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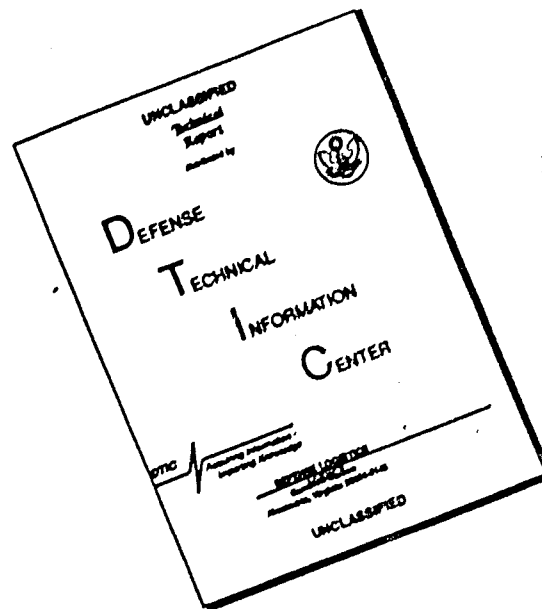
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DEPARTMENT OF THE ARMY
OFFICE OF THE ADJUTANT GENERAL
WASHINGTON, D.C. 20310

IN REPLY REFER TO

AGAM-P (M) (18 Dec 68) FOR OT UT 683138

23 December 1968

SUBJECT: Operational Report - Lessons Learned, Headquarters, 36th
Engineer Battalion (Const), Period Ending 31 July 1968 (U)

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2. Information contained in this report is provided to insure that the Army realizes current benefits from lessons learned during recent operations.
3. To insure that the information provided through the Lessons Learned Program is readily available on a continuous basis, a cumulative Lessons Learned Index containing alphabetical listings of items appearing in the reports is compiled and distributed periodically. Recipients of the attached report are encouraged to recommend items from it for inclusion in the Index by completing and returning the self-addressed form provided at the end of this report.

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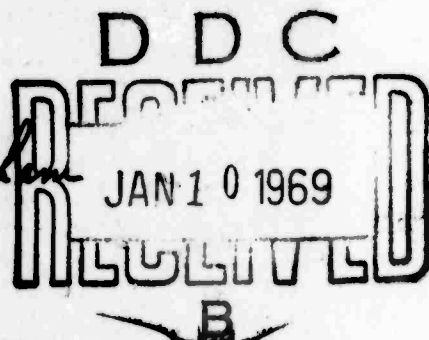
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KENNETH G. WICKHAM
Major General, USA
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DEPARTMENT OF THE ARMY
HEADQUARTERS, 36TH ENGINEER BATTALION (CONST)
APO San Francisco 96291

EGFE-OP

14 August 1968

SUBJECT: Operational Report - Lessons Learned (RCS CSFOR R1) For Quarterly
Period Ending 31 July 1968

Commander-in-Chief, United States Army, Pacific, ATTN: GPOP-OT, APO 96588
Commanding General, United States Army, Vietnam, ATTN: AVHGC-OH, APO 96307
Commanding Officer, 34th Engineer Group (Const), ATTN: EGF-OP, APO 96291

1. SECTION I, OPERATIONS - Significant Activities

a. Quarrying and crushing operations at Gia Ray terminated 1 May 1968 in preparation for moving A Company (-), 36th Engineer Battalion and attached 94th Quarry detachment to Vung Tau. All personnel and equipment including the 225 TPH crusher closed into Vung Tau 22 May 1968. 48,000 CY of 3"(-) rock were stockpiled at Gia Ray for future requirement.

b. On 8 May, OPERATION PINNAROO, a joint US - Australian land clearing effort was terminated. The 36th Engineer Battalion supported the Australians with 5 Rome Flows. During the operation which began 1 April 1968, a total of 1100 acres of light to medium jungle was cleared.

c. On 15 May, the platoon of B Company, 36th Engineer Battalion which had been located at Ham Tan returned to Vung Tau and began vertical construction in the Vung Tau area.

d. On 28 June the battalion was visited by LTG Cassidy, Chief of Engineers. LTG Cassidy visited the POL Tank Farm construction site and Quarry #1.

e. On 1 July the 67th Engineer Company (DT) was detached from the battalion and attached to the 93rd Engineer Battalion. One platoon was placed in support of the 36th Engineer Battalion, and is currently located in Vung Tau in support of battalion haul missions.

f. On 1 July D Company, 36th Engineer Battalion was relocated to Baria to occupy the cantonment left empty by the 67th Engineer Company. The move was completed by 5 July and the company is fully operational throughout the southern half of Phuoc Tuy Province.

g. During the period 14 - 17 July the battalion, supported by two float bridge companies transported 840,000 BF of lumber from Vung Tau to Dong Tam in support of MER construction for the 9th Infantry Division.

h. During the period 22 - 27 July the battalion underwent its Annual General Inspection. The findings were SATISFACTORY and no reinspection was recommended.

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14 August 1968

SUBJECT: Operational Report - Lessons Learned (RCS CSFOR R1) For Quarterly Period Ending 30 April 1968

i. On 31 July, the 156th Engineer Detachment (Well Drilling) which had been drilling wells on Phu Quoc Island completed the project and was transferred to the 159th Engineer Group. The 156th will remain in support of the battalion until 30 September 1968 in order to complete wells for MACV Advisor Housing at Baria and Ham Tan.

j. During the reporting period 200 replacements were received and processed by the battalion as replacements for rotational losses. A total of 150 personnel were out-processed.

k. During the period the battalion expended 79 days performing its construction and support missions, six days undergoing mandatory training, and six days non-duty time.

2. SECTION II. LESSONS LEARNED: Commanders Observations, Evaluations and Recommendations.

a. Personnel

(1) Shortage of Qualified Personnel in MOS 51H40

(a) Observation: During the period the battalion operated at a severe disadvantage because of lack of skilled construction supervisors having only 17 of 30 authorized on hand.

(b) Evaluation: Despite intensive efforts to identify personnel within the battalion with sufficient skill to act as construction supervisors and a concerted OJT program for those which were identified as having the abilities, the battalion was able to fill only 25% of its vacancies in the MOS 51H40.

(c) Recommendations: That a system be established at a level of command higher than battalion to screen incoming personnel who possess the degree of skill and leadership for utilization as construction supervisors and that such personnel be assigned where critical shortages in the MOS 51H40 exist.

(2) Utilization of R&R Allocations

(a) Observation: Numerous cancellations of R&R allocations occur because of lack of funds.

(b) Evaluation: Some personnel who request R&R allocations are forced to cancel their proposed R&R because of lack of funds when the time approaches for their departure. This creates an administrative burden in that another individual must be found on short notice to accept the allocation and prevent a turnback.

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(c) Recommendation: Personnel intending to go on R&R should be required to show positive proof of adequate funds in the form of money orders, checks, etc...at least thirty days prior to their anticipated date of departure.

(3) Lack of Promotion Opportunities at the NCO Level

(a) Observation: Because of a lack of supervisory personnel, lower ranking individuals are required to perform in TO&E slots which frequently call for rank two grades higher than that of the person filling the slot.

(b) Evaluation: Large amounts of sophisticated and expensive equipment and many complex construction operations are being supervised by personnel whose rank is lower than that authorized by the TO&E. These personnel often do outstanding jobs, yet cannot be promoted because of lack of time in grade, shortage of allocations, etc...consequently, efficiency is lost because incentive is lacking to the man performing an E7's job as an E5.

(c) Recommendation: That provision be made for an individual to draw pay commensurate with the responsibility of his job and not based solely on his pay grade.

b. Operations

(1) Assembly of Bolted Steel Tanks

(a) Observation: Assembly of previously used bolted steel tanks is quite difficult in some cases due to warped and bent sections.

(b) Evaluation: Difficulty has been encountered in several instances during assembly of bolted steel tanks which had been assembled previously and then disassembled due to the bending or warping of some of the steel panels. Standard assembly procedures as prescribed in applicable manuals are not satisfactory in these cases.

(c) Recommendation: All members should be set in place and bolts inserted in all holes. Only sufficient bolts should be tightened to hold members in place allowing enough slack for members which are deformed to be moved allowing complete assembly with minimum difficulty.

(2) Rock Crushing During Periods of High Rainfall

(a) Observation: When crushing a base course material during the rainy season, the binder material has a tendency to stick to the grates and screen of the vibrating grizzly and ultimately to the inclined chute of the 75 TPH jaw crusher.

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14 August 1968

SUBJECT: Operational Report - Lessons Learned (RCS CSFOR R1) For Quarterly Period Ending 30 April 1968

(b) Evaluation: Because of the high rain fall, the cohesive fines frequently encountered in blast rock tends to adhere to the vibrating grizzly and inclined chute of the crusher resulting in severe clogging and ultimately in cessation of crushing operations until the material is cleaned out.

(c) Recommendation: By removing the screen and replacing it with a solid piece of sheet metal, the cohesive material will vibrate forward to a position where it will drop straight to the conveyor belt thus eliminating downtime required to clean the chute.

(3) Construction of Aircraft Revetments

(a) Observation: During extensive construction of aircraft revetments both M8A1 matting and corrugated roofing were used.

(b) Evaluation: In constructing aircraft revetments both M8A1 matting using welded struts and corrugated roofing placed on wooden frames were utilized on two separate jobs. It was found that the corrugated roofing wood frame type were easier to construct, could be completed more rapidly, and provided a more appealing end product than the M8A1 type and required less specialized support such as welders.

(c) Recommendation: That whenever possible, corrugated roofing and wooden frames be utilized instead of M8A1 matting in constructing aircraft revetments.

c. Training

(1) Training of newly arrived personnel

(a) Observation: In many cases newly arrived personnel from CONUS are not adequately trained to perform even basic missions in RVN.

(b) Evaluation: Because many replacements received, lack knowledge in not only MOS related skills but in basic subjects such as ambush tng, rapid reaction drill, etc...it is imperative that these topics be taught as soon as time and work schedules will permit.

(c) Recommendation: Companies must be prepared to take advantage of any lulls in work schedules due to weather, material shortage, etc...by having prepared lesson plans and instructors who can conduct a class on the jobsite while the men are waiting to return to work, thereby supplementing the mandatory training topics taught at scheduled times.

d. Intelligence: None

e. Logistics

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14 August 1968

SUBJECT: Operational Report - Lessons Learned (RCS CSFOR R1) For Quarterly
Period Ending 31 July 1968

(1) Shortage of Independent Wire Rope Center Cable

(a) Observation: This unit has experienced difficulty in procuring adequate amounts of independent wire rope center cable.

(b) Evaluation: Although stocks of hemp center wire rope are more than adequate in Vietnam and have the advantage of holding lubricants better, the hemp center rope tends to develop flat spots and kink faster than the wire center rope thus requiring replacement much more frequently. Stockage levels of the wire center rope are very low in-country and timely replacement is not possible.

(c) Recommendation: Engineer units deploying from CONUS should bring an ample supply of wire center cable for use on cranes. Downtime can be greatly reduced by using wire center cable instead of hemp center cable because of the longer time required between replacement.

f. Organization: None

g. Maintenance

(1) PLL Stockage Lists for Items Replaceable as Sets

(a) Observation: In some cases the authorized stockage level for items such as bucket loader teeth as indicated in the applicable Technical Manual are inadequate.

(b) Evaluation: In certain cases such as replacing teeth on a bucket loader or scarifier teeth on a motorized grader, the authorized stockage level is not sufficient because invariably the teeth must be replaced as a set. (For example, two teeth are authorized for stockage for a bucket loader but nine teeth are required for a set).

(c) Recommendation: In order to avoid the problem of lack of replacement teeth, the necessary additional teeth required to permit a replacement by set should be added to the unit PLL as mission essential.

(2) Shortage of Starter Motors for Clark 290M Tractors

(a) Observation: Considerable downtime has been experienced because of lack of starter assemblies for the Clark 290M tractors.

(b) Evaluation: Because of a lack of starter assemblies for the Clark 290M Tractor, many useful equipment hours have been lost awaiting the supply system to provide the needed parts. By repositioning the head on a 5 ton dump truck starter motor and exchanging bendix gears a suitable replacement can be devised that works quite well on the 290M.

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14 August 1968

SUBJECT: Operational Report - Lessons Learned (RCS CSFOR R1) For Quarterly
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(c) Recommendation: That 5 ton dump truck starter motors be modified to fit the Clark 290M tractor when the required starter for the tractor is not available.

(3) Repair of Tubeless Tires on Front Loaders

(a) Observation: Occasionally new tubeless tires on front loaders are damaged beyond repair by normal means.

(b) Evaluation: At times damage to a tubeless tire which is new will be of such an extent that repair is not possible by normal means. Use of the new tire can still be gained by removing the tire and drilling a hole in the rim off center to accept a valve stem on an inner tube. A 10 ton tractor inner tube can then be placed in the tire, after a boot has been placed, and normal life can be obtained from the tire. When replacement becomes necessary, the hole in the rim can be welded shut, ground off smooth and a new tubeless tire mounted.

(c) Recommendation: When relatively new tubeless tires are damaged beyond normal repair, the insertion of a boot and inner tube can permit normal life to be obtained from the damaged tire.

Richard E Leonard

RICHARD E LEONARD
LTC, CE
Commanding

1 incl
Organizational Structure

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EGF-OP (14 Aug 68) 1st I nd

SUBJECT: Operational Report - Lessons Learned RCS CSFOR-65(R1) for Quarterly Period Ending 31 July 1968

DA, HEADQUARTERS 34TH ENGINEER GROUP (CONST), APO 96291 23 August 1968

TO: Assistant Chief of Staff for Force Development, Department of the Army
Washington, DC 20310
Commanding General, 20th Engineer Brigade, ATTN: AVBI-OS, APO 96491

1. The subject report submitted by the 36th Engr Bn has been reviewed by this HQ and is considered comprehensive and of value for documentation and review of the reporting unit's activities and experiences.

2. This HQ concurs with the submitted report with the following comments:

a. Ref SUBJECT, page 1: Reports symbol should read RCS CSFOR-65(R1).

b. Ref para 2a(1) page 2: All incoming Senior Enlisted Personnel are currently being screened for possible utilization in MOS 51H, in particular Senior Enlisted Personnel in MOS 12B40. It has been a standard policy of this HQ to assign qualified personnel with PMOS 12B40 to construction units when strength requirements justify this action. The 36th Engineer Battalion has to date not been effected by this policy because a better strength posture relative to the other battalions in the group. Further Senior Enlisted Requisitions have been validated with expected fill in MOS 51H40 during the month of September.

c. Ref para 2a(1) page 2: The subordinate commanders are responsible for insuring that each individual has sufficient funds prior to departure on R&R. When this information is required is up to the commander. However, in a combat environment, requiring proof of funds 30 days in advance is too early. Seven days prior to scheduled flight is sufficient time to require proof of funds or locate another individual for R&R or, if necessary, turn back the seat to higher headquarters for reallocation.

d. Recommendations stated in the below referenced "Commander's Observations" are considered noteworthy to merit possible army-wide adoption. No additional amplification is necessary by this HQ as the recommendations are self explanatory and the resultant benefits obvious.

Ref para 2b(1) page 3

Ref para 2b(2) page 3

Ref para 2b(3) page 4

Ref para 2c(1) page 4

Ref para 2e(1) page 4

Ref para 2g(1) page 5 (unit should submit request for change to PLL as per applicable regulations)

Ref para 2g(3) page 6

e. Ref para 2g(2): Substitutions of this type are one of the causes of lack of parts of this nature. When substitution is made, experience factors become deflated with a subsequent reduction in available parts. Concur as expedient but not as a matter of course.

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EGF-OP

23 August 1968

SUBJECT: Operational Report - Lessons Learned RCS CSFOR-65(R1) For Quarterly
Period Ending 31 July 1968

FOR THE COMMANDER:

1 Incl
nc

William E Emery
WILLIAM E EMERY
Major, AGC
Adjutant

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CO, 36th Engr Bn

8

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AVBI-OS (14 Aug 68) 2nd Ind
SUBJECT: Operational Report - Lessons Learned (RCS CSFOR R1) for
Quarterly period ending 31 July 1968.

DA, HEADQUARTERS, 20TH ENGINEER BRIGADE, APO 96491 SEP 23 1968

Commanding General, USARV, ATTN: AVHGC-DST, APO 96375

1. Submitted in accordance with USARV regulation 525-15, dated 13 April 68.
2. Subject report for the 36th Engineer Battalion has been reviewed and is considered adequate.

FOR THE COMMANDER:

1 Incl
nc


RICHARD E. TAYLOR
LIT, AGC
Assistant Adjutant

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AMVGC-DST (14 Aug 68) 3d Incl

MAJ Klingman/ds/LBN 4433

SUBJECT: Operational Report - Lessons Learned (RCS CSFOR RI For Quarterly Period Ending 31 July 1968)

HEADQUARTERS, UNITED STATES ARMY, VIETNAM, APO San Francisco 96375 31 OCT 1968

TO: Commander in Chief, United States Army, Pacific, ATTN: GPCP-DT, APO 96558

1. This headquarters has reviewed the Operational Report-Lessons Learned for the quarterly period ending 31 July 1968 from Headquarters, 36th Engineer Battalion (Construction).

2. Comments follow:

a. Reference item concerning lack of promotion opportunities at the NCO level, page 3, paragraph 2a(3): Nonconcur. Department of Defense Military Pay and Allowances Entitlements Manual, 1 January 1967, provides statutory provisions for entitlements, deductions and collections, and establishes Department of Defense policy on the pay and allowances of military personnel.

b. Reference item concerning PII stockage lists for items replaceable as sets, page 5, paragraph 2g(1): Nonconcur. Authorized stockage levels for such items as bucket loader teeth may be increased in accordance with 1st Logistical Command Regulation 700-23, paragraph 5F. The unit will be so advised.

c. Reference item concerning shortage of starter motors for Clark 2900 tractors, page 5, paragraph 2g(2): and 1st Indorsement, paragraph 2e: Concur. However, this substitution should be used only as an expedient measure.

FOR THE COMMANDER:



A.R. GUENTHER
CPT. AGC
ASST. ADJUTANT GENERAL

1 Incl
no

By Turn:
HQ 20th Engr Bde
HQ 36th Engr Bn (Const)

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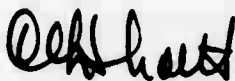
GPOP-DT (14 Aug 68) 4th Ind
SUBJECT: Operational Report for HQ, 36th Engr Bn (Const) for Period
Ending 31 July 1968, RCS CSFOR-65 (R1)

HQ, US Army, Pacific, APO San Francisco 96558 3 DEC 1968

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

This headquarters has evaluated subject report and forwarding indorse-
ments and concurs in the report as indorsed.

FOR THE COMMANDER IN CHIEF:



C. L. SHORTT
CPT, AGC
Asst AG

1 Incl
nc

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ORGANIZATIONAL STRUCTURE

1. ORGANIC UNITS:

- a. HHC, 36th Engineer Battalion (Const)
- b. A Company, 36th Engineer Battalion (Const)
- c. B Company, 36th Engineer Battalion (Const)
- d. C Company, 36th Engineer Battalion (Const)
- e. D Company, 36th Engineer Battalion (Const)

2. ATTACHED UNITS:

- a. 544th Engineer Company (CS)
- b. 94th Engineer Detachment (Quarry)
- c. Quarry Section, 595th Engineer Company (LE)
- d. Quarry Section, A Company, 93rd Engineer Battalion, (Const)
- e. 156th Engineer Detachment (Well Drilling)

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12

INCLOSURE 1

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3. REPORT TITLE			
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Experiences of unit engaged in counterinsurgency operations, 1 May - 31 July 1968.			
5. AUTHOR(S) (First name, middle initial, last name)			
CO, 36th Engineer Battalion			
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13. ABSTRACT			

14

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ITEM 1

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ITEM 5

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