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AGO D/A ltr, 29 Apr 1980
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SUBJECT: Operational Report - Lessons Learned, Headquarters, 809th
Engineer Battalion (Const), Period Ending 30 April 1968 (U)

SEE DISTRIBUTION

1. Subject report is forwarded for review and evaluation in accordance with paragraph 3b, AR 325-15. Evaluations and corrective actions should be reported to ACSFOR OT RD, Operational Reports Branch, 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
Major General, USA
The Adjutant General

1 Incl

as

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US Army Limited War Laboratory
809th Engineer Battalion
DEPARTMENT OF THE ARMY
HEADQUARTERS 809TH ENGINEER BATTALION (CONSTRUCTION)
APO San Francisco 96389

THCON-DOP

10 May 1968

SUBJECT: Operational Report of the 809th Engr Bu (Const) for Period Ending 30 April 1968, RCS CHFOR-65 (R1) WCW34A

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

Commanding General
USARSUPTHAI
APO 96233

CINCUSARPAC
ATTN: GPOP-DT
APO 96558

TO: OACSFOR
DEPARTMENT OF THE ARMY
Washington, D.C. 20310

Transmitted herewith is the Operational Report for quarterly period ending 30 April 1968.

FOR THE COMMANDER:

J.A. BAILLY
CW3, USA
Asst. Adjutant

GB2249
Operational Report of the 809th Engineer Battalion (Construction) for Period Ending 30 April 1968, RCS GSFCR-65 (Rt) WCM3A.

Section I: OPERATIONS

1. Significant Activities: As of the end of this period the battalion is committed to six (6) major projects. These projects consist of the construction of the Sattahip Northerly Inland Road Extension, Troop Housing Construction at Camp Charm Sinteepe, construction of CSA Facilities at Sattahip, construction of a fire station and telephone exchange at Camp Vayam, Sattahip, repairs of the Bangkok By-pass Extension Road (Rt. 304), and construction of a training area for the Royal Thai Army, Vicinity of Kanchanaburi, Thailand. The battalion is also committed to well drilling at various locations in Thailand.

a. The Northerly Inland Road Extension, Job Directive 67-1, was started on 11 December 1967. This road will connect the Port of Sattahip and the CSA facilities with the Southern terminal of the Inland Road. The construction requirements are as follows:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clearing and Grubbing</td>
<td>45.3 Hectares</td>
</tr>
<tr>
<td>Stripping</td>
<td>42,000 Cubic Meters</td>
</tr>
<tr>
<td>Fill Operations</td>
<td>200,000 Cubic Meters</td>
</tr>
<tr>
<td>Culverts</td>
<td>9 Sites</td>
</tr>
<tr>
<td>Ditches</td>
<td>11,000 Linear Meters</td>
</tr>
<tr>
<td>Slopes and Shoulders</td>
<td>11,000 Linear Meters</td>
</tr>
</tbody>
</table>

Progress on this project ceased in February 1968 until present due to land acquisition. The project is 43.3% complete. Completion date is unknown due to the fact that all the right-of-ways have not been purchased. See enclosure 1-4.

b. Project 67-6, Troop Housing Construction at Camp Charm Sinteepe, Thailand, consists of the following items and their respective status:

1. Three (3) each 200 man mess halls (Completed).
2. Four (4) each shower rooms (3 complete and the 4th 98% complete).
3. Enlisted mens club (Completed).
4. Repair parts warehouse - DSU (Completed).
5. Maintenance facility (Temporary construction completed, expansion remains to be done).
6. 2,000 foot runway extension to existing airfield (Request for deletion of requirement submitted).
7. Primary electrical distribution system (Requirement deleted and turned over to AMPAC Post Engineer).
During this reporting period the fourth shower room was constructed and is 92% complete. The DSU warehouse is complete and stocking of parts bins is underway.

c. Project 67-47, construction of CSA Facilities at Sattahip is continuing. This project consists of erecting seven (7) prefabricated steel PASCO warehouses, a Depot Hqs building, an ADRS building, a stock control building, a telephone exchange building, and a post engineer complex facility consisting of five (5) buildings which are being constructed of concrete block. The project requires interior and exterior utilities throughout the complex. The progress on this project has been hampere Considerably during this quarter due to the moving of B Co's entire earth moving platoon and most of their vertical construction personnel to Kanchanaburi to support the construction effort on project 68-2 and the the late arrival on the job site of the prefabricated warehouses. This project was started on 16 September 1967 and as of the end of this quarter is 58% complete, an increase of 24% during this quarter. Since the last report the scope of the project has been increased with the addition of a seventh (7) prefab warehouse, a utilities support shelter, and temporary latrine facilities. See inclosure 5-19.

d. On 15 January 1968, project 67-59 was started. It consists of constructing a fire station and a concrete block building for a telephone exchange at Camp Veyama, Sattahip. At the end of this reporting period the telephone exchange to include interior and exterior utilities is 100% complete. No plans have been received for the fire station building, therefore no construction has been started. See inclosures 20-23.

e. Project 67-66, which started on 15 January 1968, consists of constructing a prefabricated steel hanger for the Royal Thai Air Force. This project has not progressed as originally scheduled due to the lack of construction effort, late arrival of the prefabricated steel building, part of which still has not arrived and a change of priority made by higher headquarters on projects in the Sattahip area. The project is 40% complete at this time. See inclosure 24.

f. Construction of project 67-72, Repair of 5.5 KM of the Bangkok Bypass Extension, Rt. 304, started on 3 January 1968. This project consists of constructing drainage structures on the road to include culverts, headwalls and aprons, rip-rap ditches, shoulder ditches and flumes with junction boxes, changing the center line of the road by moving the road into the mountain wherever possible so as to eliminate the steep down stream slopes that had once failed. Twenty-eight (28) culverts were installed across the road with headwalls on the upstream side and concrete (rip-rap) aprons or flumes installed to prevent erosion on the down stream side. In repairing the down stream slopes, lifts were placed parallel to the existing road at the toe of the existing slopes, gradually, the lifts were stepped into the existing slope until the roadway was reached. For future erosion control, grass will be planted on the down stream side. On 15 March 1968, C Co was reassigned by higher headquarters and placed under the operational control of the 538th Engr Bn (Const). Since being placed under operational control of the 538th Engr Bn, C Co's project has increased to include other sections of Route 304 as directed. On 22 March 1968, a construction platoon from C Co was deployed to Kanchanaburi to support D Co, 809th Engr Bn. The 809th has maintained administrative support of C Co. Project completion status and construction effort of C Co,
809th can be found in the Quarterly Operations Report of the 538th Engr Bn. Progress photographs are included in this report as inclosures 25-29.

g. In January 1966, Co D, 809th Engr Bn (Const) augmented with elements of the 561st Engr Co (Const) and the 91st Engr Co (DT) were redeployed for the purpose of constructing training facilities for the Royal Thai Army vicinity Kanchanaburi, Thailand. Originally this project, JD 66-2, consisted of constructing roads, ranges, ammo storage facilities, infiltration course, a class 50 steel beam bridge and a 3200 foot airfield. The project has been amended during the past quarter with additional requirements as follows:

(1) Amendment #1, dated 1 February 1966, increased airfield length to 3500 foot, BOD ASAP.

(2) Amendment #2, dated 18 March 1968, added road work and changed bridge requirement to class 20 timber trestle. BOD for roads was 15 April 1968 and for bridge was ASAP.

(3) Amendment #3, dated 25 March 1968 called for water and sewage systems, grenade racks, and water towers with a BOD of 15 April 1968.

(4) Job Directive 68-2, dated 25 March 1968 (although having its own project number became an integral part of JD 66-2) called for construction of a 1000 man US Army cantonment area and support facilities with a BOD of 15 April 1968.

In order for the battalion to meet the demanding BOD's, additional support was required from B Co, 809th in the form of two construction Platoons (-) which were deployed on 22 March 1968 to Kanchanaburi. The project was broken down into Phase I covering all 15 April 1968 requirements and Phase II covering all other requirements that have a completion date of 1 August 1968. As of the end of this reporting period Phase I was 82% complete as troops begun to occupy the camp. Phase II is presently 5% complete. See inclosures 30-45.


(1) The 101st Well Drill Detachment is still located at Camp Essayons. They are drilling well #3 as of this date and have reached a depth of 535 foot without obtaining a satisfactory quantity of water. The first two (2) attempts at previous sites proves to be poor locations for drilling. Present geologic data indicates that a sufficient source of water may not be available at Camp Essayons.

(2) The 182nd Well Drill Detachment has completed wells at the following sites:

(a) Sattahip cantonment area; Results of water analysis indicated non-potable water and treatment of water could not meet minimum requirements for potability.

(b) Varin IWCS site at Ubon, Thailand. A well producing a satisfactory quantity of treatable water meeting standards was completed. The 182nd is now located at Camp Rayn Chit Chai at Sakhon Nakhon, Thailand and drilling is proceeding satisfactorily. See inclosures 46 and 47.
1. **Quarry Operations:** Production was increased considerably during this reporting period due to the requirement for base course for project 67-72, the Bangkok By-pass Extension, Route 304. At the close of this period a total of 9,035 cubic meters of base course has been hauled to Route 304 and 27,117 cubic meters of base course remain stock piled at the quarry.

Section II: Commanders' Observations, Evaluations and Recommendations

1. **Personnel:**

   a. Observation: There has been a slight decrease in personnel strength during the reporting period due to the loss of 200 personnel. At the present time the battalion is at 73.4% of the authorized enlisted strength.

   b. Evaluation: At the present time this unit is engaged in six (6) major projects. Unless the strength of the battalion is brought up to authorized strength the accomplishment of the mission could be seriously hampered particularly in many of the technical skills.

   c. Recommendation: That this unit be brought up to authorized strength as soon as possible. Special emphasis should be given to the filling of NCO positions within the battalion. At the present time NCO strength is approximately 62% of authorized strength. The dispersion of the units of the battalion necessitates a great deal of independent actions and decisions. Qualified and an adequate number of key personnel is essential to effective operations by these units.

2. **Operations:**

   a. Observations:

      (1) Aircraft support is not readily available to the battalion for surveillance of construction projects and control of widely dispersed elements.

      (2) Supplies are not arriving at job site as expeditiously as required for critical BCD's.

      (3) Inadequate transportation of supplies from depot causes delays in shipment of construction materials.

   b. Evaluations:

      (1) At present the three (3) construction companies are located in 3 different locations in Thailand the nearest unit is 65 miles from base camp while the furthest unit is approximately 170 miles from base camp. Much time is lost by the staff sections due to the time spent travelling to the construction sites. For example, the time necessary to travel from base camp to Sattahip and return is seven (7) hours. Total flight time is 1 hour and 30 minutes. This results in a loss of 5/2 hours of productive effort from a staff officer and limits the amount of time he can spend at the unit.

      (2) A delay in supplies arriving on the job has been experienced at Kanchanaburi and at the CSA Facilities at Sattahip. When PRO requests
are submitted by the unit, a time lapse of 15-60 days occurs before the contract is let for the supplies.

(3) In many cases this unit has had to dispatch its organic support equipment to depot units to pick up supplies. The depot normally does not inform the requesting unit that the supplies are available until the unit inquires. The depot requests transportation from transportation movements control and quite frequently transportation is not immediately available. The unit must then take organic transportation equipment from its own resources which is normally required to support construction projects in order to acquire the supplies necessary to keep the project going. The battalion is presently located 120 miles from depot supply which means that organic support equipment is lost for periods of 2 to 3 days.

g. Recommendations:

(1) The battalion should be furnished with air support on a full time basis preferably in the form of a Hues helicopter.

(2) This unit has assigned a liaison NCO to depot headquarters to hand carry FRC requests between higher headquarters approving authorities to expedite requests. It is recommended that action be taken to expedite processing of all FRC's for local procurement by all agencies involved.

(3) Action be taken to re-establish more realistic priorities in the use of available transportation and if necessary that the using unit carry its own supplies from depot, additional transportation be attached to the using unit to accomplish this mission.

3. Training:

a. Observation: The 809th Engr Bn (Const) has been excused from all formal training with the exception of Character Guidance, Commanders Call, and Safety. The SEADA lecture was presented to the 809th Engr Bn by the 17/493 MI Detachment during the latter part of January.

b. Evaluation: Equipment operators, carpenters and clerks have shown MOS qualification upon arrival to the 809th Engr Bn. OJT training to further improve their qualifications continues.

c. Recommendations: None

4. Intelligence: None

5. Logistics:

a. Observations:

(1) The 809th Engr Bn (Const), having many diversified missions this 3rd quarter, has changed the location of one (1) of their organizational maintenance facilities. D Co, 809th organizational shop moved from K22, Inland Road approximately 36 miles SSW from base camp to Kanchanaburi, Thailand, some 175 miles WNW from base camp. Elements of B Co, 809th organizational shop moved from Camp Lightning approximately 82 miles SSW from base camp to Kanchanaburi, Thailand some 175 miles WNW from base camp.

(2) C Co, 809th Engr Bn has been placed under operational control.
of the 596th Engt Bn (Const). The maintenance facilities are still under 809th Engt Bn (Const) for direct support maintenance. No major problems involving direct support maintenance for C Co, 809th have been encountered.

(3) The direct support maintenance facility has continued its mission of maintenance support with considerable success in reducing its deadline, especially in ordnance items of equipment, the deadline now stands at 03%.

(4) Multifuel engines of the 465-1A type have been easier to obtain through the closed loop program.

(5) This unit has a shortage of the following major items of equipment:

<table>
<thead>
<tr>
<th>Nomenclature</th>
<th>Short</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distributor, water tank, truck mtd, 1000 gal</td>
<td>13</td>
</tr>
<tr>
<td>Grader, road, M17D, Dec., 6x6</td>
<td>4</td>
</tr>
<tr>
<td>Loader, scoop, DCL</td>
<td>3</td>
</tr>
<tr>
<td>Roller, towed, sheepfoot</td>
<td>6</td>
</tr>
<tr>
<td>Scraper, towed</td>
<td>15</td>
</tr>
<tr>
<td>Semi-Trlr, loaded, 25 ton</td>
<td>4</td>
</tr>
<tr>
<td>Truck, tractor, 10 ton</td>
<td>25</td>
</tr>
<tr>
<td>Truck, fuel servicing, 2½ ton</td>
<td>4</td>
</tr>
</tbody>
</table>

b. Evaluations:

(1) To eliminate the problems that B Co. and D Co., 809th Engt Bn (Const) will have by virtue of being located a considerable distance from their direct support maintenance, the following steps have been taken to prevent maintenance problems:

(a) An Engineer Contact Team from our direct support unit has been provided to B Co. and D Co., 809th at Kanchanaburi. This team provides limited direct support maintenance for B Co. and D Co.

(b) An effective and efficient flow of parts from our repair parts section has been initiated and now provides critical and fast moving repair parts to B Co. and D Co., 809th. This aids in preventing unnecessary delay of needed parts.

(2) The engineer section of our support maintenance facility is experiencing considerable difficulty in obtaining repair parts needed to repair Caterpillar Model 12 motorized road graders (FSN 3805-197-4184). As a matter of interest during the past 2½ months we have sent four (4) each Caterpillar Model 12 graders to the TWA contract shop in Korat, Thailand, for engine overhaul. To date, two (2) of the four (4) graders have been repaired and returned.

(3) Repair parts (DSU) is currently moving its entire ASL into a new warehouse that was completed in February 1968. A team of four (4) civilian repair parts specialists from Hawaii are currently removing all excess repair parts from the section. This involves identifying, cataloging and shipping the excess to both Korat (507th Field Depot) and Okinawa. A repair parts annex has been initiated to serve the units at Kanchanaburi, Thailand. The annex will serve as a central point for accepting and filling requisitions from all supported units. In addition this annex unit...
stock several hundred fast moving items to better facilitate support for the units.

e. Recommendation: Repair parts for the International Harvester TD 24-241 Crawler Tractor are difficult to obtain through the military supply system. This situation, we hope, will be somewhat relieved upon receipt of the Allis-Chalmers HD-16 model crawler tractor (FSN 2410-078-6433) which has been programmed to replace the TD 24-241 in this battalion.

f. Organisation: Attached as inclosure 48 is an organisational chart for this battalion.

g. Other: None

#-Incl—

Withdrwn, Hqs, DA

JOHN V. FOLEY
LTC, CE
Commanding
THCOM-OP  1st Ind
SUBJECT: Operational Report of the 809th Engineer Battalion (Construction) for the Period Ending 30 April 1968, RCS CSFOR-65 (RI) UIC WCWJTO

Headquarters, 4th Engineer Group (Construction), APO 96233, 17 May 1968

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

1. The Operational Report for the Quarterly Period Ending 30 April 1968, RCS CSFOR-65 (RI) for the 809th Engineer Battalion is forwarded with comments as indicated.

2. Section 2, Lessons Learned: Commander's Observations, Evaluations, and Recommendations.

   a. Personnel:

      (1) Observations: This decrease in strength is Group wide.

      (2) Evaluations: The personnel shortages of the 809th Engineer Battalion are indeed serious. The problem of personnel shortages has received command emphasis by the undersigned and by the Commanding General, USAEC, USAEC, USAEC. Requisitions are being validated with name fills which are beginning to arrive as programmed. Also the battalion was recently assigned some 35 bulk fill personnel. If the present trend continues, the problem of personnel shortages will be resolved during the next reporting period.

      (3) Recommendations: As stated above, command emphasis is being placed on this problem area.

   b. Operations:

      (1) Observations: With critical construction projects assigned to 4th Engineer Group throughout Thailand, all modes of transportation are strained. These observations are valid for the entire Group.

      (2) Evaluations:

         (a) It is true that delivery of supplies to the job site requires from 15 to 60 days from date of submission of purchase requests. This lapse, however, is not considered abnormal and should be anticipated in procurement actions. The principal problem here is the lack of adequate lead time for planning projects and ordering supplies. The solution of course is for project directives and funds to be issued sufficiently far in advance to permit proper planning and normal supply action.

         (b) The 501st Depot procedures are being realigned, however failure to notify when an issue is ready is not believed to be a common occurrence. This battalion maintains a liaison office at the depot and is normally notified promptly when a shipment is ready.
THCON-OP

17 May 1968

SUBJECT: Operational Report of the 609th Engineer Battalion (Construction) for the Period Ending 30 April 1968, RCS CSFOR-65 (RI) UIC WOC3TO

(3) Recommendations: Concur in general with Battalion Commander. With regard to air support, battalions do need air support much of the time to provide command and logistical assistance to construction projects. Continuation of policy of consolidating all Army aircraft under a single detachment is still considered to be the preferred policy. The best solution is the temporary attachment of helicopters to battalions as assigned missions warrant.

c. Training:

(1) Observations: Suspension of all formal training except Character Guidance, Commander's Call, Safety and similar subjects is a standard policy for construction units in Thailand.

(2) Evaluation: OJT training has indeed been carried out effectively by this battalion and is constantly stressed by all group units.

(3) Recommendations: N/A

d. Intelligence: N/A

e. Logistics:

(1) Observations: Concur with observations of the battalion commander. It is important to recognize whenever logistic matters are discussed that construction directives do require our battalions to operate at dispersed locations throughout Thailand. This of course greatly increases the logistical problems of all 44th Engineer Group units.

(2) Evaluations: The maintenance picture for this battalion, and for all 44th Engineer Group units, is brighter than ever before because of actions similar to those cited, i.e., effective use of contact teams from DSU's and more aggressive parts procurement actions. As a result of these and other actions, this organization's deadline rate has been greatly reduced. Also, this organization has done a tremendous job in eliminating its repair parts excesses. The assistance of specialists from USARPAC was also extremely helpful.

(3) Recommendations: Replacing equipment through the close-loop system will be of benefit to this unit.

MARK C. CARRIGAN
COL, CE
Commanding
TEHR-OP (10 May 66) 2nd Ind

SUBJECT: Operational Report of the 809th Engineer Battalion (Construction) for the Period Ending 30 April 1966, RCS GSFOR-65 (RI) UTC WCW3TO

DA, Headquarters, United States Army Support Thailand, APO 96233 : JUN 1966

THRU: Commander in Chief, United States Army Pacific, ATTN: GPOP-DC
APO 96558

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

1. This headquarters concurs with recommendations/comments of the commanding officer of the 44th Engineer Group.

2. Reference, Section II paragraph 1c: Headquarters USARPAC is continuing to monitor the overall strength posture of USARSUPTHAI in conjunction with GPO, DA. Target date to attain 100% strength posture is October 1966. The present understrength in enlisted personnel is offset, to some extent, by an overhire of local national employees.

3. Reference, Section II paragraph 2: Aircraft support for the 809th Engr Bn is adequate. Centralized control of aircraft by this headquarters is the most effective means of utilizing available aircraft to satisfy the competing demands of units and elements of the command.

FOR THE COMMANDER:

[Signature]

ALAN L. MITCHELL
CPT, AGC
Asst Adjutant General
GPO2-DT (10 May 68) (U) 3d Ind
SUBJECT: Operational Report of HQ, 809th Engr Bn (Const) for Period
Ending 30 April 1968, RCS CSFOR-65 (R1)

HQ, US Army, Pacific, APO San Francisco 96558 21 JUN 1968

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

This headquarters has evaluated subject report and forwarding indorse-
ments and concurs in the report as indorsed.

FOR THE COMMANDER IN CHIEF:

[K. F. OSBOURN]
MAJ. AGC
Asst AG
Operational Report - Lessons Learned, Hqs, 809th Engineer Battalion (Const) (U)

Experiences of unit engaged in counterinsurgency operations, 1 Feb - 30 Apr 68

CO 809th Engineer Battalion (Const)

10 May 1968

682249

N/A

N/A

OACSFOR, DA, Washington, D.C. 20310