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**TO:**
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**FROM:**
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THIS PAGE IS UNCLASSIFIED
DEPARTMENT OF THE ARMY
HEADQUARTERS 459TH SIGNAL BATTALION
APO 96240

SOUTH VIETNAM

SUBJECT: Operational Report for the Quarterly Period Ending 30 April 1967
(RCS CSFOR-65)

TO: Commanding General
United States Army, Vietnam
ATTN: AVG-LH
APO 96307

SECTION I
Significant Organization or Unit Activities

1. General:

a. The 459th Signal Battalion’s area of communications responsibility has not changed since the last reporting period. Organizational changes involved the arrival in-country and assignment of the 261st Signal Company (SPT) to the battalion on 29 March 1967. The arrival of the 261st Signal Company precipitated some changes in mission for the assigned companies. The communications mission that was assigned to Company B, 459th Signal Battalion, in the Tuy Hoa - Phu Hiep - Vung Ro Bay area was assigned to the 261st Signal Company. Company B was then assigned the mission of communications support of the 9th ROK Division Base Camp at Minh Hoa, the 100th ROK Logistics Command at North Nha Trang, and the responsibility for advisory communications support at Duc My. These missions were previously supported by the Signal Operations Platoon of the Battalion’s Headquarters Company.

b. The 261st Signal Company (SPT) was activated at Fort Hood, Texas on 28 January 1966 and charted for deployment to Vietnam on 1 June 1966 with an ERD of 15 November 1966 and PRD of 12 December 1966. These dates were subsequently slipped due to the shortage of major items of equipment. A new ERD of 15 February 1967 and a new PRD of 1 March 1967 were firmed up, but again there was some additional slippage of dates and the company finally departed CONUS on 9 March 1967 while the equipment departed on 12 March 1967. The main body arrived in-country at Port Lane, Vung Ro Bay, on 29 March 1967 and the equipment arrived at the same port on 13 April 1967.

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ATTN: OT-RD, Wash, D.C. 20310

FOR OT-RD FILE
670-378
FOR OT-RD FILE
670-378
SUBJECT: Operational Report for the Quarterly Period Ending 30 April 1967
(SCCNG-MT 30 April 1967)

2. Activities: The 459th Signal Battalion continued operating in its assigned area, providing area communications and base camp communications support during the reporting period. In addition, direct combat support is being furnished to the 9th ROK Division, to include support down to the operating battalion level.

3. Personnel and Administration:
   a. The 261st Signal Company (SFT) encountered a large turnover of personnel due to slippage of the deployment dates. There was a turnover of approximately 70% of the assigned personnel during the last 5 months prior to shipment. This posed innumerable personnel and training problems in preparing the unit for deployment. In addition, several non-deployable personnel and personnel with unauthorized MOS's were assigned to the company. Some confusion and uneven distribution of personnel resulted from personnel fill being made locally and by the Department of the Army.
   b. A proposed MTOE has been submitted through channels to realign the battalion to fit the current mission. Status of the MTOE is unknown as of the closing date of this report.

4. Security:
   a. During the quarter there were a total of 203 Secret and Top Secret clearances validated, of which 17 were Top Secret. There were 171 crypto access authorizations and three Confidential clearances granted. There were no revocations.
   b. Command emphasis on physical security at battalion sites has resulted in a marked improvement in active and passive defensive posture.

5. Safety:
   a. Considerable emphasis has been placed on safety during this quarter. However, the battalion still experienced the following recordable accidents and personal injuries:

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<th>Vehicle Accidents</th>
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   (Note: The data for the quarter has been compiled and reviewed for accuracy.)

   (Signatures and additional remarks for confirmation and approval.)
b. The majority of the personal injuries are attributable to an unsafe act on the part of the individual, and the majority of the vehicle accidents could have been avoided had the individual practiced preventive driving techniques in the sense that he is more alert to avoid the situation which can result in an accident, rather than taking corrective action to prevent the accident from happening after he is well into the situation. The resultant evaluation points to the imperative requirement for safety consciousness on the part of the individual soldier.

c. Accident exposure for the Quarter:

Mileage: 143,994

6. Training:

a. Approximately 75% of the personnel in this battalion received mandatory training during the quarter. The training was conducted during periods of minimum work loads.

b. Significant progress has been accomplished in the switchboard and Communications Center on-the-job training programs. The training is conducted on a daily basis and is aimed at improving the operations and maintenance of equipment.

c. A shortage of switchboard and teletype operators necessitated a ten day training program, which was completed 13 April 1967. The personnel participating in the courses were infantrymen allocated by Headquarters, 1st Signal Brigade.

d. A Western Electric Technical Representative, Mr. Sanborn, conducted two classes of 10 days duration each, on the operation and maintenance of the Mobile Dial Control Office NN/TTC-28 at the 459th Signal Battalion "Goldfinch" site. The class input was 9 students per class, and was attended by members of the 41st, 73d and 459th Signal Battalions.

e. The 261st Signal Company (SFT) accomplished all the required training as outlined in ATP 11-116 and applicable COMARC and DA directives. A master training schedule was developed in accordance with ATP 11-116 while in CONUS and closely adhered to. Changes in readiness dates and the turnover of approximately 70% of assigned personnel in the last 5 months prior to deployment necessitated repeating the entire training program with minimum change to the master training schedule.
f. The 261st Signal Company (SPT) was handicapped with a personnel shortage which existed until just prior to deployment. During the period 1 January 1967 to 21 February 1967, the company successfully attained a satisfactory ATT and a CMMI.

g. Technical training of a realistic nature was further hampered in the 261st Signal Company (SPT) due to a lack of operational commitments at Fort Hood, Texas. Although numerous field exercises were conducted, assistance was not obtainable from the Post to add a realistic atmosphere to the training effort. This unrealistic training environment was especially noticeable in the switchboard and communications control areas.

7. Operations:

a. From 27 January to 21 February 1967, Company A supported the 9th ROK Division with a tactical radio relay system. This system was from the tactical Command Post of the division to Nha Trang. Circuitry from this system was strapped onto existing systems to provide command and control communications back to the 9th ROK Division base camp.

b. On 7 February 1967, 3 radio relay systems were terminated at Hon Tro Island. The radio relay was located at Hill 322 and spiral-four cable was used to interconnect the carrier equipment located at Hill 470. This arrangement was necessary until the two planned 50 pair interconnecting cables could be installed between the two sites. Cable installation was completed by Company B, 40th Signal Battalion on 2 April 1967, at which time the carrier was relocated to Hill 322. These 3 systems furnish off-island communications for Air Force and Air Defense Artillery units on Hon Tro Island.

c. During the period 7 February to 5 March 1967, three microwave relays were installed at Hon Tro Island for the 77UMG1, 77UMV2 and 77UMV3 systems from Nha Trang to Cam Ranh Bay. The 77UMG1 system was a newly established system and the two other systems were formerly being relayed through Hon Mot Island. With the relocation of these relays, the site operated on Hon Mot Island was closed out on 11 March 1967.

d. On 21 February 1967, teams from the Air Force 5th TAC Squadron arrived to install an AI/TEC-66 tropospheric scatter system from Nha Trang to Vung Chua Mountain with relay at Hon Tro Island. The teams at Nha Trang were placed under OPCON of the 459th Signal Battalion. In order to accommodate the circuit requirements at Nha Trang an additional 400 pair cable was installed from the Goldfinch site to the Technical Control Facility at Wetwash. The system is programmed for operation on or about 5 May 1967.
SUBJECT: Operational Report for the Quarterly Period Ending 30 April 1967

30 April 1967

(RCS CSFOR-65)

a. On 1 March 1967, the 544th and 545th Tropo Detachments arrived in the battalion area and commenced refresher training. They were subsequently committed by higher headquarters to tactical support missions outside the battalion area.

b. On 13 March 1967, the Kinh Hoa 1 and Tan Dan sites supporting the 29th ROK Regiment were deactivated due to relocation of the Korean elements and the 21H16 VHF system from Kinh Hoa to Vung Ro Mountain to Da Ngii was activated to continue the ROK support mission. Teams from the 278th Signal Company, 73d Signal Battalion established the 21H12 VHF system in this battalion’s area in direct support of the 30th ROK Regiment which had relocated to the vicinity of Kinh Hoa.

c. On 16 March 1967, the 77UH74 obstacle gain system from Nha Trang to Duc My was reconfigured by establishing a relay at Hon Tro Island. Although the Hon Tro-Duc My portion of the system is still obstacle gain, the path and general operating characteristics of the system have greatly improved. There are presently three VHF systems terminated and five VIF systems being relayed at Hon Tro Island.

d. The TORCH switchboard operated by the 54th Signal Battalion in the Camp McDermott area of Nha Trang was deactivated on 18 March 1967. On this date all former TORCH subscribers were cut over to Goldfinch Dial service. This cut over was accomplished through the installation of a completely new multipair aerial outside plant in the Camp McDermott area. This cable was installed by Company A, 459th Signal Battalion with technical assistance from Company B, 40th Signal Battalion (Const).

e. During the period 21-27 March 1967, the 213th Signal Detachment provided technical assistance to the 18th Engineer Brigade and the 54th Signal Battalion. The detachment assisted the 18th Engineer Brigade in the establishment of their communications center and crypto facility and also provided crypto maintenance and accounting assistance to the 54th Signal Battalion at the IIIFV communications center.

f. On 29 March 1967, Company A, 459th Signal Battalion, initiated a test of ITT Manpack experimental microwave equipment to determine the reliability of equipment under field and tropical conditions. The multiplex equipment being used with the microwave equipment is compact and provides 12 PCM (Pulse Code Modulation) channels. The PCM portion of the equipment did not function properly and no adjustments could be made on the equipment. As a result the test was inconclusive.
SUBJECT: Operational Report for the Quarterly Period Ending 30 April 1967 (ROSCOFOR-65)

k. On 29 March 1967, the 261st Signal Company (SFT) arrived at Port Lant. The company's equipment arrived on 13 April 1967 and after deprocessing and checking for operational readiness, the equipment was committed to replace that belonging to Company B, 459th Signal Battalion in the Tuy Hoa-Phu Hiep-Vung Ro area.

l. On 4 April 1967, an AN/MTC-3 switchboard was installed as a temporary switchboard at Hill 322, Hon Tro Island. The requirement was placed on the battalion when it was determined that the artillery unit on Hon Tro Island would be unable to operate the island switchboard as originally planned. On 22 April 1967, an AN/MTC-1 switchboard replaced the AN/MTC-3 switchboard with an overall increase in efficiency of service and an increase in capacity.

8. Logistics:

a. Prior to deployment the 261st Signal Company was required to turn in their 2 1/2 ton truck canvas and bows to the Consolidated Supply Officer at Fort Hood, Texas. The absence of vehicular canvas and bows has reduced the flexibility of vehicle utilization by limiting hauling capability to type cargo loads which will not be damaged by rain and dust, and has negated its use as a personnel carrier. Limited in-country stocks of items will prolong the procurement of replacement items.

b. In the planning of combat airlifts of vehicles and signal shelters it is necessary to use accurate dimensional and weight data. Aircrews require accurate weight information for determining the required fuel and other flight parameters of the aircraft. By obtaining accurate information and pre-staging the equipment for airlift, this organisation outloaded 154,000 pounds in less than two hours ground handling time.

9. Aviation: None.

10. Organizational Structure: The battalion was increased in strength by one company with the assignment of the 261st Signal Company (SFT) on 29 March 1967. The present structure and locations of the battalion units is as follows:

a. Headquarters and Headquarters Company - Nha Trang

b. Company A - Nha Trang

c. Company B - Phu Hiep and Minh Hoa (Unit is in the process of relocating from Phu Hiep to Minh Hoa).
SUBJECT: Operational Report for the Quarterly Period Ending 30 April 1967 (RCS CGFOR-65)

d. 213th Signal Detachment (Crypto Spt) - Nha Trang

e. 228th Signal Company (RR VtF) - Hon Tro Island

f. 261st Signal Company (SPT) - Phu Quiop

SECTION II

COMMANDER'S OBSERVATIONS AND RECOMMENDATIONS

Part I. Observations (Lessons Learned)

1. Personnel

**POSD Postponement**

**Item:** Impact of postponement of POSD of deploying units.

**Discussion:** The 261st Signal Company (Support) experienced a 70% turnover of personnel from receipt of alert orders on 25 June 1966 until final deployment on 9 March 1967. This unusually large turnover of personnel was in part due to a postponement of the original POSD of September 1966 to March 1967 based on the nonavailability of essential mission type TOE items. The large turnover resulted in an excessive administrative burden and severely hampered essential mission type training. Further, upon deployment some sixteen (16) enlisted personnel were given temporary deferments for compassionate reasons. These personnel are presently carried in a TDY status and are expected to join the unit upon expiration of their deferments.

**Observation:** Personnel assigned to a unit scheduled for deployment to an overseas station should be required to have a minimum of five (5) months service remaining after the POSD. This would permit an orderly transition period after arrival in theater. Personnel granted deferments for compassionate reasons should be transferred from the rolls of a deploying unit allowing for submission of an emergency personnel requisition to the gaining overseas command. Deploying units should arrive in country as near 100% fill as possible.

2. Operational

**Cable Splicing**

**Item:** Multi-pair polyethylene insulated cable (PIC) splices.
Subject: Operational Report for the Quarterly Period Ending 30 April 1967

Discussion: When splicing multi-pair cables care should be exercised (particularly under conditions of poor light) to insure that the correct groups are spliced together. The extra effort it takes to test the pairs and insure that the binding which identifies each group is correct is well worth it, and will actually save time, materials and money, in that it reduces the possibility of having to redo the job.

Observation: Pairs should be tested and groups positively identified when splicing multi-pair polyethylene insulated cables.

AN/TTC-28 Operations and Maintenance Area

Item: Lack of an operations and maintenance area within the AN/TTC-28 XH Mobile 60X Line Dial telephone exchange.

Discussion: The AN/TTC-28 Mobile Dial exchange has no room in the switching control van for maintenance of switches or for storage of drawings. By removing the two rear doors and center post, and adding an eight foot wood frame extension to the van, this problem is solved. The building can be insulated with empty foam ammunition cases, faced off with 3/8" plywood, and air conditioned by the units installed at the opposite end of the van.

Observation: Installation of a building extension on the switching van allows for easy movement of personnel and provides air conditioned storage and maintenance facility.

Distribution of Cryptomaterial

Item: Distribution of cryptomaterial (Top Secret) via ARFCOS.

Discussion: A definite need exists for ARFCOS courier stations to be located in strategic cities throughout RVN. Evidence of past performance demonstrates the following problems encountered:

a. Delayed shipments: Due to one centralized control point in Saigon, material for delivery to any unit must be routed to Saigon first, and then scheduled out on a different flight at a later date.

b. Manhours lost: Units concerned are losing manhours by waiting for aircraft to arrive. ARFCOS couriers are losing manhours by waiting for units to meet aircraft.

30 April 1967
SUBJECT: Operational Report for the Quarterly Period Ending 30 April 1967

Observations: Courier pick-up points and storage stations should be established at key locations in RVK to reduce handling times and manhours expended. A recommendation to this effect has been submitted through command channels.

**Toletype Motors**

**Item:** Premature burnout of toletype motors.

**Discussion:** Toletype machines operated in tactical shelters are subject to premature motor burnout if the line voltage is permitted to fall below 105 volts. As the line voltage drops, the current demands of the toletype motor increases and the motor windings overheat and burn out.

**Observation:** The line voltage supplied to shelters should be continuously monitored on the power input panel motor and toletype operations suspended when the voltage is less than 105 volts. Power wiring input to shelters should be of sufficient size to minimize line voltage drops. Generators should be adjusted to provide optimum voltage at the shelter.

**Signal Shelter Ventilation**

**Item:** Lack of ventilation and cooling in signal shelters.

**Discussion:** Signal shelters operated in the typical in-country sandbagged environment are susceptible to exceptionally high ambient interior temperatures and poor ventilation. The built-in exhaust fans do not move enough air to effectively cool the equipment and failure from high temperatures often results.

**Observation:** As a temporary aid, ponding installation of refrigeration type cooling, the use of an oscillating fan in the shelter will increase the air flow so that equipment life is prolonged. Failures due to thermal protection device operation have been reduced materially when fans are used. Wherever possible in fixed installations if the equipment chassis are operated partially removed from the mounting rack the air circulation is improved. However, in some installations this practice is not permissible because of dangerous high voltages and/or interlock switches.

**Engine Generators**

**Item:** Repair of engino generators.
SCCWO-N
30 April 1967
SUBJ: Operational Report for the Quarterly Period Ending 30 April 1967
(RCS CSFOR-65)

Discussion: This organization has been furnished large diesel engine generator sets under the KONT. GGENSEA program to provide primary power at signal sites. Upon receipt of these units, cracks were found in the engine block castings which would preclude operation of the generator sets due to loss of coolant. Return to the manufacturer for replacement would be costly and delay the installation of a given site for several months.

Observation: Repair of minor cracks in engine blocks can be made quickly and effectively by the utilization of epoxy resin stool compounds. After brightening the area to be repaired the semi-liquid material is applied and allowed to dry for a minimum of 72 hours. After 150 hours of heavy duty operation no failures of the repaired equipment were noted.

3. Training and Organization: None.
4. Intelligence: None.
5. Logistics: None.
6. Other:

"Buddy System"

Item: Initiation of a "Buddy System" with Vietnamese military units.

Discussion: Problems that arise in coordination with local Vietnamese civilian and military authorities can often be alleviated through the "Buddy System". A unit of this command has established sound liaison with an adjacent Vietnamese Air Force element. Because of the good relationships, joint use of a cable trench was possible and US unit was permitted to lay cable through a WAF controlled area which had been inaccessible in the past. A savings in time, money and manpower was realized because of the shorter route and the use of an existing trench.

Observation: Tangible benefits can be derived from an established "Buddy System".

KWK-7 Puma

Item: Usage of KWK-7 Crypto unit extractor tools.

Discussion: A problem exists with the extractor tool used with the KWK-7 Crypto unit.
SCCсынг-нт  
SUBJECT: Operational Report for the Quarterly Period Ending 30 April 1967  
(RCS CSFCO-65)  
30 April 1967

a. The operator's tine tool is made of relatively soft metal that bonds easily with repeated use if not fitted into the KMK-7 properly.

b. Operators, though informed of the proper use of the extractor tool, continue to damage the extractor through misuse.

Observation: Units should prepare an EIR on extractor tine tool and submit IAW TM 38-750 and AR 750-38. Units should carefully instruct operators as to the proper method of inserting the tool into the KMK-7 and supervise the procedure to detect misuse. This organization has suggested to representatives of Headquarters, STRATCOM, Washington, D.C, that the extractor tool be case-hardened or made from a harder metal and a study is underway.

SECTION II

COMMANDER'S OBSERVATIONS AND RECOMMENDATIONS

Part 2. Recommendations (Lessons Learned)

None.

KENNETH R. SIMES
LTC, SigC
Commanding
SUBJECT: Operational Report for the Quarterly Period Ending 30 April 1967 (RCS-CSFOR-45)  

Headquarters, 21st Signal Group, APO 96240  
23 May 1967  

THRU: Commanding General, 1st Signal Brigade (USASTRATCOM) APO 96307  
THRU: Deputy Commanding General, USARV, ATTN: AVC-DH, APO 96307  
THRU: Commander in Chief, USARPAC, ATTN: CPOP-NH, APO 96558  
TO: Assistant Chief of Staff for Force Development, Department of the Army (AGSFOR, DA), Washington, D.C. 20310

1. Transmitted herewith is one copy of Headquarters, 459th Signal Battalion report, Subject as above.

2. Concur with observations made by CO, 459th Signal Battalion.

3. The unit has been informed that an Equipment Improvement Report will be submitted on the high rate of teletypewriter motors burning out due to low line voltage (item 5, Section II teletyp motors).

4. The safety program is progressing satisfactorily, however, continual emphasis must be placed at all echelons of command.

5. The switchboard training program (Para 6w, Sec I) conducted for personnel possessing a non-signal MOS proved successful. Critical shortages within the unit were alleviated to a certain extent. Based on the success of this program, recommend that more personnel in this category be made available for the purpose of training and retention within units of the 21st Signal Group that have critical shortages of switchboard operators.

6. It is recommended that units programmed for assignment to RVN be given a stringent operational training program particularly in the area of switchboard and communications center procedures. Every effort should be made at CONUS installations to provide a realistic training atmosphere. A solution to this would be for personnel to attend on-the-job training at the CONUS installation switchboard and communications center. This will provide realistic training and better prepare individuals on operational procedures upon arrival in RVN.

Charles H. Buirk, Jr.
COL, SigC
Commanding
SCCVOP (30 Apr 67)  
SUBJECT: Operational Report for the Quarterly Period Ending 30 April 1967 (RCS CSFOR-65).

DA, HQ, 1st Sig Bde (USASTRATCOM) APO SF 96307  8 JUN 1967

TO: Commanding General, United States Army Vietnam, ATTN: AVHQC-DST, APO 96307

Commanding General, United States Army Strategic Communications Command,  
Fort Huachuca, Arizona 85613

1. IAW AR1-19, subject report from the 459th Signal Battalion (CA) is forwarded.

2. Concur with the Commander's Observations and 1st indorsement 21st Signal Group.

3. Concur in recommendations contained in paragraph 5 and 6, 1st indorsement.

FOR THE COMMANDER:

THOMAS D. BLEDSOE Jr.  
Colonel, GS  
Chief of Staff
AVHGC-DST (30 Apr 67) 3d Ind
SUBJECT: Operational Report-Lessons Learned for the Period Ending
30 April 1967 (RCS CSFOR-65) (U)

HEADQUARTERS, UNITED STATES ARMY VIETNAM, APO San Francisco 96375

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 30 April 1967 from Headquarters, 459th
Signal Battalion as indorsed.

2. Pertinent comments follow:

a. Reference item concerning postponement of POSD of deploying
units, paragraph 1, page 7: Concur. The action to be taken to correct
this situation is beyond the scope of USARV. Recommend this be studied
for possible solutions by USCONARC and Fourth US Army where the unit was
stationed at time of deployment.

b. Reference item concerning distribution of cryptomatic material
(TOP SECRET) via ARFCOS, page 8: Nonconcur. Crypto equipment is sensitive
and better controlled if distributed from a central point. Using several
control points throughout Vietnam would involve more time by CIOPAC and
create problems in control.

c. Reference item concerning switchboard training program,
paragraph 6c, page 3 and paragraph 5, 1st Indorsement: Concur. Units
programmed for assignment to RVN should be given a stringent operational
training program particularly in the area of switchboard and communications
center procedures.

FOR THE COMMANDER:

1 Incl
nc

C. R. ST. MARTIN
Capt. AGC
Asst AGC
SUBJECT: Operational Report for the Quarterly Period Ending 30 April 1967
from HQ, 459th Signal Battalion (RCS CSPOR-65)

This headquarters has evaluated subject report and forwarding
endorsements and concurs in the report as indorsed.

FOR THE COMMANDER IN CHIEF:

G. L. McMullen
Maj, AGO
Asst AG