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AUTHORITY

ago, d/a, ltr, 29 apr 1980

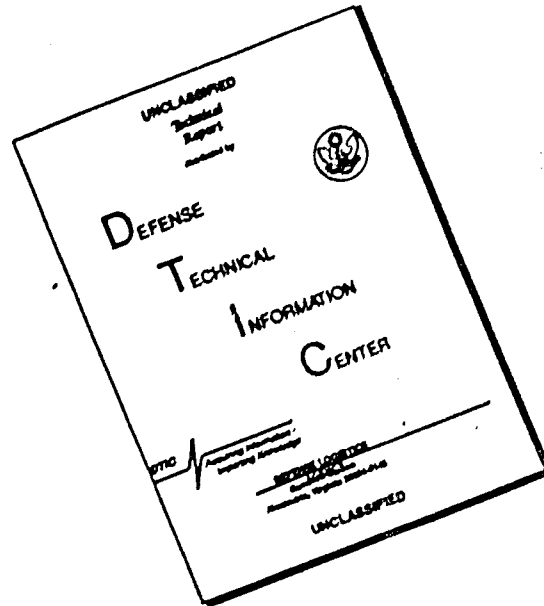
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DEPARTMENT OF THE ARMY  
OFFICE OF THE ADJUTANT GENERAL  
WASHINGTON, D.C. 20310

IN REPLY REFER TO

AGDA (M) (16 Jul 70) FOR OT UT 702066 20 July 1970

SUBJECT: Operational Report - Lessons Learned, Headquarters, 35th  
Engineer Battalion, Period Ending 30 April 1970

SEE DISTRIBUTION

*Handwritten initials: RL, CB*

1. Subject report is forwarded for review and evaluation in accordance with paragraph 4b, AR 525-15. Information of actions initiated as a result of subject report should be forwarded to ACSFOR OT UT 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:

1 Incl  
as

*Handwritten signature of Robert E. Lynch*  
ROBERT E. LYNCH  
Colonel, AGC  
Acting The Adjutant General

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DEPARTMENT OF THE ARMY  
HEADQUARTERS, 35TH ENGINEER BATTALION (COMBAT)  
APO San Francisco 96320

EGFF-OP

SUBJECT: Operational Report - Lessons Learned 35th Engineer Battalion  
(Combat) for Period Ending 30 April 1970, RCS CSFOR-65 (R2)

THRU: Commanding Officer  
34th Engineer Group (Const)  
APO SF 96320

Commanding Officer  
20th Engineer Brigade  
APO SF 96491

Commanding General  
United States Army, Vietnam  
ATTN: AVHGC-DST  
APO SF 96375

Commander In Chief  
United States Army, Pacific  
ATTN: GPOP-DT  
APO SF 96558

TO: Assistant Chief of Staff for Force Development  
Department of the Army (ACSFOR-DA)  
Washington D.C. 20310

1. Section 1. Operations: Significant Activities

a. Command

- (1) LTC James W. Ray continued to command the 35th Engineer Battalion (Cbt)
- (2) The 35th Engineer Battalion (Cbt) remained located at Camp Olson, Binh Thuy RVN with A and D Companies still remaining in Soc Trang, RVN. The 517th Engineer Company (IE) is still attached to the 35th Engineer Battalion (Cbt).

b. Personnel

- (1) The battalion strength increased from 91% (878 personnel) to 96% (920 personnel) during this report period. There are no critical MOS shortages.
- (2). The battalion had a total of 39 foreign tour extensions approved this past quarter.

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(3) There were 241 awards presented this quarter of which 41 were Bronze Stars.

(4) There was one special Court Martial.

(5) The Chaplain's activities included regular church services and visitations to all the isolated work sites of the 35th Engineer Battalion (Cbt) weekly.

(6) The 35th Engineer Battalion (Cbt) had a full time PIO Specialist who covered all the major projects within the battalion, by stories and pictures. The majority of these stories were released to the Major Armed Forces Newspapers in Vietnam. The PIO program also included Hometown News Releases which involved sending short stories about personnel in this battalion to their local hometown newspapers.

c. Intelligence & Counter Intelligence

During the period 1 February 1970 to 30 April 1970, there was one enemy initiated incident against the 35th Engineer Battalion (Cbt).

This incident occurred at grid coordinates XR076617 on 13 March 1970. Either a hand grenade was thrown or a M-79 round was fired on top of a bunker, one U.S. personnel injured.

d. Plans Operations and Training

(1) The battalions primary mission for the period has been the CY 70 LOC Program. The project requires the battalion to upgrade National Highway QL-4 from Thanh Hoa to Soc Trang (45 KM) and to pave 10 KM of QL-4 that are being upgraded by the 69th Engineer Battalion. The upgrade requires the widening and surfacing of the road as well as the construction of 6 single span bridges, three of these bridges were added to the project during this quarter. Work accomplished on this mission is as follows:

(A) 25.3 kilometers of QL-4 were cleared during this report period.

(B) 24.0 kilometers of subgrade were prepared during this report period.

(C) 20 kilometers of subbase were prepared using 22,000 cubic yards of rock during this report period.

(D) 11 kilometers of base course were prepared using 11000 cubic yards of rock for this report period.

(E) 16 kilometers of road were paved, by the 517th Engineer Company (LE) using 21000 tons of asphaltic concrete during this report period.

(F) Bridges

Locations	SD	EDC	% complete at start of qtr	% complete at end of qtr
Bridge 14 WR805987	16 Sep 69	15 Feb 70	90%	100%
Bridge 9 WR941791	17 Dec 69	10 May 70	29%	98%
Bridge 12 WS830950	26 Jan 70	15 May 70	0.0%	80%

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Bridge 16 15 Apr 70 30 Jul 70 0.0% 14.5%  
WS813015

Bridge 2 17 Apr 70 30 Jul 70 0.0% 9.5%  
WS901129

During the quarter the battalion completed the following secondary missions.

1. Nui Hon Soc (CD 290-6081-0-20) 13 January 1970 to 15 February 1970, D Company 1st Platoon. This project involved constructing a communications revetment and a living/fighting bunker, 20'x20'x8'. All supplies for this project were transported by air.
2. Ba Xoai Camp Repair, (CD 210-6095-0-20), 16 January 1970 to 15 February 1970 C Company, 3rd Platoon. After a severe mortar attack on the Ba Xoai Special Forces Camp C Company 3rd Platoon, was assigned the mission of rebuilding the fighting positions and perimeter wall at the camp. All construction materials were airlifted into the project site.
3. Cao Lanh Detention Facility, (CD 510-0314-2-21), 29 December 1969 to 27 March 1970, Company A, 3rd Platoon. The project required the construction of a Detention Camp consisting of two guard towers, two prison barracks, a kitchen, security fence, sewage system, and electrical lighting.
4. Long Phu MACV Advisory Facilities, (CD 10-292-01-034), 1 February 1970 to 27 February 1970, Company A, 2nd Platoon. This mission consisted of constructing latrines and showers for MACV Advisory Team 71. Also included in the project scope was the construction of a sewage tank and 400 feet of sewage line.
5. Naval Mine Sweep, (CD 287-6038-0-20), 1 February 1970 to 15 March 1970, D Company 2nd Platoon 3rd squad. One squad was in support of the U.S. Navy and cleared the road each day from Dong Hoa to Can Gia.
6. Rach Gia (CD 810-0318-0-01), 15 February 1970 to 15 March 1970, D Company 2nd Platoon. The project required the construction of a 20'x20' communications bunker at Rach Gia of heavy timbers, corrugated sheet metal, and 55 gallon FOL drums filled with sand.
7. Long Xuyen, (CD 810-0317-0-01), 15 February 1970 to 15 March 1970, C Company 3rd Platoon. The mission was to construct a large communications bunker of heavy timbers, corrugated sheet metal, and sandbags. The bunker size was a 20'x40'x8'.
8. Ca Mau (CD 810-0320-0-01), 10 March 1970 to 15 April 1970, A Company 3rd Platoon. This mission was to construct a communications bunker, 20'x20' in size. This bunker was constructed of heavy timber, corrugated metal, and empty 55 gallon POL drums, filled with sand.
9. Tinh Binh (CD 10-6186-0-20), 20 March 1970 to 30 April 1970, C Company, 3rd Platoon. The project scope was to build a 20x40 communications bunker, construct a concrete pad for an antenna tower, and erect three KAT houses for the personnel working the communications center to live in.

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10. Chi Lang (CD 210-6253-0-20), 13 April 1970 to 30 April 1970, B Company, 1st Platoon. The project scope was to construct an operations bunker with an inside dimension of 16' by 30' and be able to withstand a direct hit by a 122 mm mortar.

At the close of the quarter several important missions were still in progress:

1. Moc Hoa (CD 291-5990-3-21) 15 February 1970 to 30 May 1970, D Company 3rd Platoon. The general scope of this project is to perform airfield maintenance and make necessary airfield repair, to maintain an airfield classification of type II C-QEP. The following sub-tasks are to be completed under this directive.

a. Repair crown and compact base course, this is 100% complete as of 10 April 1970.

b. Seal base course with RC 800, this task is 100% complete as 10 April 1970.

c. Replace existing M8A1 matting with MX19 matting, this task was completed on 23 April 1970.

d. Dress shoulders of runway and install necessary drainage facilities, this project is approximately 60% complete.

e. Install an access road of stabilized soil and M8A1 matting along MACV compound side of the runway, this task is approximately 40% complete.

The overall completion percentage of the project number CD 291-5990-3-21 is 97% complete.

2. Moc Hoa (CD 291-5990-6-21), 15 April 1970 to 30 May 1970, D Company 1st Platoon. This battalion has been tasked to repair subgrade failures in the taxiway/parking ramp area and resurface both areas with M8A1 matting. Also this project includes the construction of an adequate drainage system for the taxiway. This project is 10% complete.

3. Moc Hoa (CD 291-5988-4-21) 10 April 1970 to 30 May 1970, D Company 1st Platoon. This task requires the application of penecrime of rotary wing traffic areas for dust control purposes.

4. Moc Hoa (CD 210-6206-0-20), 20 April 1970 to 30 May 1970, D Company, 1st Platoon. This mission is to construct protective berms around two, 10,000 gallon POL bladders. The project is 15% complete.

5. Moc Hoa, (CD 210-5909-0-20), 1 April 1970 to 30 May 1970, D Company 1st Platoon. This project consist of three sub-tasks. They are as follows:

a. Construct a 20'x32'x8' fighting operations and living bunker.

b. Construct three' revetments for UH-1 aircraft.

c. Construct one revetment for O-1 aircraft.

6. Binh Thuy Communications Facilities, (CD 810-0325-0-01), 16 March 1970 to 30 May 1970, B Company, 3rd Platoon. This project is divided into two major sub-tasks, which are as follows:

a. The erection of a ware house, 40'x96' and the erection of a communications/Headquarters building 40'x144'. This task is to be completed by 15 May 1970 and currently 70% complete.

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b. The construction of a motor pool area, a wash rack and a detach latrine are also directed under this project.

Also under project, CD 810-0325-0-01, this battalion will supply the 52nd Signal Battalion materials to build a 2 story barracks building.

7. Binh Thuy Revetment Construction, (CD 210-6145-0-20) 24 April 1970 to 31 July 1970, A Company, 3rd Platoon, 1st Squad. This project consists of constructing five UH-1 revetments, three OH-58 revetments, DBST of approximately 9000 square meters of aircraft parking area and constructing approximately 700 linear feet of woven barb wire, triple concertina fence. The project is approximately 25% complete. The fence has already been completed.

The battalion continued offload operations at Soc Trang and Phung Hiep Sites. During the reporting 33,800 tons were offloaded at Phung Hiep and 18392 tons at Soc Trang. FMK assumed control of the Soc Trang barge site on 5 April 1970, therefore rock offload statistics only cover the period from 1 February to 4 April 1970 for Soc Trang Barge Site.

The battalion scheduled and completed one training program of ARVN Engineer Mechanics from the 7th ARVN Engineer Group. The training program started on 13 February 1970 and was completed on 14 April 1970. There were 10 ARVN Mechanics who graduated from the program.

e. Logistics and Maintenance: None

f. 517th Engineer Company (Light Equipment)

(a) Command

(1) CPT Bert Scott III continued to command the 517th Engineer Company (Light Equipment).

(2) The 517th Engineer Company (LE) remained stationed at Camp Olson, Binh Thuy, RVN. The 2nd Platoon of the 517th Engineer Company (LE) remained detached to the 159th Engineer Group at Long Binh.

(3) The 517th Engineer Company (LE) is authorized a total of 173 personnel and had 182 assigned.

(b) Personnel

(1) There were 48 awards presented this quarter and of those 2 were bronze stars.

(2) There were no court martials during the quarter and there were no disciplinary problems.

(c) Intelligence and Counter Intelligence: None

(d) Operations:

The 517th Engineer Company's (LE) responsibility for the 35th Engineer Battalion's (Combat) mission to support the Battalion's FY 70 LOC Program. The 517th during this reporting period paved a total of 16 kilometers using 21,000 tons of asphaltic concrete.

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The company supported the clearing, subgrade, subbase and base course preparation utilizing organic equipment.

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

a. Personnel: None

b. Intelligence: None

c. Operations:

(1) Conservation of Detonating Cord

(a) OBSERVATION: During the quarter this battalion was required to blow tops on numerous 55 gallon barrels, therefore it was necessary to economize the use of detonating cord.

(b) EVALUATION: It takes two and three wraps of detonating cord to cut the top out of a barrel.

(c) RECOMMENDATION: Use one wrap of detonating cord around the inside lip of the barrel top and tamp wet sand over the detonating cord. This requires less detonating cord and makes a cleaner cut.

(2) Steel Stringers

(a) OBSERVATION: Obtaining the desired height for masonry plates on concrete abutments for the setting of steel stringers can be a difficult task.

(b) EVALUATION: A method must be devised to obtain the proper height of the masonry plates.

(c) RECOMMENDATION: Weld  $\frac{1}{2}$ " or  $\frac{5}{8}$ " nuts on the corners of the bearing plates and insert bolts through the nuts. Then adjust the bolts to the desired elevation, the elevation is checked with an engineer level. Once the correct elevation is reached, grout is placed between the bearing plates and the concrete abutment. After the grout has set up the nuts and bolts are cut off with a cutting torch.

(3) Recovering Vehicles from Rivers

(a) OBSERVATION: At times there are cases when the proper equipment for recovering vehicles from rivers is unavailable or the site is inaccessible to heavy equipment.

(b) EVALUATION: A hasty means of recovering sunken vehicles or equipment suitable to most situations is required.

(c) RECOMMENDATION: Two pontoon rafts can be assembled and separated with spacers (the gap is variable) then chains or cables are attached to these spacers. At low tide divers go down and connect the chains or cables to the lift-shackles of the vehicle being recovered. At high tide the pontoon rafts will rise, in turn raising the vehicle from the river bottom. The pontoon rafts can then be maneuvered to the shoreline until the vehicle grounds on the bottom.

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The pontoon is held in place until the next low tide and the process repeated. In this manner the vehicle can be moved to a position where it can be removed from the stream.

(4) Securing of Weapons in the Base Camp Area:

(a) OBSERVATION: It is necessary to secure weapons while in the base camp area to prevent accidents that involve weapons.

(b) EVALUATION: Although it is a necessity to secure weapons while personnel are in the base camp areas the weapons must remain readily available for issue in case of an alert or attack.

(c) RECOMMENDATION: The most effective method found was to convert half conexes into weapons rooms. This is a relatively minor operation. A piece of #4 rebar is attached to the width of the wall, 28 inches above the bottom horizontal reinforcing strap on the interior wall of the conex. An M-16 rifle muzzle will fit under the attached strap in each of the indented corrugations of the conex wall. To remove the weapons a slight upward motion will allow the weapon to fall free from the rack. A total of 36 weapons can be stored in the three walls of the conex. For M-79 grenade launcher storage the rebar was replaced by an 8-inch "S" hook attached to the center interior reinforcing strap in the conex. The launcher will hang securely and can be removed with an easy upward motion. All ammunition was hung on a nail driven into a piece of plywood attached to upper half of the walls of the conex. Four individual pieces of chain, two on each door, allow two padlocks for securing the doors closed and meet the required double lock security.

(d) Organization: None

(e) Training: None

(f) Logistics: None

(g) Communications: None

(h) Materiel: None

(i) Other: None

3. Section 3. Headquarters Department of the Army Survey Information: None

1 Incl

  
J.W. RAY  
LTC, CE  
Commanding

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EGF-OP (20 May 70) 1st Ind  
SUBJECT: Operational Report of 35th Engineer Battalion for Period Ending  
30 April 1970, RCS CSFOR-65 (R2)

DA, HEADQUARTERS 34TH ENGINEER GROUP (CONST), APO 96320 20 May 1970

TO: Assistant Chief of Staff for Force Development, Department of the Army,  
Washington, D.C. 20310  
Commanding Officer, 20th Engineer Brigade, ATTN: AVBI-CS, APO 96491

The ORLL submitted by the 35th Engineer Battalion has been reviewed and  
is considered comprehensive and of value for documentation of the reporting  
units activities and experiences.

FOR THE COMMANDER:

  
IVY L MYERS  
CPT CE  
Adjutant

CF:  
CC, 35th Engr Bn

AVBI-OS (Undated) 2nd Ind  
SUBJECT: Operational Report - Lessons Learned 35th Engineer  
Battalion (Combat) for Period Ending 30 April 1970,  
RCS CSFOR (R2).

DA, HEADQUARTERS, 20TH ENGINEER BRIGADE, APO 96491

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

1. Submitted in accordance with USARV Regulation 525-15, dated  
13 April 1968.
2. This headquarters concurs with the submitted report with the  
following comment: Section 2, paragraph c (4), page 7: Concur:  
Further recommend that this method be checked by a representative  
of a local Military Police unit. They inspect and approve security  
of weapons storage areas.

FOR THE COMMANDER:

*D L Mc Bride*  
D. L. MC BRIDE  
1LT, CE  
Assistant Adjutant

Copies Furnished:  
CO, 34th Engr Gp  
CO, 35th Engr Bn

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AVHGC-DST (Undated) 3d Ind

SUBJECT: Operational Report - Lessons Learned 35th Engineer Battalion  
(Combat) for Period Ending 30 April 1970, RCS CSFOR-65(R2)

Headquarters, United States Army, Vietnam, APO San Francisco 96375 30 JUN 1970

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 30 April 1970 from Headquarters, 35th Engineer Battalion (Combat) and concurs with the comments of indorsing headquarters.
2. Reference item concerning "Securing of Weapons in the Base Camp Area," page 5, para c(3): Concur. MACV Dir 55-12 prohibits the altering of serviceable CONEX containers. Army Regulation 190-11 requires triple lock security for weapons; i.e., a locked inner and outer door and a locked arms rack. Unit has been so advised.

FOR THE COMMANDER:



D. J. Winter  
CPT, AGC

Assistant Adjutant General

CF: HQ, 20th Engr Bde  
HQ, 35th Engr Bn (Cbt)

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GPOP-DT (undtd) 4th Ind  
SUBJECT: Operational Report of HQ, 35th Engineer Battalion (Combat)  
for Period Ending 30 April 1970, RCS CSFOR-65 (R2)

HQ, US Army, Pacific, APO San Francisco 96558 9 JUL 70

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

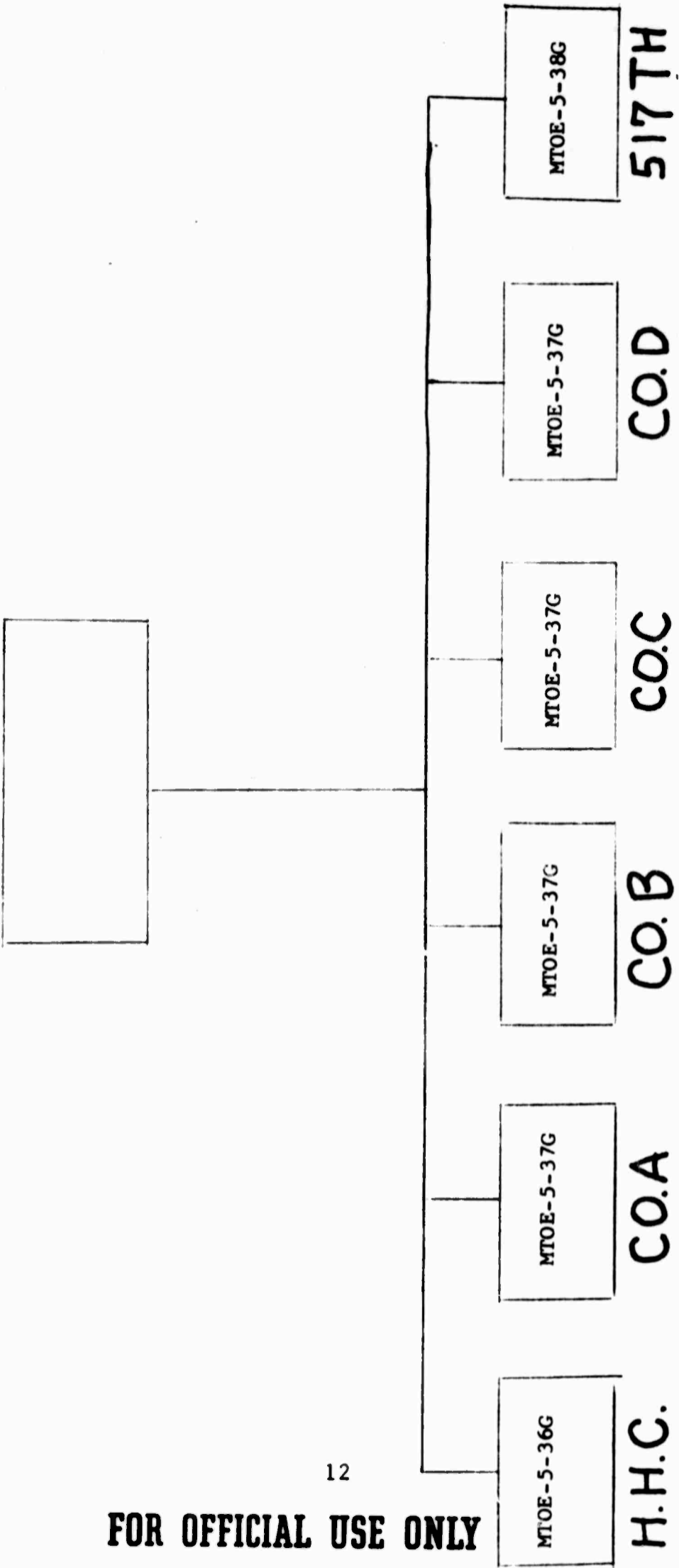
This headquarters concurs in subject report as indorsed.

FOR THE COMMANDER IN CHIEF:



L.M. OZAKI  
CPT, AGC  
Asst AG

35 TH ENGR. BN. (CBT.)



(ATTACHED)

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CO, 35th Engineer Battalion			
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