**UNCLASSIFIED**

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**TO:**

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**FROM:**

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**AUTHORITY**

AGO, d/a ltr, 29 Apr 1980
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2. Information contained in this report is provided to insure appropriate benefits in the future from lessons learned during current operations and may be adapted for use in developing training material.

BY ORDER OF THE SECRETARY OF THE ARMY:

KENNETH G. WICKHAM
Major General, USA
The Adjutant General

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CO, 70th Engineer Battalion (Cbt)

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FOR OFFICIAL USE ONLY
SUBJECT: Operational Report - Lessons Learned (RCS CSFOR-65), for Quarterly Period Ending 31 January 1968

THRU: Commanding Officer
937th Engineer Group (Cbt)
APO 96318

Commanding General
18th Engineer Brigade
APO 96377

Commanding General
U. S. Army Engineer Command, Vietnam (Prov)
APO 96375

Commanding General
United States Army, Vietnam
APO 96307

Commander in Chief
United States Army, Pacific
ATTN: GP0P-OT
APO 96558

TO: Assistant Chief of Staff for Force Development
Department of the Army (ACSPOR DA)
Washington, D. C. 20310
SECTION I. SIGNIFICANT UNIT ACTIVITIES

1. COMMAND

   a. MISSION:

      (1) To command assigned and attached units.

      (2) To plan and coordinate operations of units assigned or attached to the battalion.

      (3) To provide all non-divisional engineer support required for tactical operations in the battalion area of responsibility.

      (4) To actively maintain the battalion sector of the Engineer Hill perimeter and to defend this sector against enemy attack.

   b. ORGANIZATION:

      (1) The 630th Engineer Company (Light Equipment) was attached to the battalion during the reporting period.

      (2) Status of personnel at the end of the reporting period was as follows:

<table>
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<tr>
<th>UNIT</th>
<th>AUTHORIZED STRENGTH</th>
<th>ASSIGNED</th>
<th>PRESENT FOR DUTY</th>
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<tr>
<td>70th</td>
<td>794</td>
<td>716</td>
<td>86%</td>
</tr>
<tr>
<td>630th</td>
<td>149</td>
<td>138</td>
<td>95%</td>
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</table>

      (3) The personnel authorization for the 630th Engineer Company (Light Equipment) was reduced from 166 to 149 as authorized by MTOE 5-54D with change 7, 40 149, as authorized by MTOE 5-54D PAC 5/67 and directed by General Order 195, Headquarters, USARPAC, dated 16 October 1967.

          A request for review of actions leading to MTOE implementation to determine if present mission would warrant reconsideration was submitted through command channels on 8 November 1967.

      (4) A chart showing the battalion's current organizational structure is attached as Inclosure 1.

2. PERSONNEL ADMINISTRATION, MORALE AND DISCIPLINE:

   a. Personnel: The average present for duty strength of the battalion and its attached light equipment company remained at approximately 92%.

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b. Morale and Discipline:

(1) Morale remains at a high level. The administration of article 15's for the period remained constant at 18 per month. Four Special Courts Martial were held and the number of delinquency reports received dropped by half.

(2) Movies are shown on an average of 6 nights weekly within the battalion. Officer, NCO, and EM clubs are available for all personnel in the base camp.

(3) The battalion chaplain conducted Protestant services in the battalion and at field locations on a regular basis. Catholic services are conducted by the 937th Engineer Group (Cbt) Chaplain, both in the base camp and for units in the field.

3. INTELLIGENCE AND SECURITY

a. PHYSICAL SECURITY:

(1) The battalion is assigned a sector of the base camp security perimeter to include 8 fortified bunkers and 4 towers. Responsibility includes maintenance, manning, and control within assigned sector. A continuing effort is placed on improvement of the defensive posture of the unit to include placement of additional tactical wire, construction of new fortifications and lighting, and placement of light colored material in the perimeter to improve night visibility.

(2) The battalion continues to stress constant surveillance of all local hire Vietnamese employees.

(3) Increased enemy activity in the battalion area of operations has been reflected in a number of different ways:

(a) On 20 January 1968 the 408th Sapper Battalion conducted an attack on the Engineer Hill Base Camp and succeeded in penetrating the perimeter wire in the vicinity of the 650th Engineer Company (Light Equipment) motor pool. Though discovered quickly they were able to place explosives on a number of items of equipment causing moderate damage. The enemy force was brought under heavy fire resulting in 9 enemy killed and 2 captured. There were no friendly casualties.

(b) Reported enemy minings of route 511 between Polei Kleang and Kontum, as well as the destruction of a timber trestle bridge on that route and the enemy's capture of the town of Polei Krong resulted in closing the road for resupply to Polei Kleang.
SUBJECT: Operational Report - Lessons Learned (RCS CSFOR-65), for Quarterly Period Ending 31 January 1968

(a) Enemy activity on Route QL-19E including ambushes, miniges, and construction of road blocks resulted in increased engineer commitments along the route.

b. RECONNAISSANCE: Ground reconnaissance has been conducted on all major routes in the battalion's northern area of operations. Reconnaissance personnel are presently located in Ban Me Thout and will conduct ground reconnaissance of routes in the unit's southern area of operations as the tactical situation permits. A special reconnaissance of Route 511 from Kontum to Polei Kleng was carried out by vehicle to the Krong Poko River and on foot into Polei Kleng prior to the movement of B Company to that location.

c. DISSEMINATION OF INTELLIGENCE INFORMATION: Daily coordination with available intelligence sources is carried out to insure that the unit is kept up to date on the enemy's situation, general location, and capabilities. All available information concerning enemy ambush, mining, and booby trapping techniques is passed on immediately to subordinate units.

4. PLANS, OPERATIONS AND TRAINING:

1. Operational Support: This unit has had the following operational support missions during the reporting period.

(1) Land Clearing operations were undertaken along Route QL-14, QL-19, and 509. Initially land clearing operations on Route QL-14 between Pleiku and Kontum were begun with unit resources on 12 November 1967. On 24 November 1967 clearing was terminated after 164 acres had been cleared. On 11 December 1967 clearing resumed with two sections of the 35th Land Clearing Detachment under operational control of the battalion. Operations progressed swiftly with between 15 and 20 tractors and 3 disc harrows working. Clearing broke 100 meters on each side of the road was completed on 23 December 1967. Land clearing on Route QL-19 was begun on 11 October 1967 with one land clearing section furnished the battalion. This section was withdrawn from the battalion on 19 October 1967 and clearing was continued sporadically with limited unit resources and by hand until the land clearing section returned on 25 December 1967 and all machine clearing was completed. The remaining clearing consists of small areas which must be cleared by hand. Route 509 was cleared of vegetation 100 meters on each side of the road for its entire length utilizing equipment organic to the battalion plus one Rome Plow on loan from other Group assets. The operation began on 1 November 1967 and was completed on 18 January 1968 with a total of 1080 acres cleared.
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EGCB-QP-70E
SUBJECT: Operational Report - Lessons Learned (RCS CSFB-65), for Quarterly Period Ending 31 January 1968

(2) Route 509 was upgraded to a one way class 35 wheel 55 track fair weather road from Pleiku west to its junction with Route 14B, a distance of approximately 24 miles. A complete rebuilding or re-routing of the roadway was required on approximately seventy percent of the total length. Numerous culverts were installed up to 60 inches in size and two timber trestle bridges were constructed. On both bridge sites AVLB abutment by-passes were constructed.

(3) B Company was assigned the mission of upgrading Polsei Klong to a class II C-130 capability. This involved removing T-17 membrane from an existing runway and adjacent parking apron, lengthening the runway to 3303 feet, and placing and anchoring T-17 matting for the runway and parking apron. The initial elements of the company arrived in Polsei Klong on 31 October 1967 and commenced operations. An area was cleared to the west of the Special Forces Camp and the airfield fence was constructed utilizing four bands of tactical wire, a perimeter trench system, and numerous bunkers. Construction on the airfield proceeded steadily with a few delays due to higher priority operational support missions and equipment break downs. A substantial amount of earth work was involved in preparation of the runway and parking ramp with a total of 222,000 cubic yards of earth moved. At the end of the reporting period the runway was completed and work was proceeding on the parking ramp and taxiways.

(4) C Company (-) under operational control of the 299th Engineer Battalion (Cbt) at Dak To, constructed a 240 foot double-single Bailey bridge over the Dak Poko River. This bridge replaced an M476 float bridge of the 4th Engineer Battalion (Cbt). Construction of the bridge required driving timber piles for two piers consisting of 8 piles each as well as constructing two pile abutments. The bridge was opened for traffic on 15 December 1967. Concurrently, the unit executed several combat support missions for infantry and artillery units in the Dak To area.

(5) Mine sweeps were conducted on Routes QL-14, QL-19E, and 509 as required and in response to requests from the tactical elements on all three roads. Several sweeps conducted following ambush or road block incidents produced enemy mines which were removed and destroyed.

(6) The battalion provided equipment and personnel support as required to combat elements in the unit area of operations. Supported units included 2/1 Cavalry Squadron, 1/10 Cavalry Squadron, 3rd ARVN Cavalry Squadron, and elements of the 52nd Artillery Group. Such support included preparation of gun positions, digging in armored vehicles, construction of earth berm revetments, destruction of enemy munitions, and pioneer road construction.

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SUBJECT: Operational Report - Lessons Learned (RCS CSPOR-65), for Quarterly Period Ending 31 January 1968

(7) Maintenance of lines of communications within the unit area of operations was a continuing project throughout this period. Emphasis was placed on maintenance of routes QL-19E and QL-14. Repairs carried out included hot mix patching, improving shoulders, replacement of concrete sections on bridges, and improvement of by-passes. 14.2 miles of Route QL-19E have been patched utilizing 1702 cubic yards of hot mix asphalt. Route 509 has been graded and repaired as required.

(8) The Waterman decomposed granite quarry was operated throughout the period producing in excess of 130,000 cubic yards of decomposed granite. Bunkers were constructed and tactical wire emplaced in a continuing effort to improve the security posture of the quarry. Security was maintained on a daily basis utilizing one combat engineer platoon.

(9) B Company, 70th Engineer Battalion (Cbt) provided support to a number of units while upgrading the Polei Kleg Airfield. These included the Special Forces detachment at Polei Kleg Special Forces Camp, elements of the 1st Cavalry Division (Airmobile), and Project Delta. Assistance provided included preparation of field fortifications, peneprimeing of helicopter landing areas, clearing of unit bivouac areas, division action work in the nearby village, and road maintenance.

(10) One platoon of C Company was sent to Ban Me Thiot on 25 January 1968. Upon arrival they spent their initial time preparing a defensive sector on city Airfield. With the beginning of the communist Tet offensive they were engaged in defense of the airfield and combat support. The platoon was equipped to accomplish directed projects in the area plus limited operational support.

(11) At the close of the reporting period vegetation has been cleared 100 meters back from the road on Route TL6D from the Highland School to Waterman Quarry and clearing was progressing on the un-numbered road to the village of Plei Uet northeast of Pleiku.

(12) All required peneprime support at Camp Holloway has been carried out, greatly reducing the dust problem at that location.

(13) Work continues preparing the proposed OP-10 Quarry. Development of a rock face and the required internal haul roads are the main items to be accomplished. A 75 TPH military primary crushing unit will be placed at the site as soon as available.
SUBJECT: Operational Report - Lessons Learned (RCS CSFOR-65), for Quarterly Period Ending 31 January 1968

b. CONSTRUCTION: During the reporting period the following projects were completed or under construction:

(1) Work continued on the Camp Holloway perimeter security lighting system. Due to arrival of materials during the period the project was almost completed. 164 telescoping metal poles were placed, flood lights attached, almost 100,000 feet of wire were strung, two generator sheds constructed, and the generators were installed and hooked up. Considerable damage was done to the system by small arms fire during enemy attacks on the Camp Holloway perimeter at the outset of the Tet Offensive. At the close of the reporting period repairs were being carried out and wires buried in front of all guard towers.

(2) A tactical Operations Center for the 6/14 Artillery was completed on 15 December 1967 and turned over to the using unit.

(3) Roads and drainage structures on Artillery Hill, Pliku have been undergoing repair and upgrading throughout the period. 1400 cubic yards of 3" (-) rock and over 5000 cubic yards of decomposed granite have been employed to stabilize the roads. The surface of some of the roads has been shot with penceprime. 570 feet of culvert have been installed in the camp and numerous concrete and sand bag headwalls employed. Ditches have been cleaned out and reshaped. The project is continuing at this time.

(4) The Artillery Hill light aircraft airfield was reshaped surfaced with decomposed granite, compacted and pencoprinized. 1600 cubic yards of decomposed granite and 9000 gallons of penceprime were utilized on the project and it was completed on 14 January 1968.

(5) A six head skid mounted shower building was constructed for A Battery, 1/92 Artillery.

(6) The Engineer Hill Heliport was completed by placing and anchoring 3500 square yards of MBAL netting.

(7) A Chinaman was constructed at the proposed OP-10 Quarry site.

(8) Barrel revetments were constructed to protect two NCR 500 Vans at the 604th Maintenance Company area. The revetments were essentially complete when the area was hit with an 82 mm mortar attack. Even through a number of rounds hit in the immediate vicinity of the vans, no significant damage was suffered because of the protection afforded by the new revetments.
SUBJECT: Operational Report - Lessons Learned (RCS CSPOR-65), for Quarterly Period Ending 31 January 1968

(9) Roads and drainage structures at Camp Holloway have been undergoing repairs and upgrading during the reporting period. 8100 cubic yards of 3" (-) rock and 1300 cubic yards of decomposed granite have been utilized for road stabilization to date. A number of culverts have been installed and ditches cleared and shaped. The project is continuing.

(10) A tactical Operations Center has been begun for the battalion with the concrete work completed at the end of the reporting period.

(11) Bridge 19-31 was constructed utilizing existing abutments, placement of steel stringers, and forming and pouring a concrete deck with piers and handrails.

(12) Minor work has been accomplished on the pump stations for the An Khe to Pleiku pipeline. Equipment shortages currently preclude completion.

(13) Two MB1 parking ramp extensions, each 100 feet by 300 feet were completed for the 219 Aviation Company at Camp Holloway. Additionally three LOH revetments were constructed and four other revetments are still under construction.

(14) 84,780 square foot of MB1 netting have been placed and anchored in the 604th Maintenance Company parking apron. Additional apron awaits receipt of the required netting.

(15) A parking apron for the 355th Assault Helicopter Company (Bn) was begun on 20 January 1968. This will involve construction of a 200 foot by 600 foot flying crane landing pad and 8 parking pads all of MB1 netting.

(16) Tent kits have been constructed for three companies in the new battalion area at Engineer Hill.

5. LOGISTICS

a. For three months, the 70th Engineer Battalion (Cbt) has supported a full TO&E combat Engineer Company supplemented with an equipment platoon located at Poloi Klong, approximately 85 road miles from the base camp. During this period of time, food, fuel and construction materials were hauled overland until the road between Kontum and Poloi Klong was closed due to the increase in enemy activity in that area. A total of 1600 tons of MB1 netting was transported to Poloi Klong on low-bed trailers. Dump trucks hauled 30,500 gallons of DF2 and 5,500 gallons of NOGAS. CH-47 helicopters were used to airlift rations, POL products, personnel, repair parts and construction materials beginning on 14 January 1968 and continuing through the present.
Fifteen thousand gallons of DF2, 3500 gallons MOGAS, 22,000 pounds of rations, 1,000 pounds of C-rations along with miscellaneous loads such as equipment engines (1 grader, 1 scoop loader, 1 jeep) were transported in this fashion.

b. The water point located on Route QL-19 east of Pleiku supporting D Company, 70th Engineer Battalion and a 4th Division fire base provided an average of 5,000 gallons of water per day during the entire reporting period. Additionally, a second water point was put into operation at Polei Kleng in November of 1967 utilizing a 600 gph unit from the 4th Engr. Bn.

c. The materials handling situation was greatly alleviated with the arrival of a 10,000 pound Rough Terrain Fork lift in November of 1967. This fork lift is being utilized at Polei Kleng in Support of B Company, 70th Engineer Battalion.

d. Major equipment shortages still outstanding include: 3 graders, 7 scoop loaders, 4 graders, 5 dump trucks, 1 contact maintenance truck and 1 shop truck.

e. The Battalion has yet to receive the M-16 rifle. With as many as three companies in the field at any given time the increased fire power of the M-16 rifle would be a prime advantage.

f. The availability of trip flares for the 70th Engineer Battalion from the 341st ASP has been less than required. B Company at Polei Kleng expended more than triple their normal allocation. The resupply rate was insufficient during January and effective at the end of January issue was suspended for all US/ECV units. Unless these items can be made available in sufficient numbers security of unit operations at all sites will be jeopardized.

6. FORCE DEVELOPMENT: None

7. COMMAND MANAGEMENT: None

8. INSPECTOR GENERAL: None

9. INFORMATION: None

10. CIVIL AFFAIRS: Civic action activities have decreased during the reporting period. Christmas parties were conducted in the villages of Tien Son and Plei Net. A number of other visits were made to these villages and the battalion surgeon participated in the 937th Engineer Group (Cbt) MEDCAP efforts in the same area. Currently civic action in this area has ceased because of increased activity associated with the enemy's Tet offensive.
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SECTION II. PART I, OBSERVATIONS (LESSONS LEARNED)

ITEM: Construction of expedient sandbag headwalls

DISCUSSION: A simple easily constructed culvert headwall can be prepared with sand bags filled with decomposed granite, placed, and then saturated with a cement water solution. Such headwalls have proved to be highly durable and simple enough so that unskilled local national labor could be utilized to a maximum degree in their construction.

OBSERVATION: The use of sandbag culvert headwalls saturated with a cement-water solution is a useful technique because of their ease of construction and durability.

ITEM: Burial of lighting power lines

DISCUSSION: In construction of the perimeter lighting system at Camp Holloway, the plans called for all power lines to be strung between the light poles. This included sections of line in front of elevated guard towers. When the guards in these towers fired their individual and crew-served weapons during an enemy attack on the perimeter the power lines were severed necessitating extensive repairs. To preclude such damages the lines were then buried in front of all elevated guard positions.

OBSERVATION: Power lines for cantonment area perimeter lighting systems should be buried in all areas where elevated guard towers are employed.

ITEM: Setting light poles in a swampy area

DISCUSSION: A problem was encountered in construction of a perimeter lighting system when lights had to be placed across a swampy area approximately 1500 feet in length. It was impossible to get a crane or trucks into the area to set the poles. A UHIL helicopter was used to carry the poles in and set them in place. Then a concrete wafer, 48 inches in diameter and 24 inches thick was placed around the pole at ground level with five to six feet of the pole below it embedded in the ground. Large bolts were placed through the pole at the junction of the pole with the wafer to insure bonding of the concrete to the pole. The concrete was brought in to pour the wafer utilizing wheel barrows moving on a narrow tredway constructed of lumber and PSP. The wafer anchored the poles and gave them a stable base.
SUBJECT: Operational Report - Lessons Learned (RCS CSFOR-65), for Quarter Ending 31 January 1968

OBSERVATION: Light poles can be placed in extremely swampy areas using helicopter lift and ingenuity in construction.

ITEM: Placement of light colored material between perimeter wire.

DISCUSSION: Following a successful enemy penetration of the perimeter wire of the battalion's base camp a number of ideas for increasing the night visibility of perimeter guards were explored. It was decided to place decomposed granite between the two inner bands of perimeter wire. A thin layer of this light colored material would tend to silhouette any infiltrators so that tower or bunker guards could bring them under fire.

OBSERVATION: A band of light colored material placed within the perimeter wire greatly enhances the night vision of the perimeter guards.

ITEM: 290 M Tractor Air filter elements

DISCUSSION: In the excessive dust conditions prevailing during the dry season, 290 M tractor air filter elements rapidly become clogged with dirt. These elements cannot be cleaned and must be replaced. The present stockage level in the PLL and the resupply are inadequate to meet the high demand. It is recommended that additional elements be procured and delivery to units in RVN be expedited.

OBSERVATION: 290 M Tractor air filter elements are needed in great numbers to keep 290 M tractors operational during dusty conditions in RVN.

ITEM: Angle Brace Failures on D7E Dozer

DISCUSSION: Working in quarries and on land clearing operations in rocky terrain frequently results in damage to angle braces on the blades of the D7E dozer. Frequent examinations and tightening of the bolts which hold the angle braces of the blade will minimize such damage.

OBSERVATION: Extreme care should be exercised to preclude damage to D7E angle braces while working D7E dozers in difficult rocky areas.

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ITEM: Hydraulic line failure on land clearing dozers

DISCUSSION: During land clearing operations it was noted that hydraulic lines on Rome Plows were leaking and breaking due to timber and heavy brush falling on the lines. Replacement return lines were difficult to obtain and welding the broken lines produced only temporary results. A flexible line was needed to absorb the vibration of the equipment and shocks of falling debris. Lines from 290 M tractors and 5 ton dumps were modified and utilized with excellent results.

OBSERVATION: Flexible hydraulic lines can be adapted from other pieces of equipment and placed on land clearing dozers with excellent results.

ITEM: Use of a drop hammer to set timber piles for driving with a diesel hammer

DISCUSSION: When driving timber piles with a diesel hammer a drop hammer should be utilized initially to properly set the piles prior to driving with the diesel hammer. This technique insures proper alignment and location of the pile before the more powerful and difficult to control diesel hammer is employed.

OBSERVATION: A drop hammer should be used to "start" timber piles before final driving with a diesel hammer.
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SUBJECT: Operational Report - Lessons Learned (RCS CSPOR), for Quarterly Period Ending 31 January 1968

SECTION II, PART II, RECOMMENDATIONS

Recommend reconsideration of USARPAC GO 195, dated 16 October 1967 implementing MTOE 5-54D PAC 5/67. The effect of this order is to reduce the 630th Engineer Company (Light Equipment) capability to a one shift operation while 24 hour operational support of rock quarries and crusher sites, as well as construction projects, is expected and anticipated. If further results in the loss of approximately 20% of this battalion's horizontal construction capability and completely eliminates any flexibility in the utilization of organic equipment carrying transports for logistical purposes which is estimated to be 30% of the units present mission.

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3 - USARV
8 - HQ, 18th Engr Bde.
1 - USAES

DEPARTMENT OF THE ARMY, HEADQUARTERS, 937TH ENGINEER GROUP (COMBAT), APO 96318, 22 February 1968

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

1. The subject report, submitted by the 70th Engineer Battalion (Combat), has been reviewed and is considered to be an accurate report of organizational activities.

2. I concur with the observations and recommendations of the Battalion Commander with the following additions:

Reference Section II, Part II: The 630th Engineer Company (Light Equipment) has been included in the MTOE standardization. The strength of this unit when approved will be 221.

WILLIAM J. TALBOTT
Colonel, CE
Commanding
TO: Commanding General, U.S. Army Engineer Command, Vietnam (Prov)  
ATTN: AVGC-FEO, APO 96491

1. The Operational Report - Lessons Learned for the 70th Engineer Battalion has been reviewed by this Headquarters and is considered to be an accurate account of the activities of the Battalion for the reporting period ending 31 January 1968.

2. This Headquarters concurs in the comments contained in Section II, Part I, Observations, with the following comment added: The burial of power lines in front of elevated guard towers would prevent the severing of these lines by the firing of weapons during enemy attacks on the perimeter. However, it should be noted that special type cables designed for underground installation would be required in order to accomplish this. The insulation on plain secondary conductors, when buried, will quickly deteriorate to the extent that a direct short will be created between the conductor and the ground. The additional expense involved in procuring underground cable might justify modifying the design for security lighting systems so that the cables pass behind the elevated guard towers.

3. Reference Section II, Part II, Recommendations: Information received at this Headquarters subsequent to the date of preparation of the first endorsement, indicates that the authorized strength of the 630th Engineer Company (Light Equipment) after MTOE 5-58G is approved will be 186 instead of 221 as indicated in the first endorsement. At its present strength of 149, this organization does not possess a two shift capability due to a shortage of thirty (30) equipment operator spaces. In addition, this company's maintenance capability is severely hampered by a shortage of seven (7) mechanics helpers spaces. Therefore it is strongly recommended that MTOE 5-58G be approved and implemented as soon as possible.

HAROLD J. ST CLAIR  
Colonel, CE  
Deputy Commander
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AVCC-F&A (31 Jan 68) 3rd Ind
SUBJECT: Operational Report - Lessons Learned (RCS CSFOR-65) for Quarterly Period Ending 31 Jan 68

HEADQUARTERS, UNITED STATES ARMY ENGINEER COMMAND VIETNAM (PROV) AFO 96491 26 MAR 1968

TO: Commanding General, United States Army Vietnam, ATTN: AVHGC-DST,
AFO 96375

1. The attached ORL1, submitted by the 70th Engineer Battalion, has been reviewed by this headquarters and is considered adequate except as follows:

2. The observation is Section 2, Part I, page 9 that power lines for perimeter lighting system should be buried is valid for those power lines in line of grazing fire. Many guard towers are now designed for firing to take place from a bunker beneath the guard tower, and in these cases grazing fire should not interfere with the power lines.

   a. Burial of power lines is costly - approximately $2 - $4 a foot, dependent upon size. Alternating overhead and underground construction will require special care in splicing.

   b. No change to Security Lighting Standard will be made as the decision to install underground cable is dependent on other factions than the engineering of the system.

3. Item concerning 290M air filter elements, Section 2, Part I, page 10. Nonconcur. The comment as written indicates a lack of understanding of PEL procedures contained in AR 735-35. Paragraph 6-6b(3), AR 735-25 states that PEL quantities may be adjusted based upon demand experience. Repair parts are also stocked at DSU and depot level based upon demand.

FOR THE COMMANDER:

[Signature]

RICHARD B. BIRD
Captain, AGC
Assistant Adjutant General

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This Protective Marking is Canceled on 10 JAN 197-
TO: Commander in Chief, United States Army, Pacific, ATTN: GPOP-DT, APO 96558

1. This headquarters has reviewed the Operational Report - Lessons Learned for the quarterly period ending 31 January 1968 from Headquarters, 70th Engineer Battalion as indorsed.

2. Concur with report as indorsed. Report is considered adequate.

3. A copy of this indorsement will be furnished to the reporting unit through channels.

FOR THE COMMANDER:

[Signature]

Major, AGC
Assistant Adjutant General

Copy furnished:
HQ USAECV (P)
HQ 70th Engr Bn
SUBJECT: Operational Report of HQ, 70th Engr Bn for Period Ending 31 January 1968, RCS CSFOR-65 (R1)

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

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

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

2. Reference 2d Indorsement, paragraph 3. Records of this headquarters are in agreement with 1st Indorsement, in that the proposed standardized strength of the Engineer Company (LE) is 221. An MTOE is pending DA approval.

FOR THE COMMANDER IN CHIEF:

CL. SHORTT
CPT, AGC
ADT AG
Incl 1

70th Engr Bn

HQ's & HQ Co

630th Engr Co

Co
Operational Report - Lessons Learned, Hqs, 70th Engineer Battalion (Cbt)(Army) (U)

Experiences of unit engaged in counterinsurgency operations, 1 Nov 67-31 Jan 1968

CO, 70th Engineer Battalion

31 January 1968

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