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AGO D/A ltr, 29 Apr 1980

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DEPARTMENT OF THE ARMY
Headquarters, 937th Engineer Group (Combat)
APO 96318

ECC-OP

31 January 1970

SUBJECT: Operational Report - Lessons Learned, 937th Engineer Group (Combat), Period Ending 31 January 1970, RCS CSFOR-65 (R2)

THRU: Commanding General
18th Engineer Brigade
ATTN: AVRC-CB
APO 96377

Commanding General
United States Army Vietnam
ATTN: AWHC-DST
APO 96375

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

TO: Assistant Chief of Staff for Force Development
Department of the Army (ACSFOR, DA)
Washington, DC - 20301

1. Section I: Operations, Significant Activities.

a. General

(1) The 937th Engineer Group (Combat) is attached to the 18th Engineer Brigade and is presently organized as shown in Inclosure 1. The group has been assigned an area of operations (AO) which covers the northern portion of the II Corps Tactical Zone from the coast of the South China Sea to the western border of the Republic of Vietnam. Inclosure 2 is a pictorial representation of the Group's AOR and indicates the Area's of Responsibility (AOR) assigned by this headquarters to subordinate combat engineer battalions for combat and operational support.
(2) The 237th Engineer Group has been assigned the following missions by the 18th Engineer Brigade:

(a) Exercise command and control of engineer units assigned or attached to this group.

(b) Provide operational support for the U.S. and Free World Military Assistance Forces (FSMAF) as directed by the Commanding General of the 18th Engineer Brigade.

(c) Plan and execute troop construction programs as directed by the Commanding General, 18th Engineer Brigade.

(d) Provide for the physical security of personnel, equipment, facilities, and construction sites of all units attached or assigned to the 237th Engineer Group (Combat) and provide assistance in obtaining security for all contractor activities within the Group's area of operations.

(e) Further the revolutionary development program through engineering effort.

(3) An AOR within the Group AOR has been assigned to the 20th and the 299th Engineer Battalions (Combat) with assigned missions similar to those described above. The combat battalions are each augmented with one light equipment company to increase horizontal construction capability. The crusher and quarry section of the 15th Light Equipment Company is an exception and is attached to the 815th Engineer Battalion (Construction). The 20th Engineer Battalion (Combat) is further augmented with a land clearing company which has provided land clearing support for the tactical units and province advisors in the area. The 815th Engineer Battalion (Construction) in the highlands is augmented with a construction support company, two (2) well drilling teams, a power distribution team, and a dump truck company. The 86th Engineer Battalion (Construction) on the coast is augmented with the pile driving section of a port construction company. This port construction augmentation has been used primarily in the development of the Qui Nhon port facilities and will be used to aid in the construction of the Bong Son Bridge substructure. The panel bridge company attached to the group remained under the direct control of this headquarters throughout the reporting period and received missions on a task basis.

(4) The organization of the group was slightly changed with the reduction to 0 strength of B Company, 299th Engineer Battalion due to the reduction in the enlisted manning level. There were several moves of company size units during the reporting period. Company B of the 20th Engineer Battalion relocated from Pleiku to Camp Radcliffe on 17 Dec 1969, for the upgrade of that camp. Company D of the 20th relocated to Pleiku from Wooly Billy on 7 Nov 1969 as the transfer of operational areas between the 815th and 20th was completed. Company D of the 86th Engineer Battalion relocated its headquarters element to Phu Tai from Tuy Hoa North on 28 Dec 1969 as the center of maintenance effort for the 86th shifted north. Company B of the 86th moved to Bong Son from Tuy Hoa to begin construction of the Bong Son Bridge on 25 Dec 1969. Company D
of the 299th relocated from LZ Uplift to Camp Radcliffe on 15 Dec to assist in the major upgrade of the camp's defensive systems. The 538th Land Clearing Company moved from the Mang Giang Pass area to road camps along QL-14N from Kontum to Dak To and thence to Ben Het through November and December. In early January the 538th Company relocated to the Kontum area to complete Phase II of land clearing in the Central Highlands.

(5) The group AOR remained unchanged throughout the reporting period.

(6) Throughout the reporting period, the disposition of group effort averaged 20.6% Line of Communication (LOC), 25.7% operational support and 5.0% base construction with the remainder committed to maintenance and overhead. The highland area experienced ideal construction weather throughout the reporting period. The coastal area received steady rains throughout most of the reporting period, tapering off during the final month.

b. Operational Support

(1) General combat engineer support to the 4th Infantry Division continued throughout the reporting period. The 20th and 299th Engineer Battalions continued to provide minesweeps as required and the 815th Engineer Battalion did considerable minesweeping of its work areas on QL-14N to include borrow pits and turnout areas. All battalions performed maintenance and repairs to road surfaces, culverts, bridges and airfields, when required as a result of enemy action, weather damage, or normal improvement activities. Throughout the reporting period, the battalions provided engineer equipment support and technical assistance to infantry, artillery, and aviation units throughout the AO. During the period, the major upgrade of the Camp Radcliffe defensive system was initiated by the 20th and 299th Engineer Battalions. Several projects in support of IFFV Artillery (Metro-Media) were in progress and completed during the period. The 299th Engineer Battalion continued to provide general engineer support to the 173d Airborne Brigade and the 4th Infantry Division. The 20th continued to provide general engineer support to the 4th Infantry Division.

(2) 20th Engineer Battalion (Combat). The headquarters of the 20th Engineer Battalion remained at Engineer Hill near Pleiku. Its companies and platoons were deployed throughout the 20th Battalion AOR. The 538th Engineer Company (LC) had completed nearly all work possible prior to rains in the Mang Giang Pass area and relocated to the Kontum area at the beginning of the report period. From Kontum and road camps along highway QL-14N the 538th cleared Route QL-14 and LTL-512 from Kontum to Bon Het. Extensive clearing was done in the Ben Het and Kontum area prior to a maintenance stand-down, beginning 1 February 1970. During the period, the Ben Het CIDG Camp was completed to include repair of the Ben Het Airfield, all roadwork, a helipad, hardstand area and completion of the artillery positions. In Kontum, the Kontum firebase was completed for an 8"/175mm artillery battery. The Polei Kleng Airfield was repaired by removing MBAl matting and defective fill, and
replacing with compacted select fill and new matting. A searchlight tower was constructed at Engineer Hill and new bunkers were completed. The 71st Evacuation Hospital perimeter was upgraded with new fighting positions and standoff fencing. At Plei Me, reinforced wooden buildings were constructed for CIDG personnel. One company of the 20th set up a pre-fab operation at Camp Radcliffe, An Khe to prefabricate 57 perimeter bunkers, 21 new towers and parts for the rehabilitation of 26 towers and initiate construction of an 8"/175mm firebase. The 20th also supported the crusher quarry complex at Weight-Davis and completed living/fighting bunkers and defensive works at the quarry site.

(3) 299th Engineer Battalion (Combat). During the reporting period the headquarters of the 299th Battalion was located at Qui Nhon. In mid December the S-3 section of the battalion relocated to Camp Radcliffe to control the three company effort at Radcliffe, comprised of A and D companies of the 299th and B Company of the 20th. The battalion's effort was centered at An Khe and in Northern Binh Dinh Province. The battalion continued to maintain QL-1 from Phu Tai to the I-II Corps border and QL-19 from QL-1 to the Mang Giang Pass. As a part of the Metro-Media program, a firebase with gunsight ammo storage, powder bunkers, interior roads and HER was constructed at LZ Two Bits. At Classic firebase the drainage and interior road upgrade was completed. A 320 ft, 8 span timber pile, steel stringer bridge was completed over the Kim Son river. Route LTL-3A continued to be upgraded until heavy rains forced a halt. This route, joining QL-1 to LZ Pony, is being paved with a table mix surface for the 173d Airborne Brigade. Revolutionary development support continued in northern Binh Dinh Province with the upgrade of Route 505 and other unnumbered roads, until rain stopped construction. At An Khe, four 3000 BBL POL storage tanks, destroyed by enemy action, were partially replaced with one 10,000 BBL bolted steel tank. The tank was tested and turned over to Qui Nhon Support Command in January. Also at An Khe, 30 new perimeter bunkers and 13 new towers were constructed for the 4th Division. Twenty six perimeter towers were completed. Construction was begun on 25 sets of vehicle gates and 147 aircraft revetments for the Camp Radcliffe upgrade. Extensive land clearing was accomplished at Camp Radcliffe with 1100 acres of exterior clearing and 2160 acres of interior clearing completed. The 299th was assisted by an attached platoon of the 687th Engineer Company (LC) for the clearing operation. A contingency plan was partially implemented at LZ Uplift, LZ Crystal and the ROK Cavalry Regiment LZ on QL-19 including the construction of hasty helicopter revetments and rearm points.

(4) 84th Engineer Battalion (Construction). The 84th Engineer Battalion was tasked for several operational support missions in the Tuy Hoa - Phu Hiep and Qui Nhon areas. As operational support missions, the 84th completed pipeline burial at Tuy Hoa, a CH-54 helipad at Phu Hiep, a ford on LTL-7B and began upgrade of the Vung Chua Mountain Signal Site access road to an all-weather 2½ ton capable route. The 94th also assumed some missions of the 299th when the 299th was reduced in strength. These included aircraft revetments in the Qui Nhon area and portions of the revolutionary development support in Northern Binh
Dinh Province.

(5) The 815th Engineer Battalion (Construction). The 815th Engineer Battalion was tasked for several operational support missions in the Kontum - Dak To area, although the major effort was on the LOC project of QL-14W. The 815th repaired the Kontum Airfield, constructed POL berms at Dak To, a new helicopter refuel area at Dak To, and operated the Kontum sand pit as operational support missions. The 815th was also alerted for possible tasks under an IFPV contingency plan. Both the 84th and 815th Battalions supported crusher, quarry and asphalt plant operations by operational support.

(6) 509th Engineer Company (Panel Bridge). During the reporting period the 509th Engineer Company used its dump truck hauling capability in support of the 815th Engineer Battalion's LOC program on QL-14W. The attached 3d platoon of the 5531 Engineer Company provided bridge trucks which were used to haul materials and equipment for the 815th Engineer Battalion, 20th Engineer Battalion, and 937th Engineer Group. The company worked extensively on Sector IV of the Engineer Hill perimeter to include culvert installation, earthwork, clearing, and the construction of earth-filled PSP and timber bunkers.

c. Construction Operations:

(1) General

(a) During the reporting period an average of 20.6% of the 937th Engineer Group's effort was devoted to LOC work and an average of 5.0% to base construction. This represents a 5% increase over the previous quarter. The percentage allocated to base construction remained about the same as during the previous period. The 6% increase was applied to LOC, as all projects on the coast and in the highlands proceeded at increased speed. Weather was ideal in the highlands for highway construction. On the coast, the declining coastal monsoon slowed progress somewhat in November and December.

(b) In accordance with the USARV suspension of vertical construction, no new major projects were undertaken during the period. Significant progress was made in completing or closing out vertical construction projects already underway when the suspension was received.

(2) LOC Construction:

(a) During the reporting period LOC effort was applied on QL-14W from Pleiku to Dak To, and on QL-1S from Tuy Hoa to Tuy An. Construction was begun on the 25 KM segment of QL-14S from Dragon Mountain to the intersection of LTZL-7B. This section, being built by the 20th Engineer Battalion, is to be constructed to CENCOM Class C. Chop Chai Quarry, located at Tuy Hoa North, operated one 225 ton pioneer primary and secondary crusher and one 75 ton primary crusher in support of QL-1 construction. The 102d CS Company operated a 250 TPH Cedar Rapids primary and secondary unit and a 75 TPH primary at Wooly Bully II in support of QL-14W. The Quarry section of Company A, 815th Engineer

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Battalion operated a 225 Pioneer TPH primary and secondary crusher and 250 TPH Universal primary and secondary crusher at Webb Quarry. The 584th LE Company operated one 225 TPH Pioneer primary and secondary crusher at Weight-Davis Quarry in support of QL-14G. Asphalt for QL-14N and QL-14S was provided by a 120 TPH Standard Steel plant operated by Company A, 815th Engineer Battalion at the CIA Yard in Pleiku and a 60 TPH BLH Madsen Plant run by the 102d CS Company at Wooly Bully II. Company D, 815th Engineer Battalion erected a Cedar Rapids soil stabilization plant at Wooly Bully II for the production of asphaltic cold mix to be used as base course on QL-14N.

(b) A total of 27,627 cubic yards of base course was used to prepare 10.3 KM of road, and 4,656 tons of asphalt were placed over 4.0 KM on QL-1 from Tuy An to Tuy Hoa. Hot mix asphalt to support this section of road was supplied by an RMK contract from the RMK Asphalt Plant located at Tuy An. The target date for completion of this project is 28 Feb 70. A total of 121,749 cubic yards of earth fill were placed on QL-14N from Kontum to Dak To. Sixteen KM of this road were prepared through base course, utilizing 30,152 tons of bituminous cold mix; and 11.4 KM of asphalt paving were laid, using 14,009 tons of asphalt. On QL-14N from Pleiku to Kontum, 6.7 KM of road was overpaved using 5493 tons of hot mix asphalt. 1 April has been set as the target date for completion of QL-14N from Pleiku to Dak To.

(3) Base Construction

(a) The provisions of the USARV message suspending all vertical construction less than 90% complete in August 1969 remained in force throughout the period. Vertical construction effort was expended towards completion of facilities more than 90% complete.

(b) Cantonment Facilities - Major cantonment facilities completed during the period were:

1. Qui Nhon AUTOSEVOCOM.
2. Cold Storage Warehouse, Qui Nhon.
3. POW Compound Cheo Reo - This facility, a prisoner of war detention camp, was undertaken during the period by the 20th Engineer Battalion. The project was 99% complete at the end of the quarter, with only minor electrical and finish work remaining.

(c) Port Construction in Qui Nhon continued during the period. The Ammo Barge Off Loading Facility was completed with the installation of fire fighting and lighting systems, offshore range panels, and preparation of hardstand areas and access roads. The construction of mooring buoys and protective dolphins in Qui Nhon harbor were undertaken and completed by the 697th Port Construction Company.

(d) MACV Get Well program - Vertical facilities for MACV advisors were completed during the period at Tuy Hoa and Dak To, with

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minor finish work remaining in Dak To. Wells were dug and pumps installed by the 49th WD Detachment at Dak To, Cheo Reo, and Phu Tuc. Work continues at Phu My, Bong Son, Hoai An, Hoai Nhon, and An Tuc. Material shortages continue to be a problem.

d. Engineer Reconnaissance: Teams continued to obtain and update information on bridges in the group AO. Airfields in need of repair were also surveyed, and borrow pits and potential quarry sites were located to support the LOC program.

e. Intelligence

(1) Intelligence information received from major tactical units within the group's AO has been evaluated and disseminated to all subordinate units within the command on a daily basis.

(2) The S-3 Officer and NCOIC have attended periodic intelligence briefings and area defense conferences.

(3) The 937th Engineer Group Security Detachment is under the operational control of the S-2 with administrative control remaining under HHC. The Security Detachment continues to provide day and night patrols and ambushes, entry and exit control to Engineer Hill, fire support with mortars and operates the Group's NCS and TOC. The Security Detachment has conducted cordon and search operations in the villages of Plei Bong, Plei Rong Dup and Plei Hol. There were 4 MEDCAP missions conducted in the village of Plei Rong Dup and 2 MEDCAP missions conducted in Plei Hol.

(4) A physical security inspection of Engineer Hill, Webb Quarry and the CIA Yard was conducted on 12 November 1969 by II Corps. Inspection was satisfactory with minor discrepancies being corrected.

(5) Base Camp Security continues to be of major concern to this and higher headquarters. Goals as proposed by 18th Engineer Brigade are being implemented. Work on the eleven base camps of this group's responsibility is being completed based on the requirements of the local tactical commander, the tactical situation and terrain and the permanency of the site.

(6) Enemy activity that affected engineer operations was as follows:

(a) 7 culverts destroyed.
(b) 31 ambushes involving engineer troops
(c) 2 bridges destroyed.
(d) 25 standoff attacks against engineer troops.

(7) Engineer units have reported the following mining statistics:

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14 mines detonated, 33 mines found by engineers. Mining incidents reported by all major tactical units within the Group's AO are as follows: 42 mines detonated, 77 mines found.

(8) During the months of December and January a reconnaissance was made of all major and secondary roads within the 937th Engr Op AO to update the II Corps Route and Bridge Data Book.

(9) On 15 January 1970, a conference was held at Engineer Hill covering the effects of the RPG-2, RPG-7 and 122mm rockets. This conference was conducted by the Combined Material Exploitation Center (CMEC). According to CMEC, the minimum distance for chain link standoff fence is 15 feet from the structure being protected.

f. Training: The 937th Engineer Group continued to conduct a training orientation program for all newly assigned personnel immediately after their arrival in the group. The training includes combat skills, security procedures, safety and convoy procedure, first aid, sentry duty and weapons familiarization and firing. Continued emphasis was placed on anti-sapper tactics.

The group continued to emphasize the training initiated in the previous quarter to ARVN operators. Training continued for the 6th Engineer ARVN Group at Tuy Hoa by the 84th Engineer Battalion, primarily in welding, pile driving, and operation of the 40 ton crane. In the Pleiku area, the 815th Engineer Battalion trained operators from the 20th ARVN Engineer Group as bulldozer operators at Webb Quarry, and in asphalt plant operation at the CIA Yard.

g. Civic Action: Each battalion continued to conduct limited civic action programs with one of the primary contributions being the LOC Program itself. Additional assistance as provided by the road construction crews at villages in the form of upgrading of entrance roads to villages and technical assistance. Also, work crews on QL-14N are augmented by local villagers. Some of the specific civic action projects conducted were:

(1) 815th Engineer Battalion aided one of its civilian workers by rebuilding his home which had been destroyed by fire.

(2) 20th Engineer Battalion provided unusable and unsalvageable material to the 11th Intel Plt (ARVN) in Pleiku to rebuild dwellings that had been destroyed in an enemy sapper attack.

(3) Headquarters, 937th Engineer Group, is now allowing representatives of the Pleiku Pig Association to pick up wet garbage from Engineer Hill in order to provide feed for their pigs.

(4) Headquarters, 937th Engineer Group, has aided the villagers of Plei Rong Dup by conducting MEDCAPS and also providing assistance and some materials for the defense of the village.
h. Administrative Operations:

(1) Personnel. During the reporting period the only change in the authorized manning level was the restoration of 67 spaces in the 299th Engineer Battalion. After applying this manning level increase the group enlisted strength of 4123 was at 97% of the authorized manning level of 4247 at the end of the reporting period.

(a) Officers: At the end of the reporting period, officer strength was 183 of an authorization of 184 for 99.5%.

(b) Warrant Officers: 88% of the authorized warrant officers were assigned at the end of the period with an increase to 94% within approximately one week.

(c) Senior NCO's (E7, E8, and E9): With 164 assigned of an authorization of 186, the group is at 88% strength in this category. The assigned strength includes 14 EM in grade E6 who are on the current standing list for promotion to grade E7 and are filling E7 positions. The majority of the shortages of the senior NCO's has been in the maintenance field, i.e. MOS 62B40 and MOS 63040. This has had a detrimental effect on the maintenance operations within the group.

(d) Enlisted grades (E1 thru E6): The number of personnel assigned at the end of the period constituted 97% of the authorized manning level at the close of the reporting period. Of some significance is the fact that 12 of the group replacements received during the latter part of the period were light weapons infantrymen, MOS 11B. This trend is expected to continue for some time.

(2) Supply. The construction at the Ben Het Special Forces Camp by the 20th Engineer Battalion was started in the preceding quarter but carried over through more than half of this reporting period. During the construction, this project required a larger volume of logistical support than all the concurrent projects within the group combined. The total lumber used for this project was almost a million board feet from depots in Da Nang, Cam Rhan Bay, and Qui Nhon. Movement was by water to Qui Nhon and overland from Qui Nhon to Ben Het. The lumber was almost exclusively hauled by the supporting units which entailed a great deal of coordination and cooperation. The latter part of the reporting period primarily included the obtaining and moving of asphaltic materials for the 815th Engineer Battalion (Construction), which is operating two asphalt plants and a soil stabilization plant. During the months of November and December these plants consumed about 10,000 drums AP-3, RC-800, and MC-800. This alone required 200 S&P trailers (12 tons each) during those months. The construction of Bridge 241 at Tuy Hoa is a cooperative effort between the 84th Engineer Battalion (Construction) and the 201st ARVN Engineer Battalion with the U.S. unit providing the materials. Closer cooperation was developed during this period which has resulted in a better accountability of materials being used. This was accomplished by a meeting between the two cooperating battalions and the respective group headquarters to work out problems.
(3) Maintenance:

(a) During this report period the NOR (Non-operational Readiness) rate for USARV designated critical items has averaged 10.6%. This is a decrease of 2.2% from the last report period. Due to the present turbulence caused by the transfer of the 510th Maintenance Company of the 62d Maintenance Battalion and the activation of the 794th Maintenance Company we can foresee a slight increase in our nonoperational readiness rate for a period of four to six weeks pending receipt of technical reference material and appropriate tools and test equipment by the 794th Maintenance Company.

(b) A representative of the Group Maintenance Section has been placed on the Material Readiness Expeditor team to help in delivering repair parts directly from the depot to the user to reduce the present delay in repair parts resupply.

1. Aviation:

(1) The Aviation Section continued its mission of re-supply, reconnaissance and liaison. During this quarter the section flew 687 hours. Aircraft utilization and flight time were as follows:

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<td>e. 53-7953 U-6A</td>
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(2) Two OH-23G's were turned in during the period: 64-15153 was turned in due to excessive maintenance, 64-15306 was turned in by directive from USARV. They are to be replaced by five OH-53's expected next quarter.

(3) The section has begun performing its own periodic inspections. The result has been improved maintenance, faster turn-around time, and crewmember experience. Quality control is cross checked by a Technical Inspector from our direct support unit. This gives us an objective inspection by other than our own Technical Inspectors.

(4) Since the dry season has started dust has caused certain main rotor head bearings to wear at an alarming rate. The section was issued a new UH1H during the first part of November. A majority of the bearings in the main rotor head had to be changed within 300 hours of flight time. Especially susceptible are the damper control tube red-end bearings and the scissors lever bearings which have both been replaced.
for the second time. The stabilizer bar main support bearings have also worn out during this period, which is unusual. The frequency of lubrication on the head has been increased, however, the bearings showing the most wear are red-end bearings which are not lubricated.

(5) The section strength is 7 officers and 15 enlisted men.

j. Communications:

(1) Operations Review:

(a) As a result of unit relocations, there were three telephone circuits activated and two circuits de-activated during this reporting period. On 8 December circuit V1210 between the An Khe area switchboard and Company D, 299th Engineer Battalion, LZ Uplift, was de-activated. On the following day, circuit V2444B was activated between Headquarters, 84th Engineer Battalion, Qui Nhon and its two company task force in Tuy Hoa. On 12 January, the 167th Signal Company activated circuits V7301 and V6803. V7301, a speech plus circuit, replaced V2383/V2384 and was re-terminated from Qui Nhon to the 299th Engineer Battalion Forward at An Khe. V6803 provided the 299th Engineer Battalion Forward with a sole user voice circuit to its rear elements in Qui Nhon.

(b) A radio wire integration (RWI) station was attempted with the Radio Control Group, AN/GRA-6, which has since been replaced by a newer piece of equipment. Although modifications to adopt the AN/GRA-6 for use with the Radio Set RT-524 were made and voice contact was established, a loud, high pitched tone presented the subscriber with audio discomfort. The feedback could be eliminated by lowering the volume; however, this in turn weakened the strength of the audio.

(c) Implementation of the Nestor program within the Group is progressing at a slow rate because of the non-availability of x-mode interconnecting cables in the supply system. This unit received additional secure voice equipment in December and, again, the lack of cables precluded its use.

(d) On 15 January 1970, the Group Communications Section successfully completed the 18th Engineer Brigade Command Maintenance Inspection with a rating of 95%.

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

   a. Personnel
      NONE

   b. Intelligence
      NONE

   c. Operations
      (1) Defoliating Perimeter Wire
          (a) **Observation**: Repeated burnings decrease the effectiveness of perimeter wire.

          (b) **Evaluation**: Defoliation of perimeter wire thru repeated burnings reduces elasticity of concertina wire, allowing rolls of concertina to spread and remain in the opened configuration, permitting a less restricted passage for infiltration.

          (c) **Recommendation**: Burning to defoliate perimeter wire should be used with caution, and chemical defoliants should be considered in lieu of repeated burnings.

      (2) Installation of Concertina
          (a) **Observation**: The recommended linear distance for one roll of concertina is too great to create an effective barrier.

          (b) **Evaluation**: FM 5-15 recommends that one roll of concertina be stretched to cover a distance of 15 meters. This spreads the coils of wire far enough apart to allow easy infiltration by sappers. When concertina rolls were stretched over only 5 meters they presented a much more formidable barrier. A former sapper viewing two such emplaced triple-standard concertina fences with 25 feet of well emplaced tanglefoot stated that it would require a minimum of four hours to pass through such a fence undetected.

          (c) **Recommendations**: That concertina be emplaced at a density of one roll per 5 linear meters and that where possible it be employed in conjunction with tanglefoot.

   d. Organization
      NONE

   e. Training

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(1) Team Effort in Overlapping Programs:

(a) OBSERVATIONS: Effort was being duplicated in separate related programs of the Surgeon and the Chaplain.

(b) EVALUATION: Programs were being conducted by both the Surgeon and the Chaplain in associated areas such as VD and morality, drug abuse, alcoholic beverage consumption and safety. When these programs were combined into a team approach a more efficient and meaningful overall program was established.

(c) RECOMMENDATIONS: The team effort approach be applied to overlapping programs to promote efficiency and results.

f. Logistics

(1) Transportation of Materials

(a) OBSERVATION: Difficulty was encountered in keeping industrial complexes supplied with the large quantities of asphalt products required.

(b) EVALUATION: Heavy Class I commitments often preclude bulk shipment of asphalt materials required for LOC Construction. Road interdiction in the highlands caused an unsteady flow of these materials causing critical shortages at plant locations. To counter this problem the storage capacity of the industrial complexes was increased from a two week supply to a four week supply.

(c) RECOMMENDATION: That the storage capacity of all industrial plants be sufficiently large to accommodate a four week supply of asphalt products.

g. Communications

(1) COMSEC Equipment Cables

(a) OBSERVATION: Interconnecting (x-mode) and power cables are not issued through COMSEC logistic channels along with each issue of secure voice equipment KYB-6. Rather, the cables must be requisitioned through normal supply channels.

(b) EVALUATION:

Based on past experience, COMSEC equipment is normally readily available for immediate issue, but the lack of the required cables prevent the equipment from being used. Cables, if issued by the COMSEC unit along with each item of secure voice equipment, would minimize the non-operational time and enhance the effectiveness of the Nestor Program. This situation applies primarily to a fixed configuration.

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Each installation kit, FSN 5810-832-9141, includes x-mode and power cables which could possibly be eliminated from the kit to avoid duplication of items if cables were to be issued by COMSEC channels.

(c) **RECOMMENDATIONS:** Interconnecting and power cables should be issued with each piece of Nestor equipment and eliminate cables from each installation kit.

h. Material

NONE

i. Other

(1) Convoy Security

(a) **OBSERVATION:** Non-recoverable APC bodies can be used effectively in the rapid construction of extremely efficient gun trucks.

(b) **EVALUATION:** The use of an old APC body mounted on a 5 ton bridge truck makes an ideal gun truck for organic convoy protection. The APC requires very little work to prepare it for this purpose. It fits within the side rails of the bridge truck and is easily held in place with four cables. Fixtures are already in place for mounting crew-served weapons and radio antenna. At the completion of its use as a gun truck, the APC body can be returned to salvage, but its interim use has provided a hardened vehicle with a minimum of effort.

(c) **RECOMMENDATION:** Non-salvageable APC bodies be released to units for use as gun trucks.

C. E. ADAMS

COLONEL, CE

Commanding

3 Incls:

1. Gp Org Chart End of Reporting Period

2. AO Boundaries thru Reporting Period

3. Unit Locations End of Reporting Period

Incls 2 and 3 wd HQ, DA

DISTRIBUTION:

11 - CG, 18th Engr Bde
2 - USARPAC, ATTN: GOOP - DT (Airmail)
3 - CG, USARV, ATTN: AVHDC - DST (Courier)
2 - File

**FOR OFFICIAL USE ONLY**
AVBC-OP (31 Jan 70) 1st Ind
SUBJCT: Operational Report - Lessons Learned, 937th Engineer Group
(Combat) for the Period Ending 31 January 1970, RCS GSFOR-65 (R2)

DA HEADQUARTERS, 18TH ENGINEER BRIGADE, APO 96377 20 MAR 1970

TO: Commanding General, U.S. Army Vietnam, ATTN: AVBC-DST, APO 96375

1. The Operational Report - Lessons Learned for the 937th Engineer Group (Combat) has been reviewed by this Headquarters and is considered to be an accurate account of the Group's activities during the reporting period.

2. This Headquarters concurs with the observations and recommendations of the Group Commander, with the following comments added:

Reference: Section 2, item g. Non-concur. Cables and installation kits for NESTOR secure voice equipment were previously in COMSEC supply channels. Facilities at the COMSEC logistics units are unable to handle this extra volume of material. Cables and kits have been obtained from the Long Binh Depot. It is hoped that all depots will have the items in stock in the near future.

H. E. COTTIEN, JR.
Colonel, GE
Acting Commander

CP:
2 - AC of S for Force Development, DA
1 - CO, 937th Engr Gp

FOR OFFICIAL USE ONLY
AVHCG-DST (31 January 1970)2d Ind
SUBJECT: Operational Report - Lessons Learned, 937th Engineer Group (Combat), Period Ending 31 January 1970, HCS CSFOR-65 (R2)

Headquarters, United States Army, Vietnam, APO San Francisco 96375 4 APR 1970

TO: Commander in Chief, United States Army, Pacific, ATTN: GPOF-DT, APO 96558

This headquarters has reviewed the Operational Report-Lessons Learned for the quarterly period ending 31 January 1970 from Headquarters, 937th Engineer Group (Combat) and concurs with the comments of endorsing headquarters.

FOR THE COMMANDER:

[Signature]

D. J. WINTER
LT, AGC
Assistant Adjutant General

Cy fum:
18th Engr Bde
937th Engr Cp
SUBJECT: Operational Report of HQ, 937th Engineer Group (Combat) for Period Ending 31 January 1970, RCS CSFOR-65 (R2)

HQ, US Army, Pacific, APO San Francisco 96558 8 APR 70

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

This headquarters concurs in subject report as indorsed.

FOR THE COMMANDER IN CHIEF:

D.D. Cline
2LT, AG
Asst AG
Operational Report - Lessons Learned, HQ, 937th Engineer Group

Experiences of unit engaged in counterinsurgency operations, 1 Nov 69 to 31 Jan 70.

CO, 937th Engineer Group

31 January 1970

N/A

N/A

N/A