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AUTHORITY
AGO D/A ltr, 29 Apr 1980

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AGDA-A (M) (20 Apr 71) FOR OT UT 704046 7 May 1971

SUBJECT: Operational Report - Lessons Learned, Headquarters, 69th Engineer Battalion, Period Ending 31 October 1970

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13. ABSTRACT

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DEPARTMENT OF THE ARMY
HEADQUARTERS, 69TH ENGINEER BATTALION (CONSTRUCTION)
APO San Francisco 96215

EGFA-OP 15 November 1970

SUBJECT: Operational Report - Lessons Learned, 69th Engineer Battalion (Construction), for the period ending 31 Oct 1970, RCS CSFOR 65 (R2)

Commander in Chief, US Army Pacific, ATTN: CPOP-DT, APO 96558
Commanding General, USAECV (P) ACVV-MO 96375
Commanding General, US Army Vietnam, ATTN: AVHGC-DST, APO 96375
Commanding Officer, 34th Engineer Group, ATTN: EGF-OP, APO 96215

I. SECTION I Operations: Significant Activities

A. Command:

1. The command of the Battalion remained with LTC John H. Kern during this entire reporting period. The battalion continued its primary construction mission during the reporting period.

2. Command of Headquarters Company passed from CPT Michael E. Stovall to CPT Steven P. Yambor on 16 September and later to CPT Lawrence A. Rapisarda on 9 October 1970.

3. Command of Company A remained with CPT Roy F. Krag during this entire reporting period.

4. Command of Company B remained with CPT Jeff E. Maynard during this entire reporting period.

5. Command of Company C remained with CPT Barry E. Kerby during this entire reporting period.

6. Command of Company D remained with CPT Daniel R. Wells during the entire reporting period.

7. Command of 517th (Light Equipment) Company, which became attached to this Battalion on 1 August, remained with CPT Ruben E. Rivera.

8. Organization Locations:

a. Can Tho: Headquarters and Headquarters Company and Company A.

b. Phong Dinh Province: Company B, Binh Thuy North

c. Binh Thuy: Company C, Company D, and 517th (Light Equipment) Company.

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9. AOR: The location of the battalion remained entirely in IV Corps Tactical Zone, South of the Mekong River, with scheduled projects in four provinces of the region.

B. Personnel, Administration, Morale and Discipline:

1. The 69th Engineer Battalion (Const) remained organized under TOE 5-115G, with the companies organized under MTOE's 5-116G, 5-117G, 5-118G, and 5-117E.

2. Major shifts in staff positions took place during this period, facilitated by the availability of additional officers.

a. CPT Steven P. Yambor, from the 35th Engineer Battalion (Combat), assumed the duties of the S-3 Officer on 9 October 1970.

b. CPT David M. Jubenville assumed the duties of Civil Engineer on 5 October 1970.

c. CPT Kirby P. Bowman became the S-4 Officer on 24 October 1970.

d. 2LT Paul Ashburn assumed the duties of EEMO on 20 September 1970.

e. 1LT James A. French became the pipelines Engineer on 12 September 1970.

f. CPT Lawrence A. Rapisarda assumed the duty of Battalion Signal Officer on 3 September 1970, and his primary duty of Headquarters Company Commander on 9 October 1970.

3. Strength of the Battalion, as of the end of the reporting period, was as follows:

	OFF	WO	EM	TOTAL
AUTH	36	8	1027	1071
ASSN	30	7	982	1020

4. The last reporting period saw an increase in Battalion strength, due primarily to incoming personnel from deactivated units and the attachement of the 517th (Light Equipment) Company. There presently exists a shortage of Junior Officers in the Companies at the Platoon Leader level. Other shortages which affected the construction effort of the Battalion by MOS, Rank and Title are as follows:

MOS	TITLE	GRADE	AUTH	SHORTAGE
62B	Engineer Equipment Mechanics	E-6	2	1

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62B	Engineer Equipment Mechanics	E-5	124	16
62B	Engineer Equipment Mechanics	E-4	42	17
62B	Engineer Equipment Mechanics	E-3 (Below)	33	23
62N	Construction Machine Supervisor	E-6	10	2
62N	Construction Machine Supervisor	E-5	6	6
62F	Crane Operator	E-5	35	30

5. During this reporting period, 1 Officer was promoted to O-4, 1 to O-3, 2 to O-2; in addition there were two EM promoted to E-6, 35 to E-5 64 to E-4 and 29 to E-3.

6. Awards data for the period:

MEDAL	RECOMMENDED	APPROVED
Bronze Star Medal	30	2
Army Commendation Medal	67	30
Purple Heart	1	1
20th Engr Bde Certificate	2	2

7. The battalion employed an average daily total of 243 Vietnamese National personnel in skilled, semi-skilled and unskilled positions.

8. Morale within the Battalion remained generally good, this may be attributed to the 6½ day work week.

9. Discipline has been fair with minor racial and drug problems. Much improvement has been noted with the separation of many consistently troublesome soldiers utilizing AR 635-212.

C. Intelligence and Counter-Intelligence:

1. The battalion continued to receive comprehensive intelligence for its AOR by daily visits to G-2, IV Corps and review of operational wrap-ups and intelligence assessments disseminated daily by G-2, IV Corps. INTSUMS are received from the 164th Aviation Group (Combat), II FFV, and the 307th Aviation Battalion (Combat). Pertinent intelligence information is disseminated to the companies by the S-2 each evening.

2. Current information on LOC's with in the battalion's AOR is maintained by daily reports for G-2 AIR. IV Corp, on interdications of major LOC's in IV Corps.

3. All intelligence received is carefully scrutinized for the development of possible situations which endanger the security within the battalion. Warning messages concerning expected increase of enemy activity within the battalion AOR were disseminated expediently.

4. The battalion responsibilities for defense of the Can Tho Army Airfield were tested by a practice alert conducted on 31 October.

D. Plans, Operations and Training:

1. The 69th Engineer Battalion (Construction) has taken full advantage of the dry days between monsoon rains to perf its primay mission of construction; involving LOC Construction, combat support missions, operational support missions and base construction.

2. Effects of enemy activity on the Battalion operations were minimal; however, activity toward the end of the period required proportionately greater security effort. This was especially significant with our initiation of work on LTL-31.

a. Throughout the reporting period, there were several indirect fire attacks on the Can Tho Army Airfield. The effect on our Battalion was one minor casualty and approximately two squad days lost, to repair airfield damage.

b. On 24 October, a hand grenade exploded in the company area of "C" Company. This resulted in two casulties, one of which was serious.

c. During the latter part of October the enemy has placed mines and cratering charges on LTL-31. This has required approximately 10 Platoon working days to keep the road open.

d. The closing of LTL-31 also hindered our progress of repairing the Vi Thanh Airfield, losing both manpower and equipment hours as well as presenting additional logistical problems.

e. A few minor sniper incidents have occurred, without casualties or loss of equipment.

3. Company "A" retained the primary mission of maintenance and equipment support plus operation of the Rock Off-Load site at Phung Heip since 12 August. On 18 August, the Binh Minh Off-Load site was closed. The Sand Cement Plant, which previously had been operated by "A" Company, was closed on 22 August. During this reporting period, 96% of "A" Company's total effort has been exerted toward LOC, Operational Support and Maintenance Support.

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4. Company "B" remained primarily committed to LOC projects, principally the restoration of QL-4. They worked on the portion from Binh Minh to Ba Cang, plus the Binh Minh Bypass. Unfinished portions consisting primarily of shoulder construction were transfered to the 36th Battalion on 10 August. "B" Company moved to Binh Thuy North where they established a base camp and began work on QL-4 from Thanh Hoa to Soc Trang. They have also expended continual effort on Maintenance and Repair of LTL-27 since 20 August.

5. Company "C" performed a large variety of vertical construction projects, in addition to some horizontal construction projects including:

a. Vertical projects consisting of a mess hall, 3 BOQ's and 2 BOQ's for the 162nd Aviation at Can Tho; a 70 ft steel stringer Bridge on QL-4; prefabrication of aircraft revetments; MACV Advisory Team huts; and prefabrication of Bridge Slabs for the LOC 70.

b. Horizontal projects consisted of placment of 5500 cubic yards of sand-cement for the 147th Aviation Relocation and a DBST treatment at the CH-47 Staging Area in Binh Thuy.

c. Company "C" also operates a concrete batch plant which produced 1536 cubic yards of ready mix and 1713 cubic yards of dry mix during the reporting period.

6. Company "D" remained primarily committed to LOC projects, principally the Restoration of QL-4 from Cai Rang to Thanh Hoa. They commenced work on the portion of QL-4 from Thanh Hoa to Soc Trang on 12 September. On 30 October, Company "D" installed a float bridge for a temporary bypass and began work on Bridge LTL-31-1. To support their LOC construction work, "D" Company also operated a Rock Off-Load site at An Thanh.

(7) The 517th (Light Equipment) Company was attached to this Unit on 1 August. Its principle mission has been the equipment support of the construction effort on QL-4 and operation of the paving train for the Battalion. Additionally they were also responsible for upgrading two rock parking lots in Binh Thuy.

8. Horizontal construction has been severely hampered by the monsoon season. Both the frequent rains and continual moist conditions have caused a considerable loss in construction effort during this reporting period.

9. The following is the battalion average percentage distribution of USMH abailable for projects during the reporting period:

Operational Support	17.8
LOC Restoration	57.7

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Base Construction	19.5
Security	5.0

10.. The following is a narrative summary of projects which involved Battalion effort during this reporting period.

a. QL-4 Restoration, Cai Rang to Thanh Hoa - Company "D" has continued the task of rebuilding 10.8 km of road to CENCOM Class F Standards. During this period, the subgrade has been completed with 206 cubic yards of clay, 1.55 km of subbase have been stabilized and compacted utilizing 3740 bags of cement and there have been 2.82 km of base course completed with 11,178 cubic yards of rock. The 517th (Light Equipment) Company has laid 3.208 km of single lift paving and 4.194 km of authorized over-lay paving, utilizing 7,288 tons of hot mix and 1,575 gallons of RC 800. At the end of this reporting period, the project was 87.7% complete.

b. QL-4 Restoration, Binh Minh Bypass- This project was transfered to the 36th Engineer Battalion on 10 August and was 98.9% complete at that time. This 3.15 km section consisted of 0.75 km of widening existing road and 2.40 km of new road. It was constructed across rice paddies in order to bypass the confined road passing through Binh Minh. For the period, Company "B" completed 0.22 km of subbase with 53 cubic yards of clay-lime stabilization. They also placed 415 cubic yards of base course completing 0.02 km. The asphalt paving was placed by the 36th Engineer Battalion.

c. Restoration QL-4, Thanh Hoa to Soc Trang - Company "B" began work on this 45.1 km of road on 20 August. During the period, there were 1.70 km of subbase completed, utilizing 4,348 cubic yards of clay-lime stabilization. They have also completed 1.923 km of base course, utilizing 10,199 cubic yards of rock. Due to the shortage of compaction equipment and excessively moist conditions, construction was halted and diverted to stock piling rock for future use. A Stockpile near Bridge # 7 contains 4,000 cubic yards. The road was originally reported as being 78% complete; however, due to vast subgrade failures the road completion schedule has been adjusted and is presently being carried as 33.0% complete.

d. Bridge 16 - The Bridge, was completed on 28 October and is located on QL-4 between Cai Rang and Thanh Hoa. It is a 70 ft single span bridge. The construction was transferred from the 35th Engineer Battalion on 26 August at which time the abutments were under construction. The bridge is principally made of steel stringers and pre-cast concrete slabs.

e. Phung Hiep Off-Load - On 20 August, Company "A" assumed operational control. Rock has been supplied at a sufficient rate to meet existing requirements on QL-4. During the reporting period, 13,505 tons of rock were off-loaded.

f. An Thanh Off-Load - This site has continued to operate under "D" Company throughout the reporting period. The Off-Load Site has been continuously reliable, but has the problem of getting barges. During this period, there were a total of 21,601 cubic yards of rock off-loaded.

g. Operational Support Projects:

1. Runway Repair Can Tho Army Airfield - This is a continuous project which is done as necessary. The airfield is kept continually open with the repair crews working through the night and having all matting in place by dawn.

2. Runway Repair Vi Thanh Airfield - This project is continuous and undertaken as necessary. Presently, a repair crew is at the airfield and awaiting a shipment of rock. The crew has moved all necessary equipment to the site and removed three bundles of matting.

3. Runway Repair An Thoi Airfield - This project is also conducted as needed. Presently, there is a repair crew at the Airfield which has done extensive welding, removed 16 bundles of matting, repaired base course and replaced the matting. Present repair is approximately 75% complete.

4. CH-47 Staging Area - The pad is 300 ft x 400 ft amd is stabilized by a six inch lift of sand-cement. The initial lift of sand-cement had to be replaced in some areas, due to failure of the California Bearing Ratio Test. This was accomplished and the Battalion has been awaiting delivery of clean aggregate for a suitable DBST.

5. Unit Relocation - This project covers an area of 33,500 square yards andis located at Can Tho Army Airfield. The sand-cement is 80% complete and primed. The project also comprises 4,928 square feet of concrete pads, the construction of 8-UH1 revetments, 9-OH58 revetments and 9-AH10 revetments, all of which are presently being prefabricated.

6. Maintenance and repair of LTL-27 - This project was transferred from the 35th Battalion on 20 August, and has become the responsibility of "B" Company. This project has consisted of pothole repair, shaping shoulders for drainage, cleaning out drainage ditches and the installation of a culvert at the Binh Thuy Airfield gate.

During this reporting period, there have been 505 cubic yards of rock, as well as, 351 cubic yards of asphaltic concrete utilized and 2600 meters of ditch cleaned out.

7. Repair of ammunition supply point at Soc Trang - This project is the responsibility of "C" Company and consists of building up the area and shaping it for drainage. The project began on 22 October and had utilized 600 CY of rock by the end of this reporting period. The projected date of completion is 28 November.

h. Base Construction Projects:

1. Aviation Relocation at Can Tho Army Airfield - Due to the deterioration of the sand-cement under the M8A1 matting, it became necessary to go to an asphaltic concrete surface. In order to get the surface ready for asphalt, "B" Company has removed 232 bundles of matting and placed 1515 cubic yards of sand-cement. There have been 1950 cubic yards of sand utilized to build up the perimeter road. At the end of this reporting period, this project was transferred to "C" Company of this Battalion.

2. 162nd Aviation cantonment - This project is being accomplished with the useing unit providing labor assistance on a self-help basis. At the end of this reporting period, the project was 93% complete, lacking only some wiring, plus a concrete blastwall to be poured. Company "C" has utilized a total of 349 cubic yards of concrete on this project.

i. MACV Advisory Facilities:

1. The original scope of 75 Mobile Advisory Huts, which was met last period, was expanded by 36 this period. These Huts, prefabbed by "C" Company, were complete at the end of this reporting period.

2. Kien Giang - The planning for this project was completed with the exception of the water purification system. At the end of the period, the advanced party from "C" Company had been dispatched to the site.

3. Phu Quoc - The planning for this project is completed. It was necessary to revise much of the planning, due to a lack of materials.

j. Civic Action:

1. Company "B" assisted in the relocation of a WAHA Village located at Binh Thuy North. This was accomplished by hauling 2,060 CY of sand to the new loaction. This project was necessitated by the location of a rock dock site at the identical site of the old WAHA village.

2. Company "D" has prepared a site for a dining hall at Phung Dinh Orphanage utilizing 6 pallets of cement, 105 cubic yards of rock, a D7-E dozer for shaping and a vibratory roller for compaction. They also loaned the orphanage a 16S mixer for construction purposes. Forms for the dining hall were made from scrap lumber provided by "D" Company. The orphanage also constructed a chicken house with the excess scrap lumber.

3. Company "D" hauled 35 CY of rock and five loads of scrap lumber to a Cai Tac Church enabling the Vietnamese to finish in less than half the time originally planned.

4. Company "D" hauled and placed 50 CY of rock to keep open the road leading to Can Tho University.

5. Company "D" spread sanitary land fill for a school in Cai Rang.

11. The Battalion is presently engaged, or scheduled, on the following following number of projects during the next reporting period:

LOC Restoration	3
Operational Support Projects	7
MER Construction	3
Base Construction	3
MACV Upgrade	2
Revolutionary Development Support	1

12. The concrete batch plant at Binh Thuy, operated by "C" Company, produced 1,962 cubic yards of concrete during this reporting period. The plant utilizes two transit mixers and is responsible for the majority of the concrete used by this Battalion. The batch plant is also responsible for precast revetments and has completed forty six during the last half of this reporting period.

13. The sand cement plant processed 2,528 cubic yards of sand-cement prior to its termination of operations on 22 August. The sand-cement was principally utilized on QL-4, Aviation Relocation and the Unit Relocation.

14. The formal training schedule has been altered, to allow mandatory training to be scheduled so as not to interfer with the work schedule of the individual units. The initiation of the 6½ day work week has helped considerably in this area.

15. ARVN Affiliation - During this period, training was conducted for ARVN personnel as follows: 1 welder (44C20), 1 engineer equipment repairman (62B20), 2 ordnance mechanics (63B20), 1 electrician, and 8 water purification specialists. The ARVN response has been excellent.

E. Logistics and Maintenance

1. Supply:

a. Battalion critical shortages of major items have been reduced thru the receipt of depot issues , however, 25 ton low bed trailers are still not available in country. The Battalion is still short 4 lowbed trailers which greatly deters from our internal haul capatility.

b. Materials for projects are not being shipped from Long Binh in time to meet established deadlines. This necessitates the battalion sending a convoy to Long Binh approximately every ten days. The combination of lowbed shortage and frequent convoy burdens the assigned units which are fully committed to high priority projects. The Delta Logistical support activity has had little appreciable effect on the delivery of construction materials.

c. The battalion has been adversely affected by the shortage of tires and tubes for our vehicles. Additionally, the lack of OVM equipment remains a major determent to our operation.

2. Maintenance

a. Company "A" continues to provide most operators for MCA/LOC equipment and is responsible for second and third echelon maintenance through Dyna-Electron.

b. During the reporting period, "A" Companys third shop received and processed the following job orders, while working 750 extra hours, for the month of September:

Month	Recieved	Completed
August	137	86
September	281	308

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Month	Recieved	Completed
October	183	121

3. Support Maintenance: Job orders submitted to the "A" Company direct support activity, 02-17 requisition and red ball status for the reporting period are:

	02 Requisition	05 Requisition
Submitted	136	62
Filled	96	51
% Filled	70.6	82.2
	12 Requisition	Red Ball Status
Submitted	83	83
Filled	73	73
% Filled	87.9	87.9

2. Section II Lessons Learned

A. Personnel: None

B. Intelligence: None

C. Operations:

1a. Observation: The Vietnamese Nationals are guilty of stealing surprisingly large quantities of rock from barges, rock off-load sites and from the road itself. At times this rock theft exceeds 100 tons per 500 ton barge. It is usually taken from one exposed side causing the barges to list dangerously. Approximately 30-40 tons are stolen daily from road shoulders in the Battalion's area of operations.

1b. Evaluation: The loss of rock is a hinderance to the Battalion's efforts. Since portions of the road must be redone prior to turnover to the Vietnamese.

1c. Recommendation: That quantities of rock projected for use be increased by a factor of 30% to allow for theft. That the ARVN be tasked to adequately protect the barges and patrol the roads.

2a. Observation: The efforts to gain suitable stabilization compaction during the monsoon season are virtually wasted.

2b. Evaluations: The time and manpower that are expended during the wet season could be more profitably directed toward vertical construction.

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2c. Recommendation: The Engineer Battalion (Construction) Unit should be scheduled to work primarily on vertical construction, road and vehicle maintenance, rock stockpiling and the advantageous positioning of units for optimum work during the dry season.

3a. Observation: The accident rate of the haul vehicles in the constant heavy traffic is high.

3b. Evaluation: The accidents cause bodily injury and time lost.

3c. Recommendation: That the haul vehicles be convoyed to and from job sites, thus reducing accidents by exercising control over the vehicles.

4a. Observation: The ($\frac{1}{2}$ meter shoulder) width of class F roads has proven to be inadequate in the Mekong Delta.

4b. Evaluation: The current designed road width has proven inadequate in supporting the traffic on the shoulder and the pavement. Rapid deterioration of the shoulders have occurred when traffic has passed over the shoulder or parked on it. The $\frac{1}{2}$ meter shoulder width has proven ineffective in preventing saturation of the base course due to the high water levels in adjacent rice paddies.

4c. Recommendation: The (shoulder) width of class F roads be extended to sufficient widths to provide lateral support to the shoulders and roadway.

5a. Observation: Extreme difficulties have occurred in opening shelves during the Monsoon season.

5b. Evaluation: The road widening cannot be accomplished due to the high moisture content of the subgrade and the high water tables which are often above the bottom elevation of the shelf.

5c. Recommendation: That no shelves be opened during the Monsoon season.

6a. Observation: Sand-Cement mixed in place often has a low strength yield.

6b. Evaluation: When mixing sand-cement in place and utilizing a disc-harrow to mix the materials, care must be taken not to disc too deeply. Discing to an excessive depth will cause a lower than designed cement content and thus lower the strength.

6c. Recommendation: That the disc-harrow be painted, so that it would be easy to determine when the disc is at the proper depth.

7a. Observation: Vietnamese Nationals present a constant problem in both stealing rock off of the road and driving over stabilization, prior to its curing.

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7b. Evaluation: There has been considerable time and effort lost in replacing both rock and stabilization.

7c. Recommendation: The application of RC 800 on rocked areas and stabilization processes would aid in weather proofing, discouraging traffic from using it and discourage the stealing by Vietnamese Nationals.

8a. Observation: A single two inch lift of asphaltic-concrete typically results in an uneven pavement often only one inch thick in areas. This has led to numerous surface failures.

8b. Evaluation: When placing one lift of asphaltic-concrete, the use of a one inch leveling course aids in filling chuck holes and providing a smooth surface for the paver when it lays the final lift of paving. By allowing traffic to travel over the leveling course, failures may be located and repaired prior to applying the final lift.

8c. Recommendation: That a two lift approach, consisting of a leveling course and final lift, be utilized in lieu of the presently specified single lift approach. This approach not only improves the finished product, but also saves equipment and man hours, since much less repair is required.

9a. Observation: The stock pile areas located at the Batch Plant tend to blend together when full.

9b. Evaluation: The concrete will lose strength when having improper mixture of aggregate. This can not be avoided if the aggregate is mixed prior to being weighted for batching.

9c. Recommendation: That there be concrete storage bins built to prevent premature mixing of aggregate. These bins should consist of four foot high retainer walls on 3 sides of a rectangular concrete slab. The slab should slope directly away from the open wall side to drainage outlets located in the walls.

10a. Observation: The sand dredged from the Mekong Delta rice paddies which is used as aggregate for sand-cement, contains excessive amounts of silt.

10b. Evaluation: The silty sand causes a low strength yeild from sand-cement when the traditional amount of 10% cement is used in the mixture.

10c. Recommendation: That the design mixture for sand-cement, using dreadged Mekong Delta sand, be a minimum of 15% cement by weight.

11a. Observation: There are 38 culverts to be constructed on LTL-31.

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EGF-A-P 15 November 1970

SUBJECT: Operational Report - Lessons Learned, 69th Engineer Battalion (Construction), for the period ending 31 October 1970, RCS CSFOR-65 (R2)

11b. Evaluation: The construction in place, of culverts with scour pads and headwalls, is a time consuming task, which often must be accomplished under adverse conditions.

11c. Recommendation: That a method of pre-fabbing culvert scour pads and wingwalls be developed. The complete headwall could be set in place with a joint of culvert cast in place. This joint would then be welded to the remainder of the culvert pipe.

12a. Observation: A better solution is needed in the repair of spider cracks in asphaltic concrete surfaces.

12b. Evaluation: The present method of applying a mixture of sand and RC 70 to spider cracks has proven inadequate in that the RC 70 is too porous and does not completely seal the cracks.

12c. Recommendation: That RC 800 be used in lieu of RC 70. This will give a highly cohesive mixture offering a heavier consistancy than the RC 70 mixture.

D. Organizational

1. Observation: The line companies operations sections are not authorized a ¼ ton vehicle.

2. Evaluation: The operations section of a construction unit should be authorized a ¼ ton vehicle, to conduct offical business and for project in sections.

3. Recommendation: That all engineer construction line companies be authorized an additional ¼ ton vehicle for the Operations Officer sole use.

E. Training: - None

F. Logistics: None

G. Communication: None

H. Materials: None

I. Other: None

FOR THE COMMANDER:

JOHN H. KERN
LTC, CE
Commanding

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EGF-OP (15 Nov 70) 1st Ind
SUBJECT: Operational Report of 69th Engineer Battalion for Period Ending 31 October 1970, RCS CSFOR-65(R2)

DA, HEADQUARTERS 34TH ENGINEER GROUP (CONST), APO 96215 17 November 1970

TO: Commanding General, 20th Engineer Brigade, ATTN: AVBI-OS, APO 96491

1. The ORLL submitted by the 69th Engineer Battalion has been reviewed, and is considered comprehensive and of value for documentation for the reporting unit's activities and experiences.

2. The recommendations presented in Section II are considered valid and worthy of consideration.

3. Comments follow: Section II, paragraph c. item 10 page 13: Nonconur. Recommend that the services of the Central Materials Testing Lab be utilized to analyze the silt content and recommended mixture of cement.

FOR THE COMMANDER:

MARSHALL A STEVENS
CPT, AGC
Adjutant

24 NOV 1970

AVBI-OS (15 Nov 70) 2nd Ind
SUBJECT: Operational Report-Lessons Learned, 69th Engineer Battalion (Construction) for Period Ending 31 October 1970, RCS CSFOR-65(R-2)

DA, HEADQUARTERS, 20TH ENGINEER BRIGADE APO 96491

TO: Commanding General, United States Army Engineer Command Vietnam (Prov), ATTN: AVCC-MO, APO 96491

1. Submitted in accordance with letter, AVCC-MO, CG, USAECV(P) dated 13 July 1970, Subject: Operational Reports-Lessons Learned (ORLL's).

2. This headquarters has reviewed the Operational Report-Lessons Learned for the quarterly period ending 31 October 1970 from Headquarters, 69th Engineer Battalion and comments of indorsing headquarters.

3. Comments follow:

a. Section II, paragraph c, item 4, page 12: Nonconcur. The ½ meter shoulder width is sufficient if the proper slope is achieved from the edge of the shoulder to the rice paddy.

b. Section II, paragraph c, item 10, page 13: Concur with the indorsing headquarters. Rather than guess what mixture to use, the Central Materials Testing Lab should conduct tests and their recommendations be followed.

FOR THE COMMANDER:

D.L. MC BRIDE
1LT, CE
Assistant Adjutant

Copies furnished:
CO 69th Engr Bn
CO 34th Engr Gp

AVCC-MO (15 Nov 70) 3rd Ind
SUBJECT: Operational Reports - Lessons Learned for the 69th Engineer Battalion, Period Ending 31 October 1970, RCS CSFOR-65 (R2)

Headquarters, United States Army Engineer Command Vietnam, APO 96491 25 DEC 1970

TO: Commanding General, United States Army Vietnam, ATTN: AVHDO-DO, APO 96375

1. The significant activities and lessons learned have been reviewed and are an adequate reflection of the unit's operations during this period.

2. Reference item concerning "Supply", page 10, para E1.

a. The availability of 25 ton trailers should improve in the near future with the arrival of these units in-country.

b. The use of organic transportation assets to haul construction materials from depot to project sites, while not desirable, will continue to be required. Saigon Support Command does not have the capability to meet all demands for transportation within required delivery dates. On these occasions, depot customers must help themselves with organic transportation support.

c. Concur. Tires and tubes have not been available in sufficient quantities to meet authorized ASL and PLL stockage levels. The lack of OVE equipment delays minor repairs and causes increased operations difficulties. The OVE shortage is compounded by delays in requisitioning replacement equipment. Support units generally have a sufficient stockage of OVE. Recommend that USARPAC and DA review requirements for tires and tubes for possible increases in stockage levels.

3. Reference item concerning "Theft of Rock", page 11, para 2c(1). Action has been initiated by commanders in MR 4 to guard rock barges in transit. No action by DA or USARPAC is recommended.

4. Reference item concerning "Shoulders of Class F Roads", page 12, para 2c4. Concur with 2nd Ind, para 3a. Reference MACV Dir 415-6, Annex A, Highway Standards, para 2c2 and 2c3. "Widening of the existing embankment will be performed on one side to provide the minimum 3 meter working platform for placing fill and use of standard compaction equipment. New fill will be placed on a prepared foundation and brought to required elevation as shown on the TL and LTL typical road section". The TL and LTL road section, if constructed in accordance with the provisions of the directive, is considered structurally adequate. Per most recent MACV direction (3 Dec 70), if flood water prevents construction in strict observance of the provisions of MACV Dir 415-6, construction shall be delayed until the water subsides and work can be prosecuted under dry conditions. No action by USARV, USARPAC or DA is recommended.

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AVCC-MO (15 Nov 70)
SUBJECT: Operational Reports - Lessons Learned for the 69th Engineer Battalion, Period Ending 31 October 1970, RCS CSFOR-65 (R2)

5. Reference item concerning "Repair of Asphalt Cracks", page 14, para 2c12. The term "spider cracks" is unknown; however, the use of heavier grade liquid asphalt is concurred with. Per Asphalt Institute MS-16, para 2.13(2), "Small cracks (less than 1/8" in width) are too small to seal effectively. Large cracks (1/8" in width or larger) are to be filled with asphalt emulsion slurry or light grade of liquid asphalt mixed with fine sand. An asphalt MC-250 grade is suggested if emulsion SS-1 or SS-1h is not available. No action by USARV, USARPAC or DA is recommended.

FOR THE COMMANDER:

R. P. SPENCER JR.
1LT, CE
Assistant Adjutant

CF:
CG, 20th Engineer Brigade
CO, 69th Engineer Battalion

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AVHDO-DO (15 Nov 70) 4th Ind
SUBJECT: Operational Report - Lessons Learned, 69th Engineer Battalion (Construction), for the period ending 31 Oct 1970, RCS CSFOR 65 (R2)

Headquarters, United States Army Vietnam, APO San Francisco 96375 8 FEB 1971

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 October 1970 from Headquarters, 69th Engineer Battalion (Construction) and comments of indorsing headquarters.

2. Reference item concerning "Organizational," page 14, paragraph 2D: nonconcur. IAW AR 310-34, vehicles will not be authorized to individuals, but will be authorized on the basis of functional or activity requirements. Line companies of engineer construction battalions do not have an officer with the job title of Operations Officer. If there is a section within these companies which has insufficient organic transportation for mission performance, then the commander has the responsibility to submit an MTOE change IAW AR 310-49 and USARV Letter, 15 September 1970, Subject: The Army Authorization Documents Systems (TAADS) MTOE Update. Unit has been so advised.

FOR THE COMMANDER:

Cy furn:
USAECV
69th Engr Bn

JACK F. COOK
CPT, AGC
Assistant Adjutant General

GPOP-DT (15 Nov 70) 5th Ind
SUBJECT: Operational Report of HQ, 69th Engineer Battalion (Const) for Period Ending 31 October 1970, RCS CSFOR-65 (R2)

HQ, US Army, Pacific, APO San Francisco 96558 23 FEB 1971

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

This headquarters concurs in subject report as indorsed.

FOR THE COMMANDER IN CHIEF:

LD Cline 1LT AGC

L.M. OZAKI
CPT, AGC
Asst AG