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AGO D/A ltr, 29 Apr 1980

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

3 July 1967

IN REPLY REFER TO

AGAM-P (M)(28 Jun 67) FOR OT

SUBJECT: Operational Report - Lessons Learned, HQ, 40th Signal Battalion (Const)

TO: SEE DISTRIBUTION

1. Forwarded as inclosure is Operational Report - Lessons Learned, Headquarters, 40th Signal Battalion (Const) dated 6 February 1967. Information contained in this report should be reviewed and evaluated by CDC in accordance with paragraph 6f of AR 1-19 and by CONARC in accordance with paragraph 6c and d of AR 1-19. Evaluations and corrective actions should be reported to ACSFOR OT within 90 days of receipt of covering letter.

2. Information contained in this report is provided to the Commandants of the Service Schools to insure appropriate benefits in the future from lessons learned during current operations, and may be adapted for use in developing training material.

BY ORDER OF THE SECRETARY OF THE ARMY:

KENNETH G. WICKHAM
Major General, USA
The Adjutant General

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OPERATIONAL REPORT - LESSONS LEARNED

Section I: Significant Organization Activities

The battalion, though originally organized under TOE 11-25E, 11-26E, and 11-27E, is composed of a Headquarters and Headquarters Detachment located at Long Binh, RVN, Company A located at Long Binh, RVN, Company B located at Cam Ranh Bay, RVN and Company D located at Qui Nhon, RVN.

Each of the subordinate units has been "tailored" to fit the mission. Although all equipment necessary, under the "tailoring" concept, is not on hand, the personnel have been reorganized into a more flexible team that is better able to accomplish our mission in country. An appropriate MTOE is being submitted which, while not requiring any additional personnel, will request MOS changes, grade structure changes and more importantly, a significant increase in equipment to better satisfy the job at hand.

The equipment requested will be primarily Engineer type items (heavy construction) but of commercial design as the types available in the military inventory are inadequate for the particular requirements of this battalion.

Work has progressed on all projects although materiel shortages continue to hamper activities. Cam Ranh Bay is approximately 50% complete, while Qui Nhon and An Khe are approximately 10% complete. This is due to erratic Engineer support and shortages of poleline hardware, cable and other materiel. Long Binh project has not been started, per se, but work is progressing on the interim project formulated by TMA, Long Binh. Interim projects are underway at Vinh Long and Soc Trang.

During the reporting period, the companies, engaged in mandatory training, readiness drills and various activities normally required that do not directly affect project progress.

Section II: Commanders Observations and Recommendations

PART 1. Observations (Lessons Learned)

1. Personnel: None
2. Operations: Engineer Support

Item: Class IV Outside Plant Telephone Projects are being hampered by the non-availability of Engineer support equipment, particularly entrenchers and bulldozers.
SUBJECT: Operational Report - Lessons Learned

Discussion: The construction of the Outside Plant Telephone System in RVN requires the use of bulldozers and entrenchers which must be obtained by coordination with local Engineer units. These units are normally over-committed and cannot provide the necessary equipment when and where it is needed. Coordination of this matter has been made at the highest levels, however, it is impossible to obtain guaranteed support due to conflicts in priorities and commitments.

Observation: The only logical way of overcoming this problem is to make each company independent by providing it with the necessary heavy engineer equipment it requires. This is being accomplished by submitting a tailored MTOE which includes a bulldozer, entrencher, cable plow, pneumatic drill and other construction equipment.

**V-17 and V-18 Trucks**

Item: Telephone Construction Vehicle, V-17 and Earth Boring Vehicle, V-18 are all over-age vehicles with no new replacements in the military inventory. These vehicles are the backbone of outside plant telephone construction.

Discussion: The V-17 and V-18 vehicles deployed to RVN with this battalion required special deployment permission as they were in materiel readiness category "Amber" due to over-age. There were no replacement vehicles available then and the situation, as far as can be determined at this level, is still the same and getting more critical because the hard use being made of the machines here is causing them to wear out faster. Maintenance, though crucial, is not the crux of the problem. The vehicles are wearing out.

Observation: Action should be taken at a high level to introduce new V-17 and V-18 vehicles, or suitable substitutes, into the military inventory. Exploration should be made of the feasibility of adopting a commercial model of the vehicles such as one produced by Pitman Corporation of Missouri utilizing an International-Harvester truck frame with oversized tires and incorporating the features of both the V-17 and V-18 on the same body. This particular "Pitman Polecat" is versatile but the auger apparatus is not as efficient as the V-18 in most types of soil. It might be possible to develop a military version of the "Pitman Polecat" which is mounted on a standard military chassis and has an improved auger. A letter, through command channels, has been written concerning V-17 and V-18 procurement.

**Commercial Material**

Item: Construction requirements for outside plant telephone facilities in RVN are unlike anything experienced before by the Army in that a vast amount of commercial material is being introduced in country for installation.
SUBJECT: Operational Report - Lessons Learned

Discussion: The TOE for signal construction companies is inadequate for work being performed in RVN. Special techniques requiring non-military standard tools, equipment and hardware are required for proper installation. Poleline hardware of all sorts, but with emphasis on hardware for "Figure 8" cable and other Polyethylene Insulated Cable special hardware, is sorely needed. Lack of this materiel is forcing construction practices to be less than optimum. In addition, requisitions for which FSNs are known, are not being filled due to shortages or because the materiel cannot be located.

Observation: Immediate action should be taken by proper authorities to make available to the construction companies the proper tools, equipment and hardware necessary for the efficient and safe installation of the outside cable plant. USARV Form 47's and standard requisitions have been processed requesting the proper tools and equipment. This has had limited results.

3. Training and Organization: No new comment.

4. Intelligence: None

5. Logistics.

Material Trans-shipment

Item: Trans-shipment of materiel in RVN requires close coordination, careful planning, and safe packaging.

Discussion: This battalion has found it necessary to transship materiel all over RVN to our working elements. It has been found that there is a definite need for adequate planning before the actual movement of materiel takes place. Ensure that there is a place for everything and everything is in its place.

Observation:

a. All transportation documents should be filled out exactly as prescribed by regulations and directives.

b. Pack the equipment in a manner which will minimize damage through rough handling.

c. Clearly indicate the addressee on each face of the shipping containers. This marking should include the addressee's title, location and a telephone number at which a representative of the receiving unit can be reached.
Subject: Operational Report - Lessons Learned

Operational Summary:

- d. Once the cargo is called forward by transportation authorities, close coordination must be maintained by the consignor, transportation activity and the consignee. It is also wise for the addresses to be present at the port of destination when the cargo arrives.

- e. These constitute minimum actions to preclude errors or lost cargo.

Convoys

Item: Obtaining information on scheduled convoys moving between points connected by unsecure roads is almost an impossibility, particularly if it involves movement between CTZs.

Discussion: This battalion has occasion to move supplies, personnel and equipment to outlying areas on construction projects. This necessarily involves over-the-road transit. We have found that it is almost impossible to obtain accurate information on the availability of convoys, routing and the possibility of attaching vehicles and personnel to existing convoys.

Observation: There should be some traffic management agency or point of central contact where information on scheduled convoys, particularly between CTZs, can be coordinated or obtained.

6. Other: None

Part 2. Commanders Recommendations

1. Personnel: Unless something is done to integrate new personnel into this battalion prior to August 1967, all experienced personnel will rotate almost simultaneously. It is suggested that this problem can be overcome by assigning incoming 36C and 36E personnel to the battalion with instructions to transfer a like grade and MOS to another unit. This will balance the rotational hump and will prove beneficial to all units involved.

2. Operations:

   a. That approval of the MTOE for this unit, which requests Engineer construction equipment, be approved.

   b. That new V-17 and V-18 trucks, or a commercial substitute, be procured and introduced into the inventory to replace like vehicles that are wearing out.
SUBJECT: Operational Report - Lessons Learned

3. Training and Organization:

A school should be started in CONUS to teach Polyethylene Insulated Cable splicing and commercial closure techniques utilizing commercial material. This is extremely important to the installation and maintenance of the extensive cable plant being installed in RVN. Very few cable splicers are in the Army and more must be trained. These trainees must be well versed in new techniques not necessarily related to lead covered cable.

4. Intelligence: None

5. Logistics:

a. That trans-shipping requirements be simplified to make it as easy as possible for units to get materiel to their dispersed subordinate elements.

b. That some office be established as a control or information center on routes and convoys so that when a relatively few vehicles have to be moved thru unsecure areas, joining previously constituted convoys can be coordinated.

c. That action be taken to stock the Army inventory with the necessary hardware and construction materiel required to support the construction being done in RVN. Not since Korea has such extensive new construction in telephone facilities taken place and the supply system has just about exhausted the comparatively small stocks that were on hand. Lead time on new items is extensive but it must be coped with in hopes that eventually the proper materiel will be available when and where it is needed. If nothing else, the new materiel, when it does arrive, can be used to replace the inferior or fabricated construction that has had to be installed to provide the service required in the shortest possible time frame.

6. Other: None

KIRBY LAMAR
LTC, SigC
Commanding
SUBJECT: Operational Report for Quarterly Period Ending 31 January 1967
(RGS CSFD-65)

HEADQUARTERS, 2d Signal Group, APO 96491

THRU: Commanding General, 1st Signal Brigade (USASTRATCOM), APO 96307
Commanding General, United States Army Vietnam, APO 96307
Commanding General, United States Army Pacific, APO 96558

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

   submitted by the 40th Signal Battalion has been reviewed and found to be adequate, with the following comments noted:

   a. Section I, Significant Organization Activities, paragraph 4:

      (1) This points out the need as recognized by Telephone Management Agency (TMA) for requirements programming. This must be done on a minimum time frame of 6 months. With proper consolidation of all 6 months advance planning programs, hardware and other material requirements can be ordered with at least a 6 months lead time. This is done to some extent by TMA now, but must be proliferated and taken over for integration by a requirements unit such as ISAV Signal.

      (2) Once the material is in-country it should then be turned over to the organization that will be tasked with its installation. The present practice whereby CERIA controls all cable is extremely inefficient causing many lost manhours, considerable time consumption by staff agencies to get it released and slippage in projects completion. Unit control would eliminate the present inefficiencies introduced by CERIA controls and organizational inadequacies.

   b. Section II, Part 1, paragraph 2, V-17 and V-18 Trucks: Two letters have been forwarded by this headquarters to headquarters, 1st Signal Brigade by 2d Indorsements dated 13 December 1966 and 6 February 1967.

   c. Section II, Part 1, paragraph 5, Convoys: The comment on convoys is not valid in that the 40th Signal Battalion only shipped items by convoy once and were given all assistance 2d Signal Group and 1st Signal Brigade could give them. There are points of contact in Saigon at TMA for assistance in routing into convoys.
Operational Report for Quarterly Period Ending 31 January 1967

Section II, Part 2, paragraph 1: All incoming 360 personnel are being assigned to the 40th Signal Battalion and 360's from the 40th Signal Battalion are to be reassigned to other 2d Signal Group units as directed by the Personnel Office, 2d Signal Group. There are not 360 personnel authorized or assigned to the 40th Signal Battalion.

2. Further, I fully concur in the Commander's Observations and Recommendations portion of the report.

3. This endorsement is marked "FOR OFFICIAL USE ONLY" solely for the protection of material contained herein, and will be cancelled when separated from protected material.

2 Incl
1 Added Incl
2. Organizational Chart

[Signature]
Colonel, SigC
Commanding
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SCCVOP (10 Feb 67) 2d Ind
SUBJECT:  Operational report for Quarterly Period Ending 31 January 1967

HEADQUARTERS, 1ST SIGNAL BRIGADE (USASTRATCOM), APO San Francisco 96307
19 MAR 1967
TO: Commanding General, United States Army Vietnam, ATTN: AVC-DC,
APO 96307

Commanding General, United States Army Strategic Communications Command, Washington, D.C. 20315

1. IAW AR 1-19, subject report from the 40th Signal Battalion (Const) is forwarded.

2. Reference Section 1, paragraph 4 and paragraph 1a, 1st Indorsement. There is no single answer to the lack of adequate quantities of pole line hardware and other material. Requisitions for these materials were submitted in 1965 and early 1966 specifically for these projects. These requisitions have not been filled. Recently, these requisitions were re-validated by CONUS supply centers, indicating that the materials are still due in. In the interim, installation of projects has been attempted by obtaining needed materials through special procurements and "push packages". While these measures have been effective, the quantity of materials and delivery times have lagged behind the time frame established by base development plans. Much improvement in the degree of supply has been noticed in the past month, due to receipt of depot stockage of outside plant materials.

   a. Reference paragraph 1a(1), 1st Indorsement. Requirements programming for cable hardware and associated materials was initiated by this headquarters in July 1966. As a result of this programming some materials for outside plant installation are now arriving in Vietnam. Construction units can obtain this material by requisition through the depot system.

   b. Reference paragraph 1a(2), 1st Indorsement. Some control of cable assets at brigade level is necessary to insure the available supply is released and installed on the highest priority projects. Only multipair cable is controlled by this headquarters, cable hardware and associated items are requisitioned by the units.

3. Concur in Commander's Observation as modified by 1st Indorsement.

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SUBJECT: Operational Report for Quarterly Period Ending 31 January 1967

Reference Item V-17 and V-18 Trunks. This headquarters was informed by USARV on 2 March 1967 that 1 each V-17A and 2 each V-18A were released to the 40th Signal Battalion. USARV also dispatched a message to USATAC requesting availability and lift data on outstanding requisitions on V-17A's and V-18 vehicles. Actions above resulted from letters mentioned in 1st Indorsement. The above information has been disseminated to the 2d Signal Group.

4. Concur in Commander's Recommendations as modified by paragraph 1d 1st Indorsement with the following comment. Reference paragraph 5c, action was initiated in August 1966 to stock these materials. A Mission Essential List of these items was developed and 1st Logistical Command has placed the items on the list on requisition for depot stockage. Subordinate elements of this command have been directed to submit requisitions based on the list. Supply centers in CONUS are presently shipping these materials.

FOR THE COMMANDER:

WILLIAM A. HIGGINS
Colonel, S.W.
Dep't.
Subject: Operational Report—Lessons Learned for the Period Ending 31 January 1967 (RCS CSPOR-65)

Headquarters, United States Army Vietnam, APO San Francisco 96307

To: Commander in Chief, United States Army, Pacific, ATTN: GPOP-CT
APO 96558

1. This headquarters has reviewed the Operational Report—Lessons Learned for the period ending 31 January 1967 from Headquarters, 40th Signal Battalion (Construction) as indorsed.

2. Pertinent comments follow:

a. Reference Paragraph 4, Page 1; Paragraph 1a, 1st Indorsement; and Paragraph 2, 2d Indorsement, concerning erratic engineer support and shortages of materials: The very nature of the engineer mission in RVN often precludes or interrupts work on a project due to combat support or a sudden priority task. As the engineers are totally committed, this is a frequent occurrence, although every attempt is made to follow through on a project once it has been started. Comments by indorsing headquarters concerning the shortages of hardware and cable are considered appropriate and adequate.

b. Reference Item on Class IV outside plant telephone projects, Pages 1 and 2; and Paragraph 2a, Page 4: Since the 40th Signal Battalion is a STRATCOM unit, the MTOE referred to would have been forwarded through USASTRATCOM channels.

c. Reference Item on V-17 and V-18 trucks, Page 2; Paragraph 2b, Page 4; Paragraph 2b, 1st Indorsement; and Paragraph 3, 2d Indorsement: One V-17 and two V-18 vehicles were issued to the 40th Signal Battalion in March. By inquiry, this headquarters discovered that USATAC had received no requisitions for additional vehicles of this type. On 8 March the unit was directed to resubmit the necessary requisitions.

d. Reference Item on commercial material, Pages 2 and 3; Paragraphs 2c and 5c, Page 5; and Paragraph 4, 2d Indorsement: Recommend that USACDC review the TOE of signal construction battalions to determine if there is a general application of the requirement for local TOE augmentation or for revision of current equipment authorizations due to the new signal material in use. Concur with action taken by 1st Signal Brigade, as stated in 2d Indorsement. This headquarters has advised the 40th Signal Battalion to furnish data on shortages of authorized equipment. Based on the reply, this headquarters will provide assistance to obtain the equipment.
AVHGC-DH (6 Feb 67)
SUBJECT: Operational Report—Lessons Learned for the Period Ending 31 January 1967 (RCS CSFOR-65)

- Reference Item on transhipment of material, Pages 3 and 4, and Paragraph 5a, Page 5: Concur with the procedures adopted by the unit to facilitate material transhipment.

- Reference Item on convoys, Page 4; Paragraph 5b, Page 5; and Paragraph 1c, 1st Indorsement: Concur with comments of 2d Signal Group in 1st Indorsement.

- Reference Paragraph 1, Page 4, and Paragraph 1d, 1st Indorsement, concerning personnel shortages: Concur with action taken by 2d Signal Group as stated in 1st Indorsement, in alleviating unit’s shortages.

- Reference Paragraph 3, Page 5, concerning the need for instruction in polyethylene cable splicing: Concur. A technique using a commercial polyethylene material called SCOTCHCAST, has been introduced into RVNA which provides a satisfactory splicing technique for polyethylene cable. Training in this material should be incorporated in present CONUS training courses.

FOR THE COMMANDER:

[Signature]

STANLEY E. SCHULTZ
Major, AGC
Asst Adjutant General

1 Incl
nc
GPOP-OT (10 Feb 67) 4th Ind
SUBJECT: Operational Report-Lessons Learned for the Period Ending
31 January 1967 (ACS CSFOR-65), HQ 40th Sig Bn (Const)

HQ, US ARMY, PACIFIC, APO San Francisco 96558 11 MAY 1967

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

This headquarters has reviewed the Operational Report-Lessons
Learned for the period ending 31 January 1967 from Headquarters, 40th
Signal Battalion (Construction) and concurs as modified by the foregoing
endorsements.

FOR THE COMMANDER IN CHIEF:

[Signature]

2 Incl
nc

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ORGANIZATIONAL CHART

AS OF: 31 January 1967

40th
SIGNAL BATTALION
LONG BINH

HHD
LONG BINH

CO A
LONG BINH

CO B
CAM RANH BAY

CO D
QUI NAM

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