap | 2 | 2   |    |
| 6220-819-7028 | Lamp, Unit | 1 | 2   |    |
| 6240-019-0877 | Lamp       | 5 | 2   |    |
| 6240-044-6914 | Lamp       | 2 | 2   |    |
| 6240-299-6931 | Lamp       | 1 | 2   |    |
| 6240-643-1322 | Lamp       | 2 | 2   |    |
| 6240-727-8573 | Lamp       | 2 | 2   |    |

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T.B K (T.T) to Appendix 1 (After Action Report) to Operational Report -  
Lessons Learned (RCR -C.FOR 65) for Quarterly Report ending 31 July 1967

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EQUIPMENT "TO ACCOMPANY TROOPS" (TAT) AR 220-10  
REQUIREMENTS VS AUTHORIZED CARGO SPACE

1. Cargo requirements to comply with paragraph 21, Minimum Essential  
Equipment, AR 220-10.

|                              |                            |
|------------------------------|----------------------------|
| a. Tentage:                  | 174 measurement tons       |
| b. Tent Liners:              | 69 measurement tons        |
| c. Mess Equipment:           | 24 measurement tons        |
| d. Organizational Equipment: | 60 measurement tons        |
| e. Cots:                     | 32 measurement tons        |
| f. Individual Baggage:       | 98 measurement tons        |
| g. Basic Load Ammunition:    | <u>12</u> measurement tons |
|                              | TOTAL 469 measurement tons |

2. Cargo space allotted to the unit by Military Ocean Terminal, Bay  
Area, for T.T:

|  |
|--|
| a. 12 COMEX containers (72 measurement tons) |
| b. 130 measurement tons loose cargo.         |
| c. Total: 202 measurement tons               |

3. Utilization of allotted cargo space:

|                              |                            |
|------------------------------|----------------------------|
| a. Tentage:                  | 60 measurement tons        |
| b. Tent Liners:              | None                       |
| c. Mess Equipment:           | 11 measurement tons        |
| d. Organizational Equipment: | 20 measurement tons        |
| e. Cots:                     | None                       |
| f. Individual Baggage:       | 98 measurement tons        |
| g. Basic Load Ammunition:    | <u>12</u> measurement tons |
|                              | TOTAL 201 measurement tons |

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1-K-1

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Security Classification

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|---|---|------------------------------------|
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