

~~TOP SECRET ONLY~~
DEPARTMENT OF THE ARMY
HEADQUARTERS 19TH ENGINEER BATTALION (COMBAT)(ARMY)
APO 96238

EGD-BE-CO

31 July 1967

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

THRU: Commanding Officer, 45th Engineer Group (Const),
APO 96238

Commanding General, 18th Engineer Brigade, ATTN: AVBC-C,
APO 96277

Commanding General, U.S. Army Engineer Command, Vietnam,
ATTN: AVCC-PO, APO 96491

Commanding General, U.S. Army Vietnam, ATTN: AVGC-DH
APO 96307

Commander-in-Chief, U.S. Army Pacific, ATTN: GPOP-OT,
APO 96558

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

~~TOP SECRET ONLY~~

EGD-BE-CO

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

31 July 1967

KWENTZLER

Section 1, Significant Organization or Unit Activities

1. Command

a. During the quarterly reporting period May through July 1967, the 19th Engineer Battalion was primarily engaged in complex construction projects. The last two weeks of the reporting period the Battalion received a change of mission from construction to combat support.

b. The majority of the construction work was in support of the development of the Qui Nhon area. From its Headquarters in the Long My Valley, the Battalion concentrated its effort on three principle projects: Logistical Expansion Depot, Aviation Depot, and Phu Tai Ammo Supply Point.

c. Initial planning for the change from construction to operational support was begun in mid-June. Notification of the movement order was received 14 July, with a scheduled completion date of 23 July 1967. Two line companies, Headquarters Company, the Battalion Headquarters, and the 137 Engineer Company (LE) moved from their location in the Long My Valley to LZ English north.

d. At the beginning of the reporting period the Battalion was under TO&E-5-35D which authorized a Headquarters and three line companies. In accordance with General Order number 107, on 12 June 1967 it was placed under TO&E-5-35E which authorized four line companies. Delta Company was formed on 4 July 1967 from personnel in the Battalion and from personnel in the other Engineer Battalions in the Qui Nhon area.

e. With the attachment of the 137th Engineer Company (LE) on 24 May 1967, the 1st platoon of the 572nd Engineer Company (LE) was sent to LZ Hammond to support the 35th Engineer Battalion and the rest of the Company remained with the 19th Engineer Battalion at Long My.

2. Personnel and Administration

a. The major problem for the personnel section remains the same; assignment instructions. An advisory team from Engineer Command visited the Personnel office and complimented our system of reporting for assignments and our suspense system on receiving orders.

b. The battalion educational program has continued with primary emphasis being placed on the GED testing program. During the quarter 30 personnel have participated in the program, either by taking GED tests or by studying USAFI correspondence courses.

EGD-BE-CO

31 July 1967

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

3. Intelligence and Counter Intelligence.

a. Intelligence efforts for this period continued to be expanded towards major route and bridge reconnaissance missions within and adjacent to the engineer area of responsibility.

b. The following list of items describes in detail the major effort expanded on reconnaissance missions for this quarter:

1. Deliberate road and bridge reconnaissance of TL-439 from (CQ 058/014) to (CQ 083/914), LTL-6B, from intersection of QL-1 South (CQ 073/713) to (BQ 955/799) North of La Hai, from intersection of LTL-6B (BQ 963/785) and TL-2D to Dong Tre Airfield (BQ 913/708) and from IN 87 (BS 910/161) to IN 108 (BS 840/330) South of Duc Pho. Included in the studies were the locations and detail descriptions of all major drainage structures, cross sections of roads taken at various points along the routes and roadway photographs. Also, a detail deliberate study of a route from Ferry Site (CQ 085/735) to Tuy Hoa (CQ 161/462) was made for the purpose of preparing a report to support planning for the possible expansion of the route to a two (2) lane road.

2. Special reconnaissance for the purpose of upgrading Dong Tre Airfield (BQ 913/708). This reconnaissance included a road recon from Valley G (BR 983/175) to Dong Tre Airfield (BQ 913/708) to determine if the road was capable of holding the heavy equipment necessary to upgrade the airfield. Also, the Song Cau Airfield (CQ 087/889) was reconnoitered to insure that all damage had been reported and that the field was maintained in a high state of repair.

3. Another special reconnaissance was made to determine the areas on QL-1 South from the junction of 440 (CR 003/254) and route QL-1 to Tuy Hoa (CQ 161/462) and from intersection of LTL-6B (BR 837/043) and QL-1 to Van Canh S.F.F.C. Camp to determine areas suitable for Rome plow clearing. Several areas along these routes had heavy vegetation growing up to the road shoulder.

4. Several other reconnaissance missions were performed during this period, such as a recon to locate fill and quarry sites between bridge no IN 87 (BS 910/161) and bridge no IN 101 (BS 920/273), recon to locate a company size cantonment area from BS 920/180 to (BS 885/289), and a recon to find a possible LST beach at (BS 928/270).

4. Plans, Operations, and Training.

a. During this quarter, elements of this Battalion spent six days in training, 81 days in rear area construction, four days in movement North, and seven days on upgrading QL-1.

EGD-BE-CO

31 July 1967

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

b. During the reporting period work continued on three major projects.

1. Phu Tai Ammo Supply Point. During May, June and July maximum effort was put forth into pouring 17 pads (40'x100') using 629 cubic yards of concrete and involving 90,000 man-hours.

A complete topographic survey was made of the ASP. From this survey a new drainage system was designed and work was started to implement these plans. 72 inch culverts were installed under roads, and headwalls poured on the upstream side. New channels were cut for the water to flow through.

In another part of the ASP a brass separation yard was constructed. It consisted of 4 100 yard by 50 yard lots and an E-shaped system of access roads. All the roads and open storage lots were water-proofed with 7,000 gallons of RC-3. Headwalls were poured at each culvert placement. At the entrance a 400 square foot tropicalized administration building was constructed.

2. Aviation Depot. Earthwork continued on the Aviation Depot project. 24 hour operations were started on 2 May 1967 because of a shortage of construction equipment. Placement of concrete started on 10 May 1967 and vertical erection of the first 120'x200' pre-engineered building started on 22 May 1967. The four buildings were completed on 23 July 1967. The open storage and helipad were prepared and weather-proofed.

3. Logistical Depot Expansion. During the month of May, primary concern was for the Logistical Depot Expansion with the construction of the last six of the 40'x200' Pascoe buildings and pouring the concrete pad for the first 120'x200' Butler building. Also included in this period was the shaping of drainage, emplacing culvert, building culvert headwalls and capping culverts with concrete.

During the month of June work was completed on the Pascoe buildings and work was begun on the steel erection of the first two Butler buildings. Also work was begun on four open storage pads.

The DBST of the open storage pads, the continuation of the concrete pour, and steel erection of the Butler buildings were of primary concern during the first two weeks of July.

The incorporation of AIK laborers with the concrete pouring platoon, increased the platoons production by 25%. They were employed as screeners, trowelers, and water carriers. Another helpful factor was the arrival of the equipment of the new 137th Light Equipment Company. The addition of their graders, scrapers, and dozers greatly increased work on the ground work for the open storage areas.

EGD-BE-CO

31 July 1967

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

d. Operational Support:

Work on upgrading QL-1 was begun as soon as the unit closed into its new location. During the last week in July, one railroad abutment was removed to allow for road widening. The abutments on several destroyed bridges were removed in preparation for the construction of timber trestle bridges. Concrete was used in patching holes along the road.

Decking was started on one railroad bridge which was to be used as a bypass until a new bridge could be constructed to replace the destroyed one.

5. Logistics.

a. Demands of major construction projects (Long My Depot, 34th Aviation Depot, ASP Expansion and ASP Repair and Maint) in the Qui Nhon are again required the stockage of vast quantities of construction material by the supply section this quarter.

b. Material and supplies were given to the 137th Engineer Company (LE) upon their arrival in country.

c. Requisitions were prepared and submitted in July to reorganize the Battalion from TO&E-5-35E to MTO&E-5-35E.

d. The supply section at the end of this period is engaged heavily in obtaining large quantities of bridge material in support of the route upgrading program.

6. Force Development.

(None)

7. Command Management.

(None)

8. Inspector General.

(None)

9. Information.

(None)

For Official Use Only

EGD-BE-CO

31 July 1967

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

Section II, Part 1, Observations (Lessons Learned)

1. Personnel:

(Personnel Assignment)

ITEM: Personnel shortages.

DISCUSSION: Normal rotation and the activation of Delta Company within the Battalion reduced the number of NCO's to a point where each platoon was considered fortunate if it had more than four NCO's assigned.

OBSERVATION: By identifying competent and capable Specialist E-4 with the Company and placing them in the supervisory capacity where they could be evaluated, it was possible to determine those who could be effectively used as assistant squad leaders. By identifying the qualified personnel early, the Commanders had an opportunity to counsel and provide guidance so that when personnel losses occurred, a substitute was available if a replacement was not received.

(Personnel Records)

ITEM: Handling of records of personnel TDY or SD as part of construction effort of another unit.

DISCUSSION: A unit which is utilized in support of several major organizations, will be primarily attached to one of them for administrative support. During the last quarter the 137th Engineer Company (LE) has been attached to the 19th Engineer Battalion (C)(A) while providing various support to two additional Combat Battalions and one Construction Battalion. These units have been located as much as 70 miles apart. Due to the varied requirements for construction machinery these attachments have been increased and reduced quite frequently. This has produced a problem in the area of record handling; particularly in pay, personnel action, and casualty reporting.

OBSERVATION: The records jacket of each of the men in this type unit should be retained at the personnel office of the unit to which the major portion of this unit is attached. Each man who departs in a TDY or SD status should carry only his Health and Dental Records and a duplicate copy of DA Form 41, Emergency Data Card. This withdraws the burden of locating attached personnel who may have since been detached and reattached elsewhere.

For Official Use Only

EGD-RE-CO

31 July 1967

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

(Medical Examinations for Separation)

ITEM: Medical Examinations for individuals who are sentenced to confinement for whom processing for separation under AR 635-212 is contemplated.

DISCUSSION: In two cases, recently, processing of stockade prisoners for separation under the provision of AR 635-212 has been delayed for considerable periods of time because of the difficulty in having physicals for separation given to these individuals while confined in the stockade. The difficulty is greatly increased because of the large distance involved between the stockade and this unit. Even after several requests were forwarded to the USARV installation stockade for physicals and the necessary forms were forwarded, one man still lacks the medical examination necessary for processing with a delay of several months.

OBSERVATION: It would be desirable if the medical examinations could be given without needless delay upon request to the stockade; however, it may be necessary to have the medical examinations completed prior to confinement.

2. Operations:

(Construction of 120'x200' Butler Buildings)

ITEM: Pouring large concrete pads.

DISCUSSION: For the Butler building construction in the Long My Depot and the Aviation Depot, concrete slabs 120'x200' had to be poured. Because of high temperatures it was found that the finished pad had a tendency to cure at a faster rate than normal during the intense heat of daylight hours.

OBSERVATIONS: To keep the concrete pad from surface dehydration while concrete is still too wet to cover, a sand berm was built around the poured section and carefully flooded with water until the concrete set enough to cover with wet burlap sacks or sand.

ITEM: Installation of column, girts, and roof beams.

DISCUSSION: Some difficulty was encountered when installing columns, girts and roof beams because of the damaged components and poor alignment before the primary structure was plumbed.

OBSERVATION: A chain hoist is indispensable in installing columns, girts and roof beams. A careful analysis of the structure in the vicinity of the problem will indicate the direction to pull so that component parts can be installed.

EOD-BE-CO

31 July 1967

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

ITEM: Placing rebar under columns.

DISCUSSION: A complicated rebar design was used under columns and it was essential that the columns bolts be accurately set and level.

OBSERVATION: A jig was made to hold the column bolts in their proper position and all rebar was arc-welded to form a complete assembly. This assembly worked very well because it could be easily handled.

(Surfacing)

ITEM: Compaction of fill.

DISCUSSION: This unit did not have access to a 50 ton pneumatic roller during the extensive fill operation and had to rely primarily on a sheepsfoot roller for compaction. It was difficult to locate soft spots.

OBSERVATION: By running a loaded 290 scraper over the area in question several times and observing the ground, soft spots, if any, become obvious by the waving action under the wheels.

ITEM: Capping of culverts.

DISCUSSION: Included in the depot drainage plan were many 18 inch and 24 inch steel culverts. With the heavy traffic across these culverts many collapsed due to erosion of soil cap by the traffic.

OBSERVATION: Concrete caps were installed over all small diameter culverts where traffic was heavy.

ITEM: Grave destruction.

DISCUSSION: While moving into a new bivouac area, numerous graves were encountered on the proposed Company area. These created much concern as to whether they should be destroyed or worked around, the latter being extremely difficult.

OBSERVATION: Before movement into a new area, Civil Affairs personnel should be contacted to establish proper means of grave removal and to eliminate the confusion caused by irate nationals protecting their family grave sites.

~~For Official Use Only~~

EGD-BE-CO

31 July 1967

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

3. Training and Organization.

(TO&E)

ITEM: Loading equipment for Battalion Supply Section.

DISCUSSION: Experience has shown that Combat Engineer Battalions in RVN require a large class IV yard, whether engaged in heavy construction or operational support. Normally TO&E cranes and wreckers are committed and not readily available to the supply section. As a result, additional man-hours are required for hand loading and unloading Battalion supplies.

OBSERVATION: Engineer Combat Battalions should be authorized a fork-lift or 10-ton crane for movement of supplies. Such an addition would supplement cranes and wreckers, thus increasing the capability of the Battalion to meet material requirements.

ITEM: Mine vulnerability

DISCUSSION: Some areas are more vulnerable to mining incidents than others. The following areas should be closely checked.

a. Culverts: Because of the metal in culverts the sweep team usually has difficulty in detecting mines in these areas. Teams must look closely for any soft areas in the culvert fill and especially inside the culverts. On several occasions large command detonated bombs are pushed inside of these culverts.

b. Freshly filled pot holes and cuts in the road should always be checked. The VC generally look for areas where the emplacement can be rapidly made and easily concealed.

c. Bridges and work sites: Generally Engineer groups have large amounts of construction material at these sites stored over night. These items and areas should be closely checked each morning before work begins. Where metal construction material is used, such as Bailey bridging, it is extremely difficult to detect mines.

OBSERVATION: Knowing those areas which are especially vulnerable to mining will enable personnel to do a more effective job of mine detection.

ITEM: Local inhabitants.

DISCUSSION: To create rapport, the VC usually warn the local villagers when they have emplaced mines or boobytraps. These warnings can be either verbal or symbol.

~~For Official Use Only~~

31 July 1967

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

OBSERVATION: Watch the local inhabitants closely. If their behavior seems strange this can be taken as a warning. When civilian traffic deliberately avoids one side of the road or certain areas such as by-passes, access roads, or bridges, beware!

5. Logistics: (None)
6. Equipment and Maintenance.

ITEM: Replacement of charging circuit in concrete mixers.

DISCUSSION: 16S concrete mixers are frequently deadlined due to shortage of electrical components in Vietnam.

OBSERVATION: The problem presented by electrical failure and difficulty of obtaining electrical parts for a 16S concrete mixer could be solved by substituting ordnance parts. A 3/4 ton truck generator, regulator, and wiring harness were found to function properly on 16S.

Section 2, Part II, Recommendations.

1. Personnel

(None)

2. Operations-The heat experienced during the summer months made pouring of concrete very difficult. Large cracks often developed in the finished pad. The best solution found to this problem was to pour during the cool hours of the late evening, thus giving the concrete time to set before the heat of the day. There were times when it was impractical to pour during the night. One solution found to work well was to build a sand berm around the pad and then carefully flood it with water. After the concrete has set, the pad was covered with burlap bags or wet sand.

3. Training and Organization-Combat Engineer units engaged in road opening and upgrading projects have larger areas to sweep each day. It can take considerable periods of time for a foot mine-sweep team to cover all this ground. The remainder of the unit is delayed in getting to the job site, resulting in a considerable lose of man-hours. A modification to the TO&E authorizing each line company a jeep-mounted mine sweeper would greatly speed up mine clearing operations.

4. Intelligence:

(None)

5. Logistics:

(None)

EGD-BE-CO

~~For Official Use Only~~
SUBJECT: Operational Report-Lessons Learned (RCS CSFOR-65), for Quarterly
Period Ending 31 July 1967

31 July 1967

6. Maintenance:

(None)

1 Incl
as

Andrew C. Remson, Jr.
ANDREW C REMSON, JR.
LTC, CE
Commanding

DISTRIBUTION:

3-45th Engr Gp (Const)
2-CINC USARPAC, ATTN: GPOP-OT (Air Mail)
3-CG, USARV, ATTN: AVGC-DH (Courier)
6-CG, USAECV (P), ATTN: AVCC-PO (Courier)
3-CG, 18th Engr Bde, ATTN: AVBC-C (Courier)

~~For Official Use Only~~