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ATRIC DET (9 Aug 67)

SUBJECT: Operational Report-Louisins Lourned for the Parist Daling
31 July 1967 (Aug 18702-65) (8)

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- 1. (D) This headquarbors has reviewed the (greational Deposi-Lessons Learned For the period ending 31 July 1967 from Headquarbors, 599th Ingineer Battalian (Construction) (DPMA) as indeped.
- 2. (NOW) Farthers consent follows: Deference item consents in creased leads of fatigues and books, saction II, part I, paragraph II, page 11 and LY Cancer. The present issue in that is electate to depend on a conventional fatigues which will also be replaced in hint II were out. Although not as contrade as the tendle fatigues they may be used as a supplement. Described (field) lowery make are due in-complex and will be used in support of compations to the maximum extent possible. Although there will still be some chart of I is lander support the fighting coldier will be provided for first.
- Σ (!) I copy of this independent will be furnished to the reporting unit through channels.

POR THE CONSIDERS:

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ACTION OFFICER: MAJOR BARK

USARV Engr has reviewed reports. These comments are

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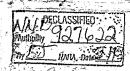
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DEPARTMENT OF THE ADMIT OFF Hasen/jer/Segi 161 HEADQUARTERS 509TH DEGISERS BATTALIGE (CDSST) AND San Transison 96238

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SUBJECT: Operational Report of Leasons Leagued

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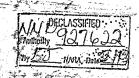
The CHILL report for the period ending 31 July 1967 to attached as Incl 1.

FOR THE COMPARISON:

1 Incl

100Alo V. SETTE VOI, USA Adjutant

REGRADED UNCLASSIFIED
WHEN SEPERATED FROM CLASSIFIED
INCLOSURES



DEPARTMENT OF THE ARMY
HEADQUARTERS 589UH ENGINEER BATTALION (CONST)
APO San Francisco 96238

EGD-BC-CO

9 August 1967

SUBJECT:

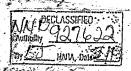
Operational Report on Lessons Learned for Quarterly Period Ending 31 July 1967 (RCS: CSGPO-28(R-1))

TO:

See Distribution

- 1. SIGNIFICANT ORGANIZATIONAL ACTIVITIES.
 - a. Narrative summary of Activities.
- (1) POM and Deployment. The 589th Engineer Battalion was activated on 21 Jan 66. During January 1966, the unit was alerted for overseas movement to Southeast Asia and given an Equipment Readiness Date of 17 Dec 66 and a Personnel Readiness Date of 31 Dec 66. The unit was nearly at full strength in officers and overstrength in enlisted men by late July 1966. By I August the battalion had sufficient strength in equipment to begin BUT and construction projects. BUT was followed by AUT, an ATT, AGIs, and a CMMI. Subsequently, in early December 1966, the movement of the unit was delayed due to a shortage of major items of engineer equipment. Following this, a new Equipment Readiness Date of 12 Mar 67 and a new Personnel Readiness Date of 27 Mar 67 were issued.
- (2) Upon receipt of the Movement Directive on 12 Dec 66 and the Movement Order on 15 Dec 66, coordination was made with Headquarters, Ft. Hood, to expedite the receipt of filler personnel, vehicles, and equipment. Task schedules, relating to each staff functional area, had previously been established and were invaluable in providing controls for meeting readiness dates. In view of the short time between ERD and PRD, a phased personnel predeployment leave schedule was established with each individual authorized a two week leave. This schedule provided sufficient personnel in garrison to prepare organizational equipment for movement and to allow for orderly close out of administrative and property accounts at Ft. Hood. Port calls for equipment and personnel were received for 28 Mar 67 and 11 Apr 67, respectively. Equipment and supplies were moved by trains from Ft. Hood to Beaumont, Texas, for outloading on two ships, the Sheldon Lykes and the Ruth Lykes, these ships called on 25 Mar 67 and 28 Mar 67, respectively, with escort personnel from the battalion. Arrangement was made for a second additional shipment composed of PLL and equipment which reached the battalion after the main shipment had departed. This second shipment was nearly 400 tons. On 8 and 9 April, the main body departed Ft. Hood by rail for Oakland Army Terminal to load on the USNS General John Pope. This ship departed for Viet Nam on 11 April and arrived at Qui Nhon, Viet Nam, on 29 April. The advance/rear party departed Ft. Hood on 17 April by plane and arrived at Qui Nhon on 23 Apr 67.





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(3) Upon departure from Conus the 589th Engr Bn had an operational readiness condition of C-1 in the areas of Personnel, training and equipment readiness and a C-2 in Equipment and Supplies on hand due to shortages of major items of engineer equipment. These shortages included five of seven 250 CFM pneumantic tool and compressors outfits. Four of six 20 ton trk mounted cranes, one of two 10 ton crawler cranes and all six water distributors.

b. Employment

- (1) Assignment: Upon arrival in Qui Nhon, Viet Nam the battalion was assigned to the 45th Engineer Group (Const) by General Order Number 72, Headquarters, 18th Engineer Brigade, APO San Francisco 96307, dated 16 May 1967. Effective date of assignment was 30 April 1967.
- (2) Mission: The primary missions of the battalion having been the upgrading of LOC in sector, construction of logistical and operational facilities for depots, and a CV2 airfield.
- (3) Attachments and Detachments: Immediately upon arrival in country Co B, 589th Engr Bn was attached to the 84th Engr Bn (Const). On 6 June 1967 the 70th Engineer Company (Dump Truck) was attached to the 589th Engr Bn. On 24 June 1967 one platoon from the 70th Engr Co (DT) was attached to the 35th Engr Bn (C).
- c. Unit Operations: During the first week in country the battalion staged at the Cha Rang Maint Depot area while a cantonment site was cleared and grubbed six miles to the west. During the staging period equipment was deprocessed and committed to project which had been transferred from other units. On 6 May 1967 the battalion moved to its new cantonment site and began establishing a cantonment. During the reporting period construction began on 7 projects taken over from other units. These projects were a 200,000 SY Log Depot, 39 miles of route maintenance, pre engineered metal buildings for G.S. Maintenance Facility, Aircraft hangars, and bridge rehabilitation. In addition 9 design and construct directives were recieved to include a CV 2 Airfield at Vinh Thanh, Drainage Structures and base course preparation at An Khe pass, 4 bridges totaling 511 ft, upgrading of route QL 19 & TL 6B, the 400 Bed ROKA 6th EVAC Hospital, 3 well water fill sites and a PX Depot site with 10 buildings, hardstands and roads.

2. SIGNIFICANT FUNCTIONAL ACTIVITIES:

- a. Organization: The 589th Engineer Battalion (Const) is organized under TOE 5-115E. The 70th Engr Company (DT) is organized under TOE 5-124E.
- b. Personnel and Administration: The battalion arrived in country on 29 April at full Officer strength, however only 847 enlisted men of an authorized 867 were assigned. 12 individuals including 1 Warrant remained in CONUS on deferments. At this time all have rejoined the unit except five Enlisted Men.

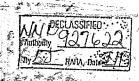


EGD-BC-CO

Operational Report on Lessons Learned for Quarterly Period Ending SUBJECT: 31 July 1967, (RCS:CSCP0-28(R-1)

This unit will not experience a personnel rotation hump at the end of its first year in country due to the large number of personnel having an ETS prior to one year in country. This ETS hump begins in September and peaks in November 1967.

- The assigned enlisted strength as of 31 July was 622, a deficit of 50 below authorized strength.
- The present Officer strength is short the following five Officers: The Equipment Maintenance Officer, CPT; the S-1 Officer, CPT; the Battalion Surgeon, CPT; the Property Book Officer, WO; and one platoon leader, LT.
- d. A more significant representation of troop assets of the battalion is the present for duty strength. This strength figure takes into account those personnel who are effectively loss to mission committments. Present for duty enlisted strength as of 31 July was 611, a deficit of 61 from the authorized TM " strength.
- CIVIC ACTION: The 589th Engineer Battalion (Const) Civic Action Program was initiated in May 1967 with the publishing of orders appointing a Civic Action Officer. On 1 August 1967 a Civic Action Committee was officially appointed by the publishing of orders. The Civic Action Officer from each company met with the Battalion Civic Action Officer to discuss the objectives of our civic action program and possible locations in which to concentrate our efforts. Contact was made with the District Chief, the sub-sector advisor, and personnel from the office of Civic Operations in Phu Phong. The Trung Air charch was presented with 33,630 plastres to aid in the erection of classrooms. MEDCAP aid is provided under direction of the Bn Surgeon. The Bn MEDCAP team has averaged 325 patients per month.
- MORALE AND WELFARE OF BATTALION: The Battalion Chaplain initiated a regular schedule of services for Protestant and Roman Catholic faiths upon arrival in country. The Battalion Chaplain arranged with the Battalion Chaplain of the 54th Transportation Battalion for Catholic Services. Religious services for the Jewish faith are provided at the 67th Evacuation Hospital in Qui Nhon. The Battalion Chaplain makes regular weekly visits to the 85th Evacuation Hospital and the 67th Evacuation Hospital in Qui Nhon to care for the hospitalized personnel of the battalion. The battalion chapel, presently located in a tent, provides an adequate facility for our worship service until such time as a better structure can be erected. We are quite fortunate to have an organist who can make two of the three Sunday worship services conducted by the Battalion Chaplain.



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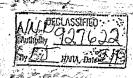
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g. Intelligence and Security. The combat intelligence requirements of the battalion have been negligible during engagement in construction activities. The battalion is located in a relatively secure area and has been divorced from normal combat intelligence activities. Nevertheless, an active intelligence program has been maintained. Enemy intelligence is obtained on a weekly basis from the USARV Weekly Summaries, the 22nd ARVN Division, and the IFFV Summary. Daily contact is maintained with RCK units and the US subsector command. Physical security of the base camp area continues to be improved with the erection of additional towers and bunkers, and the placement of tactical wire. Security plans and alert procedures have been established. Supporting fires have also been obtained.

h. Operations. The Advance Party of the 589th Engineer Battalion arrived in Viet Nam on 19 Apr 67 and reported to its parent headquarters, the 45th Engineer Group in Qui Nhon. The 84th Engineer Battalion was designated host battalion and assisted both the Advance Party and the Main Body of the 589th Engineer Battalion in staging—in. The Advance Party established initial liaison with the Qui Nhon Support Command and located and prepared an interim cantonment in the Cha Rang Depot area.

The main body of the battalion arrived in Qui Nhon on 29 Apr 67 and was unloaded the same day. The unit remained in the staging area for one week. On 1 May 67, the Sheldon Lykes began unloading the battalion's equipment. With the arrival of vehicles and a portion of its engineer equipment, the battalion began a three-fold operation: 1. The battalion cantonment area was prepared; 2. Construction projects were received and initial planning on these vas begun; 3. Available equipment was committed to the new projects. On 6 May, the battalion, minus D Company, moved to its new cantonment area. Company "D" was, at the same time, prepar ing to move to Vinh Thanh to begin construction of a CV-2 Airfield on 8 May.



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With the arrival and unloading of the Ruth Lykes Ship on 5 May 67 the battalion was fully operational. Construction was immediately begun on a Log Depot, CV2 Airfield, and Route 19 maintenance. The Log Depot called for 200,000 SY of Hardstand, 88,000 SY of surfaced road and numerous drainage structures. The CV 2 Airfield at Vinh Thanh required 2050 ft of runway plus taxiway and parking apron, all of which receive DBST. Maintenance of route 19 required immediate pot hole repair, dust cover and reshaping. Many items of engineer equipment were loaned out to other Group units until projects could be planned and construction started.

Receipt of subsequent design and construct directives fully committed the battalion within two week after arrival within country. These directives included 6 building (65,200 SF) for GS Maintenance facility, three hangar (63,500 SF) for AVN Support Facilities, three well water fill points (42,000 gal capacity), 400 bed 6th EVAC ROKA Hospital, base course preparation of route 19, 3A, and 6B (52 miles), six class 50 oneway class 35 two way bridge (511 lf), drainage structures in An Khe pass, PX Depot (1,000 SY hardstand & roads), the Revolutionary Development Program high school at Binh Khe and two cantonment projects (2000 man, 354 man).

Additional equipment missions were tasked to the battalion throughout the period in support of Group Projects assigned to other units.

f. Logistics:

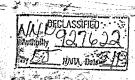
- (1) Labor: During the early stages of construction only a limited Vietnamese labor forms was used. However, later as funds became available and hiring procedures were defined, both AIK and Permanent hire personnel were added in numbers to supplement the construction effort and to free military personnel from fatigue duty for projects.
- (2) Maintenance: Maintenance requirements placed a heavy burden on the resources of the battalion throughout the period. Operation of equipment on a 24 hour basis has emphasized the importance of a sound maintenance program. Motor stables on all vehicles and equipment are performed twice daily, each for one hour, prior to the start of the day and night shifts. Contact maintenance teams are available and utilized on each shift for project site maintenance. Close supervision has been required by all levels of command to combat the high deadline rate associated with 24 hour operation in mud, sand and adverse weather. This effort has paid off in keeping the Bn D/L much lower than the Bn ceiling of 10% D/L.

Direct ordnance support is provided by 5th Maint Co.6 miles away.

IV Echelon maint of Engineer equipment is provided by 160 LEM Co 6 miles away.

The battalion has its own III Echelon engineer maintenance capability.

Repair parts supply is not yet critical due to large stock of PLL which the unit deployed with from CONES. However, PLL supply has been established with support facilities and is functioning.



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The dead line rate experienced by this battalion since arrival in Viet Nam has been an average of 4% for ordnance and 7% for Engineer.

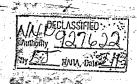
(3) Supply: The organization of the battalion supply section as authorized by TOP has proved entirely inadequate for the task of supporting the construction effort. The section is not authorized the amount of personnel and equipment required to handle the task of administration, storage and issue of rations, general supplies and construction materals necessary for the construction effort. Augmentation of personnel and equipment is necessary. The section does not have the transportation and HHE equipment required to handle the 100 to 150 tons of supplies it processes daily.

Organization of the section has been realigned in order to cope with its tasks. Generally, division of tasks has been into administration, requisitioning, operation of the materials yard, ration break-down and transportation. A full-time clerk typist and an PBO are required to handle the large number of reports submitted to higher headquarters. The requisitioning section handles the editing, requisitioning, releasing of materials, and issuing of TA 50 and organizational clothing and equipment. The ration breakdown requires two additional personnel other than authorized by TOL. The materials yard must be able to operate 24 hours a day and must be capable of simultaneous loading and unloading of materials. At least oneNCO and six enlisted men (two of which should be fork lift operators) are needed to run the yard.

The relative close proximity of the supply debots to the unit base camp represent an advantage since coordination can be effected faster and vehicle there and tear on the road is minimized. However, unit local pick-ups are fifth on the order of priority for service at Depot. Shortage of personnel and MHE equipment at supply points and large number of tasks at depot with higher priority makes it difficult to rick up supplies that have been released. As an example a unit may unsuccessfully attempt for five or more days to pick up interials which have been released. Because of higher priority at the eupmly point and a shortage of manpower and equipment the local units may not get serviced for many days, This results in loss of time, effort and resources and a slow down on construction effort. This unit is not authorized fork lifts to handle construction material. The nonavailability of MHE results in peer handling of materials, inefficient use of manpower and construction equipment (cranes, front loaders, wreckers). At least two rough terrain job lifts (10,000 lb cap) should be authorized each construction battalion.

Availability of class I, III and V supplies has been excellent. Pickup is made from local units with a minimum of effort and time consumed.

The existing procedures for processing of bills of materials appears to be too cumbersome and time consuming. Due to operational requirements most projects are started before the BOM is are approved by higher headquarters. This polaces a burden on the supply system since materials for that project must be made available immediately. However, requisitions take from 5 to 7 days to process thus increasing the possibility of delay of the construction effort.



2. COMMANDER'S RECOMMENDATIONS AND OBSERVATIONS AND LESSONS LEARNED:

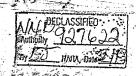
PART I, Observations (Lessons Learned)

PERSONNEL:

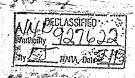
- 1. A. ITEM: Strength
- b. <u>DISCUSSION</u>: There is a shortage of heavy equipment operators, water purification specialists, construction foreman, surveyors and soil analysist within Vietnam.
- c. OBSERVATION: Units should exploit all possible means to arrive in country at full TO&E strength. Construction units should avoid filling 51H40 positions with 12B40 men if possible since most 12B40 are levied out of construction unit upon arrival in country, replacement 51H40's are in a shortage.
 - 2. a. ITEM: Processing Unit Personnel for Overseas Movement
- b. <u>DISCUSSION</u>: Engineer units of Company and Detachment size which are activated in CONUS with a relatively short time (12-16 weeks) to organize, draw equipment, train and prepare for overseas movement are allowing assigned personnel to wait until the last minute to submit Personnel Action requests.
- c. OBSERVATION: All commanders of units activated in CONUS for deployment overseas should encourage the assigned personnel to submit Personnel Actions requests as soon as possible. It was noticable in this unit that personnel were waiting until the last minute to submit Personnel Action requests. As a result the unit deployed with personnel shortages.
- 3. a. ITEM: Logistical and Personnel Support for seperate companies and detachments.
- b. <u>DISCUSSION</u>: Company and Detachment size support type units are frequently required to give support to two units located in seperate locations, this creates a problem in both maintenance and personnel support requirements.
- c. OBSERVATION: Units such as dump truck companies and construction support companies should formulate standard operating procedures for operations under conditions where platoons are seperated. This SOP should contain procedures for maintenance operations, repair parts supply, and personnel management. Due to the composition of the unit PLL and organic maintenance equipment it is difficult to split the maintenance section into two sections. Special attention should be given to this problem at command levels. Where possible additional repair parts and maintenance equipment should be authorized for units operating under these conditions.

OPERATIONS:

- 1. a. ITEM: Unloading of general cargo.
- b. <u>DISCUSSION</u>: When commercial truck contractors are used in the unloading and hauling of general cargo. Many items end up at the wrong destination. This is especially true if work is continued at night.



- c. OBSERVATION: To elimenate misplaced cargo loads by civilian carriers use an NCO to supervise the loading and send an EM with the first and last vehicle of each convoy to assure that all vehicles reach the intended destination.
 - 2. a. ITEM: Equipment Escort Party
- b. <u>DISCUSSION</u>: Each unit deploying should insist on sending an escort party with their equipment ship. This party should consist of either the maint WO or maint NCO and several mechanics with tool boxes.
- c. OBSERVATION: The escort party greatly assists in assuring that equipment is carefully loaded and unloaded and minor maintenance can be immediately preformed to process vehicle upon unloading.
 - 3. a. ITEM: Coordination with Allies.
- b. <u>DISCUSSION</u>: Whenever construction is undertaken in an area occupied by allied troops it is important to coordinate with them, especially when working during the hours of darkness. In some cases, there is a language barrier; and injury or death can result from mistaken identity.
- c. OBSERVATION: Crose coordination must be effected when working in areas secured by allied troops in order to prevent accidents.
 - 4. a. ITEM: Concrete Placement.
- b. <u>DISCUSSION</u>: Concrete, when placed during periods of high temperature and winds cures too rapidly. As a result finishing is difficult and cracking occurs. In addition inexperienced personnel tend to add water to the mix to make placing easier and there by change water cement ratio and reducing the strength.
- c. OBSERVATION: Rapid curing can be over come by placing concrete between 1800 hrs and 0700 hrs and by first soaking the area where the concrete is to be placed to prevent ground absorbtion of water in concrete. The water cement ratio must not change after the mix has been designed. If a more fluid mix is needed the mix design is changed, not the water cement ratio.
 - 5. a. ITEM: 290M Tractor Operation.
- b. <u>DISCUSSION</u>: The clark 290M tractor, when used over rough terrain while in fourth gear, will either fail or produce a very low RPM. Despite having been advised against the use of fourth gear, operations have been observed using this gear and engine failures have resulted.
- c. <u>OBSERVATION</u>: A 1/8" steel plate was fabricated with three holes to sit over gear shift bracket to block out 4th and 5th gears. Therefore, only three speeds could be obtained resulting in increased RPMs and less trouble with fuel pumps and injectors.
 - 6. a. ITEM: Dust Palliative.



- b. DISCUSOR OF Effective dust palifiative has been RC-3 applied at .4 gal/sy and covered with a sand blanket. When placed on a previously compacted rock based surface the palliative has proven a good temporary surface even on major LOC roads.
- c. OBSERVATION: RC-3 with sand blanket provides excellent dust palliative and surface for 4 to 6 weeks on heavily traveled LOCs and last much longer on area where use is not as great.

TRAINING AND ORGANIZATION:

- 1. a. ITEM: Weapons Familiarization.
- b. DISCUSSION: Units activated in CONUS should during the training phase fire not only their TOXE weapons but should also familiarize with weapons such as the M-60 machine gun and the M-79 greater's laurabler. Frequently these companies are attached to units which have these weapons as TOXE equipment. A problem is created when there is an attempt made to intergrate these separate companies into the defense plan of the supported unit.
 - 2.a. ITEM: Training of Engineer Dump Truck Companies.
- b. <u>DISCUSSION</u>: NCO's assigned to Engineer Dump Truck Composites have had little prior experience with Engineer construction procedures. These NCO's have for the most part spent the majority of their Army Cambers in the Transportation Corps.
- c. OBSERVATION: When newly activated Dump Truck Companies are going through the training cycle special attention should be given turning the NCO's in engineer occultraction procedures. They should be depressed with the fact that they are no longer just truck drivers but are now an integrated part of a construction effort. These NCO's should not be allowed to become apathetic toward the overall engineer mission.

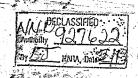
INTELLIGENCE: Nome

LOGISTICS

- 1. a. ITEM: Packing List.
- b. <u>DISCUSSION</u>: Detailed packing lists are absolutely essential while unloading in country to prevent hours of wasted time looking for something which is still packed. It is further important that a number of copies of the packing list be available to different persons so as to prevent loss of lists.
- c. OBSERVATION: Thorough care must be taken in accurately preparing detailed packing list for all inserts and conexes. In addition to packing list on the outside of container place one inside and distribute the rest to individuals concerned. Always have a unit master listing of package lists.

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2. a. <u>ITEM</u>: WABTOC



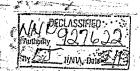
- b. DISCUSSION OF THE LATE TO NEW Ed of receiving its full authorized WABTOC package two steps are very important prior to deployment. First it is necessary to establish liaison with the Sierra Depot, in California, preferably by personal visit which can be arranged. Secondly arrange for escort party of one or two EM on the ship carrying units WABTOC.
- c. OBSERVATIONS: By establishing direct liaison with Sierra Depot unit will know what they will receive for WABTOC and shortages can be planned for. Sending a escort assures that your unit will receive its own WABTOC upon arrival in country.
 - 3. a. ITEM: Unloading Self-Powered Vehicles from Ships.
- b. <u>DISCUSSION</u>: After long periods of disuse during shipment, batteries and starters often deteriorate and become unserviceable.
- c. OBSERVATION: Batteries and starters should be available to mechanics during unloading of self-powered equipment to make those vehicles operable. A wrecker is essential to assist in unloading inoperable equipment.
 - 4. a. ITEM: Yellow TAT
- b. <u>DISCUSSION</u>: Great care should be taken in determining what should be shipped Yellow Circle TAT. Units have a tendency to duplicate effort and carry more yellow TAT than practical. Shipboard space is very limited and restricts using Yellow TAT while enroute in most cases. Yellow TAT is stored in troop billeting space, hence large amounts cause unnecessary hardships on troops.
- c. OBSERVATION: Since Yellow TAT is not utilized while enroute it is recommended that only one or two boxes be carried by a company. Place the remaining items as Red Circle TAT since Red TAT is almost immediately available upon arrival.
 - 5. a. ITEM: Equipment Security
- b. <u>DISCUSSION</u>: Equipment must never be left unattended when outside of motor park area even during day time operations. Local Nationals scavenger around parked equipment for individual equipment, tools, parts and fuel even in presence of operator in daytime if care is not taken. At night equipment must be returned or left in a secure area under guard.
- c. OBSERVATION: Failure to keep local nationals of all ages away from vehicles and equipment will result in loss of individual equipment, tools, parts and fuel.
 - 6. a. ITEM: Additional Survey Equipment:
- b. <u>DISCUSSION</u>: Engineer Construction Battalions do not have sufficient transits and levels to meet survey requirements for design and construction control. If additional transits and level were authorized the survey teams could be split up and supplemented with non surveyors to accomplish the survey work.



- OBSERVATION: Three Transits and four levels are required to increase the survey capability to meet existing survey requirements.
 - 7. a. ITEM: CV Boots.
- b. DISCUSSION: CV boots on front loaders are the main item causing downtime on this equipment. In rough terrain, CV boots wear out and split in as few as 3 days. This problem is partly due to inexperienced operators and partly due to long hours of work under rough terrain conditions.
- OBSERVATION: Deploying units are advised to have a large supply of CV boots (FSN 2530-817-2737) in their PLL and ASL.
 - 8. a. ITEM: Ground Plates for 18 Cy Scraper.
- b. DISCUSSION: The ground plates on 18 Cy Scrapers wear out rapidly when used in rough terrain and rocky soil. Resupply of this item is difficult to obtain in-country.
- c. OBSERVATION: Ground plates can be rebuilt to normal size using 3/16" hard steel rods. This results in double the wear-out time of a new plate.

9. a. ITEM: MHE Equipment

- b. <u>DISCUSSION</u>: Engineer battalions equipment becomes heavily committed immediately upon arrival in country. Large quantities of supplies are handled daily by the battalion in support of the construction effort. Most of these supplies consist of heavy timbers of palletized items which cannot be manhandled, the handling of large quantities of materials requires fork lifts especially of the rough terrain type with a capacity of over 10,000 pounds.
- c. OBSERVATION: Each construction battalion would benefit greatly by being authorized and possessing two (2) rough terrain fork lifts 10,000 to 15,000 lbs capacity. The use of this equipment will avoid waste of manpower, time and other battalion resourses (cranes, front loaders, wreckers) which are inefficiently employed for handling materials.
 - 10. 2. ITEM: Hand Tools.
- b. DISCUSSION: The construction effort in country is so intense and deadlines for completion short that units are forced to hire local personnel to augment their capability. However, the battalions are not authorized additional hand tools and are handicapped by lack of tools for this prupose.
- c. OBSERVATION: Each construction platoon should be authorized a 50% average on hand tools for use by local hire personnel.
 - 11. &. ITEMS: Uniforms
- b. <u>DISCUSSION</u>: Each individual is authorized five (5) sets of fatigues, including jungle fatigues and two (2) pairs of boots. However,



the climatic conditions, (heat, rain, dust) and the heavy labor performed increases the wear on these particular items. QM Laundry facilities take from three (3) to five (5) days for cleaning fatigues. Thus, a soldier may be forced to wear a set of clothing for two (2) or three (3) days.

- c. OBSERVATION: The issue of three (3) additional sets of fatigues and one pair of boots will greatly increase moral of the individual soldier and contribute to reduce health hazards.
 - 12. a. ITEM: Surveying Equipment.
- b. DISCUSSION: The many projects in which this unit has been involved require work of surveyors. However, the surveying capability is limited by TO&E and project progress is slowed down by lack of surveying.
- c. OBSERVATION: The authorization of additional Abbey Hand Levels, on the basis of three (3) per construction platoon will enhance the capability of platoons to perform a minimum of survey required to maintain progress.
 - 13. a. ITEM: Blank Forms
- b. <u>DISCUSSION</u>: Blank forms particularly in the area of personnel and finance are in short supply. By requisitioning and stocking a six month supply prior to departing CONUS a unit can elimenate this problem.
- c. <u>OBSERVATION</u>: It is possible to order, stock and ship a six month supply. Immediately upon arrival in country requisition should be placed for additional blank forms hereby allowing for shipment and reciept of forms prior to exhausting the units supply of forms.
 - 14. a. ITEM: Regulations
- b. <u>DISCUSSION</u>: Reciept of requisitioned Army Regulations take a much greater time period in Vietnam than in CONUS. By requisitioning all ARs as much in advance of movement as possible will allow unit to receive AR prior to deployment. Units should request USARV, USAEV (P), Brigade, and Group Regulations by letter at the earliest date possible to allow staff sections and units to be familiar with policies procedures and reports prior to arrival.
- c. <u>OBSERVATION</u>: It is possible to arrive in country with a complete set of ARs and local regulations. This provides immediate answers to many questions and problems.



PART II

COMMANDERS COMMENTS:

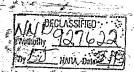
- 1. The 589th trained at Ft Hood under the operational control of the III Corps Engineer, an arrangement which worked extremely well and resulted in complete and thorough training in general military and engineer construction
- 2. Headquarters, III Corps and Ft Hood and all post agencies at Ft Hood gave the 589th outstanding support in training, logistics and supply, and maintenance during the battalion's training and POM phases. Much credit is due these agencies for the fine readiness condition in which the 589th deployed for duty in Vietnam.

myron d.

J. Austic

LEC, CE

Commanding



EGD-3

1st Ind

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

HEADQUARTERS, 45th Engineer Group (Const), APO 96238, 17 August 1967

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

APO 96377

Commanding General, USA Engineer Command Vietnam (Prov),

ATTN: AVCC-P&O, APO 96491
Commanding General, United States Army, Vietnam, ATTN:
AVHGC-DH, APO 96307
Commander in Chief, United States Army, Pacific, ATTN:

GROP-OT, APO 96558

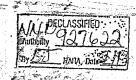
Assistant Chief of Staff for Force Development, Department of the Army (CASFOR DA), Washington, D. C. 20310

1. Operational Report-Lessons Learned of the 589th Engineer Battalion for the Quarterly Period ending 31 July 1967 is forwarded .

2. Concur with observations.

COLONEL. COMPS OF ENGINEERS

COMMAND ING



AVBC-C (16 Aug 67)

2nd Ind

LT Hegmann/dlr/DBT-163

SUBJECT:

Operational Report - Lessons Learned for the Quarterly Period

Ending 31 July 1967

2 8 AUG 1967

Headquarters, 18th Engineer Brigade, APO US Forces 96377

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

1. This headquarters has reviewed the report submitted by the 589th Engineer Battalion and considers it an excellent report of unit activites and accomplishments for the period ending 31 July 1967.

This headquarters concurs with the observations and recommendations of the Battalion Commander.

The marking for official use only is cancelled when separated from the protected material

"TOR OFFICIAL &



AVCC-P&O (28 Aug 67) 3rd Ind CPT Whitley/gdz/IBN-4581 SUBJECT: Operational Report-Lessons Learned for the Quarterly Period Ending 31 July 1967

HEADQUARTERS, UNITED STATES ARMY ENGINEER COMMAND VIETNAM (PROV), APO 96491 9 0CT 1967

TO: _Commanding General, United States Army Vietnam, ATTN: AVHGC-DH, TAPO 96375

This headquarters concurs with the 589th Engineer Battalion's ORIL and previous indorsements as written, subject to the following comments:

- 1. Reference Section 2, Part I, page 8: Nonconcur. Reduction of gear selection reduces the flexibility of the equipment. The unit will be advised that the solution is further operator's tractor training and adequate supervision to ensure correct operation and maintenance procedures.
- 2. Reference Section 2, Part I, paragraph 6, page 10: Concur. Unit is being advised of procedures through which equipment in excess of authorization may be obtained.
- 3. Reference Section 2, Part I, paragraph 9, page 11: Concur. An emergency MTOE has been submitted to USARPAC 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 MTOE.
- 4. Reference Section 2, Part I, paragraph 10, page 11: Concur. Unit is being advised of procedures through which equipment in excess of authorization may be obtained.

FOR THE COMMANDER:

Colonel, CE Chief of Staff

Info Cys Furn:

CG, 18th Engr Bde

CG, 8th US Army, ATTN: Engr

CO, 45th Engr Gp

00, 589th Engr Bn

"THIS PROTECTIVE MARKING IS CANCELED ON 1 JAN 1970

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