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AUTHORITY

AGO D/A ltr, 29 Apr 1980

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DEPARTMENT OF THE ARMY
OFFICE OF THE ADJUTANT GENERAL
WASHINGTON, D.C. 20310

IN REPLY REFER TO

AGAM-P (M) (31 Oct 67) FOR OT RD 670616

3 November 1967

SUBJECT: Operational Report - Lessons Learned, Headquarters,
809th Engineer Battalion (Construction)

TO: SEE DISTRIBUTION

1. Subject report is forwarded for review and evaluation by USACDC in accordance with paragraph 6f, AR 1-19 and by USCONARC in accordance with paragraph 6c and d, AR 1-19. Evaluations and corrective actions should be reported to ACSFOR OT within 90 days of receipt of covering letter.

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

KENNETH G. WICKHAM
Major General, USA
The Adjutant General

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as

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DEPARTMENT OF THE ARMY
HEAD QUARTERS 809TH ENGINEER BATTALION (CONSTRUCTION)
APO San Francisco 96389

THOCT-ROF

3 August 1967

SUBJECT: Operational Report for Quarterly Period Ending 31 July 1967,
RCS GRCOR - 65

THRU: Commanding Officer
44th Engr Gp (Const)
APO 96233

Commanding General
USARSUPHAI
APO 96233

CINCUSARPAC
ATTN: GRCOR-CT
APO 96558

TO: ACSFOR
Department of the Army
Washington, D.C. 20310

Transmitted herewith is Operational Report for quarterly period ending
31 July 1967.

FOR THE COMMANDER:

for George C. Brunette Maj
GEORGE C. BRUNETTE
2LT, CG
Adjutant

~~Encl~~
as
(Photographs)
Withdrawn at Aps DA

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DEPARTMENT OF THE ARMY
HEADQUARTERS 809TH ENGINEER BATTALION (CONSTRUCTION)
APO San Francisco 96389

Operational Report for Quarterly Period Ending 31 July 1967 (RCS CSFOR-65)

Section I: SIGNIFICANT UNIT ACTIVITIES

1. General:

a. As of the end of this quarter the battalion is committed on two major projects. The highest priority project is construction of the Sattahip-Northerly (Inland) Road. This mission involves construction of approximately 124 kilometers of a limited, all weather, military standard road. The completion date of this road is 31 December 1967. At the same time, the battalion has been directed to produce 200,000 cubic meters of crushed rock for base course materials. Minor projects continue to be constructed.

b. During this quarter work was completed on the Sattahip Ammunition Storage Facilities, and the 1000 man contonement area, Camp Vayama.

c. Attached as inclosure 1 is an organization chart for the battalion. Co "D" this battalion was authorized on 15 April 1967 per GO 63, Hq, USARPAC dated 4 April 1967. Because of the high priority, construction effort on the Inland Road, the company was not activated. During the next quarter the company will be organized and assigned construction missions.

2. Personnel:

a. The battalion continues to experience a serious shortage of enlisted personnel. This shortage is particularly evident in the NCO ranks, where the present for duty strength has dropped to 57 of the 112 authorized. The personnel strength of the battalion at the beginning and end of the report period is shown below.

	<u>AUTHORIZED</u>	<u>PRESENT FOR DUTY</u>	
		<u>23Apr67</u>	<u>25Jul67</u>
Officers	34	26	32
Warrant Officers	10	9	10
Enlisted	<u>861</u>	<u>667</u>	<u>726</u>
Total	905	703	768

b. While it appears on the surface that the replacement picture has improved since last quarter, it must be pointed out that the battalion has received 15 officer and warrant officer replacements with less than six months commissioned service, and that three of five companies are commanded by lieutenants who have from two months to 13 months commissioned service. Most of the enlisted personnel arrive in this command for their initial assignment after training, and have little or no practical experience in construction. The lack of experienced commissioned officers and

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the shortage of non-commissioned officers has been overcome in part by an extensive on-the-job training program. This has placed an additional supervisory burden on the less experienced personnel of the battalion.

c. The following non-commissioned officer shortages are critical to the battalion at this time:

<u>MOS</u>	<u>AUTHORIZED</u>	<u>ACTUAL</u>	<u>LOSSES NEXT PD</u>
31G40	1	1	1
51F40	1	0	0
51H40	35	5	1
51H50	5	2	1
51N40	1	0	0
62B50	2	0	0
62D40	1	0	0
62E40	26	14	1
62E50	1	0	0
62G40	1	0	0
63C40	3	1	1
76Q40	4	0	0
76W40	1	0	0
76X40	1	1	1
76Y40	6	4	1
82B40	2	1	0
03Z50	1	0	0

d. All outstanding requisitions for enlisted personnel E1-E6 have been identified by OPO Control Number and name of replacement or the notation "no name fill". There are, however, 73 line items of the June 1967 requisition who have not arrived.

e. A serious problem has arisen with the implementation of the policy that only field officers, chief warrant officers CW4, and sergeants major E9 may hand carry their military personnel records to their overseas destination. Replacements often arrive without records or orders assigning them to the battalion, which results in a delay in processing military pay actions, and a delay in making assignment entries on the morning report. In addition, tracer action must be taken each time a replacement arrives without records to insure that the records have been shipped to the 809th Engineer Battalion. In most instances there is approximately a three week delay between the time the replacement arrives in the battalion and receipt of his records. In several instances the records were erroneously shipped to Viet Nam by the losing organization.

3. Operations:

a. Ammo Storage Facility JD 44/66/30: This project began on 1 August 1966 and was completed on 21 July 1967 including double bituminous surface treatment on roads and storage pads. The scope of work accomplished was 35 ammo storage pads, and 7.9 Km of main and lateral roads. Civilian equipment was contracted to augment organic equipment and a contract was negotiated for fill material to enable the timely completion of the

project. DEBT operations began at the end of April and have been completed. In addition, one storage pad was repaired, one was rebuilt and drainage improvements made of five other pads. This project is now complete and has been turned over to the Sattahip Area Command. Maintenance of the facility is now the responsibility of the Sattahip Area Command.

b. Construction Activity, Sattahip-Northerly Inland Road, 5D67-1:

(1) Construction operations on this project are continuing at full effort. The battalion, with supporting units and equipment, is continuing two 11 hour shifts per day, Monday through Friday, and one 11 hour shift on Saturday. Critical tasks such as grading and stockpiling borrow pits require a Sunday shift also.

(2) A job directive was received in early April 1967 and assigns the mission of constructing the Inland Road to a "limited, all weather road standard". The construction concept is to build the road in two phases - a passable construction road and the final road with a compacted laterite surface. Phase one of this project was completed on 24 June 1967 with an official closing of the northern and southern sections of the road.

(3) To support the battalion on this project, contract rental equipment has been utilized. This equipment consists of 50 dump trucks, 7 bulldozers, 8 scoop loaders and 10 water trucks. To further increase the construction capability, additional equipment has been issued to the battalion from OICC and project (SLAT) stocks. This equipment includes four dozers, three motorized scrapers (14 cu. yds.), six scoop loaders, two motorized graders and three 5,000 gal. tankers. This equipment is distributed to the constructing companies to balance the construction effort. In addition to the above equipment, the 260th Transportation Company, 519th Transportation Battalion, is in direct support of the 809th Engineer Battalion with 60-5 ton dump trucks; and Co D, 23rd Thai Engineer Battalion has been attached to the 809th Engineer Battalion, providing additional construction effort. In the south, Co B has been assisted by a contract through OICC to place 200,000 compacted cubic meters of fill between stations 2+265s and 17+000s. To date approximately 119,000 cubic meters of fill has been placed and compacted by the contractor at a cost of approximately \$1.70 per cubic meter. Approximately 80,000 cubic meters of fill remains to be placed by the contractor.

(4) The total amount of contract construction hours by pieces of equipment for completion of phase one is as follows:

(a) Contract dump trucks	87,577 hrs
Contract tractors	11,581 hrs
Contract loader scoops	12,559 hrs
Contract water distributors	12,223 hrs

(5) Based on the total fill hauled, the cost of fill for phase I completion is as follows:

(a) \$1.99 per cubic meter of fill for contract equipment.

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(b) \$.60 per cubic meter of fill for support equipment for the support of the 260th Transportation Company.

(6) The total amount of engineer construction effort required to complete phase I is as follows:

Fill used	1,351,089 cubic meters
Stripping	452,467 cubic meters
Ditching	64,400 linear meters
Slopes and Ditches out	22,367 linear meters
Clearing	573 hectares
Culverts	250 sites
Length of culverts	8,461 linear meters

(7) See inclosure 2 thru 6 for typical construction efforts expanded on the Inland Road.

(c) Construction, Camp Charn Sinthope:

(1) Troop housing, JD 66/90

(a) This project, designed to raise the standards of existing billets, and make them useful for an indefinite period of time, was begun during the last reporting period. Progress had ceased during this period because of the higher priority placed on the Inland Road Project. No additional work will be accomplished on this project. R&U type projects have been assumed by a civilian contract firm. The assumption of responsibility by the civilian contract firm occurred on 1 July 1967.

(2) Repair of the Existing Mess Hall, JD 66/92

(a) This project will be cancelled. Rehabilitation of the Mess Halls will be turned over to the civilian contract firm as discussed in Para C (1) above.

(3) Secondary Electrical Repair, JD 66/92

(a) This project calls for relocation or replacement of some secondary wiring to eliminate hazardous conditions and balance loads of power source. Progress has been limited on this project by a lack of electricians. Three company areas were rewired during the previous reporting period and one this reporting period. The balance of the construction will be completed in time to tie into the new primary systems.

JD 66/93

(4) Repair Existing EM club for use as NCO club,

(a) This project was cancelled during this reporting period.

(5) New Construction, JD 67/6

(a) 440 volt primary electrical system:

(1) This project is designed to relocate the generator station and provide 416 volts, 3 phase, 3 wire power distribution system transformed to 120/208 at transformer stations located in demand centers within the camp. The generator pad is complete and many of the required utility poles are in place. This project is approximately 15% complete.

(b) Repair Parts Warehouse:

(1) An 80' x 160' warehouse is to be provided for proper storage of repair parts. Basic construction started during this quarter. Footers and side walls have been placed on a compacted laterite base. Work is continuing on this project. The project is approximately 5% complete.

(c) Construct five company size maintenance sheds, five tire & welding shops and alterations and additions to the 3rd shop.

(1) The project was started during this reporting period. A concrete pad was placed in the 3rd shop. Additional work was deferred because of high priority to the Inland Road.

(d) Construction of a 2000' extension to 809th airstrip, place double bituminous surface treatment and install permanent lighting system.

(1) This project has not been started due to the commitment of necessary equipment on high priority projects.

(e) Construction of 5 company sized shower and wash rooms, 2 company sized mess halls and 2 company sized latrines.

(1) During this reporting period one mess hall was completed. During the previous quarter 4 company sized shower and wash rooms were completed. The construction of the fifth company sized shower and wash room as well as the second mess hall has been deferred. These projects will be cancelled and when the need arises for them, appropriate requests will be submitted thru the new civilian R&U personnel on post.

(f) EM Club:

(1) The Em club portions of this project was begun during the previous quarter. During this quarter work on the project was deferred because of higher priority on the Inland Road. The project is approximately 40% complete. Final completion date is scheduled for the next quarter.

(g) Production of crushed rock, 809th Quarry:

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(1) Pursuant to instructions contained in letter Hqs, 44th Engineer Group subject as above, dated 21 March 1967, this battalion has undertaken necessary coordination with the 538th Engineer Battalion for the production of base course aggregate for use on the Kabin Buri - Korat road. The quarry is operated by the 809th Engineer Battalion with personnel and equipment support from the 538th Engineer Battalion. Production has been slow during this reporting period. The high priority Inland Road has reduced the availability of dozers at the quarry. As of the close of this period approximately 11,000 cubic meters of crushed rock have been stockpiled. See inclosure 9 and 10 for quarry operations.

4. LOGISTICS

This unit is experiencing difficulty in bringing equipment up to MTOE strength. The lack of the following items is seriously impairing our mission:

<u>NOMENCLATURE</u>	<u>QTY SHORT</u>
Grader, road	8
Scraper, towed	8
Tractor, wheeled, 830M	13
Loader, scoop	1
Crane, truck mounted, 20 ton	3
Truck, cargo 2½ ton	1
Truck, dump, 5 ton	1
Truck, tractor, 10 ton	25 (6-5 tons are O/H ILO)
Truck, tractor, 12 ton	2
Truck, utility, ½ ton	11
Distributor, water tank, 1000 gal	13
Generator set, 45 KW	6
Generator set, 5 KW	6

In addition, many vehicles presently on hand are in a red or late amber category and will soon be eligible to be scored out. Replacements for these vehicles are now or will soon be on requisition. At least 24 trucks, utility, ½ ton are in this category.

This shortage of equipment is especially critical now because of the imminent activation of D Company. This company is expected to be fully activated by 15 August, but it will be short a large number of items because of the above mentioned shortages.

We are currently using contracted equipment with operators on the Inland Road project. This equipment consists of the following:

<u>ITEM</u>	<u>QTY</u>
Truck, dump, 5 ton	50
Loader, scoop	8
Tractor D8H	3
Tractor D7E	2
Tractor D80A	2
Water distributor	10
Roller, vibratory, with prime mover	3

The vibratory rollers are under contract with a different contractor than the contractor for the other equipment. This has created supervisory problems to the extent that we have not been able to have the roller contractor adhere to his contract. We are attempting to get a new contract for this equipment.

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5. MAINTENANCE

a. The ordnance section of the Battalion Direct Support unit is experiencing extreme difficulty in getting repair parts for 2 $\frac{1}{2}$ ton and 5 ton multifuel trucks. At present this section has nine (9) 2 $\frac{1}{2}$ ton trucks deadlined for exhaust systems, nine (9) 5 ton trucks deadlined for engines, and five (5) 5 ton trucks deadlined for camshafts.

b. 89 per cent of the engineer equipment and 64 per cent of the ordnance equipment in the battalion is deadlined for parts. One of the major problems with engineer equipment repair is that the cycle time for unserviceable assemblies shipped to USARV for repair and return is seven (7) months or more. Many of the assemblies and end items that return to this battalion are defective.

Section II: COMMANDERS OBSERVATIONS AND COMMENTS

6. PERSONNEL:

a. Major concern during the coming quarter is the shortage of officers in the grade of CPT. This battalion is authorized 10 CPTS; two are present for duty, with one 30 day loss and three 90 day gains. Of this battalions 3 Major authorizations, two are present for duty, with one 60 day loss and no replacements forecast.

b. Delay or non-receipt of personnel records is a serious problem, causing unnecessary delay for processing in-coming personnel. As previously mentioned, personnel should hand-carry their records with them during a change of station.

7. OPERATIONS

a. A shortage of critical items of equipment, particularly rubber tired tractors (830M), grader and scrapers, hinders construction operations. Available equipment must be shifted from one operation to another rather than allowing these operations to run simultaneously.

b. The battalion has two separate civilian contractors supporting construction of the Inland Road. One contractor has supervisory personnel working in conjunction with the military personnel. This has resulted in outstanding support. The other civilian contractor has no supervisory personnel and this unit has a very difficult time getting the operators on the job. Future contracts should specify that supervisory personnel will be required at the job site.

c. With two different contractors working in the battalion, coordination of the equipment has been a problem. When possible further civilian type contracts should be awarded to only one civilian firm and as mentioned above the civilian firm should be required to furnish appropriate supervisory personnel.

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(d) Many of the battalion crawler dozers (TD) are old and require an abnormal amount of maintenance. These old dozers are the primary item of equipment required for construction of a major road project, similar to the Inland Road. Over 3,000,000 cubic meters of fill needs to be dug from borrow pits and the crawler dozers (TD24) must do a majority of the work. On major construction projects requiring movement of millions of cubic meters of fill, serious consideration should be given to the status of engineer equipment prior to beginning the project and every effort should be made to replace obsolete items.

(e) It is the experience of this battalion that the Hyster-type tamping roller is the most efficient roller for achieving the proper compaction of laterite soils which are the predominant fill material used on earthwork projects by this unit in Thailand. This item of equipment should be made a standard TO & E item.

8. LOGISTICS

A new S-4 Officer, a new Property Book Officer, and a new battalion Supply Sergeant were assigned during this period. On taking over, they experienced some difficulties in the areas of stock control and requisitioning. The reason for this difficulty was primarily due to a lack of precise control on paper of stock levels and back requisitions. The lesson learned in this instance is that the logistics operation should be well documented so that the operation can continue smoothly regardless of personnel changes.

During this period the Battalion experienced a very beneficial staff visit from Lt. Col. Sulkowski of DSSM, 9th Log Command. His visit enabled him to see first-hand many of the problems we had been trying to resolve through letters and reports. The result was a rapid resolution of some of these major problems that had been unresolved for months. The value of such visits and face-to-face meeting is inestimable. This concept applies to the battalion level as well, particularly since two of our companies are far removed from our base camp. We have learned to make visits as frequently as possible to the companies to become fully aware of the logistics problems they are having at that level. Furthermore, Lt. Col. Sulkowski was able to give us the names of key personnel in Bangkok and Korat who could help us with major problems in all classes of supply. Subsequent telephonic communications with these people has been very useful and informative.

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JOHN V FOLEY
LTC, CE
Commanding

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THCON-OP (3 Aug 67)

1st Ind

MAJ Ryan/fcc/250

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

Headquarters, 44th Engineer Group (Construction), APO 96233 14 August 1967

TO: ACSFOR, Department of the Army, Washington, D.C. 20310

1. The Operational Report for Quarterly Period Ending 31 July 1967
(RCS CSFOR-65) for the 809th Engr Bn is forwarded with comments as indicated:

2. Reference Section II:

a. Paragraph 7a: When fully implemented, the Closed Loop equipment replacement program will provide considerable relief in the area of equipment availability. Full authorization of equipment will be available, as well as backup equipment through maintenance floats and an equipment pool containing certain selected items of equipment.

b. Paragraph 7d: Above comment is applicable.

Mark C. Carrigan

MARK C. CARRIGAN
Colonel, CE
Commanding

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THCP-OF (20 September 1967) 2d Ind
SUBJECT: Operational Report For Quarterly Period Ending 31 July 1967
309th Engineer Battalion WONGSAI

Headquarters, United States Army Support Thailand, APO 96203

TO: CINCUSARPAC, GPCP-OT, APO 96558

1. Concur in the comments of the Commanding Officer, 44th Engineer Group. Additional remarks are provided to clarify, or indorse referenced recommendations or observations of the reporting commander.

2. Reference, Section 1, Paragraph 5a and b: The deadline rate indicated in the basic report is misleading as written. The figure offered represents 89% of the deadlined equipment that ~~are~~ ^{is} down awaiting parts.

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nc

for 
EDWIN F. BLACK
Brigadier General, USA
Commanding

COL GS
C/S

17
GPOP-DT (3 Aug 67)

3d Ind

SUBJECT: Operational Report for the Quarterly Period Ending 31 July 1967
from HQ, 809th Engineer Battalion (UIC: WCW3AA)(RCS CSFOR-65)

HQ, US ARMY, PACIFIC, APO San Francisco 96558

18 OCT 1967

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

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

FOR THE COMMANDER IN CHIEF:

1 Incl
nc



K. F. OSBOURN
MAJ, AGC
Asst AG