

UNCLASSIFIED

AD NUMBER

AD848563

LIMITATION CHANGES

TO:

Approved for public release; distribution is unlimited. Document partially illegible.

FROM:

Distribution authorized to U.S. Gov't. agencies and their contractors;
Administrative/Operational Use; 06 NOV 1968.
Other requests shall be referred to Assistant Chief of Staff for Force Development (Army),
Attn: FOR-OT-RD, Washington, DC 20310. Document partially illegible.

AUTHORITY

AGO D/A ltr, 29 Apr 1980

THIS PAGE IS UNCLASSIFIED

THIS REPORT HAS BEEN DELIMITED
AND CLEARED FOR PUBLIC RELEASE
UNDER DOD DIRECTIVE 5200.20 AND
NO RESTRICTIONS ARE IMPOSED UPON
ITS USE AND DISCLOSURE.

DISTRIBUTION STATEMENT A

APPROVED FOR PUBLIC RELEASE;
DISTRIBUTION UNLIMITED.

**Best
Available
Copy**



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

IN REPLY REFER TO

AGAM-P (M) (10 Feb 69) FOR OT UT 684114

17 February 1969

SUBJECT: Operational Report - Lessons Learned, Headquarters, 538th
Engineer Battalion (Construction), Period Ending 31 Oct 68

SEE DISTRIBUTION

1. Subject report is forwarded for review and evaluation in accordance with paragraph 5b, AR 525-15. Evaluations and corrective actions should be reported to ACSFOR OT UT, 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

KENNETH G. WICKHAM
Major General, USA
The Adjutant General

1 Incl
as

DISTRIBUTION:

Commanding Generals

US Continental Army Command

US Army Combat Developments Command

Commandants

US Army War College

US Army Command and General Staff College

US Army Armor School

US Army Field Artillery School

US Army Aviation School

UNCLASSIFIED REPORT

DISTRIBUTION NO FOREIGN WITHOUT APPROVAL OF
ASSISTANT CHIEF OF STAFF FOR FORCE DEVELOPMENT
(ARMY) ATTN FOR OT UT, WASHINGTON, D C. 20310

DDC
RECEIVED
MAR 4 1969
RECEIVED
C

AD848563

DEPARTMENT OF THE ARMY
Headquarters, 538th Engineer Battalion (Construction)
APO San Francisco 96232

THCON-ACP

6 November 1968

SUBJECT: Operational Report of the 538th Engineer Battalion (Construction)
for the period ending 31 October 1968 RCS-CEFOR-65 (RI) UIC .BAN-TO

1. Section 1, Operations: Significant Activities.

a. During this quarter, the primary mission of the 538th Engineer Battalion has shifted from the Bangkok By-Pass Extension, (Route 304), to the construction of a 1,700 man Cantonment and Depot complex in Sattahip.

b. Paving of the Bangkok By-Pass Extension was completed in July. During this quarter, the work consisted mainly of finishing the roadway in order to provide a safe and durable highway. Headwalls on all of the culverts have been placed. Clearing, sloping and shaping of the right of way is being accomplished. The centerline of the road was painted and curve guard posts were installed. Seeding and sodding of the shoulders is now being completed. All work on Route 304 will be complete by 15 December 1968.

c. The major elements of the battalion have completed their relocation to Sattahip. Two platoons of "C" Company will remain at Camp Essayons until 15 November. Thereafter, the entire battalion will be consolidated at Sattahip.

(1) Construction in the Sattahip Cantonment includes barracks accommodations for 1,740 men. In addition to the billeting area, other facilities such as clubs, mess halls, chapel, PX-Snack Bar and motor maintenance buildings will be provided. Enclosure one shows buildings completed, under construction and future projects. Complete electrical and water distribution and sewerage disposal systems are under construction. All roads and parking areas are designed to be paved. Facilities being provided are not Theater of Operations type, but semi-permanent concrete block. For this reason all personnel find the project challenging and rewarding.

(2) In the CSA Area, on 1 October, the 538th Engineer Battalion relieved "B" Company, 809th Engineer Battalion of its responsibilities for the construction of Depot Headquarters, ADPS and Stock Control buildings. During this quarter construction on the Depot Headquarters extension was initiated. Construction effort is still being concentrated on the Stock Control and Automatic Data Processing Systems buildings. Partial

Inclosure

FOR CTUT
684114

THOCH-ACF

6 November 1968

SUBJECT: Operational Report of the 538th Engineer Battalion (Construction)
for the period ending 31 October 1968 RCS-USEFOR-65 (R1) VIC BAN-10

beneficial occupancy is scheduled on these buildings for 15 November. The Depot Headquarters Building was turned over to the 9th Logistical Command on 22 October 1968. There is still some clean-up work to be done there. This should be completed by 15 November 1968.

d. Continuing activities of this battalion are its civic action projects. During this quarter over 3,600 Local Nationals were treated by the medical section. In conjunction with the 23rd Engineer Battalion RTA, over 17 kilometers of village access roads have been constructed. Six villages have been supported by providing materials, labor and earthmoving equipment to assist villagers in expansion and renovation of schools.

e. A major civic action project this quarter was the construction of a model Thai village. The village is located 129 kilometers south of Korat near the community of Ban Seio, Ban Wang, Khio and Ban Daeng. The village is the result of the joint planning of the Thai government, the Thai villagers and the Thai and U.S. Army engineers. A 14 kilometer road was constructed along the axis of a rut-ridden oxcart trail from the village to the Kabin Buri-Korat road. Work also includes construction of a community center, a temple, housing for 300 people, a high school and housing for the priests. Roads have also been constructed linking the model village to neighboring communities. A generator will provide electricity to neighboring communities and a well will be drilled to provide an adequate water supply. The village is expected to be dedicated on 11 November 1968. A map of the village is included as Enclosure Two.

2. Section 2, Lessons Learned: Commanders Observations, Evaluations and Recommendations:

a. Personnel:

(1) Observations:

(a) The present distribution of the enlisted grades in the battalion is as follows:

	E9	E8	E7	E6	E5	E4	E3	E2	E1
AUTH	1	8	32	55	272	448	174	4	0
ASG	0	6	21	26	103	353	190	98	3
PDY	0	6	20	19	95	328	181	91	3

THCON-AOP

6 November 1968

SUBJECT: Operational Report for the 538th Engineer Battalion (Construction)
for the period ending 31 October 1968 RCS-CSFOR-65 (RI) UIC WBAN-TC

(b) The present distribution of officers and warrant officers is as follows:

	OFFICERS	WARRANT OFFICERS
AUTH	38	11
ASG	35	9
PDY	32	8

(c) The critical job shortages are as follows:

<u>MOS</u>	<u>JOB TITLE</u>	<u>AUTH</u>	<u>ASG</u>
51K20	Plumber	18	7
52K20	Electrician	18	2
91C20	Clinical Specialist	1	0

(d) Officers who have arrived in the command this quarter are as follows:

<u>RANK:</u>	<u>NAME</u>	<u>TITLE</u>	<u>PMOS</u>	<u>DMOS</u>
LTC	STREETT, St Clair Jr.	Bn Commander	72162	1328
MAJ	BROWN, Roy A.	Bn XO	71331	1328
CPT	GAINES, Estel G.	Bn Maint Off	71331	4880
CPT	MORAN, Michael J. R.	S-4 Officer	1331	4010
1LT	MUELLER, Micheal P.	Plt Ldr, C Company	4880	1328
1LT	SUTLIFF, John H.	Plt Ldr, A Company	1331	4880
2LT	OLIVER, Ronald L.	Communications Off	0215	0200
2LT	SHARR, Stephen T.	Const Engr	7110	7110
2LT	YEAGY, Willis H. Jr.	Plt Ldr, D Company	1331	1331
CN2	MILLER, John A.	Maint Off, B Co	621A	621A
WO1	STONEROCK, Robert E. L.	Maint Off, D Co	621A	621A

6 November 1968

SUBJ: Operational Report of the 538th Engineer Battalion (Construction)
for the period ending 31 October 1968 RCS-CSFOR-65 (RI) UIC 100-10

(2) Evaluation: For its assigned mission, this battalion is critically short of E-6 and E-7 NCO's. These shortages make adequate supervision and control difficult. The critical shortages are also having a very adverse effect in the plumbing and electrical areas. This is the most critical skill shortage in the battalion. Personnel with heavy equipment MOS's have been cross trained to fill other skills. Since qualified instructors are not always readily available, personnel being trained are often learning improper methods and techniques. As a result, both quality and speed of construction are not always adequate.

(3) Recommendation: That more qualified and experienced NCO's of E-5 and E-6 rank be assigned to the battalion; further that the skilled construction MOS's, (particularly plumbers and electricians), be filled as a matter of urgency.

b. Operations:

(1) Unit Movement

(a) Observation: The 538th Engineer Battalion conducted a phased move during the period 1 September to present date. This move exceeded 150 miles and was from Camp Essayons to the Sattahip Area. This required construction of a new base camp. All base camp expansion was required to conform to a master plan. The master plan did not initially provide sufficient space. This is now being corrected by additional base camp construction which was 85% complete on 31 October 1968.

(b) Evaluation: Concurrent with requirements to provide maximum billets, mess hall facilities and maintenance areas in Sattahip at the earliest possible date, battalion was directed to close out Camp Essayons not later than 15 November 1968. Battalion, (primarily B and D Companies), were also tasked to move ahead on high priority cantonment area construction for others. This effort required maximum improvisation by lower level commanders. This effort also required personnel to live in crowded conditions far from latrine and messing facilities. Companies and staff sections have had to move administration, motor pools, supply and personnel several times before occupying their final locations. This seriously impaired battalion DSU functions. By 15 November 1968 these moves should be stabilized.

(c) Recommendation: That in future master plans, greater consideration should be given to the problems of base camp construction. More time could be provided for unit moves. Enough buildings have to be constructed prior to any move to allow for adequate storage, security and the efficient continuation of administrative-logistic functions.

THCCN-AOP

6 November 1968

SUBJECT: Operational Report for the 538th Engineer Battalion (Construction)
for period ending 31 October 1968 RCS-CSFOR-65 (RI) UIC BAN-TO

(2) Communications:

(a) Observation: The battalion is still in possession of obsolete radio equipment. The TO&E provides for eighteen, (18), each AN/VRC 34 radio sets, seven (7) AN/GRC 19 and one (1) AN/VRC 10. Repair parts for these radios are difficult to obtain. As a result, these radios have been deadlined for a considerable period. The commercial radio system which has been obtained on contract has not been as reliable as previously reported. When a mobile unit or base camp station is deadlined, there is no basic back-up equipment and it takes excessive time to get the contractor to repair the fault.

(b) Evaluation: For extended periods there has been no reliable communication between Camp Essayons and Sattahip. This lack of adequate TO&E equipment has hampered coordination and control.

(c) Recommendation: That the 538th Engineer Battalion be issued improved radio equipment. AN/GRC 106 radio sets should be made available.

(3) Quality Control:

(a) Observations: B Company and D Company have been performing their missions under two different concepts of organization. B Company has been working under a mission organization. Each B Company project has one squad of one platoon assigned a single building mission. This means that one platoon is responsible for one building, that is the entire job from start to finish. This also means that each person in that unit may be called upon to perform many varied tasks. Typical tasks include: Concrete finisher, mason, carpenter, sheet metal worker, electrician or plumber. Many of the men, both U.S. Army and Local National personnel are required to perform all of these tasks. D Company on the other hand is organized on a task basis. Each trade is formed into small crews. These crews do repetitive tasks on several different buildings. With many similar type buildings under construction, it is possible for each crew, (or trade), to move from building to building, repeating the same operation in each building. This means that two platoons may be simultaneously responsible for parts of the same building at any given time.

(b) Evaluation: A comparison has been noted in the quality of work by the two companies. "B" Company, organized on the mission concept, is able to produce better quality buildings. A single unit can look at its finished product and know what it has accomplished. On the other hand, with many crews working on the same buildings, each crew may blame

6 November 1968

SUBJECT: Operational Report of the 538th Engineer Battalion (Construction)
for the period ending 31 October 1968 RCS-CSFOR-65(R1) UTC 1000-10

the other for defects. The tile crew, for example may blame the painting crew for damaging the floor tile. While "D" Company's projects may sacrifice some in quality, their production may exceed that of "B" Company. This will be studied further.

(c) Recommendation: During the next quarter, "D" Company projects will be reorganized on a mission basis. After a reasonable period of time some effects should be noted. The objective of the exercise being to improve the quality without measurable sacrifice in time.

(4) Soil-Cement Stabilization:

(a) Observation: During the final stages of paving Route 304, time became the most important element due to the upcoming rainy season. It was imperative that the road be surfaced prior to any heavy rains. Isolated soft, wet spots in the base course proved to be a bothersome and time consuming problem. The usual method of scarifying and layering to dry out the area was not productive due to high humidity and overcast skies. Replacing with dry material was not acceptable due to long haul distances and the shortage of base course material.

(b) Evaluation: It was decided that cement might be used to stabilize these wet spots. Tests showed that adequate bearing capacity was reached by adding 10% cement to the base course. The cement bags were spotted and spread on the surface of the area to be stabilized. A disc harrow was used to thoroughly mix the base course and cement. No moisture was added while mixing. The cement had two beneficial effects: (1) It reduced the moisture content to a point near optimum; (2) the cement hydrated by the in-place moisture formed a matrix to increase the bearing capacity. A twenty four hour cure period was allowed before paving operations continued.

(c) Recommendation: That findings above be included in appropriate FM's or TM's as a possible solution to problem wet spots in base course or sub-base aggregate when time and weather do not permit conventional methods.

(5) Use of Jingle Stone for Base Course Material:

(a) Observation: The abundance of a rather high quality slate known as "Jingle Stone" in the Sattahip area has promoted many studies to determine its acceptability as a suitable base course material. The rock

TECH-ACF

6 November 1968

SUBJECT: Operational Report of the 538th Engineer Battalion (Construction)
for the period ending 31 October 1968 RCS-CEFOR-65 (21) UIC 1211

may be described as a highly stratified shale of medium hardness with a weak bond between layers. Hardness depends on the amount of calcite with the higher amounts showing little hardness. Its color ranges from black, grey, red to white. The dark colors usually demonstrate stronger bonds and hardness. The overburden usually consists of a good quality laterite.

(b) Evaluation: Observations by this battalion show that the stone has poor weathering capability and powders easily under traffic. However, provided a weathering surface of asphalt cement or asphalt surface treatment, a 6-10 inch layer of this aggregate material possesses sufficient bearing capacity for a class 60 military road.

(c) Recommendations: That present and future paving projects in the Sattahip Area take full advantage of available "Jingle Stone" as sub-base and base course material.

(6) Water Distribution System:

(a) Observation: The water distribution system in the cantonment area is constructed of asbestos-cement. (AC) pipe. A major problem has been the frequency of water leaks. Several reasons for the leaks were discovered. Some of the AC pipe had small hairline cracks that were not noticed during installation. When the pipe was pressure tested the cracked pipe burst. Another problem developed when some of the rubber gaskets for the couplings were pinched during installation. After the system had been in operation for a 1-3 month period, small high pressure leaks developed. These were not noticed because of the depth of the burial. This high pressure leak created turbulence in the surrounding sand and quickly eroded a hole in the pipe. Also, there have been leaks caused by vibrating compaction and construction equipment moving too close to the line.

(b) Evaluations: Since installation of a pressure reduction valve, leaks and outages have been reduced 50%. The water line is now operating adequately. When the system is completed, no future problems are anticipated.

(c) Recommendation: Great care must be taken when installing AC pipe. The laying bed has to be well prepared and the pipe installed carefully. The installation of an appropriate pressure reduction valve is advisable because it not only lowers the pressure, but reduces the variations in pressure.

6 November 1968

FMCH-CP: Operational Report of the 538th Engineer Battalion (Construction)
for the period ending 31 October 1968 RCS-CSFOR-65 (RI) UIC WBAN-TO

c. Training

(1) Observation: Higher headquarters has authorized suspension of all training with the exception of command information and character guidance. No formalized programs have been initiated and none are anticipated with the exception of familiarization firing of individual weapons. Personnel being cross trained are put under supervision of one who is skilled. When the person being trained indicates sufficient skill and proficiency, he is given his own crew to supervise.

(2) Evaluation: Much time is lost having to OJT personnel. Proficiency levels attained by OJT are usually lower than those of school trained personnel.

(3) Recommendation: That TO&E positions for skilled craftsman be filled.

d. Intelligence:

(1) Observation: This battalion is not involved in any overt intelligence work. It does, however, report all incidents or unusual occurrences that are noticed.

(2) Evaluation: None

(3) Recommendation: None

e. Logistics

(1) Equipment Shortages

(a) Observation: Present TO&E does not meet all specialized construction requirements. Specific equipment currently needed are: Backhoes, front loaders, vibratory rollers, 40 ton cranes, diaphragm pumps, ready-mix concrete trucks, threading and pipe cutting machines, power saws and a concrete floor grinder.

(b) Evaluation: The local equipment contracts are sometimes expensive and contractors are sometimes difficult to supervise. Borrowing or trading equipment unfortunately has been the past practice and the only means of keeping the job going. This is not a recommended practice. With the contracts that are currently written, there is little flexibility and excessive procurement lead time.

NOT REPRODUCIBLE

6 November 1968

SUBJECT: Operational Report of the 538th Engineer Battalion (Construction)
for the period ending 31 October 1968 RCS-CSFOR-65 (RI) UIC 1000-10

(c) Recommendation: Current TO&E forms a reasonable basis for supply and equipment. This TO&E, however, should be modified to conform to supply-repair parts and mission situations. Where consistent with the gold flow considerations, more reliance should be placed on equipment rental.

(2) Material and Supply Shortages

(a) Observation: There has been continual recurring problems in the acquisition of construction materials. The problem is two-fold. First, supplies are not being received in time. Second, many of the supplies that are received are of inferior quality. There are no specifications with the plans, and references to standard specifications are difficult to obtain. S-3 and supply personnel are not trained or experienced in writing specifications. As a result, often insufficient quantities and inadequate materials have been requisitioned. Locally purchased items lack the quality of stateside items.

(b) Evaluations: Pressure for much needed facilities and tight need-to-have dates have placed a premium on accurate and timely supply action. In general, the Army depot and local procurement sources have been responsive. Unfortunately, some design changes, improper ordering and lack of detailed prior planning have seriously handicapped the supply effort. Job stoppages have occurred for lack of sewer pipe, concrete aggregate, wood bolts, caulking lead, rebar, plumbing fittings and many other items which had been on requisition or under other procurement for extended periods. Despite some of these unhappy experiences, the supply problem should improve with better advance planning and aggressive follow-up actions.

(c) Recommendations: Allow maximum lead time from the issuance of plans and job directives to actual start date. This will allow additional time to analyze, plan, and requisition supplies through normal supply, without resorting to local procurement. If slippage occurs at any step prior to the start date, the BOD must be adjusted accordingly. Plans should be sufficient in detail and include all specifications. Aggressive follow-up action and logistic assistance be provided the constructing unit by higher and adjacent logistical elements consistent with reasonable priorities and resources available.

(3) Maintenance: Increased emphasis has been placed on organizational maintenance. First and Second echelon maintenance is being stressed. Most equipment was worked long and hard on the Route 304 project. Also there are

THOON-ACF

6 November 1968

SUBJ CT: Operational Report for the 538th Engineer Battalion (Construction)
for the period ending 31 October 1968 RCS-CSFOR-65 (RI) UIC .B.N.-TC

major equipment excesses in the battalion. This equipment will be turned in in the near future. During this quarter the battalion DSU has completed 430 job orders with 69 major line items turned in. Since the 830M's and D-8's have been turned back in, the repair parts section has been able to reduce the AIL. The number of ASL items was reduced from 3,091 to 2,587 while the percent of ASL filled increased to 73%.

(b) Evaluation: The increased emphasis on maintenance has caused a slight decrease in the battalion deadline rate. The deadline rate is expected to decrease during the next quarter as more equipment is brought to a higher standard. The standardization of equipment within the battalion and within companies continues.

(c) Recommendation: That the battalion be permitted to continue standardization of equipment.

St. Clair Streett Jr.
ST. CLAIR STREETT JR.
LTC, CE
Commanding

16 Incl Withdrawn Hq DA

- ~~1. Map of Sattahip Cantonment~~
- ~~Area and CSA Area~~
- ~~2. Map of Model Village~~
- ~~3. Organization Chart~~
- ~~4. Military Construction on Route 304~~
- ~~5. Map of Central Thailand~~
- ~~6.- 16 Construction Photographs~~

THCON-OP (6 Nov 68) 1st Ind
SUBJECT: Operational Report of the 538th Engineer Battalion (Construction)
for the Period Ending 31 Oct 68, RCS CSFOR-65 (RI) UIC WCW3TO

Headquarters, 44th Engineer Group (Construction), APO 96233, 15 Nov 68

TO: Commanding General, United States Army Support, Thailand, APO 96233

1. The Operational Report for the Quarterly Period Ending 31 Oct 68, RCS CSFOR-65 (RI) for the 538th Engineer Battalion is forwarded with comments as indicated.

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

a. Personnel:

(1) OBSERVATION: Concur. This battalion is at 96% of its assigned versus authorized strength.

(2) EVALUATION: Concur. The shortage of electricians and plumbers was partially relieved by inter-group transfers. This battalion has had a number of personnel with these skills rotate out of the command during the reporting period. Replacements were requisitioned in proper grade and MOS, but many requisitions were not filled and/or validated by higher headquarters. The recent arrival of experienced personnel in the grades of E-6 and E-7 has somewhat improved the situation.

(3) RECOMMENDATION: Concur. That personnel requisitions submitted be either validated or information be made available to the unit immediately of all nonvalidated requirements in order that immediate requisitions may be resubmitted.

b. Operations:

(1) Unit Movement:

(a) OBSERVATION: Concur.

(b) EVALUATION: The priority of construction on the primary mission continues to exceed that of base camp construction. By evaluation of needs and improved phasing of both projects, adequate facilities are becoming available.

(c) RECOMMENDATION: That more planning time be given this headquarters to allow for proper unit movement planning.

THCON-OP

15 November 1968

SUBJECT: Operational Report of the 538th Engineer Battalion (Construction)
for the Period Ending 31 Oct 68, RCS CSFOR-65 (RI) UIC J00310

(2) Communications:

(a) OBSERVATION: Obsolete army radio equipment on hand under the "D" series TOE does not satisfy battalion communication requirements. The decrease in reliability of commercial radio equipment has resulted from improper operator use, lack of adequate power to base station transmitters, and marginal antenna performance at the repeater location. Contractor maintenance support has been slow in certain instances due to the nonavailability of maintenance personnel when required. Some maintenance difficulties have been created by unit personnel attempting to modify or reinstall commercial equipment for expedience rather than contacting the authorized maintenance personnel to perform this function.

(b) EVALUATION: Telephone communications thru the IWCS system is available between Camp Essayons and Sattahip. In accordance with DCA standards these systems experienced a 99% reliability over the reporting period. Commercial radio communications experienced some decrease in reliability due to reasons stated in paragraph (2) (a).

(c) RECOMMENDATION: Recommend that the 538th Engineer Battalion be placed under the Echo or Golf series TOE at the earliest possible date and that radios authorized under this TOE be issued in order to satisfy communication requirements.

(3) Quality Control:

(a) OBSERVATION: Concur.

(b) EVALUATION: Due to the high priority of meeting a series of BOD's for barracks, BOQ's, mess halls and other facilities associated with a cantonment, some quality of work will probably slip in order to produce facilities on an assembly line basis. The project under discussion has a very tight BOD scheduled. In this case mass production techniques are essential in order to meet BOD's. Adequate supervision and maximum coordination between crews should help insure that the crews work together as a team, and a well constructed facility is built.

(c) RECOMMENDATION: The 538th Engineer Battalion give the matter further study keeping in mind the desirability of always meeting suspense dates.

THCON-OP

15 November 1968

SUBJECT: Operational Report of the 538th Engineer Battalion (Construction)
for the Period Ending 31 Oct 68, RCS CSFOR-65 (RI) UIC WCV3TO

(4) Soil Cement Stabilization:

(a) OBSERVATION: With the extreme length of the road, many borrow pits are in use. The quality of fill material varies and reacts varyingly with the weather.

(b) EVALUATION: Action taken by the construction units is in accordance with standard AASHO practices.

(c) RECOMMENDATION: That it be noted that these practices are already covered in TM's and library sets authorized the Battalion.

(5) Use of "Jingle Stone" for base course material:

(a) OBSERVATION: Concur.

(b) EVALUATION: Concur. This is an excellent example of field application of readily available native materials.

(c) RECOMMENDATION: That the unlimited source of this material be utilized.

(6) Water Distribution System:

(a) OBSERVATION: Cracked pipes are a frequent source of failures on the high pressure system. A good portion of the fractures occur during handling prior to being received by the construction unit.

(b) EVALUATION: Because of related construction, the pipes are at times covered before a suitable inspection and test period can elapse. In some instances subsurface water has washed away the sand bearing surface at the bottom of the ditch. The construction unit has had to divert effort to fill many thousands of sand bags to make a stable platform to support the pipe.

(c) RECOMMENDATION: Concur.

c. Training: Concur

d. Intelligence: Concur

e. Logistics:

(1) Equipment Shortage

THCON-OP

15 November 1968

SUBJECT: Operational Report of the 538th Engineer Battalion (Construction)
for the Period Ending 31 Oct 68, RCS CSFOR-65 (RI) UIC NCM3TO

(a) OBSERVATION: Concur.

(b) EVALUATION: Concur.

(c) RECOMMENDATION: Concur. The battalion TO&E with periodic modification will satisfy the need for specialized equipment. Due to efforts to stop the gold flow, rental requirements will be kept to a minimum.

(2) Material and supply shortages: Concur.

(3) Maintenance:

(a) OBSERVATION: Concur.

(b) EVALUATION: Concur. The reduction of the Bn ASL for Engineer direct support maintenance permits redistribution of repair parts to fill shortages in other Group subordinate units. The ordnance direct support maintenance capability of the 538th Engineer Battalion (Const) was deleted coincident with the transfer of ordnance direct support maintenance, and repair parts support to the 562nd Maint Co (Light), 7th Maintenance Battalion on 1 Oct 1968. The impact of obtaining ordnance direct support and repair parts will not become apparent until some experience has been gained. The next ORLL will include information on the effects of transferring ordnance direct support maintenance repair parts support to the 7th Maintenance Battalion.

(c) RECOMMENDATION: Concur.



E. M. HATCH
COL, CE
Commanding

THOP-MH (6 Nov 68) 2d Ind

SUBJECT: Operational Report of the 538th Engineer Battalion (Construction)
for the Period Ending 31 October 1968 RCS CSFOR-65 (RI) UIC:
WBAN-TO

DA, Headquarters, United States Army Support, Thailand, APO 96233

1968
THRU: Commander in Chief, United States Army Pacific, ATTN: GPOP-DT
APO 96558

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

1. This headquarters has reviewed the attached Operational Report-Lessons Learned and concurs with the comments and recommendations of the Commanding Officer, 538th Engineer Battalion and the Commanding Officer, 44th Engineer Group except as noted below.

2. With reference to the comments and recommendations in para 2a of the report, records at this headquarters indicated 15 plumbers authorized and 11 assigned and 15 electricians authorized and 6 assigned. A complete review of the authorization for the 538th Engineer Battalion is in progress. With regard to personnel shortages, this headquarters requisitions senior NCO replacements 8 months in advance. There are outstanding requisitions for every senior NCO departing the battalion through July 1969. Some name fills have been received. Some NCO's are diverted by 44th Engineer Group and this command has had a critical "no show" problem.

3. The recommendation at para 2b(1)(c) that more time be allowed for unit moves is sound; however it must be recognized that the ideal situation will not always prevail. Units must be able to respond to directives rapidly and with minimum interruptions to administrative and logistics functions.

4. The observation at para 2b(2)(a) is not valid. The deployment of the battalion in the past was such as to render a large portion of the communications equipment unusable due to its limited range. This is not the criteria for determining whether an item is obsolete. Attempts were made to correct the situation with commercial equipment. Attempts were also made to obtain AN/GRC-106 SSE for this unit. USARPAC denied the request for a higher priority or for a realignment of assets. The communications for the unit has improved due to consolidation at one location. Should the battalion again be dispersed it probably would experience communications difficulties.

THOP-MH (6 Nov 68) 2d Ind

SUBJECT: Operational Report of the 538th Engineer Battalion (Construction)
for the Period Ending 31 October 1968 RCS CSFOR-65 (RI) UIC:
WBAN-TO

5. There is no assurance that the use of cement to stabilize wet spots as described at para 2b(4)(c) is a lasting solution. The areas where this technique has been used should be observed for a moderate period and evaluated in later reports. Additionally this technique is already covered in TM's.

6. Concur with the recommendation at para 2e(1)(c) of the report except for the recommendation that reliance be placed upon rented equipment. CINCUSARPAC has directed that BOD's be adjusted in accordance with TOE capabilities rather than to rent equipment.

FOR THE COMMANDER:

Bobby R. Schmale

BOBBY R. SCHMALE
MAJ, AGC
Asst Adjutant General

GPOP-DT (6 Nov 68) 3d Ind

SUBJECT: Operational Report of HQ, 538th Engr Bn (Const) for Period
Ending 31 October 1968, RCS CSFOR-65 (R1)

HQ, US Army, Pacific, APO San Francisco 96558 6 JAN 1969

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:



E. L. SHORTT
CPT, AGC
Asst AG

UNCLASSIFIED

Security Classification

DOCUMENT CONTROL DATA - R & D

(Security classification of title, body of abstract and indexing annotation must be entered when the overall report is classified)

1. ORIGINATING ACTIVITY (Corporate author)		2a. REPORT SECURITY CLASSIFICATION	
HQ, OACSFOR, DA, Washington, D.C. 20310		Unclassified	
2b. GROUP			
3. REPORT TITLE			
Operational Report - Lessons Learned, Headquarters, 538th Engineer Battalion (Construction)			
4. DESCRIPTIVE NOTES (Type of report and inclusive dates)			
Experiences of unit engaged in counterinsurgency operations, 1 Aug - 31 Oct 1968			
5. AUTHOR(S) (First name, middle initial, last name)			
CO, 538th Engineer Battalion (Construction)			
3. REPORT DATE		7a. TOTAL NO. OF PAGES	7b. NO. OF REFS
6 November 1968		20	
8a. CONTRACT OR GRANT NO.		9a. ORIGINATOR'S REPORT NUMBER(S)	
b. PROJECT NO.		684114	
c. N/A		9b. OTHER REPORT NO(S) (Any other numbers that may be assigned this report)	
d.			
10. DISTRIBUTION STATEMENT			
11. SUPPLEMENTARY NOTES		12. SPONSORING MILITARY ACTIVITY	
N/A		OACSFOR, DA, Washington, D.C. 20310	
13. ABSTRACT			