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ADAM-P (M) (8 Mar 67) FOR OT

14 March 1967

SUBJECT: Operational Report - Lessons Learned, HQ, 34th General Support Group (AM&S)

TO: SEE DISTRIBUTION

1. Forwarded as inclosure is Operational Report - Lessons Learned, Headquarters, 34th General Support Group (AM&S) for quarterly period ending 31 October 1966. Information contained in this report should be reviewed and evaluated by CDC in accordance with paragraph 6f of AR 1-19 and by CONARC in accordance with paragraph 6c and d of AR 1-19. Evaluations and corrective actions should be reported to ACSFOR OT within 90 days of receipt of covering letter.

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

BY ORDER OF THE SECRETARY OF THE ARMY:

KENNETH G. WICKHAM
Major General, USA
The Adjutant General

1 Incl
a/s

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THRU: Commanding General
United States Army, Vietnam
APO 96307

Commander in Chief
United States Army, Pacific
APO 96558

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

(U) Under the provisions of United States Army, Vietnam (USA RV) Regulation Number 870-2, dated 19 July 1966, the following report is submitted in two sections.

SECTION I

ORGANIZATION

1. (U) MISSION: Headquarters, 34th General Support Group (AM&S). To provide command and control of assigned and attached combat service support units performing the aircraft maintenance and supply, to include avionics and air armament, mission in the Republic of Vietnam.

2. (U) ORGANIZATION:
   a. Headquarters and Headquarters Company, 34th General Support Group (AM&S) is organized under TOE 29-102F (MODIFIED) and established by General Order Number 6, Headquarters, United States Army, Pacific, dated 17 January 1966.
15 November 1966
SUBJECT: Operational Report for Quarterly Period ending 31 October 1966
(ECG C3FOR-65) (U)

b. The organization of the 34th Group at the end of October is shown at Tab 1. The disposition of the 34th Group in Vietnam is shown at Tab 2 and Tab 2a.

c. Headquarters Facilities: This headquarters and the 1st Aviation Brigade are joint occupants of the compound formerly occupied by USA RV Headquarters at Tan Son Nhut.

3. (U) PERSONNEL:

a. The authorized strength of this command is as follows:

<table>
<thead>
<tr>
<th>OFFICER</th>
<th>WARRANT OFFICER</th>
<th>ENLISTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>149</td>
<td>65</td>
<td>3146</td>
</tr>
</tbody>
</table>

b. The strength posture of this Group including authorized, provisional and TD spaces is as follows: (Present for duty)

<table>
<thead>
<tr>
<th>OFFICER</th>
<th>WARRANT OFFICER</th>
<th>ENLISTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>152</td>
<td>52</td>
<td>3319</td>
</tr>
</tbody>
</table>

4. (C) DIRECTORATE OF PLANS AND OPERATIONS:

a. Plans:

(1) Organization and Requirements: Based on the proposed aircraft input to Vietnam during calendar year 1967 it has been determined that the requirement for maintenance support is as follows:

(a) 1 Group Hqs
(b) 5 Battalion Hqs (1 Seaborne)
(c) 5 General Support Companies
(d) 13 Direct Support Companies
(e) 3 Avionics General Support Companies
(f) 2 Depot Supply Companies
AVGS-B

CONFIDENTIAL

SUBJECT: Operational Report for Quarterly Period Ending 31 October 1966
(NCS OSFOR-65)

(g) 1 Direct Support Detachment

(h) 1 Aviation Material Management Center

(2) At the CINCPAC Capabilities Conference in Sep - Oct 66, DA indicated the ability to fill all the above requirements when requested in CY 67 with the following exceptions:

(a) One direct support company was slipped to Apr 68.

(b) The 58th Transportation Battalion will assume its mission as an AM&ES battalion headquarters when the AMMC TDA is approved and filled.

(c) The third avionics company is a new requirement to the now existing two provisional companies and is being staffed at the CINCPAC/DA level with a MTOE to convert all three companies to general support and to give back the direct support maintenance companies their avionics repair capability.

(3) The status of the Modifications Table of Organization and Equipment (MTOE) submitted in the previous quarter is as follows:

(a) MTOE 55-66P: Headquarters and Headquarters Company Transportation Aircraft Maintenance and Supply General Support Battalion, at USARPAC 14 June 1966 for staffing and approval.

(b) MTOE 55-447P: Aircraft Depot Supply Company, at USARPAC 19 October 1966 for staffing and approval.

(c) MTOE 55-456E: Transportation Aircraft Maintenance General Support Company, at USARPAC 23 July 1966 for staffing and approval.

(d) MTOE 55-500P: Transportation Detachment (Cargo Helicopter Field Maintenance), at USARPAC 3 May 1966 for staffing and approval.

(e) MTOE 55-134P: Avionics General Support Company (Provisional), hand carried to USARPAC 26 September 1966.
b. Operations:

(1) Aircraft assets of in-country units have been placed on punch cards and a monthly runoff of "In-country aircraft maintenance assignment" is distributed to subordinate commanders. Through this media the commanders have knowledge of maintenance support requirements in each location within their area of responsibility, and can realign their maintenance capabilities to better support the combat units.

(2) On 1 October 1966 another in a series of Aircraft Maintenance and Supply Conferences was held with attendance of representatives from all maintenance battalions, operating battalion and major headquarters within RVN. Through these conferences the "user" is given all the latest information on maintenance, supply, avionics and armament; all concerned are aligned in procedures to simplify and streamline the maintenance administrative, and logistical systems.

c. Training:

(1) Subordinate units continue to utilize on-the-job training (OJT), informal instruction from contract technicians, and the Army Aircraft Mobile Technical Assistance Program (AAMTAP).

(2) The most direct training for the aircraft mechanic in technical matters is provided by the AAMTAP. Presently there are 4 classes in session.

(3) During the period between 1 August 1966 and October 1966 the AAMTAP school has expanded its facilities to include 10 classrooms and billeting for 149 students. Courses taught during this quarter and student attendance is outlined below.

<table>
<thead>
<tr>
<th>CLASS</th>
<th>STUDENT ATTENDENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH-47</td>
<td>103</td>
</tr>
<tr>
<td>UH-1</td>
<td>227</td>
</tr>
<tr>
<td>T-55</td>
<td>69</td>
</tr>
<tr>
<td>T-55</td>
<td>69</td>
</tr>
<tr>
<td>TOTAL</td>
<td>468</td>
</tr>
</tbody>
</table>
5. **DIRECTORATE OF MATERIAL:**

a. The aircraft maintenance division during the period had no significant change in function or organization. Continuous close coordination with the Maintenance Division of the 58th Transportation Battalion/AMMC and Hq USARV G-4 have contributed significantly to overcoming problems within the reorganization accomplished during June 66. This reorganization had divided the functions between the 34th Gen Spt Gp Maint Division and 58th Trans Bn Maintenance Division.

b. The theater Aircraft deadline rate for maintenance continues to show a below normal rate with a few exceptions. The UH-IB 540 continues to have inherent problems with the rotor head. Incorporation of several forthcoming modification work orders will solve the maintenance problem. Other significant maintenance problems are discussed below. The average daily work load in 34th General Support Group shops during the period was:

<table>
<thead>
<tr>
<th>Total A/C In Work</th>
<th>Work in Progress</th>
<th>Work Stoppage</th>
<th>Tech Insp</th>
<th>Awaiting Shop</th>
</tr>
</thead>
<tbody>
<tr>
<td>133.7</td>
<td>72.4</td>
<td>32.9</td>
<td>3.2</td>
<td>11.8</td>
</tr>
</tbody>
</table>

The average back log in DS Units during the period was 14-16 days with 105.5 aircraft in repair under 30 days and 27.6 in repair over 30 days.

<table>
<thead>
<tr>
<th>Total A/C In Work</th>
<th>Work in Progress</th>
<th>Work Stoppage</th>
<th>Tech Insp</th>
<th>Awaiting Shop</th>
</tr>
</thead>
<tbody>
<tr>
<td>44.7</td>
<td>37.3</td>
<td>3.1</td>
<td>1.2</td>
<td>3.7</td>
</tr>
</tbody>
</table>

The average back log is 24 days with 25.2 aircraft in repair under 30 days and 19.4 aircraft in repair for over 30 days.

c. The status of all aircraft based on DA Form 1352 feeder reports to this headquarters for months of August and September are shown at Tab 3 and 3a.

d. Tasks accomplished during the period that contributed significantly to the aircraft maintenance program were:
AVGS-B 15 November 1966
SUBJECT: Operational Report for Quarterly Period Ending 31 October 1966
(RCS CSPOR-65)

(1) A comprehensive study was made to determine if the 1st TC Bn (A Float) FAMF has been a beneficial asset to the army aircraft maintenance and supply program in South Vietnam. From the results of the study it was determined that:

(a) FAMF-1 has proven to be an effective asset to the total USARV aircraft Maint and Supply program.

(b) FAMF-1 can not support the complete depot maintenance requirement for Aircraft Components now being generated in South Vietnam.

(c) FAMF-1 has successfully provided 4200 available aircraft days by providing NORS items to the 58th Trans Bn/AMMC.

(d) It was determined that FAMF-2 could be effectively utilized and should be oriented toward LOH (OH-6A) and CH-47A component repairs. A further evaluation was directed when FAMF-1 was displaced to Qui Nhon to determine the effect of the ships capability to successfully operate in open unprotected harbors. Results of this will provide a basis for future FAMF-1 and follow on FAML type vessels deployment stations.

(2) Off shore maintenance contract established by Hq USARYIS in Tainan, Taiwan to accomplish corrosion control on U-8D and U-6F aircraft. This contract was completed on 16 Oct with the return of the last U-6F from the Air Asia contract. A total of 18 aircraft were completed and customers have been very satisfied with the results.

(3) A configuration control program has been established by the 58th Trans Bn/AMMC in coordination with this headquarters. To date only c.e type aircraft has been fully completed however procedures are now being staffed which will eventually allow a complete controlled program to be implemented. The CV-28 aircraft was completed as of 30 Sept. 66.

(4) Regulations pertaining to maintenance policy and procedures have been published and up dated to better manage the theater maintenance program.

(a) A change was published to USARV Regulation 750-16 Recovery and Disposition of Army Aircraft. It was found that a specific man hour limitation had to be established by type aircraft instead of using one figure for all aircraft in making the eventual determination to
evacuate reparable aircraft to the CONUS overhaul base. The following limitations have been established as the guide lines to be used to determine when to evacuate crash damaged aircraft:

1. O-1 2000 Man hours
2. OV-1 5000 man hours
3. U-1 3000 man hours
4. U-6 2500 man hours
5. U-8 3000 man hours
6. CV-2 5000 man hours
7. OH-13 2000 man hours
8. OH-23 2000 man hours
9. UH-1 3000 man hours
10. CH-47 5000 man hours

(b) A maintenance float regulation was finalized to establish policy for use of aircraft in the maintenance fleet. This regulation is in the process of being published.

(5) Establishment of the planned spectrometric oil analysis laboratory in Okinawa has been accomplished. The Lear-Siegler corporation was awarded the contract to perform its operational aspects under the supervision and support of USARYIS by USAAVCOM. This laboratory became operational on 12 Sept 66 and the phased input of USARV Turbine analysis samplings. USARV aircraft were phased out of the CONUS facilities on a scheduled density ratio to the Okinawa facility. This phase-over was completed on 21 Oct 66 with the final input of 300 UH-1 series aircraft. It is anticipated that after a definite work load and distribution pattern can be more finely calculated, that USARV reciprocating engines will be transferred to the Okinawa/USAR PAC facility.

(6) MWO Kit 55-1510-206-34/49 (Self Sealing Fuel Cells) - CV-ZB Aircraft Subject Kit arrived in RVN during the period April through October 1966. All complete kits have been received with the exception of one special kit which is required in conjunction with the MWO in order to modify one specific aircraft. The special kit will arrive in RVN on or about 1 November 1966. There are ten aircraft remaining that require
the modification. Operational requirements have frequently caused delays in scheduling an aircraft into the maintenance facility however this problem appears to have improved. It is anticipated that all RV aircraft will have completed the modification not later than 30 November 1966.

(7) MWO Kit 55-1510-206-34/64 (Replacement of Top Section of Root Flap Skin on CV-2A Aircraft). During May 1966, initial planning was accomplished concerning requisitioning and installation of this MWO kit. Firm requirements were established and requirements were submitted by direct support units responsible for the installation of the kits. To date all required kits have not been received and appropriate follow up action has been initiated. There are insufficient kits on hand to begin installation of the modification and action has been taken to extend the contractor personnel through 31 November 1966. Barring unforeseen problems, it is expected that all aircraft within RV will have completed the modification not later than 30 November 1966.

(8) Residual Stress Inspection on Installed CH-47 Aft Rotor Blades Inspection of CH-47 aft rotor blades commenced during the week of August 1966. The Boeing-Vertol team began this inspection at the 1st Cavalry Division at An Khe. The team is still at the location and is expected to be there until on or about 7 November 1966. All 1st Cavalry Division blades should be completed by 7 November 1966. Action has been taken recommending that the team remain at that location and continue the inspection on forty eight blades belonging to the 179th Aviation Company at Pleiku. This recommendation will preclude unnecessary delays that could be expected since the team will upon completion at An Khe, move to Vung Tau or Phu Loi. Once the team moves to its new location it will accomplish the inspection on aircraft of the 147th and 1/8th Aviation companies. Present contract is in effect through 25 November 1966. Action has been taken to extend the contract for an additional ninety days in the event circumstances do not permit completion of this inspection within the time frame allotted.

(9) Fiscal Year 67 Contract Technicians/Department of the Army Civilians.

(a) The status of contract technicians versus Department of the Army civilians remains unchanged. The most recent information available indicates that certain contract technicians will be retained through 31 December 1966. As qualified DAC's become available, they will replace contract technicians until such time all contract technicians
have been phased out of RVN. Progress to date has been somewhat slower than
expected therefore a command message has been dispatched by USARV headquarters
requesting that all contract technicians be retained through the remainder
of Fiscal Year 1967.

(b) A team from the USAAVCOM St. Louis, Mo. visited RVN for the
purpose of converting selected contract technicians to the Department of the
Army roles. Results of this visit were not revealed therefore it is somewhat
difficult to anticipate what effect, if any, the team had on the program.
Several contract technicians, appeared to be interested in the DAC program and
those who have yet not made a final decision must do so not later than 31
December 1966 or they will become ineligible for conversion here in RVN.

(10) Repair parts supply procedures for obtaining parts on crash
damage aircraft have been changed. The concept of the CH-47 coloring book is
being replaced by the establishment of a USAAVCOM, 34th Gen Spt Gp collateral
SOP. The draft instructions have been staffed and concurred in by AVCOM, 34th
General Support Group and AMMC representatives. Publication will be effected
by a letter of instruction NLT 1 Nov 66. This procedure is maintenance
oriented with the processing of SAV-N Form 558 from the repairing organization
of AVCOM for the obtainment of the not-identifiable-to-federal stock number
structural members needed to repair crash or battle damaged aircraft. Supply
activities in RVN are involved only to the extent of insuring that items listed
are not federally catalogued and to assign a document number for control and
shipping purposes. During the processing cycle each maintenance echelon will
fabricate these items within their capability. Subsequently, USAAVCOM will
obtain those items still listed by all means at their disposal and ship the
package as a repair kit.

(11) Shortage of common and special avionics test equipment at all
levels of support. USARV has granted authority for all avionics support
elements to turn in non-mission essential test equipment to GS facilities for
consolidation and redistribution. USARV has also approved using the dash 12
technical manuals on appropriate equipment as the basis of authority to
requisition and retain special avionics test equipment. As a units mission
changes and equipment is not longer required, equipment is transferred to the
unit picking-up mission or turned into the Logistical Command. This pro-
cedure is an interim procedure as AMC will publish a supply letter outlining
a new policy in the near future. An inventory of GS test equipment assets
has been conducted and reported densities are being put into a format that
can easily be transcribed to EAM punch cards for producing runoffs. This will enable better management of assets on hand and more efficient programming of future requirements.

(12) The lack of adequate in-country test equipment repair facilities. As a result of a USARV proposal in May 1966, four contractor test equipment repair and calibration facilities were established at the following Logistical Command repair shops, Qui Nhon, Nha Trang, Cam Ranh Bay and Saigon; currently these facilities are not fully operational due to shortage of parts, test equipment and establishment of repair and return program with Hawaii. Once these problems are solved it is anticipated that some relief will be experienced in the test equipment repair program.

(13) Delays in repair of SB 11-497 items (Gyro Compasses) sent to CONUS were being experienced as a result of owning units evacuating these items directly to manufacturers in CONUS and expiration of repair contracts.

(a) All equipment being evacuated to CONUS for repair must now be processed through the 2nd platoon, AVEL Spt Co, South, Tan Son Nhut who will in turn evacuate to Sacramento Army Depot under the Repair and Return program. Sacramento Army Depot has equipment repaired under open end contracts and returned to owning unit through the same chain. This provides central control at both ends of the system.

(b) Repair contracts in CONUS had expired and manufacturers would not release repaired equipment until renewal action was completed. This problem was brought to the attention of cognizant ECOM personnel during the Avionics Conference held at USARPAC in September 1966. As a result funds were made available to renew repair contracts and two action officers, one from the ECOM Procurement Division Office, Philadelphia and one from Customer Assistance Officer, USARV, were assigned to monitor this program. A letter is sent to Sacramento Army Depot and each action officer when a shipment of equipment is evacuated. This letter indicates all items of equipment shipped, work order numbers and shipping document numbers. Critical items of equipment are indicated by an asterisk and will be closely monitored by action officers and Sacramento Army Depot.

(14) Identification of avionics float assets on hand at DS and GS facilities. Inventory reports from the field are being consolidated and put into a format that can be easily be transcribed.
SUBJECT: Operational Report for Quarterly Period Ending 31 October 1966
(RCS CDPR-65)

(1) To EAM punch cards for producing runoffs which will be used to control and manage assets. First runoff should be completed in November 1966.

(15) The removal of avionics equipment from crash damaged aircraft and aircraft being evacuated to CONUS for overhaul. This headquarters sent a message to the field indicating specific items of avionics equipment that are authorized to be removed from aircraft and retained by owning unit for installation in replacement aircraft. This message also indicated that aircraft would not be accepted at aircraft processing points until equipment shortages were made up by owning unit.

e. AVIONICS:

(1) Staff Signal functions for this headquarters, and normal communications functions for this command are performed as additional duties by the officer responsible for Avionics Supply and Maintenance General Support for USARV. Most of the actual work in these areas are accomplished by an NCO and four other EM, who constitute the Communications Platoon.

(2) This undesirable situation has stemmed from an immediate requirement to perform a combat service support mission, without adequate resources of personnel, and without any precedent or proper TOE authorization. The results have been: Insufficient planning, coordination and staff supervision in the communications area, and a reduction of the effort available for the avionics support which must be provided by this command for all Army Aircraft in RVN.

(3) Since 1 August the principal actions in the general avionics area have been directed at:

(a) Improving the organizational structure to provide adequate avionics support to USARV.

(b) USARV avionics retrofit program.

(c) Effecting coordination and taking actions as necessary to identify and expeditiously resolve avionics logistics problem areas. Some discussion of these principal actions follows:

1. A comprehensive and detailed study of the overall requirement for avionics supply and maintenance support in RVN,
subject: Operational Report for Quarterly Period Ending 31 October 1966

(RCS CSFOR-65)

To include DS and GS was prepared under the direction of Hqs, USARV Avionics Officer, with inputs from this and other interested headquarters. Official copies of the study, with recommendations, were hand-carried to Hqs, USARPAC on 26 September 1966. These recommendations, when implemented, should resolve many of the outstanding problems on the avionics logistics area. The immediate task is to continue to provide avionics support, pending availability of the organization, skills, authorizations and other resources which are required.

2. The overall accomplishment of the USARV avionics retrofit program will be supervised by the USARV avionics officer. This command has several responsibilities in support of the Retrofit Program, to include provision of work space and ramp space, end item repair, technical inspection and test flights at selected Retrofit sites, and accomplishment of an MWO on the AN/ARC-54 FM radio set as required by the Retrofit Program. The Retrofit Program is scheduled to begin on or about 1 November 1966.

3. One of the biggest accomplishments in this last area is the collection of data for an EAM printout which will be the primary means of avionics inventory and configuration control within USARV. Data has been extracted from one-time reports submitted by aviation units and other sources, analyzed, and presented in proper format to EAM key-punch operators. The first printout should be available by, on or about 1 November 1966. Other specific actions have included drafting of support plan for the AN/ASN-64 Doppler.

(4) Effective October 1966, the Avionics Maintenance portion of Lessons Learned will be submitted as part of the Aircraft Maintenance Division Report.

(a) Since 1 August the principal actions in the area of Avionics Maintenance have been directed primarily towards determining in-country assets. Inventories on aircraft avionics equipment configurations were consolidated and put into EAM format for reduction to data runoffs. Inventories of float equipment are in the process of being consolidated and the first runoff is expected to be available in November. Excess test equipment being turned into GS platoons are being redistributed to DS and GS units having requirements.

(b) Other significant events that have had a direct bearing on the steadily improving avionics maintenance picture are:
AVGS-B

SUBJECT: Operational Report for Quarterly Period Ending 31 October 1966
(RCS CSFOR-65)

1. Reduction in the number of EDP's which is a result of steady reduction of zero balances.

2. Turn around time on the Repair and Return Program with Sacramento Army Depot is averaging 35 days.

3. The Personnel situation has improved significantly in the last two months.

4. We are starting to receive personnel trained in DECCA equipment and several EM and DAC's have been trained at an Air Force school on C-12 compass systems.

5. A compass Rose has been established at the GS facility at Vung Tau and compasses are being swung daily on scheduled basis.

6. The AN/ARV-82/83 instruction team from Fort Monmouth provided instruction to maintenance personnel from DS and GS facilities.

7. A new TO&E for GS companies was approved at USARV and forwarded to USARPA for approval. When approved by DA, the avionics maintenance structure in RVN will be greatly enhanced.

f. AVIONICS SUPPLY:

(1) The Avionics Supply problems remain basically the same as during the last reporting period, although partial relief has been realized in some areas.

(2) The 34th General Support Group assumed the responsibility for avionics supply in May 1966, at which time there was a 75% zero balance on a total authorized stockage list (ASL) of 6900 lines. The current zero balance is 35% on an ASL of 8000 lines. Initial stockage was obtained from transfer of avionics assets from the 1st Logistics Command and partial fills to requisitions submitted in February 1966 to the 2nd Logistics Command in Okinawa.

(3) Continuous searches of 1st Log Command depots during the past quarter has resulted in reducing the zero balance figure by more than 1000 lines.
AVG-B
SUBJECT: Operational Report for Quarterly Period Ending 31 October 1966
(RCS CSPOR-65)

15 November 1966

(4) Diligent efforts to purify the ASL at AMMC have resulted
in a current ASL accommodation of 87%.

(5) Various messages to USARPAC and USAECOM during July,
August and September of detailing EDP and zero balance problems resulted in
USAECOM directing the preparation of a "Push" package to be assembled at
Sacramento Army Depot (SAAD). Titled Project M3W, this package was to
consist of a complete fill on ASL zero balance items in quantities per
our requisitioning objectives (R/O). Project M3W was to have been air-
 shipped in two packages, on 22 August and 29 August 1966, and although
falling far behind this schedule (packages are still being received) the
push packages have been of considerable assistance in alleviating the
immediate repair parts problems.

(6) The basic problem of getting fills on requisitions placed
through the standard supply system (SSS) however, remains the same, with
no relief in sight. While solving urgent immediate requirements, there
are so many outstanding requisitions placed on the AMMC that a push package
will only fill those demands, again leaving a zero balance.

(7) The continuous backlog of requisitions at the 2nd
Logistics Command in Okinawa has caused excessive delay (90 to 100 days)
for processing. This same backlog prevents 2nd Logistics Command from
giving a reconciliation to AMMC.

(8) A problem of equal magnitude to that of repair parts
is the critical lack of float stock, as shown by the following chart:

<table>
<thead>
<tr>
<th>ITEM</th>
<th>QUANTITY INSTALLED</th>
<th>FLOAT</th>
<th>ON HAND</th>
</tr>
</thead>
<tbody>
<tr>
<td>AN/APX-44</td>
<td>1047</td>
<td>210</td>
<td>49</td>
</tr>
<tr>
<td>AN/ARC-44</td>
<td>1182</td>
<td>297</td>
<td>126</td>
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<tr>
<td>AN/ARC-51</td>
<td>1566</td>
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<td>AN/ARC-54</td>
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<td>25</td>
</tr>
<tr>
<td>AN/ARC-102</td>
<td>504</td>
<td>101</td>
<td>25</td>
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AVOS-B

15 November 1966

SUBJECT: Operational Report for Quarterly Period Ending 31 October 1966

(RCS CSFOR-65)

<table>
<thead>
<tr>
<th>ITEM</th>
<th>QUANTITY INSTALLED</th>
<th>FLOAT</th>
<th>ON HAND</th>
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<tr>
<td></td>
<td>IN USARV ACFT</td>
<td>AUTH</td>
<td></td>
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<td>1583</td>
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<tr>
<td>AN/ASN-72</td>
<td>147</td>
<td>30</td>
<td>14</td>
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(9) In no case does the on-hand float stock meet the authorized (20%) level specified in SB aa-244 and in most instances falls far short.

g. AIRCRAFT MAINTENANCE AND SUPPLY:

(1) Installation of IBM Key punch and Friden flexowriters was completed in all DSU's. Except two DSU's do not have the flexowriter portion. A request has been submitted to higher headquarters to obtain them. Maintenance support of the Friden flexowriters is difficult in that an on site repair capability has not existed in previous contracts with the Friden Company. The contract currently being negotiated will provide on site support from the central Friden Office in Saigon. This will improve support but will still not be as responsive as locating repairmen in the geographical support areas where the equipment is located.

(2) Approval was granted in October from Department of the Army, to requisition all UH-1 and CV-2 peculiar repair parts directly from the NICP by-passing intermediate ICP's. These procedures are expected to result in decreased order ship time, lower EDP rates and increased stockage throughout supply activities of units concerned.

(3) Two 1005 Univac machines were installed at the Aviation Materiel Management Center in September 1966. One machine is now operational. The other machine will be operational with completion of improved building wiring now in progress.

(4) A capability has now been developed at the AMMC to produce a monthly machine print out of reparable retrograded from Vietnam. A monthly report will be submitted in card deck form to USARPAC by registered airmail. Reports control symbol RCS CSGLD-1380 has been assigned. Report contains the following information.

Type and Model    Serial Number (if applicable)
AVGS-B

SUBJECT: Operational Report for Quarterly Period Ending 31 October 1966

15 November 1966

(NOS CSPOR-65)

<table>
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<tr>
<td>Quantity</td>
<td>Mode of Shipment</td>
</tr>
<tr>
<td>Document Number</td>
<td>Ship to Code</td>
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</table>

Use of this report by commodity managers at all supply levels will greatly improve the flow and management of reparables.

(5) A proposed regulation has been sent to USARV for approval and publication titled: Special Management of Selected Aviation Reparable Components (SMI). This regulation will provide policy for implementation of procedures to control critical, intensively managed, and other selected aviation items, such as TBO items. A draft regulation on stockage is also at higher headquarters for approval and publication. This regulation will prescribe stockage levels for all aircraft DSU's in Vietnam.

(6) A depot storage specialist team arrived in October from USAMC to assist in location surveys and inventories of the Aviation Materiel Management Center, Team is expected to remain in-country for 90 days.

(7) Requisitions have now been submitted to CONUS for the repair parts needed to establish ASL for the Fuel Control, Ultra Sonic Cleaner and Turbine Engine test stands. Bill has not been received but is expected in the near future.

(8) Bulk sheet metal structural repair kits for CH-47 aircraft FSN 1560-M34-3077, have been received and issued to GSU's and 1st Air Cavalry Division. Kits contain structural items needed for extensive airframe repair which are not contained in the supply system. These kits should prove valuable in repairing combat or crash damaged aircraft.

(9) Authority was recently granted by the Secretary of Defense to utilize Red Ball channels to requisition anticipated requirements to prevent deadlining of equipment. Implementation will be by centralization of requisitioning authority at the Aviation Materiel Management Center and review of each requirement by commodity managers to ensure proper use of the system.
AVOS-B

SUBJECT: Operational Report for Quarterly Period Ending 31 October 1966
(RCS CSFOR-65)

h. AIRCRAFT ARMAMENT:

(1) Personnel turbulence within the aircraft armament maintenance field in RVN creates voids of experience within units in the field.

(2) The qualification of armament maintenance personnel in or being assigned to RVN is generally limited to basic school training with little or no practical experience. This trend is expected to continue based upon the increasing demands that are being placed on this critical military occupational specialty. A composite picture of experience may be seen in the "authorized versus assigned" strength figures of the 14th and 765th Transportation Battalions, 34th General Support Group (AM&S).

<table>
<thead>
<tr>
<th>MOS</th>
<th>NR AUTH'D &amp; GRADE</th>
<th>ASSIGNED</th>
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</thead>
<tbody>
<tr>
<td>45J20</td>
<td>31 ea E-5</td>
<td>10 ea E-5</td>
</tr>
<tr>
<td></td>
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<td>13 ea E-4</td>
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<td></td>
<td>0 ea E-3</td>
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</tr>
<tr>
<td>TOTALS:</td>
<td>71 AUTH'D</td>
<td>70 ASGND</td>
</tr>
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</table>

(3) The rapid expansion of aircraft armament assets in RVN has made the forecasting of repair parts and components requirements increasingly difficult. The reasons for this difficulty are manifold. The commodity command in CONUS are not sufficiently aware of the magnitude of armament subsystem usage in RVN, and the staff elements in RVN which are responsible for the supply and maintenance requirements of these subsystems are not sufficiently aware of the intentions of the Commodity Commands.

(4) "Jury-Rig", by definition, are temporary of field expedients when applied to aircraft armament subsystems, and as such, they may be either approved or unapproved. Jury-rigs which are not command approved are unauthorized. Those which are command approved are installed or configured in a standard manner. The purpose of command approval, therefore, is to assure uniformity of configurations, thereby assuring the maximum of safety and the minimum of difficulty in supply, maintenance and training procedures for the supported and supporting units responsible for the subsystems. The publication of the 34th General Support Group "Policy Statement Concerning Jury Rigging of Aircraft Armament Subsystems",
AVOS-B

SUBJECT: Operational Report for Quarterly Period Ending 31 October 1966
(RCS CSPQR)

1 October 1966, has begun to show its effect in the field. Units are becoming cognizant of the need for standardization as a necessary adjunct to increased safety, and ease in performing supply and maintenance functions and pilot training.

(5) The following table depicts the percentage statistics compiled from May 1966, the month of the 34th General Support Group assumption of armament supply and maintenance responsibility, to October 1966:

<table>
<thead>
<tr>
<th>DATE</th>
<th>DEMAND</th>
<th>ZERO</th>
<th>SATISFACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 1966</td>
<td>88%</td>
<td>76%</td>
<td>11%</td>
</tr>
<tr>
<td>June</td>
<td>87%</td>
<td>58%</td>
<td>17%</td>
</tr>
<tr>
<td>July</td>
<td>82%</td>
<td>43%</td>
<td>38%</td>
</tr>
<tr>
<td>August</td>
<td>90%</td>
<td>37%</td>
<td>26%</td>
</tr>
<tr>
<td>September</td>
<td>72%</td>
<td>48%</td>
<td>64%</td>
</tr>
<tr>
<td>October</td>
<td>88%</td>
<td>48%</td>
<td>23%</td>
</tr>
</tbody>
</table>

The increase in the September zero balance is due to several causes, the first of which is the result of continued emphasis on units to fill their Prescribed Load List (PIL) and Authorized Stockage Lists (ASL); another cause is the time delay in the filling of stock added to the ASL of AMMC. The third and largest cause is the time lag and non-receipt or repair parts through normal requisitioning channels, i.e., through USARVIS (Okinawa) and USARPAC (Hawaii). It appears that the NICP's at the various commodity commands give excellent service on requisitions they receive, but many requisitions never get to these Commodity Commands. Furthermore, forecast requirements continually meet with delays in consideration and eventual cancellation because the interim ICP forecasts do not agree with those submitted from the combat zone. This situation is further aggravated by shipments of repair parts, components and weapons subsystems to AT numbers other than AT 8889. At the current time numerous aircraft armament peculiar repair parts and components are still located in 1st Logistical Command warehouses throughout RVN. Some items have been recovered from US Army Depot, Saigon and US Army Depot, Cam Rahn Bay.
6. (u) DIRECTORATE ADMINISTRATION AND SERVICES
   
a. Real Estate and Construction:

   (1) AMMC, Tan Son Nhat: Construction projects have been approved, and work begun to provide the AMMC with 44,000 square feet of additional warehouse space, approximately 20,000 square feet for ADP equipment and headquarters building, and surfacing of an open storage area. Vertical construction is being accomplished by civilian contractor, horizontal, by troop labor. These three projects were delayed because of a lack of materials for vertical construction; daily rains slowed engineer progress on the open storage surfacing project virtually to a halt. Current status of these projects are as follows:

   (a) Open storage area: Fill has been completed on one-half of this area. Area has been graded, soil stabilized and has received application of sealant. Crushed rock is now being applied which in preparation for the final PSP surface. This project has high command interest and progress is now satisfactory. Completion date is estimated to be 1 December 1966.

   (b) Warehouses: Three warehouses, each 70 x 117 feet, will be furnished and installed as a single warehouse by contractor. After arrival of the Government furnished warehouse measuring 120 x 160 feet, erection will commence to complete the project. Real estate for the erection of these warehouses has been obtained and no problems now prevent full efforts toward project completion. Estimated completion date is 1 December 1966.

   (c) AMMC Headquarters and ADP Building: Work will commence on this project concurrently with beginning of warehouse construction. Estimated completion date is 1 January 1967.

b. Qui Nhon Aircraft Supply Depot:

   (1) In late August, the decision to move the aircraft supply depot from its proposed location at Dong Ba Thin to Qui Nhon was made by the DCG, USAFRV. Staff planning by the 34th General Support Group commenced upon receipt of this decision, and has progressed to the point where real estate has been selected, warehouses (105,600 square feet) have been ordered from Japan, and a construction directive has been issued. When occupied by the depot unit, the following facilities will have been constructed by engineer troop labor:
AVGS-B
SUBJECT: Operational Report for Quarterly Period Ending 31 October 1966
(KOS CSFOR-65)

(a) Six, 80 x 220 feet prefabricated, metal warehouses.
(b) One 50 x 40 feet ADP building.
(c) Open storage area measuring 12,000 square feet, surfaced.
(d) Helipad measuring 100 x 100 feet.

(2) A cantonment area for 300 personnel will be constructed by means of "self-help". Materials to be furnished by a local engineer group. Beneficial occupancy date is estimated to be 1 January 1967. When operational, this depot will reduce the workload now present in the AMMC, and is programmed to service support units in the northern portion of Vietnam. Supply receipts direct from CONUS are presently limited by airfield accommodation at Qui Nhon, as the C-130 is the largest aircraft which can use this facility. Water port facilities are limited by the absence of piers.

c. Hangars:

(1) Prefabricated, metal hangars have been ordered to provide each DS and GS unit presently assigned to this Group with sufficient protected working area. These hangars are procured from Japan, and are due to be shipped during this reporting period. In accordance with MACCH distribution priorities, the Aircraft DS units are programmed to receive the first which become available, followed by Aircraft GS units. The total quantity ordered and shipment schedules are such that all Group units should have received their hangars prior to the end of this calendar year.

(2) Four, Brooks and Perkins, Portable Maintenance Shelters have been received within the Group. Three have been erected and are now in full use. The remaining shelter is incomplete, as vital components were lost in shipment. AMC is now attempting to replace these missing components. Users of the shelters express satisfaction, and have reported a 75% increase in production of completed aircraft maintenance. As the new prefabricated hangars are completed on site of the Brooks and Perkins shelters, these portable shelters will be shifted to units having no programmed hangar construction.
d. Warehouses: Sufficient prefabricated metal warehouses have been purchased by USARV to provide our ADS and AGS units with adequate covered storage facilities. The first delivery of warehouses has been made, and the anticipated receipt of these structures is such that all programmed structures should arrive prior to the end of this calendar year.
ATOS-B
15 November 1966

SUBJECT: Operational Report For Quarterly Period Ending 31 October 1966
(RGS CSPOR-65)

SECTION II

1. (U) Part I - Observations (Lessons Learned)

a. Aircraft Maintenance:

(1) **ITEM**: Effectiveness of FAMF-1.

(2) **DISCUSSION**: To determine the effectiveness of the operation of the FAMF a detailed study was performed to review the first five months operation in theater of the USNS Corpus Christi Bay FAMF-1.

(3) **OBSERVATION**: It is readily determined that FAMF-1 is an effective asset to the Army Aircraft Maintenance and Supply program. Its utilization to repair scheduled components and perform opportunite work has provided USARV with a capability to accomplish work not previously possible in South Vietnam.

b. Off Shore Maintenance Support:

(1) **ITEM**: Corrosion Control contract with AIR ASIA Tainan, Taiwan.

(2) **DISCUSSION**: A total of 18 U-9 aircraft were flown to Tainan, Taiwan during May through October to be repainted and have corrosion control accomplished. The contract was exceptionally responsive and completed all aircraft I/A/W contract agreements.

(3) **OBSERVATION**: Ability to use off shore maintenance facilities for aircraft that can be flown from South Vietnam is feasible. accomplishment of work as completed during this contract is not possible in South Vietnam.

c. Evacuation of Crash Damaged Aircraft to CONUS.

(1) **ITEM**: Repair limitations established for evacuation of aircraft from RVN to CONUS Depots.

(2) **DISCUSSION**: A standard procedure was established for recovery and evacuation of crash damaged aircraft within South Vietnam. As part of this procedure a 2000 man hour criteria was established as the maximum allowable repair for all aircraft damaged in South Vietnam. Any aircraft exceeding this was to be automatically considered for evacuation to CONUS.
SUBJECT: Operational Report For quarterly Period Ending 31 October 1966

(3) OBSERVATION: It was soon learned that certain types of aircraft did not fit this criteria. The theater was evacuating aircraft that could be easily repaired by aircraft maintenance units assigned within South Vietnam. A change to the policy was made and specific limitations were made for each type aircraft operated in RVN.

AIRCRAFT MAINTENANCE

d. (1) ITEM: Oil Analysis Response Time

(2) DISCUSSION: Responsiveness must be calculated by the time that it takes a sample to reach and be processed by a laboratory to the receipt of a suspect report back at the originating unit. Responsiveness must be equated at the flying hour program to insure receipt of this report at the originating unit as quickly as possible but prior to the passage of the estimated 60 to 80 hour wear-rate criteria between the detection and failure of a component.

(3) OBSERVATION: The CONUS based facilities response time averaged 7.9 days with the utilization of the highest priority permissible but totally lacked voice communication to report impending immediate failures. The Okinawa facility response time in the initial phase has averaged 4.1 days by TWX message under the criteria cited for CONUS, but has utilized its capability to telephone immediate results as required.

e. (1) ITEM: CH-47 Coloring book.

(2) DISCUSSION: The Program was strictly factory oriented and did not allow USAAVCOM the latitude to tap the many resources at their disposal. USAAVCOM stated that two coloring books have been submitted and both represent two of the oldest Red Ball requisitions in the system. With the SAV-N 556 USAAVCOM will still be able to call on factory production but in addition any of their other resources, I.E. ARADCOM, other vendors, cannibalization points.

(3) OBSERVATION: The discarding of the CH-47 coloring book for a singular procedure covering all aircraft is in the best interests of the command as it should prove more responsive.

AVIONICS

f. Shortage of Avionics Repair Parts.
SUBJECT: Operational Report for Quarterly Period Ending 31 October 1966

(1) ITEM: There is a critical lack of avionics repair parts.

(2) DISCUSSION: During this reporting period, a series of messages have been dispatched to USARPAC and USAECOM with information copies to all interested agencies. These messages detailed the criticality of the supply problems and contained the zero balance listing and requisition number of repair parts and the current EDP listing.

(a) In response to our messages, USAMC suggest USARPAC and USARV comment on two proposed actions:

1. That USAECOM prepare a push package of zero balance items for shipment as soon as possible.

2. That AMMC be allowed to requisition last out of bin replenishment on 05 priority directly to the National Inventory Control Point (NICP), Philadelphia.

(b) USARPAC returned a negative reply to 2 above, but did agree to the preparation of the push package (project MEW), which is presently relieving some immediate requirements.

(c) During August it was discovered that the 1st Log Command had continued to requisition Avionics Stockage after the 34th Group had assumed all avionics responsibility. This resulted in a false demand being placed on all intermediate depots between RVN and the NICP, thereby increasing the system backlog and reducing fill on requisitions even further. Action was taken by USAECOM representatives in conjunction with 1st Log Command, to cancel over 3000 1st Log Command requisitions for Avionics Items.

(d) The lack of federal Stock Numbers (FSN) on many items has contributed in part to the delay in filling requisitions. Most items with only manufacturers part numbers require manual processing at all stops in the supply system. Non-stock numbered items are especially prevalent in new systems such as the AN/ASN-72 Decca. In many cases, push packages arrive containing items identified only by part numbers. This also creates a problem of cross-referencing. In some cases, adequate catalogs are available; in all cases, this places a work load on an already hard-pressed system.

(3) OBSERVATION: This command has taken all possible actions considered appropriate, and will continue follow-up actions in an attempt to improve the situation. The Avionics Supply Officer, 34th General Supply
AWGS-B 15 November 1966
SUBJECT: Operational Report For Quarterly Period Ending 31 October 1966
(RCS USFOR-65)

Group, upon PCS to CONUS in October 66 will brief the CG, USAECOM on the
Avionics Supply situation.

g. (1) ITEM: Shortage of Float Stock. There is a critical
shortage of Avionic Float Stockage.

(2) DISCUSSION: Although this item was discussed in the
previous report, it is considered of sufficient importance to mention
again.

(a) The lack of float stock hinders the entire avionics
effort and is undoubtedly the single most important item in providing
rapid, efficient service to supported units.

(b) The AN/ARC-51 and AN/ARC-54 are the most critical
end items now and will be even more critical in the near future with the
advent of the retrofit program beginning in October which will increase
the density of these items. Steps have been taken to have a number of
these radios channeled directly from production to float stockage in RVN.
Although this will slow portions of the retrofit program, it will give
avionics units a minimum support capability.

(c) Production of avionics end items is lagging far
behind requirements and no relief can be expected until the second quarter
of CY 67.

(d) A recent survey of all aviation units in USRV has
afforded a reasonably accurate inventory of float stock radios. Purifying
this inventory and continual updating will afford better float stock
management i.e. an equitable distribution of assets.

(3) OBSERVATION: All possible actions have been taken by
this command to obtain and properly distribute float stock.

h. (1) ITEM: There is a serious shortage of common and special
avionics test equipment throughout the command.

(2) DISCUSSION: Shortages of test equipment can be attributed
to several factors that are a problem world-wide and which are:

(a) Manufacture, procurement and standardization of test
equipment required to support new avionics equipment being introduced
into the Army inventory does not keep pace with the manufacture of black
boxes.
SUBJECT: Operational Report for Quarterly Period Ending 31 October 1966 (RCS CSFOR-65)

(b) Procurement action to purchase commercial test equipment as a substitute for Army adopted items is slow. When items do reach the field they are difficult to support as repair parts are not in the supply system.

(c) Although authority exists for TO&E units to turn in non-mission essential equipment, Divisional units are reluctant to comply with the USARV policy. This creates an imbalance of equipment as many units retain test equipment for which they have no mission to support.

(d) Requisitioning procedures for test equipment are unrealistic. A priority requisitioning procedure is required to provide timely delivery of necessary test equipment when a unit assumes the mission of supporting a new item of equipment.

(3) OBSERVATION:

(a) More advanced coordination between ECOM planners, USARV and this headquarters is necessary to program support equipment far enough in advance of receipt of new equipment to insure timely delivery of test equipment.

(b) More emphasis is required by USARV to get TO&E units (primarily Divisional Units) to comply with the policy of turning in non-mission essential test equipment so that in-country assets can be redistributed where required.

1. (1) ITEM: There is a definite shortage of adequate in-country test equipment repair facilities.

(2) DISCUSSION: In-country test equipment repair facilities are over taxed due to the high density of electronic test equipment employed in this command. As a result test equipment turned in to logistical command repair facilities is lost to avionics maintenance personnel for an unnecessary length of time. This amplifies the already critical shortage of test equipment and delays repair of avionics equipment.

(3) OBSERVATION:

(a) There is a definite requirement for a more responsive test equipment repair program in RVN. Some relief in this area will be experienced as a result of the contractor repair teams that are working in log command repair facilities but until such time as these teams acquire necessary test equipment and 90 day stock level of repair parts, relief will be very limited.
SUBJECT: Operational Report For quarterly Period Ending 31 October 1966

(b) Many of the problems being experienced in the test equipment repair program parallel those in the avionics maintenance and supply programs such as:

1. Shortages of repair parts.
2. Shortages of test equipment.
3. Shortages of trained personnel.

(c) Until these problems can be resolved it is very doubtful that the test equipment repair program will improve appreciably in the near future.

(i) **ITEM:** A requirement exists to identify avionics float assets on hand in-country.

(2) **DISCUSSION:** Without a complete inventory of avionics float equipment assets it is impossible to maintain proper control over distribution or to program additional requirements to maintain authorized float levels. Several factors having a bearing on this problem are:

(a) Although UH-RV requested that inventories be conducted and results reported to this headquarters for consolidation, reports received were incomplete, inaccurate and in some cases no float was reported.

(b) Units hesitate to report actual quantities of float on hand because they are afraid excesses will be redistributed. This creates unnecessary demands on the supply system and denies units having valid requirements use of the equipment.

(3) **OBSERVATIONS:**

(a) UH-RV should require units to conduct detailed inventories and forward information to the 34th General Support Group.

(b) Current inventories should be reduced to K/M punch cards for runoffs to get the management program started. Inventories could be verified and updated from new inventory reports.

(c) Adjustments could then be made in command assets eliminating imbalances.
(d) Requisition could be validated and adjustments made as necessary.

k. (1) ITEM: Serious delays are being experienced in the repair and return of Gyro compasses sent to CONUS for repair.

(2) DISCUSSION: Gyro compasses were being sent to CONUS for repair by owning units instead of through 2nd platoon AVEL SPT Co, South, the only authorized in-country evacuation point for repair and return. As a result this command had no record of these shipments and could not monitor their repair and return. In addition, ECOM repair contracts with manufacturers involved expired and renewal action was delayed because of funding problems. Compasses upon which repair had been completed were not returned causing aircraft operation problems at owning unit.

(3) OBSERVATIONS:

(a) Better control should have been exercised over evacuation of equipment to CONUS.

(b) Equipment being returned to CONUS for repair should have been evacuated through the GS platoon at Tan Son Nhut.

(c) ECOM should have taken more expeditious action to renew expired repair contracts.

(d) Action officers should have been assigned to monitor this program in CONUS and in this command.

1. (1) ITEM: Maximum utilization has not been made of service contracts for avionics support.

(2) DISCUSSION: Technical assistance for avionics support in RVN has been provided primarily through contract technical services (adviser) personnel under AR 700-4. Under this regulation, definite limits are placed on the duration of such assistance, and on the amount of actual repair or maintenance which the technical assistance personnel are permitted to perform. There is a definite requirement for technical assistance within the avionics logistical system in USARV, to include both advisers and doers. AR 750-5 provides for service contract personnel, who are the doers. At this time, there are 48 technical service (adviser) personnel provided under AR 700-4, and only 16 service contract (doer) personnel under AR 750-5. A better mix is imperative, with more emphasis on the doers. The objective of building an in-house capability within the US Army to support its own equipment to provide adequate
avionics logistical support to the Army Aviation effort in Vietnam cannot be abandoned or even delayed. It is a fact of life that the responsiveness of commercial contractors to fill certain unpredicted, short term logistical requirements is better than that of the military.

(3) OBSERVATION:

(a) A request has been made to both AMC and ECOM representatives for a CONUS team to survey the requirements and assist in obtaining service contract assistance for USARV.

(b) Several commercial firms have stated that they would submit unsolicited bids in support of specific items.

m. (1) ITEM: Requirement for Avionics Inventory and Configuration Control.

(2) DISCUSSION: To facilitate management of available resources, and to limit installation of unauthorized equipment in aircraft, it is imperative that a timely, complete and accurate listing be compiled and disseminated, showing each aircraft, its parent unit, and equipment installed. From such a list, support personnel can accurately determine specific quantities required for ASL's and PLL's and other essential supply and maintenance management data.

(3) OBSERVATION: Necessary action has been taken to obtain the initial print-out. Follow-on action is required to provide continual updating, to insure an acceptable level of accuracy, to effect necessary interlace with other reports and print-outs and to maximize usefulness and concurrently minimize work-load on all concerned.

n. (1) ITEM: Better Utilization of the Modular Concept for Avionics Maintenance.

(2) DISCUSSION: Most of the avionics items in use today utilize modules or printed circuit boards or both. Maintenance support plans for the end items specify that direct support facilities identify and replace defective modules or circuit boards, and return faulty items to General Support facilities for repair. This reduces the skill level and number of repair parts required to perform the DS role, and permits concentration of available resources at a GS facility to support all using units through repair and return. This system has not been fully implemented within USARV, for the following reasons:
SUBJECT: Operational Report For Quarterly Period Ending 31 October 1966
(RCS CSFOR-65)

(a) Avionics "GS" units within RVN are organized provisionally from DS assets, and have a limited capability.

(b) The avionics support structure within RVN is not presently organized to provide channels and facilities for timely management and flow of these repairables in the volume required (151,000 avionics repairables presently supported).

(c) Sufficient float of PX modules and circuit boards are not available.

(3) OBSERVATIONS: A recently-completed study, hand-carried to USARPAC on 26 September 1966, recommends realignment of avionics support structure within USARV.

(a) This proposed structure will include utilization of the modular concept of maintenance.

(b) Sufficient personnel, experienced in avionics supply and maintenance, are not available in USARV to determine requirements for and resources of modules and circuit boards. An assistance team from CONUS is required for this purpose.

(c) Detailed appraisal must be made by competent supply and maintenance personnel to determine present assets and compute additional resources required.

(1) ITEM: There is a requirement for a full-time staff communications officer within this headquarters.

(2) DISCUSSION:

(a) The need for a full-time staff communications officer at group level has become increasingly apparent since the activation of this headquarters. Several factors have contributed to the inability of this command to assign an officer to this important function; the principal reason has been the fact that the group was organized in-country, and has been short on personnel from its inception. Available personnel and spaces have had to be utilized to accomplish the most pressing functions, such as operation of the Aviation Material Management Center; the staff communications function has been as additional duty for the avionics Officer. The results of this have been: Insufficient planning, coordination and staff supervision in the staff communications area, and a reduction of the effort available for the avionics support which must be provided by this command to all Army aircraft in RVN.
Some of the specific functions which must be performed within the staff communications area, and which would normally be performed by or under the supervision of an officer assigned for this purpose:

1. Telephone communication requirements.
2. Teletype communication requirements.
3. Radio communications requirements.
4. Data Transceiver communication requirements.
5. Signal Standing Instructions requirements.
6. Signal Operating Instructions requirements.
7. Other Signal-Related requirements.

Observation: Action should be initiated to provide a capable officer to perform the functions listed under discussion above on a full-time basis. Future headquarters structures for Group and higher commands should have provisions included for a staff communications officer.

Avionics Supply

(1) Item: E&M equipment in DSU's

Discussion: The volume of requisitioning activity and supply transactions in DSU's requires use of E&M equipment. However, aircraft direct support units are not authorized E&M repairmen and must rely on IBM and Friden Company repairmen for maintenance support.

Observation: Complete reliance on civilian repair technicians in combat zones is contrary to standard principles of unit employment. Units should have organic repair capability to sustain itself without reliance on external civilian repairmen.

Administration & Services

(1) Item: Repair Parts Storage Bin
SUBJECT: Operational Report For Quarterly Period Ending 31 October 1966

(2) DISCUSSION: During the month of May 1965, 3612 storage bins were requisitioned for warehouses that would store high dollar value aircraft repair parts. The requisitions went through the normal supply channels, with follow-up action conducted as required. Numerous messages were transmitted between the supply depots with little or no action being taken to procure the necessary bins. During the time of the message being transmitted these critical aircraft parts were stored in the best facilities available, which was less than adequate. Damage of these items was relatively extensive, resulting in a delay of maintenance and repairs for the much needed aircraft. Shipments of bins could have been made in segments until the administrative procedures were settled. Six months later, the storage bins are not yet on hand, and the aircraft density is increasing along with the repair parts requirements.

(3) OBSERVATION: The aircraft parts requirement for support of aircraft in RVN has increased and the damage to aircraft repair parts has doubled due mainly to inadequate storage space and pending receipt of storage bins.

RECOMMEND

1. (1) ITEM: Personnel Strength and Qualifications

(2) DISCUSSION: On hand and inbound personnel have limited qualifications and work being performed is generally slower and out.

(3) OBSERVATION: Aircraft armament workloads are continuously high because of extremely heavy operational commitments. In addition, much of the workload is actually generated by maintenance errors made in the field. This inexperience in the field, coupled with the inexperience within supporting units depicted in the discussion above, has created a situation which can be remedied by taking the following actions:

(a) Assignment of technically qualified US Army weapons Command personnel to strategic locations throughout RVN. A request for a total of six (6) USAVECEN representatives has been forwarded to Department of the Army for approval.

(b) Establish AAMAP courses of instruction for aircraft armament personnel in country.
The Aircraft Supply and Maintenance Evaluation and Assistance Team, 34th General Support Group (AMCS), can provide meaningful assistance during their liaison visits through on-the-spot corrective measures and advice in obtaining further help through AAMTAP and USAWECOM support as in (a) and (b) above. The present composition of the team is inadequate to support entire theater of operations, however, and should be enlarged.

s. (1) ITEM: Need to coordinate the efforts of various commodity commands in CONUS and staff elements in RVN to establish a firm armament program for RVN.

(2) DISCUSSION: With the increase of armament assets within the theatre programming and forecasting supply requirements to support the armament systems is extremely difficult.

(3) OBSERVATIONS:

(a) In order to affect adequate supply and maintenance staff responsibility over the aircraft armament assets in country it is necessary to establish close liaison with CONUS Commodity Commands.

(b) Once proper liaison is established with the various commodity commands (AVCOM: MICON: WECOM: MUCOM) it will be highly desirable to deal directly with these commands in the coordination of forecast requirements, inasmuch as the interim ICP's currently in the structure will be less knowledgeable to actual RVN requirements. This direct coordination will avoid duplication of effort and prevent undue delays in the processing of forecast requirements. (Previous forecasts have met with delays in excess of two months when routed through interim ICP's and have been returned with the notation that the requirements were cancelled and that justifications should be submitted.) Differences in fact of opinion can be resolved expeditiously by direct contact with the commodity commands, thereby greatly decreasing requisition response time, and, conversely, increasing aircraft armament availability.

(c) It appears desirable to more fully coordinate the actions of the various Commodity Commands on matters which affect two or more of the commands simultaneously. The results of such coordination should be gathered by AMC and forwarded to RVN. As an initial move in this direction, a meeting of the USARV and 34th General Support Group (AMCS) Armament Officers should be held in CONUS under the auspices of Army Materiel Command (AMC) and include representatives from AVCOM: MICON: MUCOM and WECOM. The result of such a meeting should be the design and implementation of a firm Aircraft Armament Program for RVN.
ITEM: Unauthorized Modifications to Aircraft Armament Subsystems.

DISCUSSION: "Jury-Rigs," by definition, are temporary or field expedients when applied to aircraft armament subsystems, and as such, they may be either approved or unapproved. Jury-rigs which are not command approved are unauthorized.

OBSEVRATIONS:

(a) Research and development (R&D) activities which are conducted under the auspices of an agency designed for such tasks produce safer and more reliable armament subsystems than does indiscriminate experimentation without an adequate control system.

(b) Command cognizance of the need for standardization in aircraft armament subsystems also prevails, and it is anticipated that a USRV regulation will be enacted in the near future which will delineate the requirements for the conduct of armament experimentation in the Republic of Vietnam.

ITEM: "Zero" Balances: Demand Accommodation and Satisfaction

DISCUSSION: Excellent service is rendered as long as the requisitions for armament parts or components are received at various commodity commands, however, too many are not received.

OBSEVRATIONS:

(a) By establishing the route of requisitions direct to the commodity commands involved, instead of the current routing through USARV IS and USARPAC, the following benefits would accrue:

1. Avoidance of needless duplication.
2. Rapid response to requisitions and other requirements.
3. Direct coordination with the prime agency in resolving differences in forecast requirements.
4. Overall increase in the effectiveness of the fighting force through greater availability. This can be related directly
SUBJECT: Operational Report For Quarterly Period Ending 31 October 1966

(Rev CSFOR-65)

15 November 1966

to the outcome of individual battles and the conflict as a whole, inasmuch as a flyable armed helicopter is not operationally ready without a functioning armament subsystem.

(b) G-4, USARV, advises that action is being taken to have 1st Logistical Command clear their warehouses of all aircraft armament peculiar items and ship them to 53th Transportation Battalion (AMMC).

v. (1) ITEM: Armament Subsystems (float)

(2) DISCUSSION: The current concept is to distribute armament subsystems to tactical units in RVN and maintain float subsystems, set at 10% of the total, at depot of DSU level, thereby assuring adequate maintenance and control of the float assets.

(3) OBSERVATIONS:

(a) There are no float subsystems currently available due to the rapid increase in the number of aircraft which require armament; combat or other type losses, and the inability of the supply system to fulfill the needs for new systems on a timely basis.

(b) The extremely high usage rate of the M-60 series machine guns on H-6/XM-16/XM-23 subsystems indicates that a 20% float stock should be maintained for these items.

(c) There is difficulty in obtaining adequate float M-75 grenade launchers and/or receivers for the H-5 armament subsystems. The launchers have been subjected to continuous use and are highly effective weapons, however, many are reaching the stage of deterioration where they should be replaced.

(d) Coordination with Hqs, USARV, has resulted in establishing requirements at Department of Army level for an increased number of replacement and float subsystems. The M-75 grenade launcher problem has not yet been clarified by US Army Weapons Command.

2. (U) PART II - RECOMMENDATIONS

a. That off shore maintenance contracts be considered feasible for OV-1, UBO, UBF aircraft when extensive airframe and other damage occurs that does not ground the aircraft.
b. That the publication of the S&V-N 558 procedures be implemented as quickly as possible.

c. That theater command emphasis be placed on using organizations to submit oil samples in a timely manner thereby improving overall response time.

d. That continued efforts by this command and others as appropriate to identify in-country requirements and assets.

e. That continued efforts by this command and others resolve the problem of lack of adequate in-country avionics test equipment repair facilities.

f. That continued efforts by this command and others as appropriate to insure the rapid repair and return of S311-497 (Gyro compasses) to this theater.

g. That command emphasis by C2, USARV and subordinate commands as appropriate be made known to eliminate the removal of Avionics equipment from downed aircraft in order to expedite repair and/or evacuation to CONUS.

h. That the Avionics Officers of this Headquarters and of USARV coordinate with counterparts at ECOM and other commands to insure timely response to requests for module survey teams, and initiate further action as necessary.

i. That planners for organizations of Group size provide a position for a full-time Communications Officer(s) for each such headquarters.

j. That this Headquarters in conjunction with USARV and other higher Headquarters continue efforts to gain approval to requisition armament repair parts and components directly from the commodity commands.

k. That this Headquarters in conjunction with USARV, establish stringent controls to insure equitable distribution of aircraft armament float assets on hand.

l. That close liaison be established between this theater and CONUS Commodity Commands to affect adequate supply and maintenance staff responsibility over the aircraft armament assets in-country.
SUBJECT: Operational Report for Quarterly Period Ending 31 October 1966

m. That technically qualified U.S. Army Weapons Command personnel be assigned to strategic locations throughout Vietnam.
SUBJECT: Operational Report—Lessons Learned for the Period Ending 31 October 1966 (RCS CSPOR-65)

1. This headquarters has reviewed the Operational Report—Lessons Learned for the period ending 31 October 1966 from Headquarters, 34th General Support Group (AMSS) and forwards two copies of the Report.

2. Pertinent comments are as follows:
   a. Reference Paragraph 5d(9), Section I, Page 8: The unit's statements regarding the status of this program are factual. The requirement for contract civilians will continue until qualified DnC's become available.
   b. Reference Paragraph 5d(12), Section I, Page 10 and Paragraph 2e, Part II, Section II, Page 36: This headquarters has taken action to alleviate this situation by programming three AN/SM-55 Maintenance Calibration Facilities for in-country avionics instrument repair and calibration support. Twelve additional contract technicians have been requested for manning. Anticipated date of arrival for personnel and equipment is 1 February 1967. When these facilities are fully operational, this problem area should be resolved.
   c. Reference Paragraph 5d(13), Section I, Page 10 and Paragraph 2f, Part II, Section II, Page 36: as pertains to repair delays of SB11-L97 gyroscopic compasses due to use of incorrect repair channels: Instructions, giving disposition procedures, were disseminated to all units concerned. Occasional infractions continue; however, they are being handled on an individual basis which is expected to solve this problem.
   d. Reference Paragraph 5g(5), Section I, Page 16: Both regulations referred to were approved and published by this headquarters on 18 November 1966.
   e. Reference Paragraph 5h(3), Section I, Page 17 and Paragraph 21, Part II, Section II, Page 36: Concur. Subsequent to publi-
AVHOC-DH (15 Nov 66)

SUBJECT: Operational Report-Lessons Learned for the Period Ending 31 October 1966 (RDS CSPOR-65)

lication of the unit's report, staff members from the 34th General Support Group and this headquarters visited the commodity commands to establish closer working relationships and discuss problem areas.

f. Reference Paragraph 5b(5), Section I, Page 18: Problems as delineated by the unit did and still do exist; however, they have been greatly diminished subsequent to submission of the unit's report by: (1) closer coordination with USARVUS, (2) reduction of requisition processing time at Okinawa, (3) coordination with the 1st Logistical Command and provision for processing through 1st Logistical Command supply activities requisitions for items stocked by these activities.

g. Reference Paragraph 1f, Part I, Section II, Page 23: Concur in that a critical lack of avionics repair parts exists. Representatives of this headquarters and 34th General Support Group will attend an avionics conference in CONUS during January 1967 in order to expedite a solution to this problem.

h. Reference Paragraph 1g, Section II, Page 25: A listing of item density, float stock on hand, and float stock requirements was forwarded to USARPAC Signal Officer in November 1966. AN/ARC-54 float assets are presently being received as part of the Avionics Retrofit Program.

i. Reference Paragraph 1h, Section II, Pages 25 and 26: A number of test equipment have been located in 1st Logistical Command warehouses and have been distributed to units that have requirements for the items. A revised test and special equipment shortage list was forwarded to PCOM in November 1966.

j. Reference Paragraph 1j, Part T, Section II, Page 27 and Paragraph 2d, Part T, Section TT, Page 36: Concur. This headquarters is presently staffing a directive which will require a complete inventory to be accomplished. This program will provide for continuous update of avionics equipment, including floats.

k. Reference Paragraph 1t, Part T, Section TT, Page 36: Concur with unit in that strict control is necessary for reasons stated. Action has been taken to make all commanders aware of
their responsibility for control of armament configuration of their aircraft. Additionally, Direct Support units check all aircraft as they come in for maintenance to insure that modifications are authorized; unauthorized modifications are corrected before returning the aircraft to its unit. This headquarters has requested 34th General Support Group to furnish this headquarters with information concerning authorized jury-rigs. Upon receipt of the requested information, this office will publish appropriate procedures and instructions for jury-rigging.

1. Reference Paragraph 1v, Part I, Section TT, Page 35: Concur; a shortage does exist. One reason is that many armament subsystems in excess of authorized allowances have been placed on aircraft to meet operational requirements which could not await submission and approval of MTOF's. MTOF approval and arrival of new equipment in-country will ease the problem in ensuing months.

m. Reference Paragraph 2a, Part II, Section TT, Page 35: Concur, particularly as regards the CV-1 which is especially difficult to repair when certain portions of the internal structure are damaged. Final decision as to feasibility, however, is vested with higher headquarters.

n. Reference Paragraph 2b, Part II, Section TT, Page 36: Concur; however, this action can only be accomplished by higher headquarters.

o. Reference Paragraph 2c, Part II, Section TT, Page 36: Concur. This problem has been included in the latest publications of the Commander's Notes. This headquarters will continue to place command emphasis on this matter.

p. Reference Paragraph 2h, Part II, Section TT, Page 36: Concur with the desirability of such coordination which will be effected by action to be taken as per paragraph g above, this Indorsement.

q. Reference Paragraph 2j, Part II, Section TT, Page 36: Concur. DA has directed AMC to prepare a plan for direct
CONFIDENTIAL

AVHGC-DH (15 Nov 66)
SUBJECT: Operational Report-Lessons Learned for the Period Ending
31 October 1966 (RCS CSFOR-65)

requisitioning which, if approved, will encompass all USAFV aircraft.

r. Reference Paragraph 2k, Part II, Section II, Page 36:
This headquarters monitors distribution of current float assets and
issuance of armament subsystems.

s. Reference Paragraph 2m, Part II, Section II, Page 37:
Concur.

FOR THE COMMANDER:

R. J. THORNTON
Br. H. AGC
Asst Adjutant General

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