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

TO: Assistant Chief of Staff for Force Development
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Section 1. Significant Organization or Unit Activities.

This ORLL is the third report submitted by the 14th Engineer Battalion (Combat) (Army) since its arrival in the Republic of Vietnam in October 1966. This report covers the major activities of the battalion during the months of May, June, and July 1967.

At the beginning of May, the battalion was engaged in twenty-six active projects and four operational support missions with elements stationed at seven locations in the southern half of the II Corps Tactical Zone. During this reporting period, nine separate platoons and company moves were made and on 31 July the battalion's companies were located at Phan Thiet, Bao Loc, Cung Son, and Minh Hiea while platoons were stationed at Dalat, Ban Na Thoet, Cam Ranh Peninsula, and Dong Ba Thin. Separate battalion sections also provided water supply and an air crane (D-4) dozer capability in support of Republic of Korea Army (ROKA) tactical operations north of Tuy Hien. Excepting the elements at Cam Ranth and Dong Ba Thin, the nearest unit to the battalion headquarters at Dong Ba Thin was thirty-four miles to the north at Minh Hiea while the farthest company was at Phan Thiet, one hundred and ten miles to the south. This dispersion of the battalion increased the problems of command and control, administration, and logistic support at both the company and battalion level. As only three of the eight locations noted above can be reached by secure roads, a heavy dependence was placed on aircraft for movement of personnel, critical supplies, and inspection visits. Periodic road openings to the interior locations were developed in conjunction with tactical operations to provide the necessary bulk supplies for the projects as well as to permit mobilization and demobilization of the companies for execution of construction missions.

Due to the remote locations of the units, the maintenance and repair of vehicles and equipment has been a particular problem. With the dispersion of the units and without battalion maintenance augmentation, the time required to identify needed repair parts and procure and send parts to the field has increased the length of time the vehicle or equipment was deadlined. This maintenance problem was compounded by the nature of the projects which required a considerable amount of non-TOE equipment to be hand receipted from other units. A battalion maintenance team made periodic visits to all units to advise and assist them and battalion maintenance contact teams were stationed at selected locations. Permission for battalion maintenance personnel to install third echelon component parts at isolated locations partially alleviated the problem of attempting to evacuate equipment to a third echelon shop during scheduled openings of insecure roads.
The battalion received its Annual General Inspection by the United States Army Engineer Command (Prov) during the period 8 to 12 May. This inspection was passed in all functional areas with satisfactory ratings based on an adjectival rating system of satisfactory/unsatisfactory.

Many new projects were initiated during this quarter in conjunction with the unit relocations. On 6 May, A Company moved from Khanh Dong to Ninh Hoa upon the conclusion of its mission to provide support for the 1st Brigade, 101st Airborne Division's Operation Summerall. At Ninh Hoa, the company was assigned the maintenance responsibility for QL1 from Dien Khanh (west of Nha Trang) to the intersection of QL1 and Bryant Road at Vung Ro Bay. Additionally, it was assigned responsibility for the emergency maintenance of the Nha Trang by-pass road, H11 (Route 421). Daily reconnaissance were conducted to inspect the condition of the road and bridges with repairs made as required. Deliberate maintenance was performed by using a "cold mix" asphaltic concrete to fill pot holes on the poorer stretches of the road. In late June, the battalion was directed to upgrade QL1 from Ninh Hoa to Vung Ro to carry Class 31 loads with a minimum roadway width of 123 inches. This project was completed eight days ahead of the assigned 15 July completion date and required the construction of one culvert by-pass around a weakened bridge, widening five bridges by overdecking them with timber, building a 100 foot earthen culvert causeway across the river at Ninh Hoa and constructing a 110 foot triple-singed Bailey bridge at Tu Bong (north of Ninh Hoa) to by-pass a damaged 138 foot Eiffel bridge. On this project, A Company was reinforced by a platoon from C Company and one from D Company with the C Company platoon erecting the Bailey bridge. This augmentation was necessitated by the move of an A Company platoon to Ban Ho Thuot on 21 June with the mission of constructing 19,200 square yards of H11 surfaced parking apron for O-1 aircraft, a company cantonment area, and four CH-47 helipads. At Ban Ho Thuot, the initial cantonment facilities to include a mess hall, showers, and latrines were completed and the platoon is assisting the tenant aviation unit in constructing the administrative buildings and troop billets when weather precludes work on the airfield. Final grading of the parking apron is being accomplished although this project has been considerably delayed by rains. The CH-47 helipads are completed except for surfacing them with HB11 soil matting. Other A Company projects at Ninh Hoa in progress during the quarter include operational support of the 9th Republic of Korea Division Headquarters with equipment and technical advice; a one and one-half mile tactical road to an outlying Korean unit to permit ground resupply; construction of a telephone dial central exchange; a 150 man engineer cantonment area; and support of helicopter units stationed at Ninh Hoa with dust palliation and assistance in constructing aircraft revetments. The major future project currently scheduled for A Company is the upgrading of Route QL1 to permit Class 35 two-way traffic and Class 50 one-way traffic over all bridges.
In May, B Company was stationed at Phan Rang where it supported the 1/101st Airborne Brigade's cantonment construction program with prefabricated trusses and side panels for wood tropical buildings. Early in May, the four mile Beach Road was completed connecting QL1 with a newly established port facility at Phan Rang. Work continued on the Force Structure Increase (FSI) Cantonment Program for the Army of the Republic of Vietnam (ARVN) with a total of four mess halls, four administration buildings, eight billets, and four latrines and showers completed during this period. While at Phan Rang, B Company was responsible for a daily reconnaissance of QL1 between Dong Ba Thin and Phan Rang and making repairs as required. When a bridge was destroyed in their sector of QL1, a culvert bypass was placed that same day and repair of the abutments was accomplished by driving twenty-six piles. The bridge repair was completed by ARVN engineers when B Company (-) was moved from Phan Rang to Bao Loc on 4 June with the mission of repairing a C130 capable airfield and surfacing it with HBAI matting. This project has been severely hampered by monsoon rainfalls which precluded equipment from working on the runway during the latter part of the quarter. During July, the rainfall totalled twenty-eight inches. By the end of this reporting period, the 150 by 750 foot parking apron had been treated with Medium Cutback (MC) asphalt as had a portion of the 3500 foot runway preparatory to laying the HBAI matting. In early May, a B Company platoon was moved to Dalat where it assumed maintenance responsibilities for the civilian/military airfield at Dalat Cam Ly. Rainfall has also hampered efforts to patch the airfield at Dalat where the runway is being sealed to prevent saturation of the subgrade. In addition to sandsealing the runway, a crown is being built up on the existing surface in the center third of the runway to improve surface drainage. The drainage was also improved at the sides of the airfield by the cutting of diversion ditches and by installation of over 900 feet of culvert along the parking apron. Future work at Dalat includes continuous maintenance and improvement of the airfield and construction of a 150 man cantonment at the nearby Lang Bien Mountain Signal Relay Site. B Company (-) will continue to work at Bao Loc with an estimated completion date of 1 September for that airfield project.

C Company (-) was stationed at Dong Ba Thin most of this quarter with one platoon located at Phan Thiet in support of the 2/7th Cavalry, 1st Cavalry Division's Operation Byrd. At Dong Ba Thin, assigned projects included continued expansion of the 3400 man Cantonment area, construction of 8500 square yard parking apron for O-1 aircraft, construction of a cantonment area for a C47 company, and erection of a 75 by 202 foot prefabricated steel frame aircraft hanger. Other local projects were work on the base physical security for Dong Ba Thin, construction of an equipment maintenance building, and technical advice and equipment support on the aircraft revetment program. In early May, C Company placed a 45
SUBJECT: Operational Report-Lessons Learned (RCS CSFOR-65) for Quarterly Period Ending 31 July 1967 (May, June, July)

foot M476 dry gap to open QL1 to traffic after a bridge was blown and then constructed a culvert by-pass and retrieved the M476. In early July, one platoon installed the 110 foot Bailey bridge at Tu Bong as part of the emergency upgrading of QL1 previously noted. At Phan Thiet, one C Company platoon performed continual maintenance of the helipads and provided general engineer support for the base. Other tasks included construction of landing zones in connection with Operation Byrd, building gun emplacements, road and bridge repair in the vicinity of Phan Thiet, and providing combat demolition teams for tactical operations. The platoon at Phan Thiet was also assigned the mission of constructing a 7500 barrel POL storage facility to include laying one mile of pipeline. In July the battalion was assigned the mission of upgrading Route QL1 to carry Class 16 traffic from the II/III Corps border on north of Phan Thiet to Hoe Da. To initiate this task, C Company headquarters and one platoon displaced by LST from Dong Ba Thin to Phan Thiet. By 31 July, the move was complete and work initiated on the upgrading of QL1 south of Phan Thiet. The 2nd Platoon of C Company remained at Dong Ba Thin to work on the projects remaining at that location.

At the beginning of this period, D Company's primary effort was placed on the 4000 Man Replacement Center on Cam Ranh Peninsula. An increase in the scope of this project from 97 to 102 structures slipped the completion date from 1 July to 1 August. Completion of this project is delayed by non-receipt of plumbing and electrical supplies. D Company also continued operation of its prefabrication yard for trusses and side panels for tropical buildings. Prefabricated buildings were issued for construction projects at Dong Ba Thin, Minh Hie, Ban Ho Tho, and Cam Ranh. As work at the Replacement Center slowed, new projects were assigned to include construction of a signal facility at Cam Ranh Air Base, completion of the vertical construction at the STRATCOM transmitter and receiver sites near Dong Ba Thin, building of a road to a gas generating plant on Cam Ranh Peninsula, and in late July starting construction of a telephone dial central exchange at Dong Ba Thin. The company was additionally committed to support of a 416 men cantonment construction on Cam Ranh and the improvement of Dong Ba Thin physical security. As previously noted, a D Company platoon was attached to A Company the first week in July to assist in the emergency upgrading of Route QL1. In July, the battalion was assigned the mission of repairing the airfield at Cung Son and surfacing the runway and parking apron with H8A1 matting. D Company was assigned this project. The move to Cung Son was delayed pending security arrangements with ROKA forces. When firm commitments for security could not be made due to other ROKA operational commitments, the battalion organized to provide its own security. A Company (-) with one platoon of C Company was committed as the security force for the D Company convoy along with fifty men from Headquarters Company who were detailed to ride
"shotgun" with Transportation Corps vehicles carrying supplies. The convoy moved into Cung Son on 25 July after staying overnight at Phu Hiep. Only minor sniping and mortaring incidents were encountered on the trip into Cung Son and this was quickly suppressed by guns. Hip flying cover for the move. D Company established a fortified bivouac area near the airfield and by 31 July had removed 45,000 square feet of T-17 membrane, repaired the major soft spots, and installed 68 feet of 24 inch culvert to improve the airfield's drainage. A platoon (-) of D Company remained on Cam Ranh Peninsula to continue operation of the prefab shop and complete the remaining projects as materials became available.

While the convoy for D Company utilized all of the available combat engineers at Dong Ba Thin, an emergency requirement to overdeck a bridge on Qu north of Dong Ba Thin on 27 July was assigned the battalion. A volunteer work force of Headquarters Company personnel accepted this mission and augmented by a squad from A Company rear accomplished this project on schedule in ten hours.

The 1st Platoon, 553rd Engineer Company (FB) was attached for operational control during this entire quarter for maintenance of the My Ca Float Bridge. In July, twenty new twenty-four ton pneumatic floats were received and installed. Continual maintenance including installation of new valves was required on the other floats due to the length of time the bridge has been installed in salt water. The twelve bridge trucks assigned to this platoon have been in continual use hauling supplies and supporting unit moves.

On 21 June, the 1st Platoon of the 572nd Engineer Company (LE) was attached to the battalion and stationed at Dong Ba Thin. This platoon has provided the battalion with a heavy earth moving capability which will be increasingly important as the upgrading of Route Qu1 continues.

Also attached for operational control during this quarter were the 588th and 551st Well Drilling Detachments at Minh Ha and Delat, respectively. These detachments have been augmented with personnel from the battalion to permit twenty-four hour operations drilling wells at those two locations.

As of 31 July, the battalion was engaged in thirty-eight active projects and ten minor tasks. Elements of the battalion were stationed at eight locations within a radius of one hundred and ten miles from the Battalion Headquarters at Dong Ba Thin.

As of 27 September 1967, the battalion will have completed one year out of CONUS. During this past quarter, the battalion transferred 133 men in the combat engineer MOS (12a/12b) and 65 men in non-engineer MOSs.
to reduce the September rotational hump. Combined with an earlier transfer of 91 men, the battalion has exchanged a total of 349 personnel with other units. However, 11 of 39 officers and 239 of 755 enlisted men authorized by TOs rotate in September. The loss of those personnel over a 30 day period will hamper the operations of the battalion during September and October even if replacements are received in a timely manner.

The battalion's dispersion has created administrative problems due to distance and the lack of daily or even frequent flights to all areas. During June for example, it required ten days for the Headquarters Company pay officer to reach and pay all of the men in the company who were attached to line companies. As these attachments are often of a specialized nature and of short duration, it has not been feasible to carry the attached Headquarters Company personnel on the line companies' payrolls.

The battalion is currently operating ten percent overstrength. However, with platoons and companies operating separately, this overstrength is used primarily in support functions where units are required to operate more than one mess hall, motor pool, and radio station. Additionally, with over 25 major items of non-TO equipment essential to the performance of the battalion mission, the overstrength has partially provided the necessary equipment operators and maintenance personnel.

During this quarter, the S-2 conducted deliberate reconnaissances of Route 1 from Phan Rang to Vung Ro and from the II/III Corps boundary south of Phan Thiet on north to Hoa Da (east of Song La). The latter reconnaissance covering 60 miles of insecure road was made using helicopters which landed the reconnaissance team and security element at twelve critical sites. These reconnaissances were required for the planning of the Phase I and II upgrading of Route 1. With the battalion widely dispersed, outlying elements receive their daily intelligence summaries from the local MACV detachments or tactical unit present on the ground. This results in the battalion S-2 generally collecting information and spot reports from the companies rather than disseminating intelligence to them. The primary function of the S-2 has therefore been reconnaissance and staff supervision of physical and document security rather than as a participant in the normal intelligence cycle.

The assignment of responsibility for emergency repair of twenty-six airfields in the II Corps Tactical Zone has required establishment of a program for periodic reconnaissances of each airfield. The S-2 was charged with the development of project folders on each airfield to permit rapid mobilization to repair and upgrade these fields as required.
Due to the nature of the battalion's operations which encompassed deliberate construction and operational support missions, a modification of the staff organization was required. The S-2 reconnaissance officers are used as S-3 project liaison officers on an area basis to coordinate project requirements with the companies, battalion staff sections, and using agencies. This system was needed due to the difficulty of communications over long distances, the need to expedite materials requirements and design changes, and the detailed reports required for each project.

Full utilization of the battalion's equipment has not been realized due to the insecure road conditions which preclude moving equipment from one location to another except during the periodic road openings. Movement of critically required equipment by air has been attempted but is not always possible or timely. For example, a Transportation Corps Movement Directive (TDM) to move an asphalt distributor by air from Bao Loc to Gia Vien was still outstanding at the end of the quarter after some 30 days due to severe weather conditions and limited aircraft availability. Whenever possible, equipment not committed to operational missions at these remote locations has been diverted to civic action projects on an as available basis.

The S-4 requirements for movement of bulk supplies on short notice has been particularly successful as a result of excellent cooperation from the personnel controlling all means of movement. The use of CH-47's on a regularly scheduled basis for delivering rations and critical supplies to Bao Loc and Cung Son has been exceptionally reliable.

The battalion was issued a 3000 GPD water purification unit in lieu of two 1500 GPD units giving a total of four instead of five authorized units. These units are all in operation and are utilized at Phan Thiet, Cung Son, Bao Loc, and改动的地方. The substitution of the 3000 GPD unit for two of the 1500 GPD units has decreased the flexibility of the water section. A fifth unit could currently be used at Ninh Hoa to augment the water supply there.

Requisition of construction materials comprises more than eighty percent of the supplies requested. The scope of the materials requirements is illustrated by requests in the past three months for 1.8 million board feet of lumber, 11,500 barrels of asphaltic materials, and over 22,000 bags of cement. The necessity to meet operational requirements often results in requisitions for urgently needed supplies being "walked through" in order not to delay project work. A major problem area is the issue of "in lieu of" supplies for a project which do not fit with the remainder of the bill of materials. For example, three inch pipe may be issued in lieu of four inch pipe which requires that the bill of materials must be adjusted for all
pipe fittings as well as necessitating a design change. This substitution of items has been prevalent in bills of materials for plumbing and electrical supplies.

The battalion has been active in civic action during this quarter. At Ba Ngoi, C Company constructed a 20 by 50 foot dormitory for an orphanage and further assisted with material goods. On Cam Ranh Peninsula, D Company constructed with assistance from the villagers a maternity hospital at Suoi Hai. At Tac Loc, B Company constructed roads to montagnard hamlets, assisted a Buddhist orphanage, and provided fill for an area to be used for the expansion of a school. At Phan Thiet, battalion medics travelled with civic action teams to treat local villagers and bridges were repaired as part of a Revolutionary Development program to assist the movement of rice to market. At Dong Ba Thin, headquarters Company continued to assist the Dal Gieng refugee camp by constructing a road from the market place to Dai Lai. The Battalion Surgeon held scheduled sick calls at Dal Gieng as well as visiting a montagnard refugee center north of Dong Ba Thin.

The Battalion Communications Section has maintained all radio contact with all dispersed elements of the battalion. The overall effectiveness of company communication would be enhanced by the issue of authorized PRC 25 radios to replace the PRC 10 radios on hand.

Section 2, Part I. Observations (Lessons Learned).

PERSONNEL:

1. **ITEM**: Double stencil process for cutting orders.

**DISCUSSION**: A basic format is used for cutting orders for special leave, R&R, and separation. With the number of these type orders cut each month, a considerable amount of typing time was required for the repetitive information on each set of orders. This time can be saved by cutting a stencil for the format (see Incl 1) and printing sufficient copies to last a month. When information pertinent to an individual is received, an overlay stencil is cut, signed, and printed on the basic format sheet (see Incl 2). This produces a complete order pertaining to an individual. A copy of an overprinted order is attached (see Incl 3).

**OBSERVATION**: The double stencil method of cutting individual orders decreases the time required to cut orders with no loss in accuracy or clearness of reproduction. A considerable amount of typing effort is saved by this means of producing orders.
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7 August 1967

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

OPERATIONS:

1. **ITEM:** Organization and operation of well drilling detachments.

   **DISCUSSION:** Well drilling detachments should be assigned a minimum of four men instead of the currently authorized two men. The additional men would permit twenty-four hour operation of the well drilling rig. One of the four assigned men should be an NCO experienced in well drilling operations. In order to achieve maximum technical guidance and control, the well drilling teams should be under the operational control of Engineer Command to include the requisitioning of supplies and equipment. The well drilling detachments would be attached to subordinate units for administration and rations only.

   **OBSERVATION:** To increase the efficiency of well drilling detachments, they should be assigned four men and be placed under operational control of Engineer Command for technical supervision and logistics.

2. **ITEM:** Overdecking of concrete T-berm bridges.

   **DISCUSSION:** When overdecking concrete T-beam bridges to increase the roadway width, the sleepers must be fastened to the bridge. One method is to use cable which is passed through the bridge members and tied off underneath the bridge. A faster and more effective method is to drill holes in the sleepers to line up with "weep holes" in the bridge and use reinforcing bar to anchor the sleeper. The reinforcing bar is bent flush with the bridge on the lower side and flush with the sleeper on the upper side (see Incl 4).

   **OBSERVATION:** When overdecking concrete T-beam bridges, the outside sleepers can be effectively tied to the bridge using reinforcing bar passed through the sleeper and "weep holes" of the bridge.

3. **ITEM:** Format drawings for recurring projects.

   **DISCUSSION:** Many construction projects recur which require drawings with only a change in dimensions of materials from previous projects. This is particularly applicable in the case of bridges required for the LOC upgrading program. Standard drawings are not feasible at this time due to the variance in available construction materials at any given time. A format drawing utilizing standard bearing and anchorage details, floor systems, and diagrams can be drawn to include representative longitudinal and cross-section views. The size, spacing, and number of stringers required and other data can be specified in the notes furnished by the designer and penciled onto a sepia copy of a format drawing. The sepia copy can then be reproduced and provide individual design drawings for any given project with a minimum delay.
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7 August 1967

SUBJECT: Operational Report-Lessons Learned (RCS CCFOR-65) for quarterly Period Ending 31 July 1967 (May, June, July)

OBSERVATION: Format drawings on sepia paper can be used to reduce the time required to produce a construction design drawing for recurring projects with only dimension changes in materials required.

INTELLIGENCE:

ITEM: Use of Philadelphia rods on bridge reconnaissances.

DISCUSSION: While on a deliberate bridge reconnaissance, it is not always possible to make the requisite measurements directly due to the possibility of mines, water depth, or height of a bridge. By use of an extendable Philadelphia rod, these measurements can be obtained indirectly up to distances of ten feet from the member being measured.

OBSERVATION: The use of a Philadelphia rod will ease the measurement of difficult to reach bridge members.

LOGISTICS:

1. ITEM: Handling of MBJ1 steel matting.

DISCUSSION: Due to the weight and bulk of MBJ1 matting, the loading and unloading of this material is difficult without a forklift. Expedient methods to unload the matting often results in damage to the MBJ1. A hook or lifting device installed on the banding by the manufacturer would ease the problem of loading and unloading the MBJ1 without a forklift.

OBSERVATION: A lifting ring or other device installed on the banding securing bundles of MBJ1 steel matting would reduce the danger of damage when loading or unloading it without a forklift.

2. ITEM: Rear detachments for outlying units.

DISCUSSION: With the battalion's line companies physically separated from the headquarters, it has been useful to have each company provide a rear detachment of one NCO and two E1. The NCO, normally the Supply Sergeant, takes a personal interest in his companies requirements and expedites supplies requested by them. The rear detachment also provides a point of contact for and control of line company personnel returned to battalion headquarters for administrative purposes. Under the operational control of the S-4, the rear detachments are a source of labor for the S-4.

OBSERVATION: When physically separated from battalion headquarters, a three-man rear detachment assists in expediting supplies for their assigned company and provides a point of contact for and control of unit personnel returned for administrative purposes. They additionally provide a labor force for the Battalion S-4.

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Section 2. Part II. Recommendations.

GENERAL.

1. The experience of the battalion during the past quarter reaffirms recommendations made in the previous quarter's ORLL. Action was not possible on certain of those recommendations due to restrictions on the submission of iNOS's by units within this theater. These recommendations, as modified by recent experience are discussed below.

PERSONNEL

2. This unit continues to face a severe rotational hump during the month of September despite several successful exchanges of personnel directed by higher headquarters to alleviate the problem. The loss of senior officers (Captain and up) and NCOs is particularly critical. The personnel problem could be partially accommodated if information regarding in-coming personnel was received in sufficient time to permit programming of new arrivals into key positions. It is therefore recommended that Form 66's for officer personnel and orders for NCOs be provided to battalions at least 45 days in advance and that every effort be made to insure that programmed personnel actually arrive at the unit of original assignment.

3. The dispersed location of units and the nature of the construction missions assigned to this battalion place a great deal of emphasis on stockage of construction materials and the orderly transport of those materials to forward locations. The nature of the deliberate construction missions assigned also requires augmentation of vertical construction skills within the engineer combat battalion structure. The same deliberate missions require the use of equipment items (asphalt distributors, graders, concrete mixers, compaction equipment) which are presently authorized on an iNOS or a temporary loan basis without accompanying operator or maintenance personnel. Attachment of a platoon of a light equipment company has been a partial solution to this latter problem. It is therefore recommended that approval be granted to initiate iNOS action for personnel augmentation to engineer combat battalions in the following areas:

   a. An assistant S-4 and sufficient NCO and enlisted personnel to provide the capability of operating a Class IV storage yard at one or more locations.

   b. Augmentation of vertical construction skills such as that provided by the Combat Construction Section augmentation of TOE 5-36E.

   c. Augmentation of sufficient operator and mechanic personnel and equipment to provide the capability now obtained from borrowed and temporary loan equipment authorizations.
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EGACBA-F

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

OPERATIONS:

4. The most critical items to command and control, inspection, resupply and administration for this unit is aviation support for platoon and company sized elements at dispersed locations. This battalion is presently allocated a large percentage of the aviation assets of the 35th Engineer Group, however, support is still inadequate resulting in many wasted man hours and deadlined equipment hours. It is therefore recommended that increased aviation assets be made available at the Engineer Group level to permit better satisfaction of air support requirements.

3. Incl 1-3 withdrawn, as Hqs, DA

JAMES L. EMANUEL

LTC, CG

Commanding

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Page 15
SUBJECT: Operational Report - Lessons Learned for the Quarterly Period Ending 31 July 1967

TO: Commanding General, 18th Engineer Brigade, ATTN: AVBC-OP, APO 96377

1. This headquarters has reviewed the report submitted by the 14th Engineer Battalion (Combat), and considers it an excellent report of unit activities and accomplishments for the period ending 31 July 1967.

2. This headquarters concurs with the observations and recommendations of the Battalion Commander, with the following comments:

   a. Page 12, ECONOMIL, Paragraph 3 - At present MTO action is frozen.

   b. Page 13, OPERATIONS, Paragraph 4 - Aircraft requests are considered daily by the Group Operations Section. Consistent with the needs of all elements of the Group, available aircraft are allocated to the units. During the monsoon season, it is difficult to fly into areas where some units are deployed. An increase in aviation assets with trained pilots to cover the assets would improve the command and control, inspection, resupply, and administration problems posed for units in dispersed locations.

   [Signature]
   J. H. Newman
   Colonel, GE
   Commanding
SUBJECT: Operational Report - Lessons Learned for the Quarterly Period Ending 31 July 1967

Headquarters, 18th Engineer Brigade, APO US Forces 96377

TO: Commanding General, US Army Engineer Command, Vietnam (Prov),
ATTN: AVCC-P&O, APO US Forces 96491

1. This headquarters has reviewed the report submitted by the 14th Engineer Battalion and considers it an excellent report of unit activities and accomplishments for the period ending 31 July 1967.

2. This headquarters concurs with the observations and recommendations of the Battalion Commander with the following additional comments:

   a. Reference, Section 2, Part I, Observations, Personnel, paragraph 1. The double stencil process for cutting orders appears to be a process readily adapted to save valuable typing man hours.

   b. Reference, Section 2, Part I, Observations (Lessons Learned), Operations, Item 1, Organization and Operation of Well Drilling Detachments. The capabilities of well drill detachments are very limited because of an insufficient number of personnel to both effectively accomplish the assigned mission and provide for two shift operation. It is felt, at this headquarters, a minimum of six personnel should be provided by TOE, one of which should be SSG, E-6, and be schooled in well drilling operations. Also, the assignment of the well drilling detachments to Engineer Command for supplies, maintenance, and operational control would not be the solution to the present problem. An administrative type headquarters does not have the capability to support well drilling detachments scattered throughout Vietnam. Therefore, a study is presently underway to determine ways to best utilize the well drilling detachments within the 18th Engineer Brigade Area of Responsibility.

   c. Section 2, Part I, Observations, Logistics, Item 1. Two each rough terrain fork lifts are being provided for each combat battalion.
AVBC-C (7 Aug 67)
SUBJECT: Operational Report - Lessons Learned for the Quarterly Period
Ending 31 July 1967

d. Reference, Section 2, Part II, Recommendations, Personnel, paragraph 2. The recommendations made pertaining to prior information
on replacements is well taken. Although prior information on officers
has been available for some time, further refinement to include a copy
of the DA Form 66 should be forwarded as well as the name of the officer.
Wherever possible, an individual should be sent to the unit originally
assigned to by Department of the Army; however, commanders must retain
the ability to divert where necessary. With full information on incoming
officer, a policy of assigning an officer to his DA assigned unit
would be more easily accomplished.

t/HAROLD J. ST. CLAIR
Colonel, CE
Commanding
HEADQUARTERS, UNITED STATES ARMY ENGINEER COMMAND, VIETNAM (PROV), APO 96491

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

This headquarters concurs with the 14th Engineer Battalion ORLL report, as amended by the indorsements, with the following additional comments:

a. Reference Section I, paragraph 4, page 8, Water Purification Units: At the time this item was issued, there were no 1500 GPH units available. The 3000 GPH unit was available for issue and was released in lieu of a 1500 GPH unit. Presently, there are no 1500 GPH or 3000 GPH units available. The 18th Engineer Brigade is being notified that the 14th Engineer Battalion is authorized to submit a requisition for the fifth unit.

b. Reference Section 2, Part I, paragraph 1, page 10 (Operation), and paragraph 2b, 2nd Indorsement. Item: Organization and operation of well drilling detachments: Units are being requested to submit draft MTOE changes to this headquarters for review in anticipation of possible relief of moratorium.

c. Reference Section 2, Part II, paragraph 3, page 12 (Personnel): Units are being requested to submit draft MTOE changes to this headquarters for review. The problem of insufficient personnel to operate special equipment or to meet unusual situations among different units with similar TOE will be addressed in detail.

FOR THE COMMANDER:

Info cys furn:
CG, 8th US Army, ATTN: Engr
CG, 18th Engr Bde
CO, 35th Engr Gp
CO, 14th Engr Bn
SUBJECT: Operational Report-Lessons Learned for the Period Ending
31 July 1967 (RCS CSFOR-65) (U)

HEADQUARTERS, UNITED STATES ARMY VIETNAM, APO San Francisco 96375

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, 14th Engineer Battalion (Combat) (Army) (AZOA) as indorsed.

2. (C) Pertinent comments follow:

a. Reference item concerning advance assignment information on incoming officers and NCO's, page 12, paragraph 2 and 2d Indorsement, paragraph 2d: Concur with recommendation contained on page 12, paragraph 2. The following action has already been initiated by this headquarters to furnish advance assignment information.

   (1) Officer - Status reports for each requisition item are furnished monthly to the appropriate major subordinate commanders. These reports identify filled, unfilled, and cancelled items. In addition, recently revised procedures will result in the receipt, by each major subordinate commander, of the DA Form 66 on all officers scheduled for assignment approximately 45 days in advance of their arrival.

   (2) Senior Enlisted NCO's - Each major subordinate command is furnished with an assignment letter on each senior enlisted man as soon as his assignment is received from DA. The letter identifies the individual by name, grade, service number, and MOS and specifies the requisition control and line number against which he has been applied.

   (3) Advance assignment information on junior enlisted NCO's is dependent upon receipt of a copy of the reassignment orders by the gaining unit. The gaining commander is required to be listed on the distribution of all such orders. Failure to receive copies of such orders is a problem which cannot be solved by this headquarters since the reliance must be placed upon the losing commander.

   (4) Every effort is now made to keep diversions to a minimum. However, rapidly changing conditions and mission requirements in the combat zone make it imperative that this headquarters divert personnel to meet the most urgent requirements at the time of arrival of a replacement.
b. Reference Item concerning MTOE action, page 12, paragraph 3. MTOE action is currently being processed under the standardization program. The USARV Engineer has a project officer assigned to evaluate all like engineer units.

c. Reference Item concerning aviation support for engineer units, page 13, paragraph 4. Concur with requirement for aircraft for engineer units; however, current DA policy is that non-divisional Combat Support (CS) and Combat Service Support (CSS) units deploying to RVN will have their aviation sections at zero strength and no aviators or aircraft will be requested for these units. Therefore, CS and CSS units must be provided aviation support from current assets on a priority basis. No action by USARPAC or DA is recommended.

3. (U) A copy of this endorsement will be furnished to the reporting unit, through channels.

FOR THE COMMANDER:

C. S. NAKATSUKASA
Captain, AGC
Assistant Adjutant General
SUBJECT: Operational Report for the Quarterly Period Ending 31 July 1967 from HQ, 14th Engr Bn (Cbt) (UIC: MAZQGA) (RCS CSFOR-65)

HQ, US ARMY, PACIFIC, APO San Francisco 96558 7 DEC 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, with the additional clarification that the moratorium reference in paragraph b, 3d Indorsement is incorrect. Submission of MTOE during acceleration of NAADS did not apply to USARV units. Paragraph 2b, 4th Indorsement indicates corrective action being taken.

FOR THE COMMANDER IN CHIEF:

3 Incl
CPT, AGC
Asst AG
Operational Report - Lessons Learned, Headquarters, 14th Engineer Battalion (Cbt)(A)

Experiences of unit engaged in counterinsurgency operations, 1 May - 31 July 1967

CO, 14th Engineer Battalion (Cbt)(A)