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# DEPARTMENT OF THE ARMY

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Operational Report - Lessons Learned, Headquarters, 21st Sig-

IN REPLY REFER TO

AGAM-P (M) (13 Jan 69) FOR OT UT 684202

15 January 1969

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nal Group, Period Ending 31 October 1968

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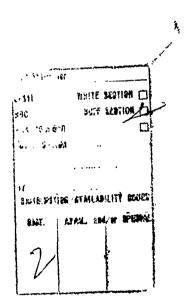
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21st Signal Group



# DEPARTMENT OF THE ARMY HEADQUARTERS, 21ST SIGNAL GROUP APO 962hO

SCCPV-NG-OPT

8 November 1968

SUBJECT: Operational Report of Headquarters, 21st Signal Group (USASTRATCOM) for Period Ending 31 October 1968, RCS CS FOR-65 (RI)

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# 1. Section 1. Operations: Significant Activities.

- a. Mission. During the period of this report the 21st Signal Group was operational in performing its mission of providing communication-electronics support for free world forces located throughout the I and II Corps Tactical Zones of the Republic of Vietnam. The Group continued to perform its mission under the command and operational control of CG, 1st Signal Brigade (USASTRATCOM). The 21st Signal Group was operational during the entire ninety-two day period of the report.
- b. General. During the reporting period 1 August 1968 through 31 October 1968, the assigned strength of the 21st Signal Group decreased to 6050. The decrease in strength was due to short-fill and delayed fill on monthly requisitions.
  - c. Activities.
  - (1) Principle Staff Changes
- (a) Lieutenant Colonel Raymond L. White assumed duties as the Chief of Operations and Intelligence Section (S-2/3) upon the reassignment of Lieutenant Colonel Keith E. Mc Call, Jr.
- (b) Major Ropert W. Welker assumed duties as the Adjutant upon reassignment of Major Ruck H. Pack.
  - (2) Distinguished Visitors.
- (a) Major General Walter E. Lotz, Commanding General, USASTRATCOM, visited this headquarters and was given an orientation briefing on the mission, organization, and function of the Group.
- (b) Colonel Dana Prescott, AACOMS Project Manager, visited this headquarters and inquired into the project status of new AACOMS equipment.

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#### d. Personnel and Administration

- (1) The actual assigned strength of the 21st Signal Group at the end of the reporting period was 95.4% of the Group's authorized strength. The actual versus authorized strength figure indicates that this Command's present internal requisition identification control measures are functioning in a satisfactory manner.
- (2) Although a high on-hand strength figure appears to indicate the presence of an extremely favorable personnel balance, critical skill shortages continue to hamper mission essential operations within the 21st Signal Group. Critical MOS shortages in MOS's 36E, 71B, 72C, 94A, and 94B have had detrimental effects on operations within the command. Reasons for the shortages can be attributed to frequently experienced short-fill and delayed fill on routine monthly requisitions. 21st Signal Group is presently undergoing a new MTOE submission program requesting realignment of existing spaces and allocation of additional spaces as required to increase the efficiency of operations within this unit. Upon approval by DA these documents should provide a realistic table of authorizations more in consonance with existing mission-essential personnel requirements.
- (3) During the period 1 August to 31 October 1968, this Command awarded 2 Silver Stars, 2 Legion of Merits, 91 Bronze Stars (8 with "V" device), 22 Air Medals, 107 Army Commendation Medals (14 with "V" device), 11 Purple Hearts, 53 1st Signal Brigade Certificates of Achievement, and 279 21st Signal Group Certificates of Achievement.
  - e. Operations.
  - (1) Communications Centers.
- (a) Communication Centers were activated at Fhan Rang and Task Force South (Dalat). The Phan Rang Communications Center will provide much improved service between the MACV Advisory Team and HQ IFFV at Nha Trang. Thirty days after activation the Task Force South communication center was conselidated with the Dalat AACC to conserve personnel and equipment resources.
- (b) The AACC at Wunder Beach was deactivated concurrently with the phase-out of the mission at that location.
- (c) Interim Autodin Mode V terminals were activated at Da Nang, Pleiku and Phu Bai.
- (d) The vanized Univac 100h Autodin Terminal was deactivated at Da Mang South and activated at the Phu Bai communication center to replace the Mode V terminals which proved inadequate for the heavy traffic volume handled by that communication center. This increased teletype capability from 200 to 1200 WPM at that location.

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- (2) Control Facilities. The total number of Technical Control Test and Patching Facilities increased to 23 during the reporting period. The two major projects were as follows:
- (a) The MSQ-73 at Chu Lai was replaced by an SB-675 during August, and the van was transferred to Dong Ha. By 25 September the MSQ-73 was installed at Dong Ha and greatly increased the control capabilities of the site which until this time was only using an SB-611 patching van.
- (b) An SB-611 was installed during October at Hue MACV to provide increased facilities in the I CTZ.
- (c) An SB-611 was replaced at Pleiku South with an SB-675 thus increasing circuit testing cabability.
- (3) Radio. The total number of radio systems operated by the 21st Signal Group decreased from 150 to 147, a 2% decrease for the quarter. During the quarter the AACS expanded from 77 to 85 while DCA systems decreased from 73 to 62. The increase in Army Area Communications provided is largely attributed to the extensive increase in support provided tactical operations in I CTZ. Major system installations include a 24 channel tropospheric scatter DCA system from Lang Bien Mt. to Ban Me thuot, a 23 channel microwave Army Area system from Nha Trang to Com Ranh Bay, and a 22 channel microwave DCA system from Nha Trang to Com Ranh Bay. The total channel capacity provided by 21st Signal Group decreased slightly to a total of 2479.
- (h) Telephone: There were 16 projects completed during this reporting period involving switchboards and cable. At the end of this quarter 21st Signal Group personnel were operating 47 manual telephone exchanges (MTE's) and 5 dial telephone exchanges (DTE's) with a total of 8440 line terminations. As of the previous period there were 44 manual telephone exchanges and 5 dial telephone exchanges with a total of 7900 line terminations. A total of 3590 circuit miles of cable were installed this reporting period as compared to 2364 circuit miles for the previous period. The following telephone management projects were completed during the reporting period:
- (a) <u>Dragon Mountain (PUS)</u>: Antennas and transmission lines for the FAA. Aircraft Control Tower at Dragon Mountain (Fleiku South) were installed 20 August 1968.
- (b) An Khe: Antennas and transmission lines for the FAA Aircraft Control Tower at An Khe were installed 20 August 1968.
- (c) Quang Ngai: An AN/MTC-1 was replaced with another AN/MTC-1, because of needed rehabilitation. Completion date was 24 August 1968.
- (d) An Son: Antonnas and transmission lines for the FAA Aircraft Control Tower at An Son were installed 25 August 1968.

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- (e) Camp Eagle: A manual telephone central office AN/MTC-1 was installed at Camp Eagle on 26 August 1968.
- (f) Cam Ranh Bay: Project Call Home. 21st Signal Group was tasked to install 3 commercial 4-wire telephones in the Cam Ranh Bay area. This commercial telephone service is being provided to specified U.S. Military Hospitals and service clubs in RVN. CONUS access is provided by RVN Telephone Company (P & T) over radio telephone circuits. This project was completed on 28 August 1968.
- (g) Mha Trang: A new multipair outside cable plant to support the new Republic of Korea Forces Compound adjacent to the Camp McDermott contonment area in Nha Trang was completed on 31 August 1968.
- (h) Quang Tri City: Quang Tri City SB-86 was upgraded to an AN/MTC-3, thus improving pick-up time and enabling the facility to serve more subscribers. Installation date was 1 September 1968.
- (i) Dalat: The Dalat local AN/MGC-9 was upgraded to an AN/TTC-7. Improved common battery scrvice is now being provided to subscribers in the Dalat Area. Completion date was 9 September 1968.
- (j) Da Neng: Da Nang East Subscriber Installation. This project was the second phase of CTO 9-68. The first phase was the installation of the main feeder cables by the 160th Signal Group. Phase two provided for the subscriber installation for Da Nang East. Project was completed 10 September 1968.
- (k) <u>Hue Citadel</u>: Installation of an SB-86 at Hue Citadel. An SB-86 was installed at Hue Citadel to provide service to the Hue MACV Advisory Team. Completion date was 16 September 1968.
- (1) <u>Da Nang:</u> Switchboard installation at the 95th Evacuation Hospital, Da Nang. An SB-86 was installed at the 95th Evacuation Hospital in Da Nang to provide service to hospital wards. The completion date was 19 September 1968.
- (m) LZ English: The AN/MGC-9 at LZ English was upgraded to an An/MTC-1. This project was completed on 8 October 1968.
- (n) <u>Camp Evans</u>: Two ea AN/TTC-7's were provided from 1st Signal Brigade assets and installed at Camp Evans. This installation replaced an AN/MTC-1. Line capacity was increased from 200 to 600 and pickup time was reduced by adding 3 ea DSA Positions. Project completion date was 11 October 1968.
- (o) Camp Hollaway: Antennas and transmission lines for the FAA Aircraft Control Tower at Camp Hollaway (Pleiku) were installed 18 October 1968.

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- (p) Camp Eagle: Two ca AN/MTC-l's were providing base camp communications at Camp Eagle. To provide better telephone communications at this base camp the two AN/MTC-l's were relocated, and through use of interconnecting cables, were connected in tandem. This resulted in increased line capability and decreased operator pickup time. Project was completed 26 October 1968.
- (q) Cam Ranh Bay: Outside plant Cam Ranh Bay Piers Section. This project extended dial service from the army dial telephone exchange at Cam Ranh Bay to the new location of the traffic management agency BOQ's. Completion date was 30 October 1968.
- (r) Ban Me Thuot: This project provided a multipair outside cable plant in support of M.CV Advisory Team #33 at Ban Me Thuot. Project was completed on 31 October 1968.

#### f. Training

- (1) During the reporting period sixteen training inspections were conducted by the 21st Signal Group Training Officer and Training NCO in a continous effort to upgrade the overall Group training program. A primary consideration in the inspections is the continuous improvement of the Mission Essential (OJT) Program. During the reporting period, Mission Essential Training accounted for 3370 personnel trained, an increase of 733 over the previous reporting period.
- (2) Special Training Projects, reflected in the following chart, were effective in reducing problem areas encountered by the in troduction of new equipment and recognized weaknesses of personnel in certain HOS's.

| SCHOOL  | TOTAL NR TRAINED  |
|---|-------------------|
| SSB Maint. Ccurse (AN/GRC-106/VSC-2)              | 14                |
| Cable Splicir Technical and Refresher Training    | 24                |
| Microwave Oper. Course* (AN/TRC-29 and AN/TCC-13) | 6l <sub>4</sub> . |
| Tech Facilities<br>Controllers Course             | 13                |
| Tel Key System ·<br>Maint Course                  | L <sub>4</sub>    |
| Tropo Oper Course* (AN/TRC-90)                    | 19                |

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| SCHOOL                                       | TOTAL NR TRAINED |
|--|------------------|
| Radio Relay Maint<br>Course (AN/GRC-50)      | 16               |
| PLL Course**                                 | 31               |
| Mortar Training***                           | 33               |
| PCM System Oper (AN/TRC-110/117) (AN/GRC-50) | 40               |
| Ckt Restoral Course                          | 1հ               |

- \* 1st Signal Brigade Schools conducted by 21st Signal Group.
- \*\* PLL Training conducted by 1st Logistical Command.
- \*\*\* Mortar Training conducted by 3/506th 101st ABN Division.
- (3) Special Training, as reflected in the proceding chart, accounts for 355 personnel trained during the re-crting period.
- (4) Mindatory training continues to be conducted in accordance with 1st Signal Brigade Regulation 350-1.
  - g. Intelligence.
- (1) Enemy Activity. Units of the 21st Signal Group experienced a reduction in enemy activity during the reporting period as compared to the previous quarter. One isolated signal site sustained an intensive ground attack. Elements of the 21st Signal Group overcame the attacking force resulting in 9 enemy KIA, 2 friendly KHA, 12 friendly WHA and moderate damage to the site. The operations of the site were not interrupted as a result of the attack.
- (2) Equipment Damage. Equipment damage due to enemy activity within 21st Group was moderate. Items destroyed included four empty cable rec1s and one M-ll rifle. One 3/h ton vehicle was heavily damaged. Equipment sustaining moderate damage: included one 3/h ton-whicle, one Al/182-51, van, and one 2½ ton truck. The following items received light damage: One AN/MRC-5h van, one AN/MGC-17 and one AN/GPC-h6.
- (3) Casualties. Twenty-two men of the 21st Signal Group were wounded in hostile action and three were killed during the reporting period. There was no significant change in number of casualties in comparison to the previous period. The majority of the casualties resulted from a single attack on an isolated signal site.

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- (h) Security Violations. There was one possible compromise and one administrative violation during the reporting period as compared with three compromises and no administrative violations during the previous reporting period. This represents a decrease of 30%.
- (5) Security Inspections. Quarterly Physical Security Inspections were conducted at each installation under the 21st Signal Group. Frequent inspection trips by Brigade I & S Section personnel have served to improve the physical security at several sites of the 21st Group.
  - h. Logistics: Nonc.
  - i. Organization.
- (1) The 517th Signal Detachment (Tropo) moved from Phu Bai to Dong Ha during the latter part of July to establish a system between Dong Ha and Phu Bai. The 544th Signal Detactment (Tropo) deployed from Da Nang on 6 September 1968 with one terminal going to Hue MACV location and the other going to Phu Bai. The 544th helped to decentralize the Hue tropo site, an unprotected location, by establishing one terminal of system BBT21 (Hue-LZ Stud) at Hue and another terminal of system 77UT52 (Phu Bai-Da Nang) at Phu Bai.
- (2) On 10 September 1948 the subarens of communications responsibility of the 1959th and 1934 Signal Battalions were reconfigured so as to give the 1959th Signal Battalion responsibility for Darlac province and specifically the city of Ban Mc Thuot. The change was made to facilitate greater ease of command and control.
- (3) In September, the 1st Signal Brigade organized a new signal group, I CTZ Signal Group (Prov), to assume area communciations responsibility for all of I CTZ. The provisional headquarters was organized by 1st Signal Brigade General Order 743 dated 10 September 1968 and effective 8 September 1968. The authorized strength of the provisional group headquarters will be 21 officers, 4 warrant officers, and 60 EM for a total of 86. Personnel and equipment for the provisional group will be transferred to the unit from in-country resources. The location of the provisional group headquarters is Phu Bai and the Commanding Officer is COL Mitchel Goldenthal. When operational, the provisional Signal Group will assume command and control of the 63d and 37th Signal Battalions, thus reducing the 21st Signal Group to four (4) battalions. The target date for the cutover is undetermined as of the time of this writing.
- (h) A group reorganization conference was convened at 21st Signal Group Headquarters on 9 October 1968, with representatives from 1st Signal Brigade, 21st Signal Group and all subordinate battalions present. The conference outlined the program for resubmission of proposed MTOE's by all assigned units to Department of the Army. The program entails reorganization of all fixed communications facilities; the reorganization of each battalion headquarters under TOE 11-76G; and an assigned s curity force unit for the 21st and Provisional Groups.

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- (5) The advance party of the 270th Signal Company (CA) arrived in-country at Cam Ranh Bay Air Base on 19 October 1968 with the main body arriving in two increments at Phu Cat Air Base on 28 and 31 October 1968. Upon arrival unit's personnel (168 assigned/172 authorized) were flown to An Khc for predeployment processing. The company's equipment arrived by ship on 31 October 1968 and will be convoyed to An Khe.
- (6) The 17th Cable Construction Platoon arrived in-country on 29 October 1968 at Phu Cat Air Base. Upon arrival the unit's personnel (55 assigned/63 authorized) were flown to An Khe for pre-deployment processing. The units equipment is scheduled for arrival on or about 4 November 1968 and will be conveyed to An Khe.
- (7) Both the 270th Signal Company and the 17th Cable Construction Platocn will be assigned to the 63d Signal Battalion but attached to the 43d Signal Battalion for all purposes while at An Khe. They will be relieved of attachment to the 43d and deployed to the 63d's area in the near future. The arrival of these two units in-country raised the 21st Signal Group's authorized strength to an all time high of 6576.

# j. Aviation.

- (1) The Group Aviation Section is in the process of improvement of the Maintenance Section thru the self-help program. A new hanger has been designed and the land for its construction is being sought. Command emphasis has resulted in improved cleanliness of maintenance areas and a decrease in safety hazards.
- (2) The group avaiation section has obtained spaces for one mechanic in each of the helicopter engine and airplane schools at Vung Tau. An attempt is being made to obtain two allocations per month until all qualified personnel have attended.
- (3) All revetments have been inspected and all unservicable sandbags replaced.
- (4) Two fixed wing aviators have completed aircraft transition courses, one each in the U-6A Reaver and the U-1A Otter.
- (5) A training program is being started for all personnel involved in aerial flight. It is composed of two classes per week taught by the section's aviators. The subjects include all matters related to survival, escape, and evasion.
- (6) A biweekly fixed wing transport route has been devised and will begin on 9 November 1968.
- (7) U.S. Air Force weather service information is not adequate for operations near Vung Ro and Lang Bian Mountain signal sites. A Group operated weather service at the above locations is planned for the next quarter.

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(8) During the period of August, September, and October 1968, availability figures are as follows:

| •     | <u>F1</u> | XED WING     |      |
|-------|-----------|--------------|------|
| Hours | Scrties   | Cargo (Tons) | Pass |
| 96    | 356       | 17           | 540  |
|       | ROT       | ARY WING     |      |
| Hours | Sorties   | Cargo (Tons) | Pass |
| 200   | 2135      | 68           | 5163 |

# August - October Quarterly Averages per Aircraft

|             | AVILIBILTTY |     |      | HOUR | HOURS FLOWN     |       |  |  |
|-------------|-------------|-----|------|------|-----------------|-------|--|--|
|             | UlA         | U6A | UHlD | ULA  | U6A             | UHlD  |  |  |
| *USARV      | 73          | 64  | 76   | 52   | 38              | 91    |  |  |
| 21st Sig Gp | 48          | 79  | 55   | ÷∺27 | 42 <del>*</del> | ***50 |  |  |

<sup>#</sup> USARV averages are for 1st Quarter FY 69.

# 2. Section 2, Lessons Learned: Commander's Observations, Evaluation, and Recommendations.

- a. Personnel. None
- b. Operations.

# (1) Use of Microwave Antonnas with AN/GRC-50 Radios

OBSERVATION: Recent tests using microwave antennas with AN/GRC-50 radios have shown considerable promise. One test using the "G-line" to the microwave antenna resulted in little noticeable difference in receive levels but the signal-to-noise ratio was better. Coaxial cable was run straight to the microwave antenna. This test improved the receive level reading from eight to between twenty-five and thirty and again resulted in improved signal-to-noise level.

EVALUATION: Apparently the microwave antenna's greater gain over standard AN/GRC-50 horn antenna for the VHF frequencies accomplishes considerable noise reduction at the same time. Should continued tests prove this to be the case, systems can be engineered to be considerably quiter over more extended ranges.

Low utilization of fixed wing aircraft due to shortage of fixed wing Aviators. This has been remedied by the arrival of two fixed wing Aviators. Even utilization of Rotory Wing Aircraft was due to the aircraft being in Field maintenance for 2188 hours during the quarter.

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RECOMMENDATION: These tests should be continued until results are definite and predictable, and then this use should be effected where most needed.

# (2) Selected Frequency and Space Diversity Operation of HF Radios.

OBSERVATION: Extensive outages of three to four hours daily at the Da Nang and Fhu Bai stations have been experienced on the MACV Command HF RATT Net due to frequency interference and static. Problem were encountered only on receive at these out stations. No outages were experienced due to the Long Binh net control station not receiving the out stations.

EVALUATION: Attempts were made to improve station reception at Da Nang and Phu Bai by installation of additional antennas to operate in the space diversity mode. Limited space available at Da Nang for antenna installation did not allow the optimum antenna seperation, however space was available for proper antenna separation Phu Bai. Attempts to eliminate these outages due to man made interference and static by use of space diversity techniques were unsuccessful. It is assumed that operation of HF radios in space fiversity mode will reduce outages only if the outages are due to fading. These stations in question were not experiencing fadingos Further attempts to decrease station outages by frequency changes were made. Investigation of the atmosphere characteristics by using data published in USASTRATCOM Intermediate Distance Sky Wave Propogation Charts dated October 1968 and plotting LUF-MUF-FOT charts, indicated frequencies presently being used were below the lowest usable frequency. Frequency near the frequency of optimum traffic was obtained and station outages were considerablly reduced.

# (3) Employment of AN/TRC-97B Tropo Vans.

OBSERVATION: It is not feasable to employ AN/TRC-97B tropo vans within this command because of the present concept of maintenance. The Joint Army-Air Force Maintenance Contract prevents timly equipment repair and restoration to operational status when an equipment failure is experienced. During a recent tasking of the Air Force to troubleshoot and repair two AN/TRC-97B's located in Nha Trang, RVN 31 days elapsed from time of the request until maintenance team arrived on location. Maintenance team personnel placed defective parts on requisition (no parts are stocked in RVN) and team returned to home station in Japan. Two weeks have passed and supply action is still pending.

EVALUATION: Joint Army-Air Force Maintenance Contract prohibits Army personnel from performing all but minor maintenance functions. Furthermore only Air Force personnel may requisition parts for the AN/TRC-97B through Air Force channels.

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RECOMMENDATION: That consideration be given to re-evaluate the Army-Air Force Maintenance Contract to achieve a realistic plan of effective maintenance and logistic support capable of sustaining AN/TRC-97's for an extended period after employment. It is further recommended that AN/TRC-97's should not be employed in any situation that requires immediate system restoration until maintenance and logistic problems are solved.

# (4) VHF Antenna Tests.

OBSERVATIONS: In some areas the terrain and distance between VHF sites has resulted in marginal systems. The polarization, frequency, and height of the antennas has been varied with no noticeable improvement.

EVALUATION: A field experiment was established terminating an AN/TRC-24 receiver with a 600r terminated unidirectional rhombus. Varying the characteristics of the rhombus and types of matching units did not improve the reception of the system compared to the reflector dipole. The rhombic antenna is not readily compatible with the AN/TRC-24. Detailed examination of the problem showed that the only possible way to improve these systems would require antennas in the reflector dipole family or modification of the reflector dipole organic to the AN/TRC-24 equipment. Investigating the former, AT-880/U corner reflector antennas were tested anyway. The results were equivalent to the reflector dipole without being properly fed and matched.

RECOMMENDATION: Corner reflectors be used for marginal VHF systems.
Their characteristics with proper connection whould improve the system.

#### (5) Use of 48V Lamps as Supervisory Lights in the SB-249 Switchboard.

OBSERVATION: 48C1 Lamps (FSN 6240-715-0037), which has been used when 6C type lamp (FSN 6240-153-6515) is not available, does not provide satisfactory illumination of the supervisory signals in SB-249's.

EVALUATION: Resistor NR (2K Ohms) is connected in series with supervisory lamps and causes less than 48 volts to be applied across the lamp filament.

RECOMMENDATION: That sufficient quantity of 6C type lamps be requistioned and stocked to preclude substitution of 48Cl type lamps for 6C type lamp.

#### (6) Mode V Autodin Maintenance Problems.

OBSERVATIONS: The Mode V Autodin Terminals still lack qualified maintenance support which is resulting in lengthy circuit outages and altrouting of messages.

EVALUATION: The implementation of this program without qualified maintenance support as a result of incomplete functional training, lack of PLL's, spare parts and manuals, are major contributing factors to the problem.

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#### RECOMMENDATIONS:

- (a) That increased emphasis be placed on obtaining spare parts, and the training of MOS 72B and 32G personnel for Mode V terminals installed.
- (b) That required manuals and publications be furnished concurrent with receipt of equipment for all future Mode V terminals.
- (c) That required PLL's, and necessary spare parts be identified, established, and furnished concurrent with activation of future Mode V terminals.
- (d) That projects such as AUTODIN, AUTOSEVOCOM etc, should not be activated until positive and adequate maintenance support is provided.

# c. Training.

# Cancellation of AN/TRC-97B Classes

OBSERVATION: The AN/TRC-97B equipment used at the USATF 1st Signal Brigade Tropo School in Nha Trang has been slated for operational use elsewhere in RVN. Along with the equipment instructors have been pulled out of the school to operate the AN/TRC-97B's.

EVALUATION: Classes may have to be susp nded at the Tropo School if the instructors and equipment are not returned in the near future. It is anticipated that a problem will develop with the arrival of more AN/TRC-97B equipment in-country without sufficient people trained as operators. With suspension of the AN/TRC-97B classes, training on this equipment in RVN will have come to a complete halt.

RECOMMENDATIONS: Although the AN/TRC-97B school equipment and instructor personnel are needed to support present operations, it is of vital importance that trained personnel be on hand to operate additional AN/TRC-97B equipment as it arrives in-country in the future.

# d. Intelligence.

# Sentry Dogs for Isolated Signal Sites.

OBSERVATION: The Sentry Dogs for one of 21st Signal Group's more important signal sites are to be removed due to an MTOE realignment in USARV.

EVALUETION: The necessity for a high degree of security on such a site still exists, and thus the removal of those Sentry Dogs will necessitate replacement with sufficient manpower to provide a comparable degree of security. Manpower is at a premium within this command at this time.

SCCPV-NG-OPT 8 November 1968 SUBJECT: Operational Report of Meadquarters, 21st Signal Group (USASTRATCOM) for Period Ending 31 October 1968, RCS CS FOR-65 (RI)

RECOMMENDATION: That arrangements be made to keep the Sentry Dogs.

- Logistics. None
- Organization. None
- g. Other. None

1 Incl

Acting Commander

# DISTRIBUTION

9 ea - CG, 1st Sig Bde ATTN: SCCPV-OP-CR 3 ea - CG, USARV, ATTN: AVHGC-DST 2 ea - CINCUSARPAC, ATTN: GPOP-DT

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SCCPV-UP-CR (& Lov 62) 1st Ind SUBJECT: Uperational Report of Headquarters, 21st Signal Group (USASTRATCOM) for Period Ending 31 October 1968, RCS CSFCR-65 (R1)

- DA, HQ, 1st Signal Brigade (USADTRATCOM), APO 96384 1 Dec 68
- To: Commanding General, United States Army Vietnam, ATTN: AVHGC-DST, AFO 96375
- 1. Subject report is forwarded in accordance with USANV Regulation 525-15.
- 2. This headquarters has reviewed the report and concurs in it as submitted with the following comments and/or exceptions:
- a. Paragraph le(1)(d), p.2. Insert a period at the end of the paragraph on line five.
- b. Paragraph 1f(2), p.5. Delete "instroduction" and insert "introduction" on line two.
- c. Paragraph 2b(5), p.ll. Concur in the recommendation that a sufficient stockage of 6C type lamps be maintained so as to preclude the requirement to use a substitute, such as 48Cl lamps. While the 48Cl lamp will work in place of the 6C, the illumination provided (as stated) is insufficient for a supervisory signal.
- d. Paragraph 2b(6), p.11. This headquarters does not concur in reference paragraph.
- (1) Communications projects such as AUTODIN were implemented with a knowledge of certain limitations present at the time. However, to delay implementation of these systems until the maintenance support mentioned is available would result in insufficient communications available to support Vietnam units.
- (2) The situation implied by referenced paragraph is not completely accurate.
- (a) US Army Training Facility 1st Signal Brigade (USASTRATCOM) presently trains 4 Mode V maintenance personnel every 21 days to insure that enough of these personnel are available until CONUS trained maintenance men arrive in sufficient numbers.
- (b) The 1st Signal Brigade arranged a system of direct support and general support maintenance for all Mode V terminals connected to the Nha Trang AUTODIN Switch. This system is working well.
- (c) The 1st Signal Brigade provided 21st Signal Group with Mission Shop Stock Lists (MSSL's) for the Teletypewriter Control Unit (C-7050/G) and the Low Level Signal Unit (AN/UGA-8). Also, guidance was provided for requisitioning procedures to be followed by the Mode V terminals for common, COMSEC unique, and AUTODIA peculiar parts.

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SUJECT: Operational Report of headquarters, 21st Signal Group (USASTRATCOL)
for Period Ending 31 October 1/68, RCS CSFOR-65 (£1)

(d) Parts are presently on sites and adequate repair parts (ADL) are available at the Nha Trang ADC to support all mode V Terminals connected to the switch.

red The CommanDin:

WILLIAM G. SKINNER

Colonel, GS Chief of Staff

CF:

Assistant Chief of Staif for Force Development, Department of the Army, Washington, D.C. 20310

Commanding General, United States Army Strategic Communications Command, ATTN: DCSOPs, SCC-UPS-AT, Fort Huachuca, Arizona 85613

AVHGC-DST (8 Nov 68) 2d Ind SUBJECT: Operational Report of Headquarters, 21st Signal Group (USASTEATUCEM) for Period Ending 31 October 1968, RCS CSFOR-65 (R1)

HLADQUARTERS, UNITED STATES ARMY, VIETNAM, APO San Francisco 96375 17 DEC 1968

- 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 1968 from Headquarters, 21st Signal Group (USASTRATCOM).

#### 2. Comments follow:

- a. Reference item concerning use of microwave antennas with AN/GRC-50 radios, page 9, paragraph 2b(1): Concur in the recommendation. The horn antenna for the AN/GRC-50 radio was designed for tactical applications. Substitution of antennas for specific situations to improve communications quality is encouraged provided the systems will be in use for extended periods of time and the integrity of the original equipment configuration is retained.
- b. Reference item concerning employment of AN/TRC-97B tropo van, page 10, paragraph 2b(3). The problem of maintenance on the AN/TRC-97B equipment has been recognized. A five-man Air Force field maintenance team has been in Vietnam since 1 November 1968 to provide maintenance assistance on AN/TRC-97B sets. On 2 December 1968 eight Army signal maintenance personnel were sent to Clark Air Force Base for four weeks of maintenance training on the AN/TRC-97B. CG USAECOM has been requested to negotiate a contract with RCA to provide supply and maintenance support for the AN/TRC-97B, and to provide two in-country maintenance technicians.
- c. Reference item concerning use of 48V lamps in the SB249 switch-board, page 11, paragraph 2b(5); and 1st Ind, paragraph 2c: Concur in the 1st Indorsement. Proper requisitioning procedure and warning against improper substitution of 48V lamps in the SB249 switchboard will be discussed in a future issue of the USARV pamphlet, Command Communications.
- d. Reference item concerning MODE V AUTODIN maintenance problems, page 11, paragraph 2b(6); and 1st Indorsement, paragraph 2d: Concur in the 1st Indorsement.
- e. Reference item concerning sentry dogs for isolated signal sites, page 12, paragraph 2d. This recommendation was presented in earlier

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correspondence from the 1st Signal Brigade and has been favorably considered. Sentry dog teams were not withdrawn from the signal site referred to in the report.

FOR THE COMMANDER:

A.R. GUENTHER CPT. AGC

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ASST. ADJUTANT GENERAL

Cy furn:

HQ 1st Sig Bde (USASTRATCOM)

HQ 21st Sig Gp (USASTRATCOM)

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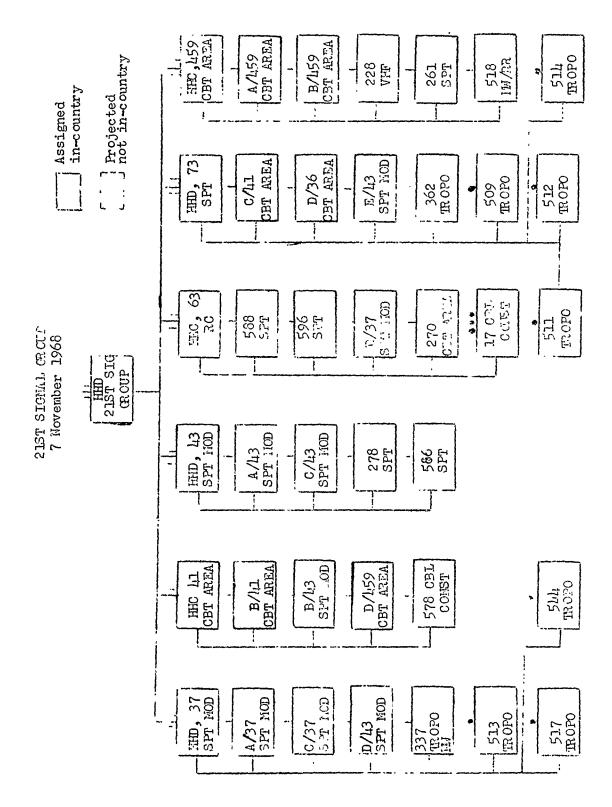
HQ, US Army, Pacific, APO San Francisco 96558 27 DEC 1968

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

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

FOR THE COMMANDER IN CHIEF:

C. L. SHORTT
CPT, AGC
Asst AG



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