UNCLASSIFIED		
AD NUMBER		
AD867298		
LIMITATION CHANGES		
TO: Approved for public release; distribution is unlimited.		

FROM:

Distribution authorized to U.S. Gov't. agencies and their contractors;

Administrative/Operational Use; MAR 1970. Other requests shall be referred to Army Assistant Chief of Staff for Force Development, Attn: FOR-OT-UT, Washington, DC 20310.

AUTHORITY

ago, d/a ltr, 29 apr 1980

THIS REPORT HAS BEEN DELIMITED AND CLEARED FOR PUBLIC RELEASE UNDER DOD DIRECTIVE 5200.20 AND NO RESTRICTIONS ARE IMPOSED UPON ITS USE AND DISCLOSURE.

DISTRIBUTION STATEMENT A

APPROVED FOR PUBLIC RELEASE;
DISTRIBUTION UNLIMITED.



DEPARTMENT OF THE ARMY

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

IN REPLY REFER TO

AGDA (M)

(19 Mar 70)

FOR OT UT 694160

27 March 1970

Operational Report - Lessons Learned, Headquarters, 73d Signal Battalion, Period Ending 31 October 1969

SEE DISTRIBUTION





1. Subject report is forwarded for review and evaluation in accordance with paragraph 4b, AR 525-15. Evaluations and corrective actions should be reported to ACSFOR OT UT, Operational Reports Branch, within 90 days of receipt of covering letter.

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

BY ORDER OF THE SECRETARY OF THE ARMY:

l Incl

as

KENNETH G. WICKHAM

Major de eral, USA The Adjutant General

DISTRIBUTION:

Commanding Generals

- US Continental Army Command
- US Army Combat Developments Command
- US Army Materiel Command

Commandants

- US Army War College
- US Army Command and General Staff College
- US Army Armor School
- US Army Aviation School
- US Army Combat Surveillance School
- US Army Electronic Warfare School
- US Army Engineer School
- US Army Field Artillery School
- US Army Infantry School
- US Army Signal School
- US Army Southeastern Signal School

Reproduced by the CLEARINGHOUSE for Federal Scientific & Technical Information Springfield Va. 22151 UNCLASSIFIED REPORT

DISTRIBUTION NO FOREIGN WITHOUT APPROVAL OF ASSISTANT CHIEF OF STAFF FOR FORCE DEVELOPMENT (ARMY) ATTH FOR OT UT. WASHINGTON, D.C. 20316

DEPARTMENT OF THE ARMY HEADQUARTERS, 73RD SIGNAL BATTALION (SPT) APO US Forces 96312

SCCPV-NG-SS-OP

13 November 1969

SUBJECT: Operational Report-Lessons Learned, 73rd Signal Battalion (SPT), Period Ending 31 October 1969, RCS CSFOR-65 (R2)

See Distribution

1. Operations: Significant Activities.

a. General:

- (1) The reporting period represented a diverse and dynamic quarter during which the battalion was cited for earlier operations and strove to continue providing the finest possible communications. Activity in the radio, wire and commenter areas produced growth, refinement and consolidation of assets. A training program for ARVN personnel was initiated by the battalion. Experimental, test radio systems provided greater flexibility and capabilities for the battalion. At the close of the quarter, the transfer of the 362nd Signal Company (TROPO) to the II CTZ Signal Battalion effected substantial changes in the organizational structure and areas of responsibility within the 73rd Signal Battalion. The battalion was engaged in operations for 92 consecutive days during the reporting period.
- (2) During the reporting period, there have been several company level changes of command within the battalion. On 17 August 1969. Major Lloyd D. Umbaugh assumed command of the 362nd Signal Company vice Major Frank L. Mills who returned to CONUS. First Lieutenant Edwin A. Moyer assumed command of the 73rd Signal Battalion Headquarters Detachment on 20 August 1969 vice First Lieutenant John J. Barry who departed Vietnam for CONUS. On September 4, 1969, Captain Robert G. Heaton assumed command of Company C, 41st Signal Battalion vice Captain James M. Canty who No tated to CONUS. Five days later, on 11 September 1969, Captain Bruce A. Gorton took command of the 362nd Signal Company vice Major Lloyd D. Umbaugh who is now serving as the Area Communications Commander in Dalat. In recent changes of command, Captain Ronald L. Wilson took command of Company C, 41st Signal Battalion on 2 October 1969 vice Captain Robert G. Heaton who was assigned to the II Corps Tactical Zone Signal Battalion. On 26 October 1969, First Lieutenant Stanley G. Hash became the Detachment Commander of HHD. 73rd Signal Battalion vice Captain Edwin A. Moyer who became the site commander at Lang Bian Mountain. In other administrative changes, Major Charles L. Fisher Jr. assumed the position of Battalion

FOR OT UT 694160 Inclosure SCCPV-NG-SS-OP

13 November 1969
SUBJECT: Operational Report-Lessons Learned, 73rd Signal Battalion (SPT),
Period Ending 31 October 1969, RCS CSFOR-65 (R2)

Executive Officer on 1 September 1969 vice Major Richard C. Jamison who became the S-4 at 21st Signal Group in Nha Trang. On 4 October 1969, Captain John C. Speer became the S-4 Officer vice First Lieutenant Jonathan R. Lines who was serving as interim S-4 Officer.

(3) VIP Visits:

DATE	PERSON (S)	PURPOSE OF VISIT
2 Aug	1) BG Jack A. Albright (Deputy CG, 1st Sig Bde) 2) COL Thomas C. Musgrave (CO, 21st Sig Gp)	Official opening and ribbon cutting ceremony for the new CRB Army CommCenter.
12 Aug	 BG Geoffrey Cheadle (USAF, Assistant Chief of Staff, MACV J-6) LTC L. C. Tolbert (CO, 1881st Comm Sq) 	Staff Orientation visit of the Tactical Interface Point (TIP) on Hill 184
17 Aug	1) COL Thomas C. Musgrave (CO, 21st Sig Gp)	Official opening of C/41st Sig Bn newly renovated mess hall at CRB
18 Aug	 COL Thomas C. Musgrave (CO, 21st Sig Gp) LTC Humphrey J. Martin (CO, 43 Sig Bn) LTC James G. Tice (Deputy CO, 21st Sig Gp) LTC James N. Chapman (CO, 459th Sig Bn) MAJ Guy P. Morse (Interim CO, II CTZ Sig Bn (Prov) CPT James L. Walker (ADJ, 21st Sig Gp) CPT Dennis A. Kaiser (Commo Officer, 21st Sig Gp) 	To attend 21st Sig Gp Battalion Commander's Conference hosted by 73rd Sig Bn, CRB
22 Aug	 MAJ Robert P. Erogi (1st Sig Bde) MR. Paul J. Lacky (1st Sig Ede, Civilian Engineer) 	Evaluate CRB cable plant and to update briefings on job being performed
16 Sep	1) LTC Louis H. Rajchel (Junior Officer Advisor, 1st Sig Bde)	Talk to and counsel all Junior Officers in 73rd Sig Bn concerning their retention in the USA

SCCPV-NG-SS-OP 13 November 1969 SUBJECT: Operational Report-Lessons Learned, 73rd Signal Battalion (SPT), Period Ending 31 October 1969, RCS CSFOR-65 (R2)

19 Sep	 MG Hugh F. Foster (CG, USATRATCOM PAC) BG Thomas M. Rienzi (CG, 1st Sig Bde) COL Thomas G. Musgrave (CO, 21st Sig Gp) 	Presentation of Meri- torious Unit Commen- dation to 73rd Sig Bn for outstanding ser- vice in the Republic of Vietnam.
21 Sep	 MAJ Edward O'Keefe Jr. (1st Sig Bde, C/C Section) CW3 Paul J. Zitek (!st Sig Bde, C/C Section) CW2 F. X. Kuntman (2!st Sig Bde, C/C Section) 	Orientation visit
23 Sep	1) LTC Robert A. Swett (Chief of 21st Sig Gp Comm Section)	Familiarization of Battalion area
23-24 Sep	1) COL John E. Hoover (CO, Regional Comm Gp)	Visits to sites of 21st Sig Gp/RCG Co-locations
1-6 Oct	1) COL Travis J.L. Stephens (Signal Unit Advisory Branch, MACV J.6)	Courtesy calls on Signal Site tours at BOL, GIA, BMT, LBM, and PRL.
28 Oct	 COL Paul A. Vnencak (Director of Operations, ist Sig Bde) COL John I. Williamson (Director of Signals, Royal Australian Army) LTC Barry H. Hockney (Australian Signal Officer, Vietnam) 	Tour of 73rd Signal Battalion Sites at LBM, PRL, PRG, and CRB.

b. Activities:

(1) Personnel: During this reporting quarter, the battalich has continued to emphasize the awards program as reflected by the number of award recommendations submitted to the 21st Signal Group from this Headquarters. During August, this Headquarters forwarded 29 award recommendations to the 21st Signal Group including three (3) Brinze Star Medals, twenty—two (22) Army Commendation Medals and four (4) Gertificates of Achievements. In September, this Headquarters submitted thirty—ona (31) award recommendations, including (6) Bronze Star Medals, twenty (20) Army Commendation Medals and five (5) 21st Signal Group Certificates of Achievements. The month of October saw the largest number of award recommendations submitted during this quarter with forty—three (43) award recommendations forwarded. During the month, there were eight (8) Bronze Star Medals, one (1) Air Medal, fourteen (14) Army Commendation Medals, and twenty (20) 21st Signal Group Certificates of Achievement recommendations forwarded. Summarizing the entire quarter—there were one hundred and

INCL

SCCPV-NG-SS-OP

13 November 1969

SUBJECT: Operational Report-Lessons Learned, 73rd Signal Battalion (SPI), Period Ending 31 October 1969, RCS CSFOR-65 (R2)

three (103) award recommendations submitted to the 21st Signal Group. Ninety (90) awards were received back from Brigade and presented during August, September and October. This total was composed of twelve (12) Bronze Star Medals, fifty-one (51) Army Commendation Medals and twentyseven (27) Certificates of Achievement. Also during the quarter, HHD, 73rd Signal Battalion and Company C, 41st Signal Battalion received 1st Signal Brigade Certificates of Achievements for August and September in recognition of outstanding safety performance during the fourth quarter of the fiscal year 1969, by sustaining no recordable accidents.

(a) The following is a list of critical MOS shortages within the Battalion:

MOS	AUTHORIZED	<u>ACT UAL</u>
31L20 Field Radio Relay Equipment Repairman	19	3
31M2O Kadio Relay & Carrier Attendant	70	57
36C2O Lineman	99	70
51L20 Refrigeration Specialist	7	3
72020 Telephone Switchboard Operator	75	65

The shortages of trained personnel in MOS's 31L20, 31M20, 51L20 and 72C20 are still creating a hardship in the operation of the numerous communications sites within this battalion. There is a critical need for Field Radio Relay Equipment Repairmen, Radio Relay & Carrier Attendants and experienced Refrigeration Specialists. There has been a substantial gain in teletype Repairmen (31J20) since the last quarterly report and this has helped to alleviate maintenance and repair problems that units have experienced in this particular area.

(b) The following are percentages of fill of the battalion's requisitions:

MONTH	REQ	FILL	4
AUG	257	153	59 · 5%
SEP OCT	162 134	83 73	51.2% 54.4%
001	124		مربيد والمدر

(c) Promotions from grade E6 to E7 still remain extremely slow. There have been three (3) promotions in the entire Group during the last quarter, two of which were in the 73rd Signal Battalion.

DATE OF PROMOTION LIST	NUMBER OF EM ON LIST
31 AUG 69	74.
28 SEP 69	69
27 OCT 69	67

SCCPV-NG-SS-OP

13 November 1969

SUBJECT: Operational Report-Lessons Learned, 73rd Signal Battalion (SPT),
Period Ending 31 October 1969, RCS CSFOR-65 (R2)

- (2) Intelligence: During this quarter, special emphasis was placed on physical security. Throughout the battalion, new defensive improvements were planned and implemented. Courtesy inspections were held by the 97th MP Battalion. As a result of these inspections, the battalion recognized weak points in site defense, and implemented new procedures to improve security at all sites.
- (a) Company C, 41st Signal Pattelion, Hill 184 received a physical security survey conducted by the 97th MP Battalion Inspection Team. An overall rating of excellent was given to the area. Minor deficiencies are now being corrected. The defense posture of Beaver Site (Battalion Headquarter's area) is presently being re-evaluated. A new defense plan has been drafted and action has been initiated to upgrade and increase all fighting positions. Improvements include a new five man fighting bunker for defense of the northwest corner of Beaver Site, sand filled barrel revetments around the main CommCenter building at Beaver Site, and a new two story guard/fighting tower to be constructed at Beaver Site to increase observation capabilities.
- (b) New measures to improve the defensive posture of Lang Bian Mountain were implemented, during this reporting period, with special emphasis placed on perimeter security. The perimeter has been extended to include the chopper pad and site motor pool, as suggested in last quarter's security inspection. The upgrading of the perimeter included construction of four new fighting bunkers and barriers around the entire perimeter. A new barrier is being constructed with three (3) complete rows of concertina wire stacked to form a pyramid on top of the tangle foot.
- (c) Project "duffle bag" at Lang Bian Mountain is progressing at a very slow rate. Assistance has been requested for the repair of inoperable equipment. The extreme erosion problems that were occurring last quarter have been improved with installation of excsion check dams constructed by the 577th Engineer Battalion. It is still, however, difficult to keep this equipment buried.
 - (3) Operations:
 - (a) Organization:
- (1) The structure of the 73rd Signal Battalion (SPT) was significantly altered at the end of the reporting period, when the 362nd Signal Company (TROPO) moved its headquarters to Cam Ranh Bay and became part of the II CTZ Signal Battalion. In conjunction with the move, Company E, 43rd Signal Battalion assumed operational control of Pr'Line, Don Doung and Kraus Compound Signal Sites and relocated its operations from LPM to Dalat in order to rejoin the company headquarters which had moved the month before. Company E, 43rd Signal Battalion row operates the entire portion of Battalion communications located within central II CTZ.

SCCPV-NG-SS-OP

13 November 1969
SUBJECT: Operational Report-Lessons Learned 73rd Signal Bettalion (SPT)

SUBJECT: Operational Report-Lessons Learned, 73rd Signal Battalion (SPT), Period Ending 31 October 1969, RCS CSFOR-65 (R2)

(2) On August 12, 1969, Company C, 41st Signal Battalion Operations was relocated from Hill 184 to an area adjacent to the company orderly room in the Cantonment area at Cam Ranh Bay. An expandable van which was previously used in the old commenter was parked next to the Operations van. This new van louses the unit training section and TTY equipment to operate the company terminal in the 73rd Signal Eattalion command and control network. This relocation of company operations enables the commander to more effectively utilize this section in controlling and supervising the unit's mission.

(b) Training:

- (1) Formal Schools: During the reporting period, maximum use was made of quotas to the USATF, 1st Signal Brigade. There were approximately thirty-one (31) personnel attending various courses at the USATF. These courses were found to be extremely beneficial for personnel newly arrived in-country. It is also a very good refresher course for experienced personnel. There were four (4) personnel attending the AN/TRC-97B course at Clark Air Force Base, in the Philippines at the start of the quarter, and six (6) additional quotas filled during the quarter.
- (2) The 362nd Signal Company (TROPO) is experiencing difficulty at its Tropo Academy in maintaining qualified instructors. It is preferred to have MOS qualified personnel trained as instructors, however, few replacements are arriving with these qualifications. Personnel who have had instructor training have been requisitioned.
- (3) During this past quarter, the 362nd Signal Company (TROPO) discovered that without technical assistance, the AN/TRC-97B's could not be kept up to the operational standards required by 1st Signal Brigade. No technical assistance is available. The schools that are available for the training on the AN/TRC-97B's are not adequate due to the fact that they offer operator oriented courses. A problem in repairing of defective parts, replacement of parts, and non-availability of TM's is being experienced. The power generators are also a problem in that 52B personnel do not have sufficient knowledge of 400 Hz generators.
- (4) Special maintenance training was conducted at Company C, 41st Signal Battalion's DTE by a Gustav Hirsh representative on the new tandem switching equipment. The training, given to four of the DTE's frame room specialists (36H2O) included theory, operations, and troubleshooting.
- (5) On 28 and 29 August 1969, members of the Southeast Asia Pictorial Center visited Company C, 41st Signal Battalion for the purpose of preparing a full length color motion picture film for the CG, 1st Signal Brigade. The signal sites on Hill 184 and Hill 182, the Dial Telephone Exchange and the CRB North Switchboard at the 22nd Replacement Battalion were filmed during these two days.

SCCPV-NG-SS-OP

13 November 1969
SUBJECT: Operational Report-Lessons Learned, 73rd Signal Battalion (SPT),
Period Ending 31 October 1969, RCS CSFOR-65 (R2)

(6) At the close of the quarter, Lang Bian Mountain and Pr'Line Signal Sites had each received two ARVN Microwave Operators (26L) for on-the-job training. The ARVN's receive administrative support from local national units and engage in regular shift operations on the Battalion Microwave systems. Problems with the language barrier are being countered with a two-way exchange of language instruction on the sites.

(c) Logistics:

- (1) On 17 August 1969, Company C, 41st Signal Battalion reopened its mess hall after three and one half months of extensive remodeling and expansion. The new facility has now more than doubled its original size and shows considerable upgrading of both its kitchen and dining areas.
- (2) Due to increased housing requirements of supported units, the Phan Thiet Signal Center Platoon of Company D, 36th Signal Battalion was required to evacuate the MACV Hotel. Two billets were erected at the air-field site using frame type sections (James Ways), which will each house eight to ten men. The co-location of the Phan Thiet Platoon with the Signal equipment at the airfield will provide additional protection to troops and will remove the existing travel problems from downtown Phan Thiet to the airfield.
- (3) The most pressing logistics problem of Company D, 36th Signal Battalion has been transportation. Use of 21st Signal Group assets has been limited due to limited cargo capability of the UH-1. The CH-47A and B helicopter service from the 243rd Assault Support Helicopter Company, which used to provide the sole regular link between Phan Thiet and Dong Ba Thin, has been reduced. The 243rd is scheduled to receive the newer, more powerful CH-47C helicopters in the future. When these are received payloads will increase greatly. Use of Caribou support from Cam Ranh Air Base and ICY/ICU support from the Navy Support Facility and the South Beach areas of Cam Ranh Bay have proven to be the major means of resupply for the Phan Thiet Platoon.
- (4) On October 21, 1969 Company C, 41st Signal Battalion received its annual CMMI by the 21st Signal Group Inspection Team. The company received an overall rating of satisfactory with a score of 86%.

(d) Communications:

- (1) Radio: The radio activities during the quarter included the upgrading of terminal equipment and the conduct of several tests of new systems.
- (a) On 4 September 1969, the Deputy Commanding General, 1st Signal Brigade directed that a test system be installed between Phan Thiet in II CTZ and Ham Tam in III CTZ. As the control terminal, the 73rd Signal Battalion (SPT) provided applicable SOI material. The initial attempt with UHF equipment (AN/GRC-50) failed, however, a second effort with VHF equipment (AN/TRC-24)

SCCPV-NG-SS-OP

13 November 1969
SUBJECT: Operational Report Lessons Learned, 73rd Signal Battalion (SPT),
Period Ending 31 October 1969, RCS CSFOR065 (R2)

established strong contact in spite of a poor profile. The system was deactivated 28 September due to a change in command priorities.

- (b) On 20 September, this battalion began testing a microwave system of AN/TRC-29 equipment between Cam Ranh Bay and Phan Rang. The profile of this system indicated that the radio path was not line-of-site. There was one major obstruction, a mountain approximately 350 feet high in the signal path. Equipment was installed and testing continued for one week. No contact was established. After analysis and inspection by personnel of the Communications Section of 21st Signal Group to insure that all possibilities had been explored, it was decided to discontinue the test on 30 September 1969.
- (c) Completion of a second antenna at the Dong Ba Thin MARS Station was effected 5 September. The Hi-Gain model T-3002, AA dual-tower system, log periodic antenna stands 100 feet in the air and can be rotated. The antenna, erected with the cooperation of the 243rd Assualt Support Helicopter Company in Dong Ba Thin, was moved by wheeled vehicle from the unit headquarters and reassembled in place at the station. A CH-47A helicopter was supplied by the 243rd ASHC and erection was completed in one afternoon. Use of the helicopter saved seven additional hours of ground preparation, and many hours were saved by not having to assemble the antenna in a vertical position. The MARS Station now has two quality phone patch terminals. A similiar antenna was erected on CRB Hill 184 on 15 September 1969. The antenna, which was formally used at the 1st Signal Brigade's Dong Ba Thin HF Site, was completely disassembled, transported approximately 12 miles, and reassembled in a matter of eight days. The use of this 80 foot antenna has greatly increased the quality and reliability of MARS transmissions from the CRB Hill 184 MARS Station.
- (d) In late September, frequencies were issued for the Tropo systems from Cam Ranh Bay to Lang Bian Mountain. After initial testing, permission was obtained to operate in a quad diversity configuration. Maximum efforts by the equipment operators, assisted by technical representatives from Collins Radio Company, succeeded in identifying defective equipment and reducing the noise on the system. Eventually, the system was improved to acceptable standards. Without continuous adjustment and alignment, however, the system will not sustain minimal teletype standards. Test equipment and assistance from DCA were requested but delays in both areas impeded progress. Final results will not be known until the next quarter.
- (e) On 20 September, two AN/TRC-24 radio systems from Phan Rang Hill 180 to Phan Rang MACV and Hill 180 to Phan Rang Beach were replaced with AN/GRC-50 radio equipment. Present configurations are one AN/TRC-110 on Hill 180 and an AN/MRC-102 at each of the two distant sites. The newer AN/GRC-50 provides more reliable communications to the subscribers in the area.

SCC PV-NG-SS-OP

13 November 1969

SUBJECT: Operational Report-Lessons Learned, 73rd Signal Battalion (SPT),

Period Ending 31 October 1969, RCS CSFOR-65 (R2)

- (f) On 9 October 1969, the battalion was given the mission to establish an additional 12 channel VHF system from CRB to PRG. After initial contact, PRG began to receive frequency interference, and the system was re-established on new frequencies. Frequency interference was again experienced. Frequencies were changed three different times during the next three days. On 14 October 1969, a teletype test was conducted on the system with good results. The system was given a designator of BBH9E and activated on 27 October 1969.
- (g) An additional test system was begun on 15 October 1969 to establish a stronger path for the 77UHN4 from Lang Bian Mountain to Gia Nghia. Presently, the system is an extended A Band shot possessing a very poor profile. The test began on C Band with negative results. A follow-up test on B Band resulted in good communications to Gia Nghia, however, the receive at LBM could not be improved beyond marginal standards. The test was discontinued on 30 October 1969.
- (h) A passive reflector, utilizing back-to-back extended range and tennas, was employed on the BBH8D in mid October. The system showed inditial improvements; however, weather conditions reduced the reliability of the new antenna system. At the close of the quarter, a plan was proposed to reterminate the BBH8D into Phan Rang Hill 180.
- (i) During this past quarter, the AN/TRC 97B Trope system from LBM Island has proven unreliable due to the source of power. At the close of this reporting period, Lang Bian Mountain received a 400 Hz converter. Early indications show that the new power source will reduce future power problems involving the AN/TRC-97B system.
- (2) Wirer Wire activities during this quarter were high-lighted by new cable construction and continued cable rehabilitation to upgrade the existing cable plants within the battalion area of responsibility. The greatest concentration of work is being done by Company C, 41st Signal Battalion at Cam Ranh Bay. During the quarter, two (2) major cable projects were completed at CRB. A third project began on 27 October 1969 and will be completed in the next quarter. To assist Company C, 41st Signal Battalion, a platoon from the 578th Signal Company was attached to do heavy construction work. A survey of the Dalat outside plant was made and plans for upgrading this facility have been formulated. The CRB Dial Telephone Exchange was designated a ministandem and work to cut over the exchange was completed on 15 October 1969.
- (a) On 15 August 1969, the 578th Signal Company completed installation of a 15,000 ft, 100 pr extension to the O1 cable in CRB. The project was designed to remove distribution lines from the TK-1 cable line and extend service to the POL Tank Farms, the Joint Military Ammo area, and the Army Ammo area. An additional 12,000 ft of 25 pr cable was installed for direct service to subscribers in the area.

SCCPV-NG-SS-OP

13 November 1969

SUBJECT: Operational Report-Lessons Learned, 73rd Signal Battalion (SPT),

Period Ending 31 October 1969, RCS CSFOR-65 (R2)

- (b) In early August, it became apparent that cable problems in the CRB Army Depot were so extensive that immediate action was necessary to correct continuous telephone outages, and at the same time meet the increasing subscriber needs in that area. In early September, the Depot rehabilitation project began. Construction work consisted of installing 150 ft of 300 pr cable, 5,000 ft of 100 pr cable, 4,000 ft of 25 pr cable and 1,000 ft of 6 pr cable. Construction was completed on 8 October 1969.
- (c) During the last quarter, the 73rd Signal Battalion was requested to install two (2) security communications cable plants within the CRB area. The first cable plant was designed to supply communications to the guard towers surrounding the POL storage area. The project required the installation of 10,000 ft of WD-108 and six (6) 35 ft telephone poles. The second project, at the 6th Convalescent Center (CC), required the installation of 11,000 ft of WD-108, for service to the local guard towers and bunkers, and an SB-22 switchboard at the command post. Personnel from the 73rd Signal Battalion instructed the 6th CC personnel in the operation and maintenance of tactical communications equipment. Work on both projects was done by personnel from the 578th Signal Company and Company C, 41st Signal Battalion.
- (d) Efforts to rehabilitate TK-2 and 06 cables also began in late August. An abrupt decline in the serviceability of both cables material-ized rather pointedly with the coming of the first rains. Rehabilitation action was initially impeded when it was discovered, by the use of a tone set, that approximately 10,000 ft of the cable was located directly beneath the middle of a heavily travelled black-top road. Additional testing indicated that the cable was 100% bad at three (3) points along this portion of the cable. A similar dilemma was faced with the 06 cable, a distribution cable to the field grade officers trailer park. Extensive testing indicated that several long sections would have to be replaced in order to completely rehabilitate this cable. After a critical study of the situation, a 300 pr cable, to replace TK-2, 06, and 100 or leg of the 03 cable was proposed to the 1st Signal Brigade. Brigade engineers surveyed the project and concurred with the 73rd proposal. Work started on 27 October 1969 with a projected completion date of 20 November 1969.
- (e) On 20 October 1969, the CRB Dial Telephone Exchange was designated as a mini-tandem by DCA-SAM. Work began immediately to give operator access to all 44 tandem trunks. By 15 October 196, the project was completed by personnel from Company C, 41st Signal Battalion. This will vastly improve long distance service to the subscribers of the CRB switchboard, and the tributary switchboards being serviced.
- (f) During this quarter, an assistance team from 21st Signal Group surveyed the battalion's manual telephone exchanges. Minor deficiencies were roted and corrected by the responsible units. Of special interest was the recommendation for development of a new frame at Dalat Local. This project has been planned by Company E, 43rd Signal Battalion and is currently in progress.

SCCPV-NG-SS-OP

SUBJECT: Operational Report-Lessons Learned, 73rd Signal Battalion (SPT),
Period Ending 31 October 1969, RCS CSFOR-65 (R2)

(3) CommCenter:

- (a) On 2 August 1969, Company C, 41st Signal Battalion officially opened its new Army Area Communications Center. The facility was formally dedicated by BG Jack A. Albright, Deputy Commanding General, 1st Signal Brigade. Also present at the dedication was Colonel Thomas C. Musgrave, Commanding Officer, 21st Signal Group. On the spot awards were presented to Lt. Stanley G. Hash (ACM), OIC of the new CommCenter, and SP6 Jerry K. Barlow (ACM) for their outstanding contributions to the timely opening of the facility. The modern building replaces the old CommCenter complex which was a make—shift arrangement of vans connected to a small wooden building. This new facility contributes to improved communications service resulting from more space and improved environmental control.
- (b) On 20 October 1969, an additional CommCenter was established by the battalion. The new facility, located at the MACV Compound in Ba Ngoi, operates out of a AN/MGG-17 and an adjacent office. The 60 word per minute secure circuit terminates at the Nha Trang Army Area CommCenter. The facility is operated by Company D, 36th Signal Battalion and provides service to CORDS and MACV Advisory Team 30.
- (c) Company C, 41st Signal Battalian CommCenter in Cam Ranh Bay reduced its message reject rate from 3.5% in August to 2.4% in October. Circuit reliability also rose from 95.8% in August to 98.2% in October. Operations for this CommCenter were normal with only minor difficulties encountered with data circuit SMT-5.
- 2. Lessons Learned: Commander's Observations, Evaluations, and Recommendations.
 - a. Personnel. None.
 - b. Intelligence.
 - (1) Use of Unrepairable Conexes as Bunkers.
- (a) OBSERVATION: Because of the extreme range of climatic conditions and the deteriorating effects of the elements it has proven difficult to maintain bunkers in high state of readiness and repair.
- (b) EVALUATION: Much of this problem is due to the fact that sandbag material is not durable enough to endure the severity of the elements.

SCCIV-NG-SS-OP

13 November 1969

S JECT: Operational Report-Lessons Learned, 73rd Signal Battalion (SPT),
Period Ending 31 October 1969, RCS CSFOR-65 (R2)

- (c) RECOMMENDATION: It has been found that by use of unrepairable conexes, effective bunkers can be built with sandbag buffer walls constructed on the inside of the conex; thereby, maintaining bunker safety and decreasing maintenance and repair work.
 - c. Operations. None.
 - d. Organization. None.
 - e. Training. None.
 - f. Logistics.
 - (1) <u>Use of Tie-Down Straps</u>.
- (a) OBSERVATION: Securing of conexes or large bulk items to be transported on flatbed or tactical military vehicles is better achieved with Air Force cargo Tie-down straps than with the use of conventional link chains.
- (b) EVALUATION: The strength and particularly, the take-up feature of the nylon straps continue to secure the load even if the weight is shifted or strain is applied, a normal occurrence on rough road surfaces.
- (c) RECOMMENDATION: Whenever conexes or large bulk items are transported by vehicle over unpaved or rough roads, fasten the load with nylon tie-down straps instead of link chain.
 - g. Communications.
 - (1) TA 236 Handset Replacement.
- (a) OBSERVATION: TA 236 Telephone Sets have been noted to pickup high environmental noise in radio operation areas when used for MARS calls.
- (b) EVALUATION: Replacement of the standard TA 236 handset with an HS-101 "butterfly" handset has reduced this noise and reduced the number of repeated MARS transmissions and improved the service and efficiency of the MARS station.
- (c) RECOMMENDATION: That "butterfly" handsets be employed with the TA 236 in areas where environmental noise in high and RWI or MARS operation is required.
 - (2) Heated Air Process for Drying Cable Splices.
- (a) OBSERVATION: During the monsoon seasons, many of the underground cable splices become a serious problem due to improper sealing of splice cases.

SCCPV-NG-SS-OP

13 November 1969

SUBJECT: Operational Report-Lessons Learned, 73rd Signal Battalion (SPT), Period Ending 31 October 1969, RCS CSFOR-65 (R2)

- (b) EVALUATION: Past experience has shown that once the wet splice is properly dried, a splice case can be reinstalled and the cable can be returned to service. However, the frequency of rainy spells during the monsoon season makes the lengthy air drying methods very unreliable. The use of desicants to speed up the process is not recommended with the commonly used "PIC" cable.
- (c) RECOMMENDATION: To speed up the drying process, a duct can be attached to the breather of a $2\frac{1}{2}$ ton truck and heated air distributed over the flared out pairs.
 - h. Materiel. None.

i. Other. None.

-l-Inel

as

Incl wd HQ, DA

LOUIS J. ZKLEZNIKAR

LTC, SigC Commanding

DISTRIBUTION:

2 - CG, CINCUSARPAC, ATTN: GROP-DT, APO 96558

1 - CG, USASTRATCOM-PAC, Schofield Barracks, Hawaii, APO 96557

3 - CG, USARV, ATTN: AVHGC-DST

1 - CG, 1ST SIG BDE (USASTRATCOM) ATTN: SCCPV-OP, APO 96384

5 - CO, 21ST SIG GP, ATTN: SCCPV-NG-OP, APO 96240

SCCPV-NG (13 Nov 69) 1st Ind

SUBJECT: Operational Report - Lessons Learned, (3d Signal Battalion (SPT), Period Ending 31 October 1969, RCS CSFCR-65 (R2)

DA, HEADQUARTERS, 21ST SIGNAL GROUP, APO 96240

27 November 1969

TO: SEE DISTABUTION

- 1. Subject report is forwarded LAW 1st Signal Brigade Regulation 1-19.
- 2. This headquarters has reviewed the basic report and concurs with the information contained therein with the following comments and/or exceptions:
 - a. Paragraph la(3), page 3. CW2 Kunzman is misspelled.
 - b. Paragraph 1b(3)(b)(3), page 6.
- (1) Technical assistance is now available for the support of Tropo systems (AN/TRC-97B) by USAECOM. The USAECOM technical representative is located in the Logistics Section of 21st Signal Group and is available on a twenty-four hour basis for all subject systems in I and II CTZ, RVN.
- (2) Although the AN/TRC-97B course in the Philippines is nominally a "maintenance course", personnel returning from the course have claimed it is more operator than maintenance oriented.
- (3) Mr. Getman, the Mobility Equipment Command's representative to 21st Signal Group, has been conducting on-site instruction for generator repairmen on both 60 cycle and 400 cycle generators.

Thomas C. MUSGRAVE

Colonel, SigC Commanding

DISTRIBUTION: (1st Ind Only)

6 - CG, 1st Sig Bde, ATTN: SCCPV-OP, APO 96384

2 - ACS FOR, DA, Washington, D.C. 20310

1 - File

5 - CO, 73d Signal Bn, APO 96312

SCCPV-OP-AD (13 Hov 69) 2d Ind

SUBJECT: Operational Report - Lessons Learned, 73rd Signal Battalion for Period Ending 31 October 1969, RCS CSFOR-65 (R2)

- DA, HQ, 1st Signal Brigade (USASTRATCOM) APO 96384 9 December 1969
- TO: Commanding General, United States Army Vietnam, ATTN: AVHGC-DST, APO 96375
- 1. Subject report is forwarded in accordance with AR 525-15.
- 2. The following comments are made:
 - a. Reference item "critical MOS shortages," Page 4, Para 1b (1)(a).
- (1) MOS 31L20 and 36C20 remain consistantly short throughout the Brigade. Input of these MOSs continue at a slow rate of fill.
- (2) With continuing emphasis at Group level to cross/re-train personnel coupled with continued monitoring of assignments in each of the MOSs, the 21st Signal Group should retain sufficient assigned personnel in each of the MOSs to effectively continue the mission. MOSs 31M, 51L and 72C2O since reporting period have been brought up to over 80% of assigned strength. Paragraph 1b (1)(c) Promotions: Promotions to grade E7 are effected by 21st Signal Group. In order to effect promotion to E7 a cancelled section II requisition must be received from DA and a promotion allocation. During the quarter 21st Signal Group requisitions cancelled by DA were insufficient to receive a large number of promotion allocations.
- b. Reference item "Training," Page 6, Para 1b(3)(b)(3): Technical assistance for the AN/TRC-97B has been available to 21st Signal Group since May 1969. An RCA FSR was stationed in CRE from May to 30 Jun 69. At that time ECON EER Mr. Lewis Hicks was stationed there. During September, Mr. Hicks was brought to Long Binh to attend MEIT maintenance classes in AACONS Hi-Caps equipment, but remained on call, with Mr. Johnson, TRC-97B EER with 2d Signal Group, to respond to assistance requests from 21st Signal Group and II Corps' 54th Signal Battalion. At the end of the AACONS course, Mr. Johnson was assigned full time to 21st Signal Group.
- c. Reference item "Evaluation," Page 13, Para 2g(2)(b): This Head-quarters does not concur with last sentence of ref para. There is no justification given for not using desiceant to dry wet splices. The use of desiceant to dry wet splices on PIC cable is an approved practice when used properly.

FOR THE COLMANDER:

T. E. HULLENHICK

Mullemie

LTC, AGC

Adjutant General

AVHGC-DST (13 Nov 69) 3d Ind SUBJECT: Operational Report-Lessons Learned, 73d Signal Battalion (SPT) Period Ending 31 October 1969, RCS CSFOR-65 (R2)

HEADQUARTERS, UNITED STATES ARMY, VIETNAM, APO San Francisco 96375

\$ 11/1 107r

THRU: Commanding General, United States Army Strategic Communications Command-Pacific, APO 96557

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

- 1. This headquarters has reviewed the Operational Report-Lessons Learned for the quarterly period ending 31 October 1969 from Headquarters, 73d Signal Battalion (SPT).
- 2. Reference item concerning "Use of Tie-Down Straps", page 12, paragraph 2f(1); concur. It is desirable to use nylon straps due to the favorable weight to strength ratio. However, when this item is not available, metal bands can be substituted.

FOR THE COMMANDER:

MAJ. At

Assistant Adjutant Testocki

Cy furn: 73d Sig Bn 1st Sig Bde SCCP-OP3 (13 Nov 69) 4th Ind SUBJECT: Operational Report - Lessons Learned, 73d Signal Battalion (SPT), Period Ending 31 October 1969, RCS CSFOR-65 (R2)

Headquarters, U. S. Army Strategic Communications Command-Pacific, APO San Francisco 96557 31 JAN 1970

- TO: Commander in Chief, U. S. Army, Pacific, ATTN: GPOP-DT, APO 96558
- 1. Subject report is forwarded in accordance with AR 525-15.
- 2. This headquarters has reviewed and concurs with subject report as indorsed.

FOR THE COMMANDER:

FRANK C. MAHIN COL, GS Chief of Staff

CF:
CG, USARV, APO 96375 wo Incl
CG, 1st Sig Bde (USASTRATCOM, APO 96384 wo Incl
CO, 21st Sig Gp (USASTRATCOM), APO 96240 wo Incl
CO, 73d Sig Bn (USASTRATCOM), APO 96312 wo/Incl

GPOP-DT (13 Nov 69) 5th Ind

SUBJECT: Operational Report of HQ, 73rd Signal Battalion (SPT) for Period Ending 31 October 1969, RCS CSFOR-65 (R2)

HQ, US Army, Pacific, APO San Francisco 96558 4 FEB 70

THRU: Commanding General, US Army Strategic Communications Command,

Fort Huachuca, Arizona 85613

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:

C. L. SHORTT CPT, AGC

Asst AG

CF:

DA, ACSFOR

CG. USASTRATCOM-PAC

SCC-PO (13 Nov 69) 6th Ind SUBJECT: Operational Report of HQ, 73rd Signal Battalion (SPT) for Period Ending 31 October 1969, RCS CSFOR-65 (R2)

Headquarters, United States Army Strategic Communications Command, Fort Huachuca, Arizona 85613 1 2 Mag 1979

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:

M. G. alderson

Security Classification		
DOCUMENT CONTR	OL DATA - R & D	
(Security classification of title, hody of abstract and indexing a		
1. ORIGINATING ACTIVITY (Corporate author)	28. REPORT SECURITY OF ASSISTED ATION	
HO CACCEOR DA Washinston D.C. 20210	UNCLASSIFIED	
HQ, OACSFOR, DA, Washington, D.C. 20310	2b. GROUP	
3. REPORT TITLE		
S. HEPOHT TILE	(C)	
Operational Report - Lessons Learned, HQ,	73d Cional Rottalion	
operacional Report - Lessons Learned, no,	73d Signal Baccallon	
4. DESCRIPTIVE NOTES (Type of report and inclusive dates)		
	rgency operations. 1 Aug 60 to 31 Oct 60	
Experiences of unit engaged in counterinsus	Baney operations, I Aug 07 to 31 oct 07.	
CO, 73d Signal Battalion		
oo, 754 bighar baccarron		
S. REPORT DATE	76. FOTAL NO. OF PAGES 78. NO. OF REFS	
13 November 1969	22	
M. CONTRACT OR GRANT NO.	Se. ORIGINATOR'S REPORT NUMBER(S)	
b. PROJECT NO.	694160	
N/A		
	90. OTHER REPORT NO(S) (Any other numbers that may be easigned this report)	
10. DISTRIBUTION STATEMENT		
10. DISTRIBUTION STATEMENT		
11. SUPPLEMENTARY NOTES	12. SPONSORING MILITARY ACTIVITY	
N/A	OACSFOR, DA, Washington, D.C. 20310	
13. ABSTRACT		
H. 그는 왕이 아이지 않아 아르네 하나 있다면 하다고 있다.		
. 2	n .	
'	•	