

EGD-HD-Q

SUBJECT: Operational Report - Lessons Learned, 84th Engineer Battalion
(Construction), Period 1 May to 31 October 1971, RCS CSFOR - 65 (R3)

e. Intelligence:

(1) During the period from 1 May to 31 October 1971, enemy activity directed against this unit has been relatively light although 116 incidents involving personnel and equipment have been reported. Most of these incidents were directed against the 59th and 60th Land Clearing Companies which were conducting their operations in Quang Nam Province. These incidents included the following: there were 67 mining incidents involving dozers and 4 APC's hit mines, mortar and R-G attacks on three occasions, booby traps (175m) hit dozers on two other occasions, 15 bunker complexes were found and destroyed and finally on 17 occasions caches of explosives and food were found. Casualties were also relatively light as six U.S. personnel were killed and 18 wounded. Since most of this unit's activities were centered in or around the Da Nang area, enemy activity was expected to be light. Direct enemy contact against other elements in this battalion was almost non-existent and this pattern can be expected to continue; however, extreme caution is still required for route maintenance projects in outlying regions.

f. Communications:

(1) Upon the completion of the land line circuit between our battalion and our higher headquarters the teletype communications began to function correctly with increased regularity. Until this time, however, the teletype communications were sporadic at best and non-existent most of the time. We are now attempting to operate both land line and teletype circuits. Lesson plans and instructional programs were developed to teach the ever increasing number of people using the radio the proper procedure and techniques. This accomplished two objectives:

a. It reduced the number of errors and security violations over the air.

b. It enabled more people to pass their own traffic without making the NCS pass it for them.

The class was primarily designed for officers and vehicle drivers. It covered such items as how to read the SOI, authenticate and KAC, what to say, and what not to say over the radio with proper use of proverbs. Characteristics of the AN/VRC - 12 and faulty series of radios and hints for first echelon maintenance were also covered. A practical exercise was also included wherein the participants would pass traffic over the radio.

g. Medical:

(1) The primary activities of the medical section for 1 May through 31 October 1971 can be categorized into five main areas. The first area, care of sick and wounded, is self-explanatory. The medical section maintained a permanent aid station at Camp Hoa Long and one at Phu Bai in addition to providing company aidmen for outlying field type operations. The second area, maintaining an up-to-date immunization status within the battalion was also performed at both Da Nang (Hoa Long) and Phu Bai installations. The third area

e. Medical: (Cont'd)

of operation, environmental sanitation, surveillance and supervision, was provided at all areas where troops from the 84th lived. This included insect control, surveillance of garbage and refuse disposal, rabies surveillance, malaria surveillance and general sanitation. This was done with the liaison aid of field sanitation teams provided by each company and unit. The fourth area of operation, physical examination, involved primarily those individuals being processed out of the army through 212 discharges and retirements. The fifth area, control and treatment of drug and alcohol abuse, involved several different areas of action. One area, that of education, was aimed primarily at newly arriving members of the 84th Engineer Battalion. The battalion surgeon spoke to each incoming group of men on the subject of drug and alcohol abuse. In the care of alcoholics, an active program relying upon therapy with Antabuse was established. In the area of other drug abuse, primarily heroin, an impatient and outpatient amnesty program was maintained. The failure of the battalion level amnesty program to achieve any significant results has led to a recent reorganization of the amnesty program, called the Exemption Program, which will rely heavily on the use of the USARV established rehabilitation center at Camp Viking.

h. Religious Activities:

(1) During the reporting period 1 May through 31 October 1971, the chaplain section organized a fund drive for the Sacred Heart Orphanage called the Lennes Deposit Fund. Money was contributed by men of the 84th EBC from their pay. Again, in the same month food and clothing was donated to the orphanage in the name of the battalion. Drug orientation lectures have always been the shared responsibility of the chaplain and doctor. Character Guidance classes are given at regular intervals. Films of a character guidance nature are inserted now and then with commercial films in the H, NCO, and Officer's Clubs to generate discussion and thought. One week was set up as Religious Emphasis Week and was devoted to nightly revival meetings. The event was a complete success. Attendance at the revival meetings numbered well over one hundred each night. Plans are being made to reschedule this type of activity.

(2) Throughout the reporting period, worship services have been the focal point of chapel activities. Roman Catholic Mass is held on Saturday at 1830. A chaplain from the neighboring 11th Combat Aviation Brigade provides the service. A general protestant Service of worship is held Sunday at 1000 hours. The Sacrament of the Lord's Supper is held on the first Sunday of the month. The Sacrament of Baptism and Confirmation are also available. A Sunday night Bible Study is being planned. Most of the chaplain's time is involved in counseling during duty hours. There is a scheduled open counseling on Saturday at 1900 hours. Regular visits are made by the chaplain to the hospital, stockade and all the companies. Needless to say, his personal contact with the men in these informal conditions gives him a chance to learn and instruct.

SUBJECT: Operational Report - Lessons Learned, 84th Engineer Battalion
(Construction), Period Ending 11 Oct 1971, RCS CSFOR - 65 (R3)

i. Civic Actions:

(1) Emphasis in the 84th Engineer Battalion has shifted to ARVN affiliation. Material and Equipment support has been furnished ARVN Units working on the Quang Nam Province Vocational School located in Hoi An and other educational and religious projects in the Da Nang area. Material support was limited to scrap lumber and cement from various projects, but was gratefully received and used by the Vietnamese. Encouraging the ARVN units to help themselves has been the rule. One project involved a demolition team supplied by the 84th Engineer Battalion working in conjunction with approximately 100 Vietnamese farmers to clear 1000 meters of irrigation canal. This project was warmly received by the Vietnamese people and considered a great success in improving relations with the Vietnamese. Voluntary contributions are received monthly from the members of this battalion and donated to local orphanages.

j. PIO:

(1) During the reporting period several improvements were made in the information dissemination by this battalion. Home town news releases and press releases were emphasized strongly by the battalion. A weekly battalion bulletin has added greatly in getting information to the troops. Most recently a battalion newspaper, The Lizard Reporter, was created and is published on a weekly basis.

(2) The 84th Engineer Battalion realizes the importance of keeping the public and troops informed. An increase in command emphasis has resulted in a more efficient and diversified information program.

k. Safety:

(1) Safety continues to be a matter of concern in this command. Safety councils have been formed and meet periodically to discuss problems and recommend solutions. Daily safety lectures have been initiated at company level to constantly remind the personnel of the ever present safety hazards. Vehicular accidents are the most common form of accident because of the over-sized equipment and narrow congested haul routes, coupled with a daily exposure of many pieces of equipment. This battalion has set speed limits of 15 miles per hour in built up areas and 25 miles per hour on the open road. All haul effort is done in convoy with an officer as convoy commander for all convoys of six vehicles or more. This method has been a big factor in reducing the number of accidents. The exposure of other vehicles on the road has been reduced similarly by requiring at least one occupant in the grade of E-6 or above.

l. Logistics:

(1) During the past six months this battalion has processed approximately 42 requisitions a week for construction materials and approximately 25 documents a week for turn-ins and issues of major items.

(2) We have not produced any water in the last six months except here at Camp Hoa Long. We have our own wells with in-line chlorinators and produced

SUBJECT: Operational Report - Lessons Learned, 84th Engineer Battalion
(Construction), Period En'tn October 1971, RCS CSFOR - 65 (R3)

1. Logistics: (Cont'd) ✓

approximately 15,000 gallons of water a day for our own consumption.

(3) At the present time we enjoy a good working relationship with our DSU and with depot. Being located within 15 minutes driving time we haven't had much trouble getting materials if they were available. Near the end of the reporting period more and more items started going under the direct control of the Inventory Control Center, Vietnam. This made the items harder and harder to get released and caused delays up to two or three weeks in release dates. This will become more of a problem as all items go under their control.

n. Maintenance

(1) For this command maintenance has proven to be as much a part of the mission as the mission itself. There are three aspects that must be covered to point out this commands success in this area they are skilled personnel at organization level, adequate repair parts supply and skilled personnel at the direct support level.

(2) There are some pieces of equipment that have caused problems and will continue to cause problems due to their critical nature and the fact that all facets of the U.S. Military posture in this country is diminishing.

(3) The ability of the maintenance personnel at the organization level to perform their mission has been commendable. The maintenance supervisors coming into this battalion within the last six months have been observed to be above average in ability and in knowledge of their fields. These people were able to utilize their experience and ability to maintain an operational readiness posture that is one of the highest in the Republic of Vietnam.

(4) Due to the declining U.S. Military profile, the overall supply system has not been the best, but the personnel at Tech Supply have managed to circumvent this problem by a method of controlled substitution. Controlled substitution means using similar items with different FSN's for the same purpose. This plus knowledge of storage locations at depot has proven to be most useful.

(5) The Direct Support Facility has established an efficient and speedy operation for completing the jobs that are received. This unit will accept work and providing the parts are on hand will complete the job within 3 days.

(6) Combining all of this, it is understandable why this unit is one of the leaders in the field of operational readiness in the Republic of Vietnam.

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

a. Personnel:

(1) SUBJECT: Observation on over strength.

SUBJECT: Operational Report - Lessons Learned, 64 th Engineer Battalion
 (Construction), Period Ending 31 October 1971, RDS CSFOR - 65 (R3)

a. Personnel: (Cont'd)

(a) OBSERVATION: It is evident that individuals are being assigned from standdown units without serious consideration as to the proper utilization of the individuals concerned.

(b) EVALUATION: The assignment of individuals from standdown units merely for the purpose of requiring them to remain in country without regard to the needs of the gaining unit is not consistent with good personnel management practice. The result is the utilization of the individuals for duties other than what he was trained for, thus making the individual lack the desire to produce. Since most of the young soldiers resent being here, when they are just transferred from one unit to another, job to job, without job satisfaction, they are inclined to become bored and resentful and this only results in additional disciplinary problems.

(c) RECOMMENDATIONS: Consideration of the gaining unit's needs, to include projected losses, should be taken into consideration before the wholesale reassignment of personnel. A prime example is when the 14th Engineer Battalion Standdown, personnel were reassigned to the 39th Engineers and before they could even get settled properly they were transferred to this battalion because the 39th was notified to standdown. Regardless of how long an individual has been in country, consideration of the individual needs and value to the command should be taken into consideration prior to reassignment solely for the purpose of retaining the individual in Vietnam to complete the short tour requirement.

(d) COMMAND ACTION: None.

2. SUBJECT: Transfer of short timers from standdown units;

(a) OBSERVATION: This battalion has received personnel with such insufficient retainability that by the time he processes into his unit, he was getting ready to depart again.

(b) EVALUATION: The in country reassignment of individuals with less than 90 days remaining in country does not benefit the individual or the gaining unit. Personnel assigned with only 20, 30, or less than 60 days until DPOOS cannot be properly utilized. To start with, they are bitter for being reassigned with such a short amount of time remaining and they know that in most cases, since they will be leaving soon, the primary job they will be assigned will be one of trying to keep them busy. Many times these individuals feel what they are doing doesn't even help the mission, this cause them to become lax and only adds to disciplinary problems.

(c) RECOMMENDATIONS: Do not reassign individuals with less than 90 days remaining in country to other units in Vietnam.

(d) COMMAND ACTION: None

SUBJECT: Operational Report - Lessons Learned, 84th Engineer Battalion
(Construction), Period Ending: October 1971, RCS CSFOR - 65 (R3)

b. Intelligence: None

c. Operations:

(1) Compaction of Sand Cemants

(a) OBSERVATION: Towed compaction equipment was extremely difficult to pull through sand and required a large prime mover which was wider than the compactor and left ridges in the final compacted surface. A smaller prime mover could be utilized if the entire area of compaction and turn around were saturated with water. However, this method normally exceeded the unit's water delivery capability. Little trouble was encountered in the sand cemant area once it reached GMC.

(b) EVALUATION: A self propelled roller that can move forwards and backwards eliminating the need for turn around would solve the problem.

(c) RECOMMENDATIONS: Self propelled rollers be made an organic part of all Construction Battalions.

(d) COMMAND ACTION: Recommended change to NMRE was submitted on 1 Jun 1971. To provide immediate relief requests for temporary loan were submitted in May 1971.

(2) Booby Traps at Destroyed Culvert Sites:

(a) OBSERVATIONS: While repairing a blown culvert site on QL1, five men were grouped together near the side of the road complacently conducting conversation. Job site security consisted of gun trucks parked on the road bed. No sweep of the area was conducted and no security placed at 360 degrees around the site. The culvert site was swept for mines using mine dogs and mine detectors. An explosive charge was detonated under the grouped individual resulting in 5 KIA.

(b) EVALUATION: Complacency was the killer. Had the site and surrounding terrain been vigorously swept, alert sentries placed around the work site and individuals on the site kept alert and dispersed, casualties could have been avoided or at least minimized.

(c) RECOMMENDATIONS: Frequent training classes and exercises be run to keep personnel aware of the importance and proper method of approaching enemy destroyed sites. A through briefing be conducted prior to moving to the site to insure a well informed and alert repair force.

(d) COMMAND ACTION: Mine and booby trap training has been emphasized in the battalion. Classes are taught at company level on a monthly basis. Booby traps have been made a subject of daily discussion when working on sites susceptible to enemy activity.

EGD-HD-CI

SUBJECT: Operational Report - Lessons Learned, 64th Engineer Battalion
(Construction), Period Ending 1 October 1971, RCS CSFOR - 65 (R3)

c. Operations: (Cont'd)

(3) Transit Mix Concrete:

(a) OBSERVATION: While pouring concrete at the Keystone Retrograde Facility, it was noted that the consistency of the concrete varied from truck to truck. It was learned that the contractors batch plant was consistent with the mix, but the drivers were adding water to make the concrete more workable for the ground crew.

(b) EVALUATION: The strength of the concrete varied with the slump. Strict supervision and quality control was needed at the batch plant and at pour site. If trucks were checked prior to leaving the plant and again during the pour, the quality of concrete could be controlled readily.

(c) RECOMMENDATIONS: A quality control representative be stationed at the batch plant to check the mix and slump of each batch. Another quality control representative at the pour site to check slump on every load during the pour.

(d) COMMAND ACTION: This procedure has been made a part of this battalion's Quality Control SCI.

(4) Compaction:

(a) OBSERVATION: While excavating for form work on the Keystone Retrograde Facility, Hydraulic fill was encountered which could not be compacted. The material remained spongy regardless of the compactive effort applied.

(b) EVALUATION: The hydraulic fill had to be removed, at least to a depth to allow a bridging action when rock was added to the excavated area.

(c) RECOMMENDATIONS: The bad material be excavated to a depth of 7 feet and 6-10 inch surge rock be placed in an attempt to bridge over the spongy base. Six feet of surge rock was adequate to bridge the area and another 12 inches of select fill provided a perfect blend with the surrounding fill. Forms were constructed and concrete poured. Class 60 loads have been driven over the area with no apparent subgrade failure.

(d) COMMAND ACTION: None.

(5) Transporting Pipe to Inaccessible Areas:

(a) OBSERVATION: We were required to lay 1500 feet of 6" PCL line at Spanish Beach to support the Keystone Retrograde Facility. This area was not accessible to vehicle traffic and only light boats could approach it because of a reef. This problem of delivering pipe to the site had to be solved immediately.

EGD. RD-1

SUBJECT: Operational Report - Lessons Learned, 84th Engineer Battalion
(Construction), Period Ending 31 October 1971, RCS CAFER - 65 (R3)

c. Operations (Cont'd)

(b) EVALUATION: Helicopter delivery would be possible, but many trips would be necessary hauling bulky loads. If the pipe was capped at both ends it may be possible to float them to the site.

(c) RECOMMENDATIONS: The 6 inch pipe be capped and transported to the vicinity of the site by barge. Pipe would be floated a shore during high tide. Over 1500 feet of pipe was transported in this manner with no loss.

(d) COMMAND ACTION: None

(5) Expedient Septic Tank:

(a) OBSERVATION: A 450 gallon/day septic tank was needed at the TR-1 MACV Facility. Forming material was critical to other areas of the project and in short supply. A method other than concrete had to be devised.

(b) EVALUATION: Corrugated metal pipe could very possibly be used for the tank and baffles.

(c) RECOMMENDATIONS: A 48" corrugated metal pipe be utilized as the tank and 18" corrugated metal pipe be used as the baffles. A concrete floor and top be constructed. System has functioned perfectly since installation.

(d) COMMAND ACTION: None

(7) Ring Footer:

(a) OBSERVATION: The mess hall at the TR-1 MACV Facility needed plumbing installed under the concrete floor. Plumbing material was not available but all other construction material was on hand.

(b) EVALUATION: The floor slab could not be poured because of the non-availability of plumbing material, but it was extremely important to commence construction in order to meet existing schedules.

(c) RECOMMENDATIONS: Pour a ring footer to permit construction to continue. The building be erected on the footer and when plumbing material became available they would be installed. The concrete floor be poured after erection of building frame and installation of plumbing.

(d) COMMAND ACTION: None

(8) Fabrication of Spreader Bars:

(a) OBSERVATION: Dump trucks to haul rock for the Double Bituminous Surface Treatment on Route ML-13C were critical. Very few dump trucks in the battalion were equipped with spreader bars.

EGD-PD-G

SUBJECT: Operational Report - Lessons Learned, 84th Engineer Battalion
(Construction), Period Ending 31 October 1971, ICS CSFR - 65 (R3)

c. Operations: (Cont'd)

(b) EVALUATION: In order to split a rock evenly a spreader had to be used. More spreader bars had to be made available immediately.

(c) RECOMMENDATION: Manufacturing an appropriate tool by welding a $\frac{1}{2}$ " sheet of steel, cut to pattern, on the back of the 5 ton truck. Two pieces of 2" angle iron, 21" long and $9\frac{1}{2}$ " apart be attached to the end of the steel. A 1" bar, 26" long be placed horizontally and welded to the bottom of the angle iron to connect to the spreader box.

(d) COMMAND ACTION: None

(9) Communications Tower:

(a) OBSERVATION: A 55 foot communications tower was needed at Camp Non Long to improve the existing communication facility.

(b) EVALUATION: Construction with 60 foot timber poles was suggested, but timber poles of that length were not available. Also the location of the tower was so confined that manipulating the poles would be difficult, if not impossible. Old 40 ton crane booms were available at the PDC yard.

(c) RECOMMENDATION: A 6' x 6' x 8' footer be excavated. The first 15' section of boom be placed in the hole and rebar be formed in and around the section. Concrete be poured embedding the tower section in reinforced concrete. From this base, 15 foot sections be added until the desired height is reached.

(d) COMMAND ACTION: None

(10) Road Reconnaissance under Flood Conditions:

(a) OBSERVATION: While inspecting Highway Q1 after typhoon Hester, it was found that the majority of the road was under water.

(b) EVALUATION: A complete road reconnaissance had to be conducted to determine the trafficability of the road. Supply convoys were critical to stranded units.

(c) RECOMMENDATIONS: A foot reconnaissance be conducted using a 5 ton dump truck to follow the ground mounted recon team. All members of the recon team be equipped with inflated life jackets and required to hold onto an anchor line attached to the 5 ton dump truck.

(d) COMMAND ACTION: None

d. Organization: None

e. Training: None

f. Logistics

(1) Procurement of Construction Materials:

(a) OBSERVATION: Many projects are very "short-fused" requiring immediate response. Construction materials are normally held up during the initial phases of the project.

(b) EVALUATION: Procurement of materials requires a certain amount of paper work in the form of bills of materials and requisitions. However, the required administrative work could be completed and processed very quickly. The locations of materials, delivery of materials and continuous follow-up were the factors causing delay.

(c) RECOMMENDATIONS: An officer be assigned to the S4 Section with the primary duty of material readiness expeditor. Procurement of construction materials being his primary function.

(d) COMMAND ACTION: This situation is peculiar only to this combat zone, therefore, the need for an MRE would have to be determined by the existing situation.

g. Communications:

(1) Shortage of Communication Equipment:

(a) OBSERVATION: The 84th Engineer Battalion (Construction) has been assigned combat engineer projects as well as construction projects. This has made it necessary to operate with squad size units, widely dispersed throughout built up areas and on occasion, being isolated on remote fire support bases. Control has been a constant problem because of the lack of sufficient radios.

(b) EVALUATION: Construction battalions involved in tactical operation should have the same squad level communications capability as the Combat Engineer Battalions.

(c) RECOMMENDATIONS: The MRE for Construction Battalions be changed to authorize squad level communications.

(d) COMMAND ACTION: A recommended change to the MRE is now being drafted.

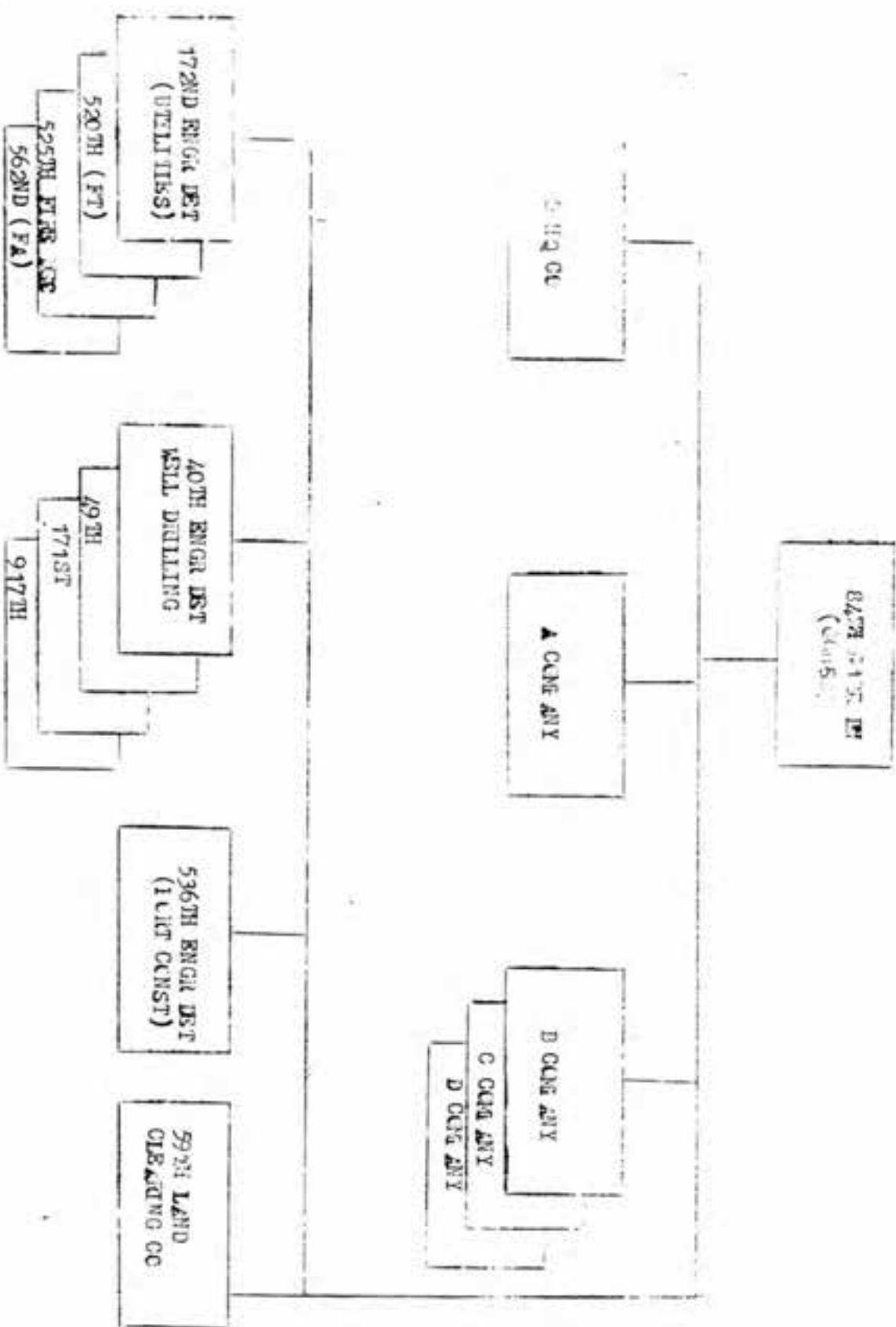
h. Material: None

i. Other: None

2 Incl

1. Schematic Organization
2. Station List

Daniel L. Lyman
DANIEL L. LYMAN
LTC, CEC
Commanding

INCLUSIONS I:
54TH ENGINEER BATTALION (CONSTRUCTION)

INCLUSIONS II

SGN. ENCL.

SUBJECT 84th Engineer Battalion (Construction) Station List

| <u>UNIT</u> | <u>WIC</u> | <u>LOCATION</u> | <u>COORDINATES</u> | <u>FC</u> |
|-----------------------|------------|-----------------|--------------------|-----------|
| 84th Engr Bn (Const) | WEAR-AA | Da Nang | BT063755 | 96349 |
| A Co | WEAF-AC | Da Nang | BT063755 | 96349 |
| B Co | WEAR-BC | Da Nang | BT063755 | 96349 |
| C Co | WEAR-CO | Da Nang | AT955809 | 96349 |
| D Co | WEAR-DC | Da Nang | AT955809 | 96349 |
| 40th Engr Det (WD) | WD2B-AA | Da Nang | BT063755 | 96349 |
| 49th Engr Det (WD) | WEMQ-AA | Da Nang | BT063755 | 96349 |
| 59th Engr Co (LC) | WAIS-AA | Da Nang | AT955809 | 96317 |
| 171st Engr Det (WD) | WDAE-AA | Da Nang | BT063755 | 96349 |
| 172nd Engr Det (Util) | WDYQ-AA | Da Nang | BT061730 | 96349 |
| 520th Engr Det (HG) | WDZL-AA | Da Nang | AT955809 | 96349 |
| 525th Engr Det (WT) | WBCK-AA | Da Nang | AT955809 | 96349 |
| 536th Engr Det (RC) | WBAS-AA | Da Nang | BT063755 | 96349 |
| 562th Engr Det | WDXQ-AA | Da Nang | AT955809 | 96349 |
| 917th Engr Det (WD) | WC8I-AA | Da Nang | BT063755 | 96349 |
| 60th Engr Co (LC) | WEUU-AA | Da Nang | BT067744 | 96349 |

DEPARTMENT OF THE ARMY
HEADQUARTERS, 87TH ENGINEER BATTALION (CONSTRUCTION)
APO SAN FRANCISCO 96345

31 MAR 1972

EGP-BR-OP

SUBJECT: Operational Report - Lessons Learned, 87th Engineer Battalion
(Construction), period ending 31 March 1972, RCS CCR-R (R3)

TO: Commanding General
United States Army Engineer Command, Vietnam
ATTN: AVCC-D
APO San Francisco 96491

Commanding General
United States Army, Vietnam
ATTN: AVHMC-DC
APO San Francisco 96375

Commanding General
United States Army, Pacific
ATTN: GICP-DM
APO San Francisco 96558

TO: Assistant Chief of Staff
For Force Development
Department of the Army (ACOFOR-2)
Washington, D.C., 20310

1. Operations: Significant Activities

a. Command

(1) General: During the reporting period, units of the 87th Engineer Battalion (Construction) underwent a series of deactivations and redeployments. The following deactivations and redeployments of units within the 87th Engineer Battalion (Construction) occurred:

(a) On 31 December 1971, the 511th Engineer Company completed its deactivation operations.

(b) On 7 January 1972, the 551st and 171st Engineer Det ("M") completed their deactivation operations.

(c) On 22 January 1972, the 47th Engineer Det ("M") was redesignated to the 150th Engineer Group (Construction) Long Ninh RVN.

(d) During the period 8 January 1972 to 31 January 1972, the 562nd and 520th Engineer detachments prepared for redeployment to CONUS. All equipment was crated and shipped from Daop Water Thor, in Long RVN on 15 January 1972. On 31 January 1972, 90% of each unit's personnel were redeployed to CONUS with the detachments.

OPS-OS-009

DAFD-077

(e) On 28 January 1972, the 525th Engineer Det. completed deactivation op rations.

(f) During the period 7 January 1972 to 28 January 1972, Company B, 27th Engineer Battalion (Combat) and the 526th Engineer Det ("Util") completed deactivation operations.

(g) During the period 1 February 1972 to 20 February 1972, D Company, 84th Engineer Battalion (Construction) complet d standdown operations.

(h) During the period 1 March 1972 to 15 March 1972, the 40th Engineer Det ("Util") completed deactivation operations.

(i) On 1 March 1972, the 536th Engineer Det ("C") and the 917th Engineer Det ("Util") were reassigned to Engineer Region, "R1 (Provisional).

(j) During the period 1 March 1972 to 31 March 1972, the 84th Engineer Battalion (Construction) less "C" Company completed standdown and a two-man color guard escorted the colors to Engineer Command for safekeeping pending redeployment.

(k) During the period 15 March 1972 to 31 March 1972 the 172nd Engineer Det ("Util") and the 160th Engineer Det ("Util") completed deactivation operations.

(2) Mission:

a. To excavate, haul, compact and grade and to provide stabilized earth substrates for airfields, roads, helicopters, supply storage areas and similar projects.

b. To construct and rehabilitate buildings, port facilities, bridges and drainage structures, and to install and repair utilities.

c. To provide combat/operational support as directed by CG, XXIV Corps.

(3) Commanders and Principal Staff:

| | |
|------------------------------|-----------------------------|
| 84th Engineer Battalion | LTC Daniel J. Lycan |
| WMC, 84th Engr Bn (Const) | Cpt Harry W. Hambric |
| Co A, 84th Engr Bn (Const) | Cpt Robert J. McLean |
| Co B, 84th Engr Bn (Const) | Cpt Ronald L. Witz |
| Co C, 84th Engr Bn (Const) | Cpt Stephan J. Hunt |
| Co D, 84th Engr Bn (Const) | Cpt David T. Block |
| 536th Engr Det (PC) | Cpt Terrence T. Cooney |
| 172nd Engr Det ("Util") | Maj Alfred P. Shover |
| 562nd, 525th, 520th Engr Det | 1LT Forrest I. Johnson (PC) |
| 40th, 49th, 171st, 551st nd | |
| 917th Engr Det | Cpt Samuel J. Smith |

| | |
|--|----------------------------|
| Battalion Executive Officer | Col Robert R. Hardiman |
| S-1 | Cpt Harry Leak III |
| S-3/S-2 | Cpt David J. Wooden |
| S-4 | Cpt Charles R. Joyner, Jr. |
| Communications Officer | Cpt Harry L. Duncom |
| Battalion Surgeon | Cpt Lewis D. Elliston |
| Chaplain | Cpt Pablo Teodoro, Jr. |
| Engineer Equipment Maintenance Officer (ETR) | CMA Eugene F. Thompson |

b. Administration:

(1) Strength:

| | <u>Authorized</u> | | | <u>Actual</u> | | |
|----------|-------------------|----|------|---------------|---|------|
| | Off | W | T | Off | W | T |
| November | 51 | 11 | 1490 | 49 | 6 | 1474 |
| December | 49 | 10 | 1424 | 48 | 5 | 1541 |
| January | 39 | 9 | 1331 | 36 | 9 | 1094 |
| February | 41 | 9 | 1200 | 21 | 8 | 997 |

(2) Awards: During the period 1 November - 31 March 1972 there were 106 Bronze Star Medals, 328 Army Commendation Medals, and 5 Purple Hearts awarded to members of the 84th Engineer Battalion (Construction).

(3) Discipline: There were a total of 393 Article 15's administered during the reporting period. There were 2 convictions by courts-martial.

(4) Local National Help: Local nationals were employed extensively for cleaning battalion equipment, various construction projects - particularly stilling labor and police of areas for "synthetic" pits. Total expenditures for this period was \$10,000.00. The myriad of tasks performed by the local nationals was a tremendous assistance to this Battalion.

1. P. D.-T.

31 March 1972

2. Operational Report - Lessons Learned, 84th Engineer Battalion (Const),
Period ending 31 March 1972, RCS CSFOR-65 (R3)

c. Construction Operations:

(1) A joint effort was undertaken by the 84th and 27th Engr Bn to construct a helicopter re-arm point for the 133rd Inv Co at Phu Bai. The 84th Engr Bn was the initial construction unit with the 27th Engr Bn completing the project. The scope of this project was to construct a 200' x 400' landing area, 8 roads utilizing 3A1 matting and 8 ammo bunkers. Project was completed on 6 Nov 71.

(2) 84th Engr Bn was tasked with upgrading the surface and improving drainage on Tien Sha Road for ARVN's in Da Nang. This was accomplished by placing 1 - 18" culvert and adding rock to the surface as necessary. Project was completed on 9 Nov 71.

(3) 84th Engr Bn constructed 6 - 24' x 12' x 6' Skin Camels. Camels were used to float and protect heavy lines for transferring petroleum products. Project was completed on 13 Nov 71.

(4) 84th Engr Bn was tasked with facilities engineer repairs & utilities in Da Nang. Since tasked, the Battalion has processed and completed 204 job order requests (DA 2701's) involving repairs on electrical systems, towers, buildings, ditches and numerous miscellaneous jobs. In most cases one job order combined several structures eg; 12 job's on electrical repairs totaling 136 buildings. The remaining JOR's were turned over to RR, MR-1 (PROW) on 1 March 1972.

(5) 84th Engr Bn repaired Guard Towers at Camp Horn for XVIII Corps. Detonated superstructure, decking, caps and bracing were removed and replaced. Project was completed on 10 Nov 71.

(6) 84th Engr Bn cleared debris and leveled 600' x 400' of the overrun of Marble Mountain Airfield located in Da Nang. Penetrime was applied to this area as a dust palliative. Project was completed on 4 Dec 71.

(7) 84th Engr Bn was tasked with a major overhaul of water production in Military Region 1. This ranged from cleaning and testing to redrilling. 62 wells were rejuvenated and 10 new wells were drilled during the reporting period.

(8) 84th Engr Bn constructed a helipad at Freedom Hill in Da Nang. This consisted of a 6" lift of rock on a laterite base with an asphaltic sealer as a final surface treatment. Project was completed on 13 Dec 71.

(9) 84th Engr Bn constructed necessary protective structures and wire for security of ASP 107 in Da Nang. Protective wire was employed extensively using a triple band of concertina, double iron tanglofoot and intermediate protective wire. Personnel bunkers and perimeter towers were constructed. Also interior roads were upgraded. Project was completed on 14 Dec 71.

(10) 84th Engr Bn completed construction of the retrograde facility in Da Nang. The initial phase of construction required moving of 12,600 SF area for 2 working facilities, 2 - 200 LF lowline ramps, 90 LF of security fence for protection of high cost, small retrograde items, 7200 LF of security fence for the entire facility. Additionally, 44,000 SY asphaltic vehicle parking area was constructed.

QM-77-CF

31 March 1972

SUBJECT: Operational Report - Lessons Learned, 84th Engineer Battalion (Const),
period ending 31 March 1972, RCS CSFOR-65 (23)

Both salt and fresh water wash facilities were installed along with a flood light
----- to enable night washing operations to be conducted.

(11) 1/30th Engineer Battalion constructed firing positions for 2/4th Artillery at the Northern Artillery Cantlement area in Da Nang. This project consisted of construction of four (4) gunpads. A total of 13 bunkers were installed. Three bunkers were installed at each pad consisting of an ammo bunker, powder bunker and a troop bunker. A command bunker for the entire complex was also installed. A 15 foot observation tower was installed atop one of the bunkers. Protective earth berms for pads and bunkers were emplaced. The project was completed on 5 Jan 72.

(12) Protective concrete revetments were installed by the 84th Engineer Battalion at Ticon for 101st BN Division. This project consisted of the removal of wooden frame, sand filled unservicable revetments and the installation of 168 linear feet of precast reinforced concrete revetment panels. Each panel was nine (9) feet high, eight (8) feet long, six (6) inches thick supported on precast concrete footers. This project was completed on 14 Jan 72.

(13) The 84th Engineer Battalion (Construction) installed protective concrete revetments at MMF for the 11th Combat Aviation Group. This project consisted of the removal of sand filled unservicable barrel revetments and the installation of 6176 linear feet of precast reinforced concrete revetment panels. Three different height panels had to be installed due to the different types of aircraft. 4000 linear feet of five (5) feet six (6) inch high panels for UH-1 type craft, 1360 linear feet of nine (9) foot high panels for medium fixed wing type craft, and 816 linear feet of four foot high panels for OH-58 type craft. All panels were eight (8) feet long, six (6) inches thick supported on precast concrete footers. Phase one of this project was completed on 7 Feb 72. Phase II was 70% complete and turned over to AR, NB-1 (PPW) on 1 March 1972 for completion.

(14) The 84th Engineer Battalion (Construction) once again began emergency fender repair on Da Nang Deep Water Pier. This project consisted of emergency repairs to the fender system which was severely damaged due to docking of large ships. Work commenced 17 January 1972 on berth #3 where repair was needed most. The first task undertaken was removing the damaged fender system and installing a new fender system. After completion of the fender system renovation began on the twelve (12) remaining fender systems by replacing damaged 12" x 12" timber, and lashing salvaged 200 tires to the side of the fenders to act as a shock absorber and prevent damage to pier and ships. Work was completed on berth #3 on 4 Feb 72. Construction has been temporarily halted on further renovation of berths #1, 2 and 4 due to heavy ship traffic at Deep Water Pier.

(15) As a result of Typhoon "Victor", the 84th Engineer Battalion (Const) had the mission of re-constructing guard towers and wire barriers along the perimeter of the 65th Vac Hospital during the period 8 Nov 71 to 12 Nov 71. This project consisted of repairing 11 storm damaged towers and the construction of a 400 meter long berm with triple standard concertina wire along the trench -----. This project was completed 12 Nov 71. Subsequently the security fence was upgraded to a MACV-Phase III type. This additional work was completed on 1 Jun 72.

31 March 1972

SUBJECT: Operational Report- Lessons Learned, 24th Engineer Battalion (Const), period ending 31 March 1972, RCS C3FOR-65 (R3)

(16) The 84th Engineer Battalion (Construction) constructed a security fence and replaced guard towers at NAF during the period 5 Nov 71 to the completion date 4 Feb 72. The security fence project consisted of removing debris along 3500 feet of fence line and repairing fence and gates as needed. 1700 meters of concertina and 200 meters of barbed wire was installed. This project was completed 15 Nov 71. NAF guard tower replacement project consisted of removing eight (8) unserviceable steel guard towers and replacement with 84th Engr. Bn (Const) standard type guard towers. This project was complete on 4 Feb 72.

(17) Military Region 1 Well Drilling Program: The 40th, 48th, 171st, 551st (Const) to conduct well drilling operations over the entire MR-1. Top priority was given to fire support bases and MACV team compounds at isolated locations. As the "draw down" of US troops continued, many new sites were canceled because of the "anticipate" withdrawal of US units. At the end of this reporting period, 62 wells have been refurbished and the following new wells completed:

| <u>Location</u> | <u>Drilling Unit</u> | <u>Dates</u> |
|-------------------------|----------------------|--------------------|
| Son Trinh | | |
| Phu Bai, 65th Evac Hosp | 40th | 1 Sep - 12 Sep 71 |
| Phu Bai, 8th PRFS | 48th | 13 Sep - 10 Jan 72 |
| Freedom Hill 1 | 917th | 13 Sep - 10 Jan 72 |
| Freedom Hill 2 | 171st | 18 Sep - 31 Nov 71 |
| Freedom Hill 3 | 917th | 18 Sep - 20 Oct 71 |
| Tan Ky | 171st | 20 Oct - 27 Oct 71 |
| MML (3 wells) | 917th | 10 Jan - 5 Feb 72 |
| | 40th | 12 Jan - 28 Feb 72 |

An above ground construction crew was assigned from one of the three companies to complete the water distribution system.

(18) The 34th Engineer Battalion (Construction) was tasked on 7 Jan 72 for on-call support of Northern RVN-1 (Phu Bai). This project consisted of constructing and erecting 5 search light towers for perimeter security; erecting 10,000 meters of triple standard concertina perimeter fencing; constructing 6 personnel bunkers; building 1 base defense T02; constructing 3000 meters of main line; upgrading perimeter lights; upgrade and repair of roads in antenna field and leveling field's of fire for the 8th PRFS. The project further consisted of the operation of a raft on the Perfume River until 10 Feb 72; repair of billets and offices for "C" Co 171st; repair of 120th Aviation Highway; repair of revetments at Camp Evans; repair of gun pads at Fire Base Pastogne and construction of a 12 x 12 bunker at Fire Base Sarge. These projects were completed on 20 Feb 72.

QF-HD-OP

31 March 1972

SUBJECT: Operational Report - Lessons Learned, 84th Engineer Battalion (Const), period ending 31 March 1972, RCS CSF02-65 (73)

d. Intelligence:

(1) General: Enemy activity remained light throughout Military Region 1 for the reporting period. There were no enemy initiated incidents directed against the 84th Engineer Battalion during the reporting period. This was due primarily to the monsoon season and the redeployment/inactivation of units of the 84th Eng Bn.

(2) Statistics: No enemy initiated incidents occurred during the reporting period.

(3) Weather: The weather during the reporting period was mostly cloudy with light rain or drizzle. Visibility was 4 to 6 miles during overcast conditions and 2 to 4 miles during rain. Listed below is the table for actual monthly rainfall data for the periods concerned:

| <u>Location</u> | <u>Nov</u> | <u>Dec</u> | <u>Jan</u> | <u>Feb</u> | <u>Mar</u> |
|-----------------|------------|------------|------------|------------|------------|
| Phu Bai | 8.32 | 10.91 | 7.63 | 2.40 | 1.17 |
| Da Nang | 5.73 | 5.45 | 4.24 | Trace | Trace |

e. RVN Training:

(1) During the reporting period, the training program that had been initiated during September 1971 was expanded to include a significant amount of maintenance orientation. In addition to the basic engineering skills of site analysis, and equipment operator training, a majority of the program was addressed to carry operations to coincide with the turnover of Phu Loc Quarry to the RVN. A training team consisting of eleven (11) personnel at the quarry and seven (7) personnel with the RCT concentrated on preventive maintenance programs, supply and acquisition procedures in connection with establishing SL/PLL, and establishing a routine scheduled maintenance program. This program was terminated on 15 Jan 72.

(2) Coordination was effected with RVN Engineers and with the RVN Dacat which had as a stated mission the training of maintenance personnel. Both programs supplemented one another and accomplished several important aspects of Vietnameseization:

- (a) Increased the number of technically proficient personnel.
- (b) Instilled confidence in the RVN Supply System.
- (c) Energized the RVN Supply System by placing the proper demands on it.
- (d) Allowed for the establishment of a long term training program by the user and the supplier to coordinate and communicate capabilities versus requirements.

31 March 1972

SUBJECT: Operational Report - Lessons Learned, 84th Engineer Battalion(Constr), period ending 31 March 1972, RCS CTFOR - 65 (R3)

(e) Allowed for the establishment of a comprehensive preventive maintenance program at company level, the principles of which are applicable at all levels.

(3) In retrospect, this training program, although extremely successful, probably should have been initiated at the outset of the construction season, early in 1971. An early start would have allowed practical application and reinforcement of newly acquired skills, would have permitted smoother transition from a dominant US role to a dominant ARVN role and would have identified potential problem areas in sufficient time to permit corrective action with long term solutions rather than stop-gap measures.

f. Civic Action:

(1) During this reporting period, Civic Action programs centered around equipment support to local nationals.

(2) In late December, the 84th Engineer Battalion leveled an old cemetery which the city of "a "ang had identified for a Bus Stop. All incoming large buses would be met at the bus stop with smaller taxi-buses. Coordination was made to ensure the ARVN/GVN agencies were present in the event that unmarked graves were discovered.

(3) A second bus stop was constructed at Task Force I. This consisted of leveling, grading and ditching an area 300' by 400'. This bus stop will serve the south west side of "a "ang.

(4) A raft was operated by the 84th Engineer Battalion at the POW bridge rafting site which supported local villages as well as the logging industry in the area.

(5) The 84th Engineer Battalion aided several orphanages in the "a "ang area during this period. Aid consisted of money, food, clothes and repair work on orphanage buildings all donated by the men of the battalion.

g. Aviation:

(1) As the 84th Engr Bn continued to re-enlist, the value of the aviation section became increasingly more evident. Throughout the period although there were fewer troop units available to perform given tasks, the work load did not decrease in relative proportion to the decreased number of customers. Since the entire "I" area of operations was serviced by the 84th Engr Bn it would have been impossible to monitor projects without air transportation.

(2) As was the case when the Bn was at full strength, the single most important contribution from the aviation section was the flexibility and mobility afforded the commander- and operations personnel which in turn allowed them to evaluate project management, quality control and effective utilization of all resources. Without the air asset, the Bn could not have been responsive to the needs of the users.

h. Communications:

(1) Communications were sporadic during this period due to requirements for new lines from the 84th Engr Bn to higher headquarters. These problems have been solved and now both land line and teletype circuits are operational. Lesson plans and instructional programs were developed to teach the ever increasing number of personnel using the radio the proper procedures and techniques. These accomplished two objectives:

SGD-ED-OP

31 March 1972

SUBJECCT: Operational Report - Lessons Learned, 84th Engineer Battalion (Crust), period ending 31 March 1972, RCS CEFOR-65 (-3)

- (a) It reduced the number of errors and security violations over the air.
- (b) It enabled more people to pass their own traffic without making the NCS pass it for them.

The class was primarily designed for officers and vehicle drivers. It covered such items as how to read the SOI, authentication and K.C., what to say, and what not to say over the radio with proper use of profanity. Characteristics of the NVRC - 12 and family series of radios and hints for first echelon maintenance were also covered. A practical exercise was also included wherein the participants passed traffic over the radio.

i. Medical:

(1) The primary activities of the medical section for 1 Nov through 31 March 1972 can be categorized into five main areas. The first area, care of sick and wounded, is self-explanatory. The medical section maintained a permanent aid station at Camp Hon Long and one at Phu Lai in addition to providing company aidmen for cutlyine field type operations. The second area, maintaining an up-to-date immunization status within the battalion was also performed at both Da Nang (Hon Long) and Phu Bai installations. The third area of operations, environmental sanitation surveillance and supervision, was provided at all areas where troops from the 84th lived. This included insect control, surveillance of garbage and refuse disposal, rabies surveillance, malaria surveillance and general sanitation. This was done with the liaison aid of field sanitation teams provided by each command unit. The fourth area of operation, physical examination, involved primarily those individuals being processed out of the Army through 212 discharges and retirements. The fifth area, control and treatment of drug and alcohol abuse, involved several different areas of action. One area, that of education, was done primarily at newly arriving members of the 84th Engineer Battalion. The battalion surgeon spoke to each incoming group of men on the subject of drug and alcohol abuse. In the care of alcoholics, an active program relying upon therapy with antabuse was established. In the area of other drug abuses, primarily heroin, an impotent and cut patient amnesty program was maintained. In addition to the battalion level amnesty program there was an additional program called the Exemption Program, which relied heavily on the use of the USAID established rehabilitation center at Camp Viking.

j. Religious Activities:

(1) During the reporting period 1 November 1971 through 31 March 1972, the chaplain section organized a fund drive for the Sacred Heart Orphanage called the Donnas Deposit Fund. Money was contributed by men of the 84th Engineer Battalion. At the same time food and clothing was donated to the orphanage by personnel in the battalion. Drug orientation lectures were as always the shared responsibility of the chaplain and doctor. Character Guidance classes were given at regular intervals. Films of a character guidance nature were inserted now and then with commercial films in the YM, NCO and Officers Clubs to generate discussion and thought.

SD-70-CF

SURVEY: Operational Report - Lessons Learned, 84th Engineer Battalion (Cnct),
Period ending 31 March 1972, RCS 03702-65 (73)

31 March 1972

(2) Throughout the reporting period, worship services have been the focal point of chaplain activities. Two Catholic Masses were held on Saturday at 1830. A chaplain from the neighboring 11th Combat Aviation Brigade provided the service. General protestant service of worship was held Sunday at 1000 hours. The Sacrament of the Lord's Supper was held on the first Sunday of the month. The Sacrament of the Baptism and Confirmation was also available. Most of the chaplain's time was involved in counseling during duty hours. There was scheduled open counseling on Saturday at 1900 hours. Regular visits were made by the chaplain to the hospital stocks and all the companies. Needless to say, his informal contact with the men in these informal conditions gave him many opportunities to learn and instruct.

k. PIO:

(1) During the reporting period several improvements were made in the information dissemination by this battalion. Home town news releases and press releases were emphasized strongly by the battalion. A weekly battalion bulletin helps greatly in getting information to the troops. Most recently a battalion newspaper, "The Lizard Reporter", was created and published on a bi-monthly basis.

(2) The 84th Engineer Battalion realized the importance of keeping the public and troops informed. An increase in command emphasis resulted in a more efficient and diversified information program.

l. Safety:

(1) Safety continued to be a matter of concern in this command. Safety councils were formed and met periodically to discuss problems and recommend solutions. Daily safety lectures were initiated at company level to constantly remind the personnel of the ever present safety hazards. Vehicular accidents were the most common form of accident because of the oversized equipment and narrow congested haul routes, coupled with a daily exposure of many pieces of equipment. The battalion set speed limits of 15 miles per hour in built up areas and 25 miles per hour on the open road. All haul efforts were done in convoy with an officer as convoy commander for all convoys of six vehicles or more. This method was a big factor in reducing the number of accidents. The exposure of other vehicles on the road was reduced similarly by requiring at least one occupant in the grade of E-5 or above.

m. Logistics:

(1) During this reporting period the battalion processed approximately 30 requisitions a week for construction materials. Due to the Army's dwindling role in "W", this unit along with many others experienced increasing difficulty in obtaining materials from the supply activities. Often it was discovered certain materials were just not available. In order to obtain materials in a reasonable time frame it became necessary to hand carry most requisitions thru supply channels.

31 March 1972

SUBJECT: Operational Report - Lessons Learned, 84th Engineer Battalion (Const), period ending 31 March 1972, RCS C7700-65 (P3)

(2) "M" Company 84th Engr Bn (Const) stoodown from 1 February 1972 to 29 February 1972. A total of 750 tons of retrograde materials was turned in to the Keystone facility. This consisted of 120 vehicles and all other items included in the company TOT.

(3) Realizing that the cleaning of equipment is the bottleneck of the retrograding process, it was decided that an efficient wash point would be indispensable. As a result the S-4 section took on the task of creating the desired facility. In order to clean the multitude of equipment the 84th possessed, eight wash pads were constructed. The source of water was the South China Sea. A 350 GPM pump was used to pump the water to the facility and the water was pressurized by using a 600 CFM compressor. This facility greatly assisted the battalion in meeting turn-in schedules.

(4) On 1 March 1972 the 84th Engr Bn (Const) received official stand-down notification. During the period 1 March 1972 to 31 March 1972 a total of 2,433 tons of retrograde material were turned-in. This consisted of 432 vehicles and all other items included in the TOT. No major problems were encountered during this turn-in period.

a. Maintenance:

(1) Equipment maintenance received increased command attention as inclement weather somewhat curtailed general construction projects. Full advantage was taken of this opportunity to prepare equipment for the upcoming construction season.

(2) Most of the equipment required by the residual engineer force was provided from assets on hand in the battalion. The Direct Support Facility (DSF) performed technical inspections on each piece of equipment and team composed of the operator and an organizational mechanic from the losing unit corrected all discrepancies prior to transfer.

(3) It is noteworthy that this organization has consistently maintained one of the highest operational readiness postures in RVN throughout the reporting period. Even the extra work load created by the large volume of transfers referred to in (2) above failed to cause a reduction in operational readiness. This fact is directly attributable to the high caliber of organizational and direct support maintenance personnel in this battalion.

84TH ENGINEER BATTALION (CONSTRUCTION) *

84TH ENGR BN
(CONST)

HQ & HQ CO

A COMPANY

B COMPANY

536TH ENGR DET
(PORT CONST)
1
C COMPANY
D COMPANY

172ND ENGR DET
(UTIL)

40TH ENGR DET
(WELL DRILLING)

160TH ENGR DET
(UTIL)

ENGR REGTOW
TR-1, (PRLOW)

* * Organization at beginning of standdown period, 1 February 1972

84 TH ENGINEER BATTALION (CONSTRUCTION) STATION LIST

29 February 1972

| <u>UNIT</u> | <u>UIC</u> | <u>LOCATION</u> | <u>COORDINATES</u> | <u>IPO</u> |
|------------------------|------------|-----------------|--------------------|------------|
| 84th Engr Bn (Const) | VBAF-MM | Da Nang | BT063755 | 96349 |
| A/84th Engr Bn (Const) | VBAF-MO | Da Nang | BT063755 | 96349 |
| B/84th Engr Bn (Const) | VBAF-BO | Da Nang | BT063755 | 96349 |
| C/84th Engr Bn (Const) | VBAF-CO | Da Nang | BT063755 | 96349 |
| 40th Engr Det (D) | WDZX-MM | Da Nang | BT063755 | 96349 |
| 172nd Engr Det (U) | WDYQ-MM | Da Nang | BT063755 | 96349 |
| 536th Engr Det (PC) | VBAF-MM | Da Nang | BT063755 | 96349 |
| 917th Engr Det (D) | WC8X-MM | Da Nang | BT063755 | 96349 |
| ER, MR-1 (PROV) | WOBROQ | Da Nang | BT063755 | 96349 |
| 160th Engr Det (U) | WDXO-AA | Da Nang | BT063755 | 96349 |

HEADQUARTERS, 84TH ENGINEER BATTALION (CONSTRUCTION)
APO SAN FRANCISCO 96349

EGD-BD-OP

31 March 1972

SUBJECT: 84th Engineer Battalion (Construction) Keystone after Action Report.

Commanding General
US Army Engineer Command, Vietnam
ATTN: AVCC-MO
APO 96491

1. On 10 May 1965 the 84th Engineer Battalion (Construction) departed Fort Ord California enroute to Vietnam. On 11 June 1965 the battalion debarked from the USNS Barrett and set up its bivouac at Qui Nhon, Vietnam, under the control of the 937th Engr Co (CBT). After establishing a temporary base camp in downtown Qui Nhon for approximately five months, the battalion was scattered and moved to new company locations in the vicinity of Qui Nhon.
2. The battalion remained in Qui Nhon until November 1970 and continued a full schedule of construction. Among the many facilities constructed were the Qui Nhon and Lang Biang Depot; the 85th Evacuation Hospital; airfields at Qui Nhon, Da Nang and Phu Bai; ammunition supply points at Qui Nhon and Phu Bai; pipelines, general structures, extensive road construction to include the Bang Son Bridge and participation in combat support operations. After the completion of the depots, the emphasis of work was shifted to upgrading and maintenance of primary LOCs in the vicinity of Qui Nhon.
3. In November 1970 the 84th Engineer Battalion (Construction) moved to Camp Hau Lien, East Da Nang, Vietnam and was assigned to the 45th Engineer Group (Construction). During the last 17 months, the battalion performed numerous outstanding construction efforts. Some of the projects included the Keystone Retractile Facility, Route ML-130, Task Force 1 Facility, ML-1A Bridge, L-n: Gi-ring in Quang Nam Province, Concrete Revetments, Quarry Operations, Civic Action Projects and Typhoon Rehabilitation.
4. During the latter part of 1971, the 84th Engineer Battalion was the sole support battalion for the standdown operations of all non-divisional engineer battalions, companies and detachments remaining in MR-1. Also during the above stated period, the Battalion at one time had a total of 18 units assigned. These units consisted of Land Clearing Companies, Utilities Detachments, a Port Construction Detachment, Fire Fighting Detachments, two Combat Engineer Companies and Well Drilling Detachments with a total assigned strength of 1790 personnel at one time.
5. During the seven year period that it has served in Vietnam the 84th Engineer Battalion (Construction) provided monumental engineer support to the US and free world forces in MR-1 and MR-2 tactical zones. Logistics bases, combat bases, fire support bases and base camps were developed and improved thru 1972.

Upon redeployment of the 84th Engineer Battalion (Construction) on 31 March 1972, Engineer Region, MR-1 (Provisional) (ER, MR-1 (Prov)) will remain in the Da Nang area to carry out operational engineer support missions and facilities engineering missions for MR-1.

6. The 84th Engineer Battalion (Construction) transferred its remaining missions and functions to ER, MR-1 (Prov) on 1 March 1972. The 84th Engineer Battalion (Construction) completed its standdown and personnel reassignment except as noted in incl 3. The turn-in of equipment and transfer of functions were completed well ahead of schedule.

7. This final After Action Report is submitted to record the procedures, problem areas and lessons learned by this Battalion and to provide considerations which may assist other units during standdown operations.

8. A revised list of 84th Engineer Battalion (Construction) activities and the time frame in which they were turned over to ER, MR-1 (Prov) is in Inclosure 1. Inclosure 2 is a summary of observations and problem areas encountered during Keystone activities with recommended solutions. Inclosure 3 is a discussion of problems encountered in personnel reassignment. Inclosure 4 is the Administrative Annex used during standdown.

Daniel L. Lycan

DANIEL L. LYCAN
LTC, CE
Commanding

4 Incl

1. Functions Turn Over
2. Observations on Keystone activities
3. Personnel Assignments
4. Administrative Annex to OPLW 1-72

DISTRIBUTION

- 10 - CG, USARV/GRC/CDW, ATTN: AVOC-NIC-P
3 - CG, XXIV Corps, ATTN: AVTIL-CE
3 - CG, USARV, ATTN: AVDCO-PO
3 - ACSFOR, DM (1 thru channels)
2 - USARPAC, ATTN: GPOF-DT

Functions Turnover to ER, MR-1 (Prov)

| SECTION | TURNOVER DATE |
|--------------------------------------|---------------|
| S-1 | |
| Awards | 10 Mar 72 |
| SIR's | 10 Mar 72 |
| Line of Duty Investigations | 10 Mar 72 |
| Claim Investigations | 10 Mar 72 |
| Health and Welfare | 10 Mar 72 |
| Service School Attendance | 10 Mar 72 |
| Breach of Contract | 10 Mar 72 |
| Compassionate Reassignments | 10 Mar 72 |
| ITT's | 10 Mar 72 |
| Voluntary Retirement | 10 Mar 72 |
| Curtailment of Foreign Service Tour | 10 Mar 72 |
| Hardship Discharge | 10 Mar 72 |
| Request for Transportation | 10 Mar 72 |
| Early Release to Attend School or | 10 Mar 72 |
| Seasonal Employment | 10 Mar 72 |
| Courier run | 10 Mar 72 |
| Postal Operations | 10 Mar 72 |
| S-2 | |
| Reports of Enemy Action | 6 Mar 72 |
| Security of Classified Materials | 6 Mar 72 |
| Review of National Agency Clearances | 6 Mar 72 |
| Suspensions of MAC's | 6 Mar 72 |
| Station List | 6 Mar 72 |
| Non-recurring Reports | 6 Mar 72 |
| S-3 | |
| Construction Directives | 1 Mar 72 |
| Job Order Requests | 1 Mar 72 |
| Liaison Officer Functions | 1 Mar 72 |
| Publicity of Projects | 1 Mar 72 |
| AIK Funds | 1 Mar 72 |
| Well Drilling | 1 Mar 72 |
| SITREPS | 1 Mar 72 |
| S-4 | |
| Issuance of Construction Materials | 6 Mar 72 |
| Materials Stockage | 6 Mar 72 |
| Maintenance | 5 Mar 72 |
| Stockage of Repair Parts | 5 Mar 72 |
| COMMUNICATIONS | |
| Maintenance of Commo Equipment | 8 Mar 72 |
| Operation of Radio Nets | 8 Mar 72 |
| Control and Issue of SCI and SSI | 8 Mar 72 |

Inclosure 1

OBSERVATIONS ON KEYSTONE ACTIVITIES

1. Single Item Processing Point (SIPP) and Multiple Item Processing Point (MIPP). Having assisted two Battalions, Group Headquarters and several detachments in standing down, this battalion was well aware of the problems encountered during standdown operations. The major potential problem area was congestion at the SIPP and the short time frame allocated for turn-in of major items of equipment. To avoid this problem each company was directed to fill out the turn-in paper work during January 1972 and have it edited by the Battalion Maintenance Officer. Concurrent with this, a wash point was constructed in the Battalion area and each company was given scheduled times for washing of equipment. By using these procedures and maintaining close supervision throughout the entire chain of command, the Battalion was able to turn in all of its equipment on time, even though only 8 days were allotted for turn-in. The second area that was considered a potential problem area was MIPP. This area was cleared easily due to each commander being directed to turn in all excess items early and thereafter turn in individual items of equipment as each person departed. Supervision at all levels of the chain of command again played a major role in accomplishing this task in the time frame allotted.
2. Transfer of Equipment to Engineer Region MR-1 (Provisional). Another problem closely related to the SIPP and MIPP scheduling was the transfer of equipment to ER, MR-1, (Prov). A tentative list of equipment required was received from Engineer Command. The best equipment from all units was selected, processed through the Battalion RSM for TI and repairs needed to put it in a Green condition and then set aside for the Engineer Region. Although there were a few minor changes to this tentative equipment list, transfer of all major items of equipment was completed well before the Battalion entered the standdown period.
3. Containment Clearance. The final area considered a potential problem was the turnover of Camp Hoa Long. This problem was avoided because extensive clean up and repair operations were conducted prior to and during standdown. Supervised by key members of the battalion staff, this operation placed Camp Hoa Long in excellent condition for turnover. Close coordination with ER, MR-1, (Prov) was maintained during the clean-up operations. This coordination made it possible to turn over areas as they were cleared by the Battalion.
4. Security. The security of Camp Hoa Long was of prime concern to the Battalion Commander during standdown. Security of the compound during the standdown was maintained by constant revision of guard requirements. As a unit would lose personnel, its guard requirement would be lowered and ER, MR-1, (Prov) would assume a greater share of the guard commitment. This step procedure was very effective in that it allowed ER, MR-1, (Prov) to phase into the role as security force and learn the security procedures from personnel who were well acquainted with them. Security of equipment was also a prime concern of the Battalion Commander. To insure that no equipment was buried instead of turned-in he ordered the entire compound minesweep. This minesweep was conducted by the Battalion S-3 with negative results.

PERSONNEL ASSIGNMENTS

Planning for manning of the Engineer Region was initiated in late December 1971. By 15 January 1972 personnel had been selected to fill approximately 90% of the spaces. Engineer Command was requested to provide the remaining personnel. Selection criteria was MOS qualification, high moral character, and a minimum of five months remaining on Foreign Service Tour when the Battalion entered its standdown period. Personnel were assigned to HQC detailed for duty to the Engineer Region, and relocated into a new unit area within Camp Hoa Long.

As soon as the official notification of the 84th Engr Bn standdown was published, a schedule was drawn up for movement of personnel scheduled for reassignment. Drawdown schedule for personnel was closely coordinated with the plans for turn-in of equipment.

Two problems were encountered in transfer of personnel. First, equipment turn-in was completed well ahead and personnel were available for release early. Reassignment instructions were not received from USAFV far enough in advance to allow any flexibility in movement of personnel. As a result, personnel were available to meet the demands of the In/Out Processing Center, but they could not be released because orders could not be published.

The other critical problem occurred when the criteria for assignment to the Engineer Region was changed after the 84th Engr Bn was part way through its standdown. This change resulted in approximately 150 new persons being designated for the Engineer Region forces. Many of these individuals had already received reassignment orders which had to be cancelled. In addition, the personnel who had initially been assigned to the Engineer Region, had to be reported to USAFV for reassignment instructions and the entire personnel movement schedule had to be revised. This change after the Battalion had begun standdown caused severe turbulence not only in scheduling reassessments and movements, but also to the many individuals involved. Even with this increased workload on the Personnel Section, all departing personnel received their reassignment orders and departed by 31 March 1972.

Inclosure 3

AVCC-MO (31 Mar 72) 1st Ind

SUBJECT: Operational Report — Lessons Learned, 84th Engineer
Battalion (Construction), Period Ending 31 March 1972,
RCS GSFOR - (R3)

HQ, US Army Engineer Command, Vietnam, APO San Francisco 96491

3 APR 1972

TO: Commanding General, US Army, Vietnam, ATTN: AVHDO-DO,
APO San Francisco 96375

The significant activities and lessons learned have been received
and are an adequate reflection of the unit's operation during
this period.

FOR THE COMMANDER:



WESLEY L. DANNER
CWO, USA
Asst Adjutant General

3 Incl
nc

AVHDO-DO (31 Mar 72) 2d Ind

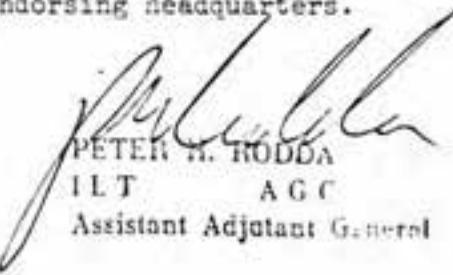
SUBJECT: Operational Report - Lessons Learned, 84th Engineer Battalion
(Construction), Period Ending 31 March 1972, RCS CSFOR - (R3)

Headquarters, United States Army Vietnam, APO San Francisco 96375 6 APR 1972

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

This headquarters has reviewed the Operational Report-Lessons Learned for
the period ending 31 March 1972 from Headquarters, 84th Engineer Battalion
and concurs with comments of indorsing headquarters.

FOR THE COMMANDER:


PETER H. RODDA
1 LT AGC
Assistant Adjutant General

3
Incl
nc

Cy furn:
USARENGRCOMDV

GPOP-FD (31 Mar 72) 3d Ind

SUBJECT: Operational Report-Lessons Learned, HQ 84th Engineer
Battalion (Construction), Period Ending
31 March 1972, RCS CSFOR-65 (R3)

HQ, US Army, Pacific, APO San Francisco 96558

4 MAY 1972

TO: HQDA (DAFD-ZA) WASH DC 20310

This headquarters concurs in subject report as indorsed.

FOR THE COMMANDER IN CHIEF:

M. L. Man

M. L. MAN
1LT, AGC
Asst AG

3 Incl
nc

