## UNCLASSIFIED

# AD NUMBER AD827121 NEW LIMITATION CHANGE TO Approved for public release, distribution unlimited **FROM** Distribution authorized to U.S. Gov't. agencies and their contractors; Critical Technology; 24 APR 1967. Other requests shall be referred to Army Office of the Chief of Staff for Force Development, Attn: FOR-OT-RD, Washington, DC 20310. **AUTHORITY** oag d/a 1tr 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

AGAM-P (M) (20 Apr 67) FOR OT 670174

24 April 1967

Operational Report - Lessons Learned, Headquarters,

69th Maintenance Battalion (GS)

TO:

SEE DISTRIBUTION

1. Forwarded as inclosure is Operational Report - Lessons Learned, Headquarters, 69th Maintenance Battalion (GS) for quarterly period ending 31 January 1967. Information contained in this report should be reviewed and evaluated by CDC in accordance with paragraph 6f of AR 1-19 and by CONARC in accordance with paragraph 6c and d of AR 1-19. Evaluations and corrective actions should be reported to ACSFOR OT within 90 days of receipt of covering letter.

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

BY ORDER OF THE SECRETARY OF THE ARMY:

1 Incl

DISTRIBUTION:

KENNETH G. WICKHAM

Major General, USA The Adjutant General

Commanding General

US Army Combat Development Command

US Continental Army Command

Commandants

US Army Command and General Staff College

US Army War College

US Army Air Defense School

US Army Artillery and Missile School

US Army Armor School

US Army Chemical Corps School

US Army Engineer School

US Army Military Police School

US Army Infantry School

US Army Intelligence School

US Army Medical Field Service Scho

(Continued on page 2)

FOR OT RD 670174

subject

This document ransmittai

## DEPARTMENT OF THE ARMY HEADQUARTERS, 69TH MAINTENANCE BATTALION (GS) APO 96312

AVCA CR-D-MB-69-OP

7 February 1967

SUBJECT: Operational Report For Quarterly Period Ending 31 January 1967,

RCS CSFOR-65

TO:

Deputy Commanding General

United States Army, Vietnam

ATTN: AVC-DH APO 96307

Subject above for this headquarters is forwarded in compliance with Army Regulation 1-19.

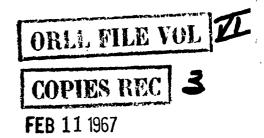
TEL: CRB 459

1 Incl

as

L. CONRAD DAVIS

LTC, OrdC Commanding



DEPARTMENT OF THE ARMY
HEADQUARTERS, 69TH MAINTENANCE BATTALION (GS)
APO 96312

OPERATIONAL REPORT FOR QUARTERLY PERIOD ENDING 31 January 1967

## TABLE OF CONTENTS

		PAGE NO.	•
SECTION I	SIGNIFICANT ORGANIZATIONAL ACTIVITIES	1 THRU 3	3 4
SECTION II	COMMANDERS OBSERVATIONS & RECOMMENDATIONS	4 THRU 6	5
PART I	Observations (Lessons Learned)	4 AND	5
PART II	RECOMMENDATIONS	6	
SECTION III	ORGANIZATIONAL STRUCTURE	6	

#### SECTION I: SIGNIFICANT ORGANIZATIONAL ACTIVITIES

During this quarter changes were constantly being incorporated into the Battalion Ground Defense Plan. This action became necessary due to the large number of construction projects being carried out within the Battalion's defensive perimeter. Practice exercises and alerts were conducted at random to insure that subordinate companies kept pace with changes occurring within their respective areas.

The 135th Heavy Equipment Maintenance Company was given the mission of evacuating repairables to Second Logistical Command. In order to accomplish this, a large area was covered with steel matting to provide hardstand for the vehicles and assemblies awaiting shipment. Most of the month of November was required to complete the placing of the matting. Each unit within the battalion provided a detail on a daily basis for this project. Many problems were encountered, the greatest of which was securing the correct type matting in adequate quantities from the engineer storage yard. The project was completed by the end of November and immediate steps had to be taken to prevent erosion of the area due to heavy rains.

The 136th Light Maintenance Company was reassigned to the 532nd Supply and Service Battalion in Tuy Hoa and departed the Cam Ranh Bay area on 15 November. Prior to that time, however, there were many false starts and delays. Communications between the gaining and losing battalions were at best incomplete which resulted in confusion in several instances.

With the departure of the 136th, the 135th assumed a direct support maintenance mission. The take over was accomplished with little or no letdown in customer support. This condition is to exist until early spring when the 135th is scheduled to assume a GS mission.

On 16 November, the Battalion initiated its BCI (Battalion Command Inspection) program. Each week, the Battalion staff inspected one of the companies within the Battalion. The inspections were broken into two categories: The mission activities and the company area. All areas within the two categories were exhaustively investigated. Initially, none of the companies were able to meet the requirements set by the Battalion Commander. However, after each company had received two BCI's, the level of performance had risen considerably. By the end of January, 3 of the 5 subordinate units had achieved a superior rating (90% or better) and the two remaining units were rated as excellent with overall scores in the upper 80 percentile bracket.

As the year drew to a close, it became apparent that Cam Ranh Bay was becoming the show place of RVN. More and more VIP's were arriving to view for themselves how the military was handling the build-up of troops and equipment. Once again the 69th was called upon to carry the ball. A  $\ddagger$  ton vehicle was specially equipped to transport dignitaries around the Cam Ranh Bay area. The results may have seemed nebulous at the time, but the favorable impressions initially received by the visitors did much to polish the image of Cam Ranh Bay.

#### SECTION I: SIGNIFICANT ORGANIZATIONAL ACTIVITIES

As more and more units arrived in the Cam Ranh Bay area, the list of units supported by the 69th continued to grow. The Battalion experienced a continuous problem with these new units in regard to their equipment densities. The Operations Section would send each unit a stenciled form requesting densities and in many cases would never receive an answer. Only after maintenance became necessary did the units realize the need for submitting the requested densities.

On 7 December 1966, the Battalion received first notification of the planned inactivation of the 510th Engineer Company. Since the unit was the only Engineer field maintenance support facility in the Cam Ranh Bay area, an all out effort was launched to keep it in the system. At the time this publication was forwarded, the issue was still in doubt although the prospects of retention were dim.

On 9 December 1966, the Battalion began job ordering limited quantities of equipment to a civilian contractor (Vinnell Corporation) for general support maintenance and rebuild. The arrangement allowed some equipment that had previously been evacuated out of country to remain in the Cam Ranh Bay Area - thus saving much time and expense in shipment.

On 17 December 1966, a representative of APG arrived, seeking information to incorporate into the branch school at Aberdeen. Much to his surprise, the Battalion staff had many comments to make regarding all phases of maintenance and supply. A form was printed to be sent to APG with further comments should any come to mind.

The month of January 1967 was spent revising the maintenance support plan of the battalion and acquiring densities from the new units arriving in country. Much time was spent preparing the supply sections of the subordinate units to convert to the NCR 500 computer system. This system arrived on 31 January and is to be in operation during the first week of February 1967.

Investigation of an extremely high failure rate of 6000 pound Anthony rough terrain fork-lift GMC diesel engines led to the conclusion that new engines, preserved for long term storage or overseas shipment, should be thoroughly inspected prior to operation. This includes both crated and installed engines.

It is thought that an excessive amount of preservative oil gathers in the middle cylinders of these engines during the preservation process. Excessive compression pressures or hydrostatic lock at initial operation starts a chain of events which eventually results in the early, uncalled for destruction of the engine.

This battalion now inspects these new engines prior to operation to determine if the excessive oil condition exists. In addition, the oil pans are dropped during maintenance to look for chips of metal in the oil, indicating an incipient failure so that destruction of the engine can be prevented.

#### SECTION I: SIGNIFICANT ORGANIZATIONAL ACTIVITIES

One of the major problem areas encountered with the LDS-465 engines was blown headgaskets. To prevent this from continuing to be a problem, a program of torquing the cylinder heads was initiated. The most logical time for this to be accomplished is upon receipt of the equipment in country, prior to use of the new vehicles.

The 442nd Transportation Company arrived in Cam Ranh Bay with sixty-one (61) five ton truck tractors. The 135th Heavy Equipment Maintenance Company was assigned the mission of torquing these new engine cylinder heads. Becore this work could be started, it was necessary for the 135th Heavy Equipment Maintenance Company to fabricate the special head bolt wrenches since none were available. By using an assembly line method, this task was accomplished in thirty-six (36) hours in addition to other direct support activities.

This outstanding effort by the 135th Heavy Equipment Maintenance Company contributed to the immediate assumption of the assigned mission by the 442nd Transportation Company which was transporting cargo for Cam Ranh Bay Support Command facilities.

SECTION II: COMMANDERS OBSERVATIONS AND RECOMMENDATIONS

PART I: Observations (Lessons Learned)

Item: Unit Defense In Areas Experiencing Construction

<u>Discussion</u>: Difficulties arise when defensive position terrain is constantly being changed.

Observations: Frequent exercises at random intervals require units to keep abreast of changes occurring within their areas of responsibility.

Item: Placing of Metal Matting

<u>Discussion</u>: Much time is lost if the materiel is issued in small increments. Coordination between units becomes difficult when deliveries occur at staggered intervals.

Observations: An initial estimate of total material requirements should be developed. Any additions or deletions could be made on a one time basis when exact needs were determined.

Item: Movement of a Maintenance Company

<u>Discussion</u>: Difficulties were encountered due to lack of voice communications. Much time was wasted and a great deal of work had to be repeated as a result.

Observations: A reliable means of voice communication should be established between the losing and gaining battalions when a subordinate company is transferred.

Item: Battalion Command Inspections

<u>Discussion</u>: The subordinate units were not too pleased to have to prepare for an inspection on a monthly basis. Many individuals thought the man-hours involved in preparation were wasted as far as maintenance was concerned.

Observations: After two months of inspections, the performance of all units was markedly improved. Even though much time was invested in the BCI program, it proved to be well worth the effort.

Item: Submission of Densities

<u>Discussion</u>: As new units arrive in the area supported by this battalion, they normally seek out the maintenance unit that will provide their support. However, these new units frequently fail to consider that direct support maintenance units need to know what density of equipment each possesses.

Observations: Some procedure requiring incoming units to have in their posession a current listing conquipment by type, model, and FSN; would save many maintenance management man-hours after their arrival in country.

SECTION II: COMMANDERS OBSERVATIONS AND RECOMMENDATIONS

Item: Civilian Contractor Maintenance

<u>Discussion</u>: Many problems were encountered initially in setting up the procedures to be followed to get equipment into the contractor's shops. Detailed contractual information was limited and difficult to obtain.

Observations: Any changes in the established Army maintenance system should be carefully planned and coordinated before being implemented on a large scale. If this is done from the organizational level upwards, fewer problems will result.

Item: Sending Information to Branch Schools

<u>Discussion</u>: In order to implement Lessons Learned in the shortest possible time, each branch school needs to be advised of possible changes in policies and procedures that are presently being taught. A method should be divised by which the units in the field could pass recommendations on policy change, alteration of standard procedures, and modification of equipment directly to each branch school.

Observations: If each branch school, both fficer and EM, were to disseminate a questionnaire on a quarterly basis, requesting information from the troops in the field; modifications in maintenance and supply, equipment, and operating procedures could be more quickly reviewed by personnel in a position to determine feasibility.

#### PART II: Recommendations

- A. Require a portion of exercises and alerts to be held during daylight hours. This will allow troops that never see the area they are to defend to observe possible enemy approach routes and make visual contact with the friendly positions on their flanks.
- B. In critical areas such as RVN, when a unit is to be moved; the unit's higher headquarters should exert every effort to establish direct voice communication with a like unit in the gaining organization. At this time, firm information can be obtained concerning the proposed movement.
- C. As soon as company mission activities are well under way, the experienced personnel at the battalion staff level should provide the companies with guidance.on a regular basis. The BCI's mentioned impart I of this publication are an effective tool to use in this instance.
- D. New units arriving in country should submit to their supporting unit a complete density of all on-hand equipment. This allows the rapid compilation of a support plan by the maintenance unit, as well as rapid repair and return of equipment to the supported unit.

#### PART II: Recommendations

E. Recommend all branch schools encourage direct communication between units in the field and the school itself. This would allow those who should know, (the schools) to obtain information rapidly from units in the field, without unwarranted changes by intervening headquarters.

10

#### 4. SECTION III. ORGANIZATIONAL STRUCTURE

### 69TH MAINTENANCE BATTALION (GS)

HEADQUARTERS & HEADQUARTERS DETACHMENT

128TH SIGNAL COMPANY (DEPOT)

129TH MAIN SUPPORT COMPANY

135TH HEAVY EQUIPMENT MAINTENANCE COMPANY (GS)
Canvas and Leather Repair Platoon Attached

510TH ENGINEER COMPANY (DS)

AVCA CR-D-MB-69-OF (7 February 1967) 1st Ind SUBJECT: Operational Report (Lessons Learned) RCS CSFOR-65

HEADQUARTERS, 69th Maintenance Battalion (GS), AFO 96312, 9 February 1967

TO: Commanding Officer, Cam Ranh Bay Depot (Prov), ATTN: Dir/SIFT, APO 96312

- 1. The 69th Maintenance Battalion (GS) participated in operations for 92 consecutive days during the reporting period.
- 2. Reference Part II., A.: This headquarters now conducts ap roximately 25 per cent of its \*ractice exercises during duty hours.
- 3. Reference Part II., B.: The 69th Maintenance Battalion new contacts its next higher headquarters for communications when it is determined that a subordinate unit must be transferred.
- 4. Reference Part II., C.: The battalion staff conducts inspections on a weekly basis within the battalion.
- 5. Reference Part II., D.: This headquarters now requires each newly arrived unit supported by the 69th Maintenance Battalion to submit a density listing of all its on hand equipment.
- 6. Reference Part II., E.: All recently graduated Ordnance Officers in the battalion submitted recommendations to The Ordnance School. At the present time, a procedure is being devised whereby officers of the other branches and the enlisted may do likewise.

TEL: CRB 459

//

L. CONRAD DAVIS LTC, OrdC Commanding AVCA CR-D-SIPT (9 Feb 67)

2d Ind

12

SUBJECT: Operational Report for Quarterly Period Ending 31 January 1967 (RCS CSFOR-65)

HEADQUARTERS, CAM RANH BAY DEPOT (PROV), APO 96312 15 FEB 1967

TO: Commanding General, US Army Support Command, Cam Ranh Bay, ATTN: AVCA CR-GO, APO 96312

- 1. This headquarters has reviewed subject report for the 69th Maintenance Battalion (GS), as indorsed.
- 2. Recommendations included in this report are well within the capability of the Battalion to implement, and as indicated in preceding portions of the report, and in 1st Indorsement, recommendations have been implemented.

FOR THE COMMANDER:

TEL: CRB 184

EDWARD S. GRYCZYNSKI

CPT, AGC

Asst Adjutant

cc: ACSFOR, DA (2 copies mailed direct)

13

AVCA GR-GU-P (7 Feb 67) 3rd Ind SUBJ ECT: Operational Report for Quarterly Period Ending 3l January 1967 (RCS GUFOR-65)

HEADQUARTERS US ARMY SUPPORT COLLIAND CAM HANH BAY, APC 96312 18 FEB 1967

THRU: Commanding General, 1st Logistical Command, APO 96307

Commanding General, US Army, Vietnam, APO 96307

Commander-in-Chief, US Army, Pacific, APO 96558

To: Assistant Chief of Staff for Porce Development, Department of the Army, Fashington, D.C. 20310

The inclosed Operational Report on Lescons Learned submitted by Headquarters, 69th Maintenance Battalion, adequately reflects the activities of that command for the period indicated.

FOR THE COIFIANDLR:

WILLIAM R. JENKINS

CPT AGC ASST AG

TEL: CR3 231

l Incl

14

AVCA GO-O (7 Feb 67)

4th Ind

SUBJECT: Operational Report for Quarterly Period Ending 31 January 1967 (RCS CSFOR-65)

HEADQUARTERS, 1ST LOGISTICAL COMMAND, APO 96307

1 1 MAR 1967

TO: Deputy Commanding General, United States Army, Vietnam, ATTN: AVHGC-DH, APO 96307

- 1. The Operational Report Lessons Learned submitted by the 69th Maintenance Battalion for the quarterly period ending 31 January 1967 is forwarded herewith.
- 2. Reference last item, page 4 and item D page 5: It is felt that if DA Form 413 is accurately prepared by deploying units and appropriate actions have been taken by all supply activities in accordance with Section II, AR 220-10, change 1, sufficient information would be available upon arrival of unit in the overseas command.
- 3. Concur with the basic report as modified by the comments contained in the preceding indorsements. The report is considered adequate.

FOR THE COMMANDER:

Frenklin E. Boing

Cpt, AGC

Aux Adjutant General

TEL: Lynx 782/430

1 Incl

GPOP-OT (7 Feb 67) 6th Ind SUBJECT: Operational Report-Lessons Learned for the Period Ending 31 January 1967, RCS CSFOR-65 - Hq 69th Maint Rp6(GS)

HQ, US ARMY, PACIFIC, APO San Francisco 96558

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

This headquarters concurs in the basic report as indorsed.

FOR THE COMMANDER IN CHIEF:

1 Incl nc

G. R. KOBALY CPT, AGC

Asst AG

15

AVHGC-DH (7 Feb 67)

5th Ind

SUBJECT: Operational Report-Lessons Learned for the Period Ending 31 January 1967 (RCS CSFOR-65)

23 MAR 1967

HEADQUARTERS, UNITED STATES ARMY VIETNAM, AFO San Francisco 96307

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

- 1. This headquarters has reviewed the Operational Report-Lessons Learned for the period ending 31 January 1967 from Headquarters, 69th Maintenance Battalion as incorsec.
- 2. Reference Part I, Section II, Item: Submission of Densities, Page 4; and Paragraph D, Part II, Section II, Page 5: Submission of equipment consities is required by USARV Administrative Order 1-67.

FOR THE COMMANDER:

F. THORNTON I

1 Incl

Asst Adjutant General