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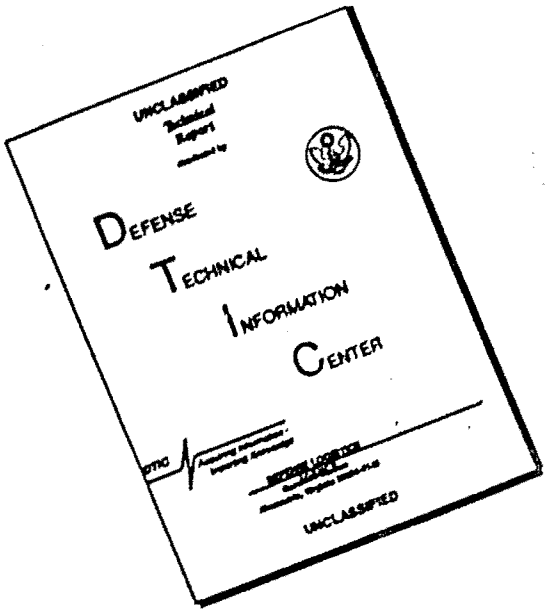

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(4) Lessons Learned, ~~DEPARTMENT OF THE ARMY~~
HEADQUARTERS, 168TH ENGINEER COMBAT BATTALION,
~~APO US Forces 96289~~

EBA-CO (9)

(11) 13 May 1967

SUBJECT: Operational Report ~~Lessons Learned (RCS CSFOR-65)~~, for the Quarterly Period Ending 30 April 1967.

(12) 29p.

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APO US Forces 96491

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(18) OACSFOR

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Section 1, Significant Organization or Unit Activities

1. GENERAL

During the period 1 February - 30 April 1967, the 168th Engineer Combat Battalion successfully accomplished diverse engineer support missions throughout the II-Field Force tactical area. These missions encompassed the entire spectrum of combat engineering, to include tactical support, revolutionary development, maintenance and improvement of lines of communication, and cantonment construction. The majority of the battalion's effort supported 1st Infantry Division, although major construction projects at Prek Klok and Bunard provided facilities for detachments of the 5th Special Forces Group. In all, the past quarter was exceptionally eventful, with major emphasis on combat support activities. Productivity and morale soared to new heights, and the battalion upheld with distinction its motto, "Assistance to All".

2. COMMAND

LTC Edwin F. Pelosky attained his twelfth month in command of the battalion during the quarter, with Major John J. Terpstra filling the Executive Officer position and Major John D. Simpson serving as S-3. Captains George Davenport (S-1), and Charles Steen (S-4) retained their staff positions, while Captain Gaylin Thomas moved from Headquarters Company to S-2. Captains Donwell Whitley and John Kammerdiener retained command of Company A and 557th Engr Co (LE) respectively, while Captain Richard Kepner assumed command of Headquarters Company (in February) and Company C (in March) successively. He was replaced in Headquarters Company by Captain Donald Barta in April, with Captain Davenport (S-1) assuming a dual role as Headquarters Commandant in the interim. Upon the departure of Captain Dwayne Lee in April, Captain Calvin Anderson assumed command of Company B. There were no significant organizational changes during the quarter. In April, however, this headquarters received authorization to constitute a fourth line company effective 1 May. Once again during Operation Junction City the battalion was placed in direct support of 1st Infantry Division, and subsequently in direct support of 25th Division, working with the 196th Light Infantry Brigade. As in previous operations, the direct support relationship with 1st Division proved mutually beneficial. With the 196th Infantry Brigade, however, logistical support and tactical coordination proved less than satisfactory in several instances. Undoubtedly the relatively modest support structure of the brigade and the novelty of the engineer direct support relationship to them contributed greatly to the problems encountered, and these were generally resolved satisfactorily by direct command liaison.

3. PERSONNEL, ADMINISTRATION, MORALE AND DISCIPLINE

There was an extremely heavy influx of personnel into the 168th Engineer Battalion during the reporting period. This resulted from two factors. First, the battalion was granted authority to activate a new company on 1 May, and this prompted the arrival of 145 additional men during April. Second, in an effort to offset the rotational hump in the 15th Engineer Battalion, 9th Infantry Division, approximately 50 men from that unit were transferred to the 168th, with none sent in return. The immediate result of this rapid influx was an extremely heavy burden on the battalion personnel section. It also forecast a large rotational hump for April 1968. During the quarter, the battalion was initially understrength, while the end of the period found the battalion 5% overstrength in EM but 15% understrength in officers. Also during the quarter, a sundry fund club was erected for the officers, and plans were drawn up for expansion of the main EM club. Sundry Fund assets were utilized to purchase new furniture for all of the clubs, and the club improvement has resulted in similar improvement in unit morale. The battalion had few serious disciplinary problems during the period, with five court-martials being convened: two special and three summary. Perhaps as a result of increased combat support operations, the attendance at chapel has improved tremendously within the battalion. Both Catholic and Protestant services were well attended during the period, and the attendance is still rising.

4. INTELLIGENCE AND COUNTERINTELLIGENCE

The S-2 section of the battalion continued its missions of route reconnaissance, security, and tunnel exploration and destruction throughout the quarter. The tunnel teams were affected greatly on 1 February when three team members were fatally wounded during a mining incident. One tunnel team was subsequently reconstituted, and it served with distinction during Operations Lam Son, Junction City and Manhattan. While in War Zone C for Operation Junction City, the S-2 section also provided route security for engineer work parties and did an outstanding job of compiling and disseminating engineer intelligence. Careful recording of enemy mines encountered during the operation enabled the section to discern an apparent pattern of employment which greatly assisted mine clearing teams. (See Section 2, Part I) Following the operation, a display of captured weapons and material was prepared by S-2 for orientation of replacements and visitors. In addition, a pictorial history of Prek Klok was prepared for higher headquarters. It is understood that some of the photos were subsequently selected for display in the Pentagon. While in garrison, the S-2 section retained staff supervision of perimeter security. This involved design and inspection of new mortar bunkers in the battalion area in order to provide overhead cover for all personnel.

The section also conducted detailed reconnaissance of Route Brown along the proposed Saigon bypass and of the Thu Duc Special Forces Camp in anticipation of future construction requirements. At quarter's end, the S-2 tunnel destruction, security, and reconnaissance elements remain well prepared for any potential missions.

5. PLANS, OPERATIONS, TRAINING

a. Plans: The battalion maintained and updated contingency plans for replacement of major bridges in its sector. Plans were also developed for construction of C-130 (Type II) airfields at Prek Klok and Bunard. In connection with the Bunard Project, it was also necessary to develop detailed plans for airlift of heavy equipment into and out of the construction site (see Section 2, Part I). The practical experience gained during these moves will be of great assistance in planning future moves. Finally, design drawings were prepared for several new standard buildings, including a 20' x 100' storage shed and an 80' x 200' maintenance building.

b. Operations:

(1) Combat Support: Combat support occupied a large percentage of the battalion's effort during this quarter, with all elements participating at one time or another. The unit took part in four major operations, and fought extremely well in its first major battle.

(a) Lam Son(28 January - 12 February 1967): At the beginning of the quarter, Headquarters, Company A, one platoon of Company C, elements of 557th Light Equipment Company, and attached dozers from the 588th, 169th, 27th, and 86th Engineer Battalions were engaged in Operation Lam Son in the vicinty of Chanh Long (XT 862255). On 1 February, two security jeeps from the S-2 section were ambushed near Hoa Loi. Four men in the first vehicle were killed by a command detonated mine, and the survivors in the other jeep came under heavy automatic weapons fire for over an hour until gunships and an armored relief force swept the area. In retaliation for the incident, several houses adjacent to the firing device which activated the mine were demolished pursuant to the orders of the Commanding General, 1st Infantry Division. Other mining incidents wounded two personnel and damaged two dozers and a 5 ton tractor. Despite these losses, the operation was quite successful in opening the Lam Son area to future penetration. Over 300 acres of medium jungle were cleared and windrowed, and 175 meters of tunnels were destroyed.

(b) Junction City (20 February - 31 March 1967): Headquarters and Headquarters Company, Companies A(-), B(-), one platoon of C Company. two equipment platoons from 557th Engineer Company, a third echelon support detachment from the 610th Maintenance Battalion, and a platoon from the 104th Dump Truck Company deployed from Di An to Suoi Da on a non-stop motor march at midnight on 20 February, closing into the staging area at 1400 hours the same day. Initially, all units were

engaged in minesweeping, road repair, and jungle clearing operations along the routes into War Zone C. Company A, reinforced by one grader, one front loader, and an asphalt distributor from the light equipment company and a dump truck platoon, subsequently assumed responsibility for repair and maintenance of the T-17 membrane-surfaced airfield at Suoi Da and all roads between Tay Ninh and the forward area. The company also developed a select borrow pit at the foot of Nui Ba Den (Black Virgin Mountain). Daily mine sweeping support was provided to 3rd Brigade, 1st Infantry Division, and general engineer work was accomplished as required. On 23 February, Headquarters Company, Company B, and 557th Light Equipment Company moved to Prek Klok to begin work on a C-130 airstrip and CIDG base camp for the Special Forces. For the next month, every man worked from dawn to dusk clearing jungle, shaping the runway and berms, and placing M8A1 matting on the airfield. In all, some 100 acres were cleared of trees ranging up to 150 feet in height and 3 feet in diameter, using Rome Plows, bulldozers, demolitions and chainsaws. 32,000 cubic yards of select fill were hauled and compacted to form the 2,900 foot runway, turnaround, and a parking apron large enough for three C-130s. 1,300 tons of airfield matting was then placed on the field to give it the necessary strength and durability. Finally, a Special Forces Camp was constructed, using 89 conex containers reinforced by heavy timbers and positioned in a twelve foot high earth berm. Throughout this time, vital minesweeping and road repairs continued on a daily basis. On 9 March, 557th Engineer Company (LE) was assigned the mission of upgrading a C-130 airstrip at Katum, 3 miles from the Cambodian border. In three days the laterite-surfaced runway was extended 800 feet and a suitable parking apron was constructed. Throughout the operation, the equipment operators and maintenance personnel of the company also provided invaluable support to all elements of the battalion. Other vital support by land and air came from the battalion supply section at Di An, Tay Ninh, Soui Da, and Prek Klok. The maintenance section kept the equipment running well despite the heat and difficult conditions encountered. It was a team effort which involved hard work and long hours under the worst possible conditions, but, in the final analysis, it achieved success. Four members of the battalion task force were killed during the operation, and eight were wounded. One 290M scraper, one fuel tanker, and one 5 ton dump truck were destroyed, and one 290M, 2 dump trucks, one grader and one lowbed were damaged by hostile action.

(c) <u>Battle of Prek Klok Camp (10-11 March 1967)</u>: During Operation Junction City, the battalion was engaged in its first major battle, an incident which merits special mention in this report. At the time of the attack, Headquarters and Headquarters Company, Company B(-), the C Company platoon, two attached platoons from D Company 27th Engr Bn, elements of 557th Engr Co (LE), and the maintenance detachment were bivouacked with 2nd Bn, 2nd Infantry (-) and 2nd Bn, 33rd Artillery (-) at Prek Klok. Sporadic sniper fire was encountered in the area during the last week of February and first week of March, but no major engagements resulted. In early March, hostile movement was also detected on several occasions by listening posts around the perimeter.

At approximately 2000 on the night of 10 March, an ambush patrol from 2/2 Infantry had brief contact with an enemy squad to the northeast, but the fighting broke off quickly without further incident. Shortly after 2200, the Battle of Prek Klok Camp commenced with an intensive mortar bombardment by the Viet Cong. Approximately 200 rounds of 60 mm., 82 mm., and unprecedented 120 mm. mortars rained into the area for over a half hour, followed immediately by an estimated two battalion assault toward the 168th perimeter from the east as the mortars lifted. The men of the battalion joined their infantry counterparts in the defensive positions, valiantly filling gaps in the line when four armored personnel carriers were destroyed or damaged by enemy RPG-2's, 57mm. and 75mm. recoilless rifles. Company B mobilized a ready reaction force for the camp, and moved to the center of the airstrip for subsequent deployment to critical sectors of the threatened perimeter. Twenty minutes later, while the main assault continued, a Viet Cong diversionary force launched a secondary assault from the south, directly toward positions manned by the men of the 27th Engineers. The battle raged until 0400 the following morning, with the secondary attack being beaten off by midnight, and the main attack switching from due east to southeast as repeated air strikes, artillery concentrations, and effective small arms fire took their toll against the attackers. In all, over 100 air sorties were flown on behalf of the besieged camp, and 6,000 rounds of artillery were fired. Individual and joint acts of heroism were too numerous to mention, as men of the battalion and its attached units mounted burning APC's to secure 50 caliber machine guns badly needed to turn back the assault, tended the wounded in the open despite intensive enemy machine gun fire, and filled gaps in the line. At the end, the entire battalion was committed on line except for a ten man local reserve hastily reconstituted from the maintenance detachment. The defense was well planned, well executed, and well supported by engineers, infantry, artillery and air force alike. On the following morning it was observed that the enemy had approached to within ten meters of the line, but was never able to penetrate the valiant defense. Five wounded Viet Cong from the 272nd V.C. Regiment and one from the Phu Loi Battalion were captured on the battlefield, and over 200 bodies were discovered around the perimeter and along the routes of withdrawal to the east. Many weapons, including RPG-2 launchers, 57mm. recoilless rifles, BAR's and AK 47's were also recovered, as were a large number of 75 mm. recoilless rounds, RPG rockets, small arms ammunition, grenades, and miscellaneous combat equipment. Engineer losses included two killed, six wounded, one 290M Scraper damaged beyond repair, and one 5 ton dump truck damaged slightly. The infantry suffered one killed and 25 wounded, plus four APC's severely damaged. The Battle of Prok Klok Camp marked this battalion's baptism of fire in a major engagement. The awards merited during the battle are but a small indication of its valorous performance.

(d) Harvest Moon (3 April - 10 May 1967): On 1 April, the battalion was tasked with the mission of constructing a C-130 (Type II) airfield at Bunard for a Special Forces CIDG detachment which was to build a fortified camp in the vicinity. Company C, reinforced by equipment from 557th Engr Co (LE), was assigned the mission, which also involved airlifting the task force from Bien Hoa and Phuoc-Vinh to the Nui Ba Ra airfield near Song Be, and clearing and improving approximately 25 miles of long unused roads and trails between Song Be and Bunard for subsequent movement into the project site. Three C-124 sorties of aircraft flown in from Japan especially for this movement were utilized to lift two D7E dozers and an ERDLATOR, and 20 sorties of C-130 lifted the remainder of the equipment and personnel. The airlift was completed in two days and the road to Bunard was traversed on 6 April, with security provided by 5th ARVN Division. An infantry battalion from 1st Division joined the task force at Bunard, and established a defensive perimeter in conjunction with the CIDG battalion which had conducted the initial airborne/airmobile assault into the area. The 3100 foot airfield was constructed along a ridgeline immediately adjacent to the proposed Special Forces Camp, utilizing natural organic silt as a subgrade, and laterite from a newly developed pit as the wearing course. Construction proceeded on schedule despite heavy rains, and the first 2400 feet of the field was certified by the Air Force for C-123 traffic on 24 April. Concurrently, a one kilometer pipeline and pumping system was installed to provide water to the camp from a nearby stream, and assistance was rendered to the Special Forces Detachment in construction of the CIDG camp. Work continued on the remaining 700 feet, a 140' x 140' turnaround, and a three aircraft parking apron until 6 May, when the Bunard Field was accepted as C-130 (Type II) capable. At that time, it was decided that security requirements for extraction of the task force by road to Song Be were prohibitive, so detailed plans were drawn up for extraction from Bunard by C-130. This airlift was noteworthy in that D7E tractors were, for the first time to our knowledge, disassembled and flown in C-130 aircraft from a relatively short forward airstrip (see Section 2, Part I). Extraction was completed in three days, utilizing 21 C-130 sorties and 2 C-123 sorties. The project was a great success in terms of timely completion, effective maintenance and aerial resupply support, and high quality of the finished airfield. It set a high standard for major construction operations in isolated areas, and conclusively proved the viability of conducting such operations with a small but well supported task force. In this instance, the necessity for full equipment utilization, precise job management, and close engineering control was also demonstrated effectively.

(c) Manhattan (22 April - 12 May 1967): Toward the end of the quarter, Company A (-) participated in Operation Manhattan in direct support of 1st Infantry Division, as did one equipment platoon (reinforced) from 557th Engr Co (LE). The company was initially charged with the responsibility for improving 8 kilometers of MSR between Dau Tiong and Fire Support Base Oscar at the southern edge of the Michelin Rubber Plantation. With the onset of the monsoon season, improvement of the road became a major undertaking involving construction of a 300 meter corduroy causeway into the fire support base across a swampy area. Upon completion of this road, the company moved on to construct a 45 foot timber trestle bridge on the road between Dau Tiong and Ben Suc, followed by another causeway further up the road in order to permit installation of an AVLB across a nearby stream. All these missions were accomplished expeditiously and with notable success. Concurrently, four land clearing teams were constituted from the 7 Rome Plows and 3 bulldozers provided by the reinforced equipment platoon. These teams moved through the jungle along with infantry and mechanized battalions cutting swaths and landing zones in the northern sector of the Iron Triangle. In all, 1208 acres were cleared during the operation, which was still in progress as the quarter ended.

(f) Other Combat Support: Rome Plows and bulldozers from the light equipment company cleared jungle in the vicinity of Binh Phuoc throughout the quarter in support of the Revolutionary Development Program. At the end of the reporting period, 1664 acres had been cleared and windrowed. On 12 February, a seven-dozer task force from 557th Engineer Company (LE) and elements of the S-2 section participated in a one day jungle clearing operation with 5th ARVN Division and local RF/PF forces in the vicinity of Phu Loi. Two dozers were slightly damaged by mines, and one adviser was fatally wounded by shrapnel. A total of 25 acres was cleared. Later in February, Company B supported the Thu Duc Special Forces detachment by improving roads and drainage around the camp. Throughout March and April, an airfield maintenance team from Company C applied dust palliative to airfields at Minh Thanh and Quan Loi in support of 1st Division operations. In March and April, Companies A and B provided minesweeping teams on two separate occasions to support elements of the 1st Division on Operation Lam Son. Company B also cleared minefields at Long Binh and Bien Hoa during the quarter. Two armed convoys were conducted between Di An and Phuoc-Vinh, and local platoon sized ambush patrols continued at Di An on a weekly basis except when the battalion was in the field. Finally, selected items of equipment and operators from the 557th Light Equipment Company supported 27th Engineer Battalion at Tong Le Chon during Operation Junction City II, and on Operation Portsea in the Delta.

(2) Cantonment Construction: During the past quarter, construction continued at Di An and Phuoc Vinh, and a new cantonment directive was received for Cat Lai. In spite of its heavy combat support commitments, the 168th Engineer Battalion continued to outproduce its sister battalions in terms of quantity and quality of construction.

(a) Di An: Companies A and B continued construction on the main base for 1st Division Headquarters and Support Command, and in the "North 40" for 2nd Brigade. 1416 cubic yards of concrete were produced in the batch plant for use on Di An projects. On the main base, production included: 200 linear feet of culvert, 50,000 square feet of troop billets (technical assistance and supervision of self-help), 18 shower heads, 4,000 square feet of administrative buildings, 4,000 square feet of warehouses, a 4,000 gallon water storage tank and pumping station, and a 1,000 square foot dispensary. At the end of the quarter, work continues on the Support Command Chapel, an RRU Operations Center, storage sheds, troop billets, water well fill stands, and maintenance buildings. Installation of remaining electrical materials in the Dial Central building remains deferred pending receipt of several critical items. At the close of the reporting period, the main base was 80% completed, up from 70% three months ago. On the "North 40" construction completed during the quarter included: 350 linear feet of culvert, 21,000 square feet of troop billets, 42 shower heads, 3,000 square feet of administrative buildings, 2,000 square feet of dispensaries, 5,000 square feet of maintenance buildings, and a 2,000 square foot kennel for the Scout Dog Platoon. Work continues on the 2nd Brigade Chapel, administrative buildings, a post exchange, troop billets, and maintenance buildings. The 2nd Brigade area is now 66% complete, up from 57% last quarter. Overall, Di An is well along in its construction program. Virtually all vital facilities are completed, and the troop billet self-help program is proceeding at a healthy pace. It is anticipated that the present construction program will be completed by the end of 1967.

(b) Phuoc Vinh: Company C continued construction for the 1st Brigade at Phuoc Vinh. During the quarter, the following work was accomplished: 5,000 square feet of mosshalls, 1,759 linear feet of culvert, 48,000 square feet of troop billets, 2,000 square feet of administrative buildings, 4,800 square feet of warehouses, 4,000 square feet of maintenance buildings, 2,000 square feet of clubs, and a 1,000 square foot dispensary. 882 yards of concrete were produced in the Phuoc Vinh batch plant. The company also completed its project to construct taxiways and an adequate parking apron at the Phuoc-Vinh airfield, and constructed six artillery gun positions at the base camp. A total of 30,000 cubic yards of laterite was extracted from the Phuoc Vinh pit during the quarter. Work continues on dog kennels, troop billets, mosshalls, maintenance buildings and culverts. Overall, Phuoc Vinh is now 70% complete, up from 58% last quarter.

(c) Cat Lai: In April, the battalion was assigned responsibility for construction of a 1272 man cantonment for the 11th Transportation Battalion at Cat Lai. Planning commenced immediately, and by the end of the quarter design drawings and bills of material for almost all proposed structures were complete.

(d) Xom Tam: 557th Engineer Company continued rock production at Xom Tam in general support of 79th Group construction projects. During the quarter, the unit produced almost 23,000 cubic yards of crushed rock, with breakdown as follows: 3" minus: 8,585 cubic yards; 1½" - ½": 13,725 cubic yards; ½" minus: 650 cubic yards. In addition, the company operated the laterite pit at Xom Tam and a new pit north of Di An which yielded a total of 158,000 cubic yards, of which 65,000 went to the battalion. Indigenous personnel were hired on a selective basis to augment the soldiers working in the quarry, thereby alleviating the severe personnel shortages of the company. The Xom Tam area also showed further development as a defensible living area. Berms around the tent-frame billets were improved, and a security lighting system was devised for the camp. In a consolidation move, all headquarters and maintenance elements of the company completed movement to the quarry in March. From this centrally located base the 557th Engr Co provided effective equipment support to this battalion at Di An, Phuoc Vinh, and in the field, and to other units of 79th Group at Xuan Loc, Gia Ray, Long Binh, Phu Loi, Lai Kho, Bien Hoa, Tay Ninh and in the Delta. Throughout the quarter, the operating equipment and personnel of the company were totally committed, stretching its resources to the limit.

c. Training: Prior to deploying to the field on Operations Junction City and Manhatten, units of the battalion conducted intensive refresher courses in combat engineering subjects. Newly assigned personnel were given orientation training within the battalion, and many received additional on-the-job training in defensive fortifications by improving the battalion perimeter while most of the unit was in the field. In April, the battalion was invited to participate in a replacement orientation program to be conducted by 1st Division Support Command at Di An. This will involve a week of intensive combat training, including live fire exercises and combat patrols outside the perimeter. It is believed that this course presents an opportunity for our replacements to receive a more comprehensive indoctrination than the battalion is able to give from within its own resources. The results should become evident in the forthcoming quarter.

6. LOGISTICS

During the period S-4 continued normal operations including convoys to Phuoc Vinh and airlift of significant amounts of resupply to Quan Loi and Minh Thanh. Receipts during the period amounted to 4280 tons, consisting mostly of construction supplies. Of supplies issued, 1460 tons were used at Di An, 1110 tons sent to Phuoc Vinh, 220 tons to Minh Thanh and 70 tons to Quan Loi. The section also supported the Battalion in Combat operations with S-4 representatives in the field for Cedar Falls and Junction City. One or two water points have operated continuously during the period. During Junction City, S-4 personnel coordinated and supervised the movement of 2200 tons of supplies from Tay Ninh to Prek Klok. Over 100 tons were sent from Di An during the same operation. During Operations Cedar Falls and Junction City, the battalion was placed in direct support of the 1st Infantry Division and thus became eligible to receive Class II and IV support from the 1st S&T Battalion, a privilege not normally enjoyed. This relationship made available many items which previously were unavailable to the 168th Engineers in its construction support role and afforded a great savings in time due to physical proximity of the 1st S&T Battalion.

7. FORCE DEVELOPMENT

Once again, the battalion had the opportunity to constitute cover teams for jungle clearing operations in the Iron Triangle and in Revolutionary Development activities at Binh Phuoc. In each case, the necessity for having contact maintenance support and air compressors with each team was readily apparent. While the majority of the battalion was in the field, the rear detachment experimented with new concepts in self-help construction in an attempt to achieve maximum productivity with a minimum number of skilled personnel. In conjunction with 1st Infantry Division Support Command, a self-help construction team was constituted from likely replacements in the division pipeline, who were advised and supervised by an engineer NCO. The battalion also provided qualified operators for concrete mixers and other engineer equipment as required. It was found that these teams could operate far more effectively than the usual battalion and company-level self-help personnel, moving from unit to unit on a regularly scheduled basis. The concept is particularly applicable to cantonments where the bulk of remaining construction consists of standard troop billets. Conceivably a cantonment reaching 80% completion could be finished solely by small engineer supervisory detachments working with base level self-help teams, thereby freeing engineer combat units for tactical operations without EM/CA encumbrances in the rear area.

8. COMBAT MATERIEL

During the quarter this battalion initiated a survey of critical items of equipment in an attempt to determine major replacement problems. A specific item selected for presentation to higher headquarters was the problem of cracked frames in 5 ton dump trucks. Based on serviceability criteria, it appeared that the battalion might have over 50% of its dump trucks scored out during a two or three month period in the near future. It was suggested that a phased replacement program for dump trucks and other critical equipment be instituted so that a unit does not face the likelihood of becoming non-combat ready at a critical time. This recommendation and the background data upon which it was based became a matter of interest to maintenance management personnel at Engineer Command, who initially reached the tentative conclusion that a majority of our trucks are presently unserviceable, and should be deadlined or scrapped out immediately in the hope that the resultant non-combat readiness of the battalion would prompt replacement action. While it was recognized that such a solution might be acceptable somewhere other than Vietnam, this unit made arrangements with supporting maintenance units to weld or fishplate cracked frames to preserve combat readiness. Nevertheless, as the quarter ends, the basic problem of replacement remains without an acceptable solution. This battalion will continue its efforts to achieve phased replacement without loss of readiness.

9. INSPECTOR GENERAL

Major John J. Terpstra was appointed by US Army Engineer Command, Vietnam (Provisional) as acting Inspector General for the battalion. During the quarter, he acted on six complaints from members of the unit. One inquiry, forwarded from higher headquarters, involved an individual's complaint that he had been denied school training for the equipment operator's field for which he had specifically enlisted. This matter was resolved by reassigning the man to 557th Light Equipment Company for appropriate on-the-job training.

10. INFORMATION

The battalion newspaper continued sporadic publication between field paper stories and numerous home town news releases were distributed regarding awards presented during the various operations of the battalion. In the aftermath of Operation Cedar Falls (January, 1967), Life magazine published a pictorial article which showed, among other things, a bulldozer from 557th Light Equipment Company engaged in jungle clearing operations in the Iron Triangle. While on Operation Junction City, the headquarters was also visited frequently by newspaper reporters and photographers, although no major articles regarding our part in the operation have yet appeared.

11. CIVIC AFFAIRS

The Battalion Surgeon and Chaplain have continued their support of orphanages in the Di An area, and expanded their efforts to needy Montagnards and Vietnamese refugees near Bunard while the battalion was engaged in Operation Harvest Moon. At Bunard, the presence of security forces was a remarkable catalyst for a new village which reached a population of 1200 during the month long operation. Most of the newcomers had been living primitively in the hills ever since the original village of Bunard was wiped out by the Viet Cong several years ago. Through the influence of the battalion chaplain, a Vietnamese priest from Phuoc Vinh was flown to Bunard to conduct services for the refugees, many of whom had not seen a clergyman for five years. The response was heartwarming. In all, Bunard was undoubtedly the most successful civic action project in which this battalion has played a part. But it was not the only area where the men of the battalion took time to make friends among the villagers. In both Chanh Long and Suoi Da, Company A constructed playground facilities for the Vietnamese children using excess materials. The good will benefits derived from such activities are intangible, but certainly significant in winning over the local populace.

Section 2, Part I, Observations (Lessons Learned)

1. PERSONNEL

a. Religious Services

ITEM: Attendance at chapel services.

DISCUSSION: There was a large increase in religious service attendance during the past three months. Although cynics may ascribe part of this increase to a corresponding increase in combat operations, this would be at best a half-truth.

OBSERVATION: Field worship services are desired by commanders and troops alike. Concurrent scheduling for Catholic Mass and protestant worship increases attendance at both services. Further, scheduling services at the same time and same location several weeks in succession improves attendance.

b. Awards and Decorations

ITEM: Mass distribution of Awards and Decorations.

DISCUSSION: The normal procedure for the selection of personnel for awards is well known. However, in a combat situation, several adjustments in procedure are needed. First, it is desirable to award

the medals for achievement and valor as soon as possible after the action occurs. The reasons for this are the obvious esprit-de-corps advantages, the difficulty of ever assembling the group for a post-operation award ceremony, and the greatly reduced amount of administrative overhead.

OBSERVATION: At the conclusion of an operation, Officers and NCO's should submit a list of personnel recommended for decorations, to include a brief narrative of actions performed, up the chain. This list will be consolidated and finalized at battalion level and presented to the approving authority for approval. The decorations that are approved are then awarded, and the necessary paperwork is subsequently initiated by the S-1 section.

2. OPERATIONS

a. Rock Crushing Techniques

ITEM: Blast Rock Surge Pile

DISCUSSION: In feeding blast rock to 75 TPH Eagle Crusher one encounters many problems which can be eliminated or reduced by utilizing a surge pile. A surge pile is simply a pile of blast rock located very near the hopper of the crusher. It should be situated so that blast rock can be loaded directly from it into the hopper. Oversized blast rock arriving at the crusher should be spotted before dumping into the hopper and off-loaded in the surge pile to be secondary blasted. It it is possible to load out blast rock faster then it can be crushed, the surge pile should be built up. It can then be used if load-out of blast rock ceases - such as when preparing for a major blast. Thus there is no waiting at the crusher for blast rock.

OBSERVATION: Surge piles would be utilized whenever possible in quarry - crusher operation. Thus temporary breaks in the chain- of-production do not cause the entire operation to cease and production is increased in the long run. It is also safer to use the surge pile when crushing at night. It becomes unnessary to illuminate the quarry itself.

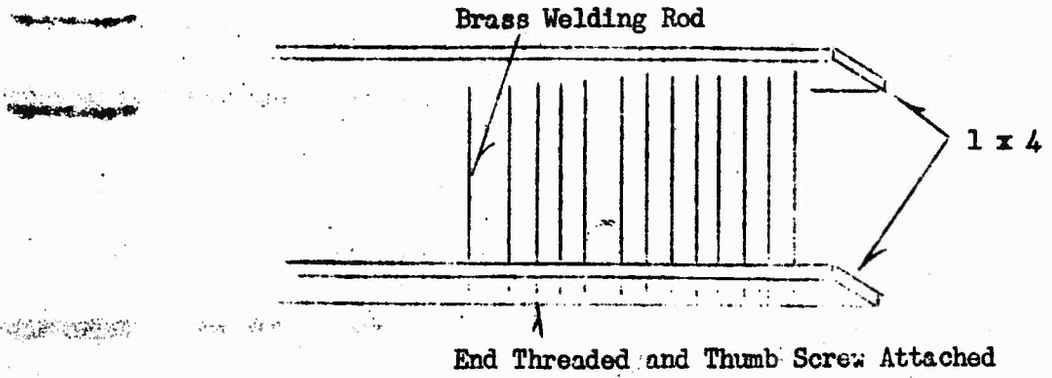
b. Blasting Techniques

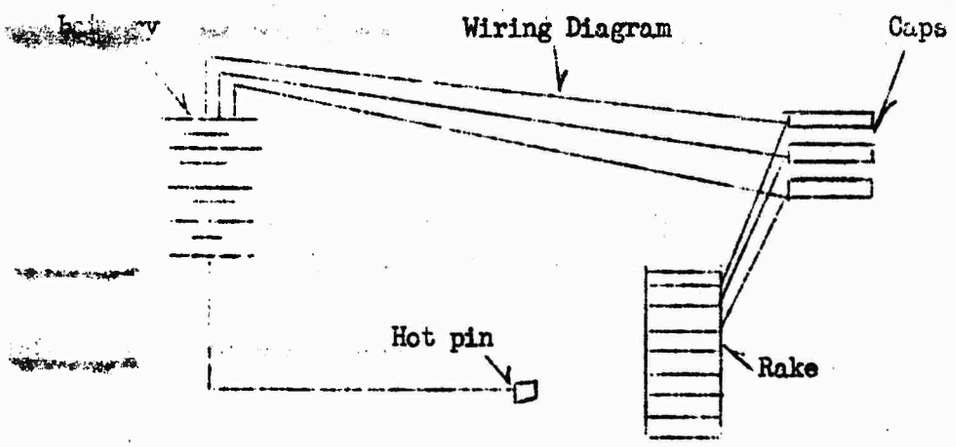
ITEM: Field Expedient Delay Caps

DISCUSSION: Often in this theatre of operations there is a severe shortage of delay caps. Instantaneous caps can be made to act with a delay by using a simple field expedient. Tie in all the holes that should blow at the same time with one piece of detonating cord. Repeat for other holes. Prime each set with an instantaneous electric cap. A separate wire has to be run from the blast site to a power supply in a

safe bunker. There [illegible] tied to a post on the expedient firing device. (See diagram) A 28 volt system is hooked up and a hot pin is raked across the rack in a single rapid stroke. The detonation wires should be formed into a single rope for ease in handling.

OBSERVATION: The rack and hot pin should be brassed before each firing. The individual should practice the firing stroke so that no pins in the rack are missed. Results at the Xom Tan Quarry have been excellent.





c. Blasting Techniques

ITEM: Hole Patterns and Firing Sequence

DISCUSSION: Successful quarrying operations require more refined techniques than those outlined in military manuals on the subject. If it is assumed that the hole pattern is such that dynamite is distributed uniformly throughout the rock to be blasted, then the only variables are the amount of explosive used and the manner in which detonation is accomplished. Experience in a certain vein of rock should lead to a power factor suitable for that particular application. This is figured as so many pounds of dynamite per cubic yard of in-place rock. In computing charges, include only the rock which will be moved by the blast and be certain to use the same type of explosive or experiment to find the power factor for each one. It will probably be between .5 and 1.00 lbs/cu yd. Once this power factor is determined it is just a matter of mathematics to determine how much explosive to put in each hole. Uniform results can be expected only if the math is correct and proper control over rock drilling is maintained. The manner of detonation is the remaining variable. Delay caps are a must, but their application can be tricky. A good way to plan the blast is to decide where you want the pile of blast rock after the explosion. The pile should be conical or ridge-like. The zero delay caps should be on the cone or along the ridge. Successive delays should detonate rows of holes away from the cone peak or ridge. This can get quite complicated. Four simple applications are shown:

1. 333333
   222222
   111111
   000000

   Row patterns result in a ridge-like rubble pile parallel to the face and usually hard to work.

2. 876545678
   765434567
   654323456
   543212345
   432101234
   432101234

   Horse-shoe pattern results in a ridge-like rubble pile perpendicular to face and easy to work.

3. 4
   434
   43234
   4321234
   432101234
   4321234
   43234
   434
   4

   Circular pattern results in a cone, easy to work. Desirable when there is no quarry face.

4. 9987654 Oblique pattern is useful when trying to avoid
9876543 throwing rock in a certain direction - such as
8765432 at a nearby pagoda.
7654321

OBSERVATION: Control of the power factor prevents excessive "throw" thus protecting nearby structures and equipment. There is also an optimun power factor for best breakage. Experience shows that best breakage is obtained when the power factor is low - which is somewhat of a surprise. The real key to best breakage is the placement of charges and use of delay caps. Blast results can be planned, secondary blasting is reduced, and the need for a utility dozer in the quarry is lessened. Since the rock can actually be piled up, the crane-shovel becomes much more effective in load-out.

d. Mine clearing

ITEM: Clearing Brush from Minefields

DISCUSSION: While clearing a minefield at Long Binh, a tank dozer was used to push brush and grass off to the side, where it could be burned. However, there was so much dirt mixed in with it that it didn't burn, and had to be spread out to be checked with mine detectors, and then reheaped. In another minefield, also at Long Binh, an effort was made to burn the grass and brush off with gasoline before stripping. This turned out to be dangerous, inefficient, and largely ineffective.

OBSERVATION: If at all possible, a flame thrower should be obtained for clearing minefields grown over with grass and brush before the area is stripped or checked with mine detectors.

e. Mine clearing

ITEM: Clearing Areas of Anti-Personnel Mines.

DISCUSSION: Minefield clearing was required at Bien Hoa, RVN. The minefields were primarily composed of M 14 and M 16 anti-personnel mines, although one mine of undetermined orgin was found during clearing. The minefields were enclosed by double apron barbed wire fences. The fields were cleared by first driving over the mined area with a Tank Recovery Vehicle or M48A3 Tank. The top four inches of soil were then removed using a D7E bulldozer. The stripped soil was then checked visually and by metallic mine detectors and the remaining mines were destroyed by blowing in place. For protection of the bulldozer operator, the cab of the tractor was enclosed with sheet steel.

OBSERVATION: M 14 mines greatly complicate mine clearing operations, since they cannot be effectively detected. They should be used only with discretion, and not in minefields which are likely to be relocated frequent

f. Jungle Clearing

ITEM: Disposal of Debris after Jungle-Clearing

DISCUSSION: At Prek Klok, during Operation Junction City, the debris left after jungle-clearing presented a security problem. In order to clear fields of fire, debris disposal teams attempted to burn fallen timber with black powder, diesel fuel, old tires, and flame-throwers. It was found that the debris could not be piled high enough to burn completely, or even satisfactorily, owing to the size and hardness of the logs. It was necessary, therefore, to dig large ditches and dozer the larger logs into them for burial. Smaller debris was then burned with flame throwers.

OBSERVATION: Burying trees is not a very efficient method of disposal, but it is quicker than dragging them away. If the logs will not burn, burying them is probably the next best solution.

g. Airfield Matting

ITEM: Anchoring M8A1 steel planking

DISCUSSION: An efficient, effective method of anchoring the side edges of the runway at Prek Klok was desired. Since an intrenching machine was available, the method used was as follows: Two-foot ditches were dug parallel to the sides of the runway, two feet outside the edge. Alternate rows of matting were extended approximately four feet outside the edge, thus passing over the trench. A five ton dump truck was then driven over the ditch to bend the ends of the planks down while another vehicle proceeded at the same pace on the matting to prevent buckling. The ditch was then filled and compacted.

OBSERVATION: This method was certainly faster than a picket anchorage system and seems to be more secure, especially in areas with a high water table.

h. Airlift of Equipment

ITEM: Preparation and loading of D7E dozers for airlift on C-130 aircraft.

DISCUSSION: Upon completion of an isolated airstrip at Bunard, heavy equipment was extracted by C-130 aircraft. Runway length and altitude determined a maximum aircraft load of 35,000 pounds, far less than the 48,500 pound D7E dozers. To meet the weight limitations,

the blade assembly, hydraulic rams, winch, belly pans, trunions, and rock guards were initially removed, bringing the dozers down to approximately 41,000 pounds. The dozers were then positioned on the rear of lowbed trailers with both track master pins at the bottom rear corner of the tracks. To accomplish this, each side of the dozer had to be jacked up alternately to permit proper positioning of the pins. The master pins were then removed, and the dozers were walked out of their tracks onto the aircraft, reducing the aircraft load to an acceptable 35,000 pounds. In order to get the dozers to walk out of their tracks, extreme care must be taken to align the track pin height with the dunnage height in the vertical plane, and the interior edge of the dunnage with the sprocket guard in the horizontal plane.

OBSERVATION: While it is possible to load the D7E dozer on C-130 aircraft in the manner prescribed, the loading operation is very touchy and could result in damage to the aircraft if the dozer slipped off its tracks prematurely or got hung up on the dunnage.

3. TRAINING AND ORGANIZATION

. Organization of new units

ITEM: Constitution of a fourth line company from existing units and replacements.

DISCUSSION: The battalion was given authority to constitute a fourth line company effective 1 May and an appropriate number of inexperienced fillers arrived late in April. It was decided to draw one intact squad from each line platoon and one complete platoon headquarters from each of two existing companies. This will give the new company an infusion of experienced small units who can carry on missions normally expected of this battalion without significant loss of efficiency.

OBSERVATION: In this manner, the new headquarters is only faced with the prospect of constituting three new squads and one platoon headquarters, as are the companies from which experienced units were drawn. It is believed that this concept will minimize the problems which might be expected within a newly organized company.

4. INTELLIGENCE

a. Enemy Mine Warfare

ITEM: Patterns of mine laying

DISCUSSION: On Operation Junction City, forty five enemy mines were discovered along the roads in this battalion's sector. Thirty-five were found and blown by minesweeping teams and ten were blown the hard way. The majority of the mines were pressure detonated, 12 inches in diameter, 4 inches thick, and of local manufacture. They contained approximatoly twenty pounds of explosives within a thin metallic cover encased in a polyethelyne bag. The mines were sometimes booby trapped with butterfly bombs, and frequently stacked two or three deep, buried from 6" to 24" below the road surface. As the operation progressed, a general laying pattern was discerned. Mines were emplaced on both shoulders of the road at staggered 10 meter intervals, so that one side had 2 - 4 mines at 20 meter intervals, and the other side split that interval with a similar number of mines. This pattern blocked traffic very effectively when one vehicle detonated a mine and the following vehicles attempted to bypass it, thereby detonating a mine on the opposite side of the road.

OBSERVATION: Units encountering mines should pay close attention to laying patterns. Whenever a vehicle is disabled by a mine, thereby blocking traffic, it should be assumed that any likely bypass is also mined.

b. Enemy Harrasment

ITEM: Whistles and lights around the perimeter

DISCUSSION: On numerous occasions at Prek Klok, whistles were heard by listening posts and from the perimeter positions on dark nights. On at least five separate occasions, a dim diffuse glow was observed in an area approximately 50-100 meters within a woodline adjacent to the perimeter. The light would blink on and off at sporadic intervals without any apparent pattern. These occurences were thoroughly investigated without results by night and day patrols into the areas where they were observed, and by reconnaissance by fire. Such countoraction generally caused immediate cessation of the whistles and light, although they sometimes were observed later the same night.

OBSERVATION: It is conceivable that the whistles and light could have been enemy signals to reconnaissance elements prior to the Battle of Prek Klok Camp. The light was especially mysterious and it was initially thought that it might be reflecting from a tunnel air hole onto the foliage. However, all exploration of the area yielded negative results and the cause remained undiscovered when we departed from Prek Klok after a month in position.

5. LOGISTICS

a. Support Maintenance

ITEM: Limited Third Echelon Maintenance

DISCUSSION: The 557th Engineer Company is located far from its support maintenance unit and much down time was added in taking equipment to and from the 3rd Echelon repair facility. Some equipment, such as a rock crusher, is not practical to move. The D. S. unit was over extended with contact maintenance commitments to field locations and other higher priority jobs. As a result, equipment was not getting attention as fast as desired. On the other hand, this unit has a large maintenance facility with 46 mechanics and related personnel, many of whom are familiar with third echelon repair procedures. It was arranged that the D. S. unit provide one of their personnel to work in this unit's motor pool. His job is to requisition 3rd Echelon parts through his parent unit and supervise our mechanics in doing limited third echelon work.

OBSERVATION: The deadline rate went down. Repairs are made on the spot and with the operators present. In most cases 1st, 2nd and 3rd echelon maintenance can be done concurrently, thus reducing the time a piece of equipment is down for maintenance.

b. Equipment Evacuation

ITEM: Expedient Loading of Heavy Items.

DISCUSSION: On two occasions disabled heavy items of equipment needed to be evacuated. One was a 40 ton crane that had blown its engine in a hostile area and could not be repaired on site. The other was a 290M earthmover which had hit a mine in War Zone "C", blowing off a wheel and freezing the axle and transmission. Neither of these items, one weighing 120,000 pounds, the other weighing 55,000 pounds, could be loaded with available cranes. It would have been dangerous to drag them up loading ramps onto a lowboy.

OBSERVATION: The problem was solved in both cases by using a dozer to cut a slot near the disabled piece of equipment, parking a lowboy in the slot, thus putting the trailer top at ground level, and then dragging the item onto the lowboy with two dozers. Two dozers were used for two reasons: 1) Because of the heavy dead load 2) Proper placement of the dozers allowed steering.

c. Dozer Maintenance

ITEM: Overheating of D7E bulldozers

DISCUSSION: Dozers engaged in jungle clearing operations in Vietnam are prone to overheat, which in turn causes excessive wear and damage to engine components. On previous operations, overheating had been minimized by blowing out radiators with compressed air every few hours and by removing and thoroughly cleaning radiators and belly pans whenever possible. Recently, it has been observed that most of the dozers which have been used continually on jungle clearing operations for several months do not respond to these solutions, and continue to overheat every few hours.

OBSERVATION: It appears that the coolant system on the D7E is inadequate for sustained jungle clearing operations in a tropical climate. Recommend that appropriate engineering studies be conducted to determine if existing dozers should be modified to prevent overheating, or if future models can be redesigned.

Section 2, Part II, Recommendations

1. During my 13 months as commander of the 168th Engineer Battalion, the unit has participated in eight major tactical operations, and in cantonment construction at five major bases. Looking back, I am well satisfied with the work that has been done. The meritorious unit citation and hundreds of individual awards which have been earned by the battalion attest to its excellence in construction and in combat. But this is not to say that we have been without mistakes, or that the existing organization cannot be improved. In my opinion, there are several mistakes which should not be repeated, and some organizational changes which should be made. The following recommendations summarize my views.

2. It is essential that engineer organizations tasked with cantonment construction missions be provided the personnel and equipment to accomplish their mission well. Specifically, they should be construction battalions, or army combat battalions organized under TOE 5-35E with a combat construction augmentation. The success of this battalion could not have been achieved without vital additional equipment which was bought, begged, borrowed, and rebuilt from such diverse sources as USOM, cannibalization points and the Inprest Fund.

3. Military construction programs for the various cantonments should be realistically funded, and sufficent construction materials should be programmed in country on a timely basis. It has been observed that several bases have already exceeded their programmed costs by considerable amounts, probably because additional units and/or facilities

were added to the cantonment without a commensurate increase in funding. This problem in turn leads to periodic shortages of construction materials, presumably because funds are not available to procure and ship the necessary materials to Vietnam. Recommend that future add-ons be programmed on a scheduled basis and that funding be arranged at the same time authorization for new facilities is granted.

4. Non-divisional engineers are utilized most effectively in a combat support role when specific battalion or company size missions can be assigned directly to the unit, and integrity can be maintained. On one operation when this battalion was placed in direct support of 1st Infantry Division, it was utilized in this manner, with one company supporting a brigade of the division in a designated sector, and the battalion minus constructing an airfield and camp. The results were outstanding. Control of the battalion's resources was easily maintained, and the inevitable maintenance and supply problems were quickly resolved. On another operation the subordinate elements of the battalion were split up to augment organic engineers throughout the division area of operations. Control was virtually impossible, and maintenance and logistics problems abounded. Recommend that non-divisional battalions be employed as integral units whenever possible to make maximum use of their capabilities and minimize problem areas.

5. Finally, based on experience acquired equally in MCA construction projects and combat support activities, I recommend that non-divisional combat engineer units be designated as specialists in either, but not both, fields. It is extremely difficult for a unit charged with MCA responsibilities to move to the field for extended combat support operations. The operational commitment suffers because the unit must leave substantial staff and troop elements behind to continue the construction program. Likewise, the MCA program suffers because the supervisors who normally plan and record progress are not available. Obviously, any engineer forces not committed to combat support can and should engage in construction work. It is believed, however, that this can be accomplished by having such units act as "sub-contractors" for whatever agency is made responsible for MCA construction at the base. The present system barely works, and is fast reaching the breaking point as construction records multiply concurrently with combat requirements. Recommend that selected non-divisional combat battalions be phased out of the MCA program and specialize in combat missions.

Edwin F. Pelosky

EDWIN F. PELOSKY
LTC, CE
Commanding

EGE-CO (13 May 67) 1st Ind
SUBJECT: Operational Report Lessons Learned (RCS CSFOR-65), for the Quarterly Period Ending 30 April 1967

DA, HEADQUARTERS, 79TH ENGINEER GROUP, APO 96491, 11 June 1967

TO: Commanding General, U. S. Army Engineer Command Vietnam (Prov), APO 96491

The Operational Report - Lessons Learned submitted by the 168th Engineer Battalion has been reviewed and is considered adequate. Concur with the recommendations of the battalion commander in Section 2, Part II subject to the following comments:

a. Paragraph 2. Concur with the recommendation. The conversion of D-series combat battalions to the E-series TOE and the augmentation of the battalions with the combat construction section have been the subjects of previous correspondence from this headquarters. 1

b. Paragraph 3. Basically concur with the comments of the battalion commander, although it appears that there is no immediate relation between the status of cantonment funds and the periodic shortages of construction materials. 2

c. Paragraph 4. The lessons learned in the employment of supporting engineer forces, as outlined in this paragraph, have been valuable in the formulation of plans and concepts of operation for non-divisional battalion employment.

d. Paragraph 5. Concur. This headquarters has directed the establishment of teams within the combat battalions subject to field deployment. These teams remain behind during periods of field operations to maintain continuity in the construction effort at each base camp. It is anticipated that this team concept will eventually evolve into the concept outlined by the battalion commander.

Walter C. Gelini

WALTER C. GELINI
Colonel, CE
Commanding

1 Incl
nc

Copies furnished:
ACSFOR DA (dupe)
CO, 168th Engr Bn

AVCC-P&O (13 May 67) 2d Ind CPT Hubbard/ccb/BNH 487
SUBJECT: Operational Report-Lessons Learned (RCS CSFOR-65) for Quarterly Period Ending 30 April 1967

HEADQUARTERS, UNITED STATES ARMY ENGINEER COMMAND
VIETNAM (PROV), APO 96491

TO: Commanding General, United States Army, Vietnam, ATTN: AVHGC-DH, APO 96307

1. The subject report, submitted by the 168th Engineer Battalion (Cbt), has been reviewed by this headquarters and is considered adequate.

2. The recommendations and comments made by the submitting and Indorsing commanders have been reviewed and this headquarters concurs, subject to the following added comments:

a. Section 1, paragraph 8, page 12. Proper procedures, previously published and apparently misinterpreted by the unit, for determination of repairability and subsequent corrective action by support maintenance unit are being reemphasized. Command maintenance personnel have arranged for a team of technical representatives from ATAC to come to RVN for further corrective action on cracked frames.

b. Section 2, Part I, paragraph 5c, page 22, ITEM: Overheating of D7E Bulldozers. It is believed that kit, modification, D7E Tractor, FSN 2410-800-0345, which is available in-country will help alleviate the overheating problem. Purpose of the kit is to help prevent debris from entering the engine cooling air stream and impacting against the radiator core. The unit is to submit Equipment Improvement Reports (EIR's) to National Maintenance Point on the cooling system of each tractor that is overheating. 1st Logistical Command is in contact with USAMEC on the problem. Units have been instructed to have the modification applied to all D7E's. The 168th Engineer Battalion tractors have not been fully modified as yet.

c. Section 2, Part II, paragraph 3, pages 22 and 23. Due to the lack of available funds for cantonments in the regular and supplemental MCA Programs, project directives were issued authorizing the full scope and a fair share of the available funds. It was fully recognized that the funds were not adequate to complete the scope directed to MACDC authorized standards. It was anticipated that additional funds would be programmed into the existing projects as new appropriations were received from Congress. However, in some cases the construction progressed at a rate faster than it was possible to program the additional funds into the projects. Additional funds are being programmed into these projects from funds made available in the FY 67S MCA appropriation. Programming in this manner allows the construction unit to work efficiently on the most urgently needed facilities. Fully funding specific cantonment facilities

USARV, ATTN: AVHGC-DH

AVCC-P&O (13 May 67) 2d Ind 1967
SUBJECT: Operational Report-Lessons Learned (RCS CSFOR-65) for Quarterly Period Ending 30 April 1967

and omitting others does not provide the flexibility required in an active theater.

d. Section 2, Part II, paragraph 5, page 23. Several engineer combat battalions are being placed under operational control of the Field Force Engineer for combat support purposes. The overall engineer effort required in-country precludes assignment of all combat battalions to such status on a continuous basis.

FOR THE COMMANDER:

RICHARD J. DUCOTE
Colonel, CE
Chief of Staff

mdl

63

AVHGC-DST (13 May 67) 3d Ind
SUBJECT: Operational Report-Lessons Learned for the Period Ending 30 April 1967 (RCS CSFOR-65) (U)

HEADQUARTERS, UNITED STATES ARMY VIETNAM, APO San Francisco 96375

22 JUL 1967

TO: Commander in Chief, United States Army, Pacific, ATTN: GPOP-OT
APO 96558

1. This headquarters has reviewed the Operational Report-Lessons Learned for the period ending 30 April 1967 from Headquarters, 168th Engineer Battalion as indorsed.

2. Pertinent comments follow:

a. Reference item concerning phase out of non-divisional combat battalions from MCA program paragraph 5, page 23: Non-Concur with 1st and last sentences of referenced paragraph. Restriction of designation of non-divisional combat engineer units to only combat support or only MCA activities would render the present area-oriented engineer support structure ineffective. Engineer groups have the capability to vary the structure of battalions by attachment as required; specifically, construction companies can be attached to combat battalions to facilitate MCA activities in the battalion areas of responsibility. This is no change from current policy.

b. Reference item concerning combined field operations, paragraph c, page 10: Concur with the procedure indicated, which appears to constitute efficient utilization of training resources, and to enhance cooperation between supported and supporting organizations.

FOR THE COMMANDER:

C E St Marten

1 Incl
nc

C. E. ST. MARTEN
Capt. AGC
Asst AG

GPOP-DT(13 May 67) 4th Ind
SUBJECT: Operational Report for the Quarterly Period Ending 30 April 1967 from HQ, 168th Engr Cbt Bn (RCS CSFOR-65)

HQ, US ARMY, PACIFIC, APO San Francisco 96558 2 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:

K Osbourn

V F. OSBOURN
MAJ, AGC
Asst AG

1 Incl
nc

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GPOP-D ([redacted]) [redacted] Ind
SUBJECT: Operational Report for the Quarterly Period Ending [redacted]
from HQ, [redacted]

HQ, US ARMY, PACIFIC, APO San Francisco 96558 2 OCT 1967

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

[redacted]

[redacted]

K. F. OSBOURN
MAJ, AGC
Asst AG

1 [redacted]
[redacted]

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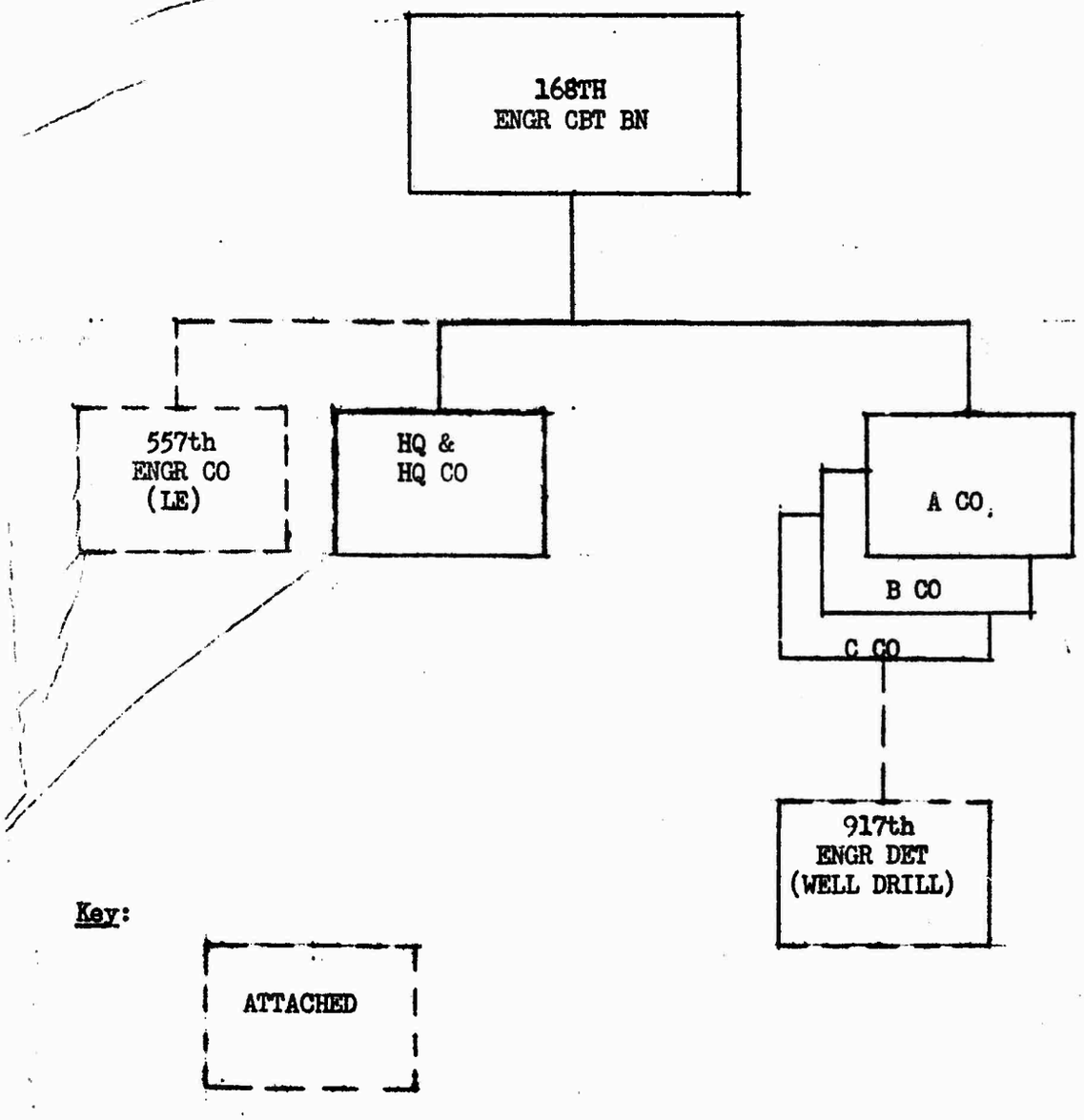

Inclosure 1 to Operational Report-Lessons Learned for the Quarterly Period February 1967 thru April 1967