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

BY ORDER OF THE SECRETARY OF THE ARMY:

Kenneth G. Wickham
Major General, USA
The Adjutant General

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1. **Operational/Significant Activities**

a. **Organization and Location:** Headquarters and Headquarters Company, 765th Trans 3n (A.M.S) (GS) is organized under MCOE 55-66? P01, USARPAC 2/67, dated 29 Dec 67, as directed by USAFRAC GO 131, dated 23 Feb 68. The HHC is located at Vung Jau, RVN. Subordinate units of the battalion, with locations, are as follows:

1. 56th Transportation Company (AD), located at Long Thanh N.
3. 330th Transportation Company (GS), located at Vung Jau.
4. 338th Transportation Company (AD), located at Vung Jau.
5. 511th Transportation Company (AD), located at Vinh Long.

b. **Mission:** The primary mission of the headquarters is to provide command, control, staff planning and administrative supervision of the aircraft general support company, the three aircraft direct support companies and an avionics general support company. The principal missions of the subordinate units are as follows:

1. **Direct Support Units:** To provide direct support and backup direct support in the areas of aircraft, engines, aircraft systems avionics and aircraft armament systems for 1,056 aircraft of all types located in the southern half of the III Corps and the entire IV Corps Tactical Zones.
2. **General Support Unit:** To provide general support and backup direct support maintenance for all aircraft, aircraft components and armament systems supported by the direct support units, with the exception of avionics systems.
3. **Avionics General Support Unit:** To provide general support and backup direct support avionics maintenance for more than 1,256
aircraft. In addition to support for the above aircraft that are organic to aviation units in the support area, the 317th Maint Co supports Army aircraft located in Thailand (JUSAG), aircraft operated by Air America and U.S. C-7A aircraft.

(4) Additional battalion missions include:
   (a) Operation and control of the Army Aviation Refresher Training School (AARTS), with present capacity of 215 resident students.
   (b) Operation of a primary Theater Aircraft Reparable Program (TARP) agency. The battalion control DSU (383rd FCS) is located at Vung Tau. It receives reparables from units throughout Vietnam, moves them directly to the depot level shops of the USNS Corpus Christi Bay (PAF) as well as the battalion GS level shops, receives the serviceable output of these shops and returns the components to the supply system.

c. Changes in Command: During this reporting period the following changes in command occurred:
   (1) On 17 Nov 69, MAJ John C. Warren assumed command of the 317th Maint Co from MAJ Robert D. Shelton.
   (2) On 19 Dec 69, MAJ John P. Gallup assumed command of the 611th Trans Co from MAJ Rex L. Holloway.
   (3) On 23 Dec 69, CPT Charles V. Spain assumed command of Headquarters Company from CPT Albert J. Sirianni.
   (4) On 15 Jan 70, LTC Gerald E. Royals assumed command of the battalion from LTC Arthur J. Junot.

d. Mission Operations:
   (1) All units of the battalion participated in Combat Support Operations and conducted integrated unit and individual training during the entire reporting period.
   (2) Unit Re-Organization: The 317th Maintenance Company (Lt Equip) (GS) was organized utilizing personnel and equipment from the 69th, 258th and 342nd Signal Detachments, which were formerly known (collectively) as the Aviation Electronic Support Company (South) (Prov). The organization was effected on 1 Dec 69, under USARPAC GO 726, dated 26 Oct 69. The three signal detachments making up the AES were deactivated on the same order.
   (3) Unit Deactivation: The 303rd Transportation Company (GS), formerly located at Long Thanh N, became the first aircraft maintenance unit to be officially deactivated in RVN, effective 31 Jan 70.
   (4) Aircraft General and Direct Support Maintenance: During this reporting period, the aircraft GS and DS units of this battalion provided maintenance on 698 aircraft located in the II, III and IV Corps Tactical Zones. This support included all installed and float
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Armament systems, repair of battle and crash damage, repair of direct exchange components and repair of LARP items. The following breakdown represents performance data in this mission area:

(a) Aircraft Maintenance. A summary of aircraft maintenance activity by level is shown below:

**DIRECT SUPPORT MAINTENANCE**

<table>
<thead>
<tr>
<th>Aircraft Received</th>
<th>NOV</th>
<th>DEC</th>
<th>JAN</th>
<th>TOTAL</th>
<th>MONTHLY AVERAGE</th>
<th>NET CHANGE THIS QTR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>180</td>
<td>139</td>
<td>217</td>
<td>536</td>
<td>178</td>
<td>-23</td>
</tr>
<tr>
<td>Aircraft In-Progress</td>
<td>48</td>
<td>47</td>
<td>48</td>
<td>143</td>
<td>47</td>
<td>-55</td>
</tr>
<tr>
<td>Aircraft Completed</td>
<td>133</td>
<td>148</td>
<td>211</td>
<td>492</td>
<td>164</td>
<td>-22</td>
</tr>
</tbody>
</table>

**PERFORMANCE**

<table>
<thead>
<tr>
<th>TIME TO REPAIR</th>
<th>NOV</th>
<th>DEC</th>
<th>JAN</th>
<th>TOTAL</th>
<th>PERCENT</th>
<th>NET CHANGE THIS QTR</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-10 Days</td>
<td>86</td>
<td>104</td>
<td>150</td>
<td>340</td>
<td>69.1</td>
<td>-7.3%</td>
</tr>
<tr>
<td>11-20 Days</td>
<td>25</td>
<td>24</td>
<td>26</td>
<td>75</td>
<td>15.2</td>
<td>+4.3%</td>
</tr>
<tr>
<td>21-30 Days</td>
<td>13</td>
<td>11</td>
<td>5</td>
<td>29</td>
<td>5.9</td>
<td>+0.9%</td>
</tr>
<tr>
<td>31+ Days</td>
<td>9</td>
<td>9</td>
<td>7</td>
<td>25</td>
<td>5.1</td>
<td>-2.6%</td>
</tr>
</tbody>
</table>

**GENERAL SUPPORT MAINTENANCE**

<table>
<thead>
<tr>
<th>Aircraft Received</th>
<th>NOV</th>
<th>DEC</th>
<th>JAN</th>
<th>TOTAL</th>
<th>MONTHLY AVERAGE</th>
<th>NET CHANGE THIS QTR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>31</td>
<td>13</td>
<td>65</td>
<td>109</td>
<td>36</td>
<td>-11</td>
</tr>
<tr>
<td>Aircraft In-Progress</td>
<td>21</td>
<td>22</td>
<td>23</td>
<td>66</td>
<td>22</td>
<td>-41</td>
</tr>
<tr>
<td>Aircraft Completed</td>
<td>37</td>
<td>22</td>
<td>76</td>
<td>135</td>
<td>45</td>
<td>-1</td>
</tr>
</tbody>
</table>

**PERFORMANCE**

<table>
<thead>
<tr>
<th>TIME TO REPAIR</th>
<th>NOV</th>
<th>DEC</th>
<th>JAN</th>
<th>TOTAL</th>
<th>PERCENT</th>
<th>NET CHANGE THIS QTR</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-20 Days</td>
<td>26</td>
<td>10</td>
<td>53</td>
<td>89</td>
<td>65.9</td>
<td>-10.6%</td>
</tr>
<tr>
<td>21-40 Days</td>
<td>8</td>
<td>4</td>
<td>12</td>
<td>24</td>
<td>17.8</td>
<td>+4.9%</td>
</tr>
<tr>
<td>41-50 Days</td>
<td>0</td>
<td>1</td>
<td>7</td>
<td>8</td>
<td>5.9</td>
<td>+2.1%</td>
</tr>
<tr>
<td>51+ Days</td>
<td>3</td>
<td>7</td>
<td>4</td>
<td>14</td>
<td>10.0</td>
<td>+3.2%</td>
</tr>
</tbody>
</table>

(b) Aircraft Components:

<table>
<thead>
<tr>
<th>RECEIVED</th>
<th>REPAIRED</th>
<th>NRTS</th>
<th>NRTS RATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>2522</td>
<td>1692</td>
<td>636</td>
<td>37.6%</td>
</tr>
</tbody>
</table>

(c) Aircraft Turbine Engines:

<table>
<thead>
<tr>
<th>RECEIVED</th>
<th>REPAIRED</th>
<th>NRTS</th>
<th>NRTS RATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>119</td>
<td>76</td>
<td>56</td>
<td>56.8%</td>
</tr>
</tbody>
</table>

(d) Aircraft Armament Sub-Systems Components:

INCL

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RECEIVED 686
REPAIRED 613
MAINT HAN HOURS 3,193

Note: NRTS is an abbreviation for Not Reparable This Station

(5) Avionics Components Processed:

<table>
<thead>
<tr>
<th>Type</th>
<th>Number</th>
<th>56th</th>
<th>317th</th>
<th>611th</th>
</tr>
</thead>
<tbody>
<tr>
<td>40's Received:</td>
<td></td>
<td>8,358</td>
<td>11,069</td>
<td>6,170</td>
</tr>
<tr>
<td>40's Completed:</td>
<td></td>
<td>7,753</td>
<td>9,858</td>
<td>5,990</td>
</tr>
<tr>
<td>40's Avail to 3AAD &amp; FAMP:</td>
<td>NA</td>
<td>3,241</td>
<td>NA</td>
<td></td>
</tr>
</tbody>
</table>

(6) Aircraft Processing: This battalion has the mission of offloading and processing aircraft delivered to Vung Tau by surface vessel. The offloading operations for this quarter involved three vessels from which 69 aircraft were discharged and prepared for issue.

(7) New Aircraft Issues:

<table>
<thead>
<tr>
<th>TYPE</th>
<th>NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>AH-1G</td>
<td>53</td>
</tr>
<tr>
<td>OV-1</td>
<td>3</td>
</tr>
<tr>
<td>U-21</td>
<td>1</td>
</tr>
<tr>
<td>U-1A</td>
<td>1</td>
</tr>
<tr>
<td>U-6A</td>
<td>1</td>
</tr>
</tbody>
</table>

(8) Aircraft Processed for Retrograde:

<table>
<thead>
<tr>
<th>TYPE</th>
<th>NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>OH-6A</td>
<td>13</td>
</tr>
<tr>
<td>UH-13</td>
<td>3</td>
</tr>
<tr>
<td>UH-1D</td>
<td>2</td>
</tr>
<tr>
<td>UH-1G</td>
<td>4</td>
</tr>
<tr>
<td>UH-1C</td>
<td>4</td>
</tr>
<tr>
<td>U-21</td>
<td>1</td>
</tr>
</tbody>
</table>

(9) Aircraft Recovery Operations: During this period the aircraft direct support companies of this battalion riged 236 aircraft for aerial lift. Of these, 86 were field extractions (the rigging operation taking place in an area temporarily secured by ground troops and/or armed helicopters), and 150 aircraft were riged for maintenance evacuation (airlift of the aircraft from one secure area to another). The 330th Trans Co (GS) successfully airlifted 30 aircraft in support of the DS companies. This marks the end of 43 continuous months of aerial lift support during which the 330th has a record of 1,281 recoveries, while experiencing no accidents or major incidents.

(10) Flight Operations: This battalion operates a consolidated flight operations section (under the supervision and control of S-3) from which all aviators and aircraft assets of the units stationed at Vung Tau are controlled. This results in optimum utilization of aircraft assets. The wide dispersion of battalion units, the large area of maintenance support responsibility and the tactical situation create a flight operations workload of unusual proportions for a battalion of this type. There are no flight operations personnel authorized.

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Ending 31 Jan 70, RCS: CsFOR-65 (R2)

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SUMMARY OF FLIGHT OPERATIONS

<table>
<thead>
<tr>
<th>PAX CARRIED</th>
<th>S/CONS AIRLIFTED</th>
<th>HOURS FLOTTEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>5,185</td>
<td>585</td>
<td>3,087</td>
</tr>
</tbody>
</table>

(11) Technical Supply Operations: The following statistics represent the operations of the Direct Support Supply Activities of the DS companies:

<table>
<thead>
<tr>
<th>ASL Lines:</th>
<th>56th</th>
<th>338th</th>
<th>611th</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lines at Zero Balance:</td>
<td>15,992</td>
<td>12,161</td>
<td>10,641</td>
</tr>
<tr>
<td>Total Requests Received:</td>
<td>12,898</td>
<td>13,948</td>
<td>10,498</td>
</tr>
<tr>
<td>Demand Accommodation:</td>
<td>83%</td>
<td>78.3%</td>
<td>87.9%</td>
</tr>
<tr>
<td>Demand Satisfaction:</td>
<td>71%</td>
<td>74.4%</td>
<td>80.5%</td>
</tr>
</tbody>
</table>

(12) Theater Aircraft Repairable Program: The total bulk tonnage of aircraft components processed by this battalion in support of the PARP program during this period is as follows:

| Total Tons Received: | 985.8 |
| Shipped to CONUS NRTS: | 364.5 |
| Shipped to FAMF: | 57.5 |
| Shipped to 330th (GS): | 105.6 |
| Shipped to Saigon: | 458.2 |

(13) Army Aviation Refresher Training School (AARTS): The AART school, operated by this battalion, provides refresher and new equipment training for personnel throughout RVN. This school, sponsored by the 34th General Support Group, is staffed by one officer, five enlisted men and 21 civilian personnel. During this reporting period, 1,080 students were graduated from the following courses:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>GRADUATES</th>
<th>COURSE</th>
<th>GRADUATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>OH-6A Airframe</td>
<td>91</td>
<td>T-53-L-11 engine</td>
<td>44</td>
</tr>
<tr>
<td>UH-1D/H Airframe</td>
<td>121</td>
<td>T-53-L-13 Engine</td>
<td>102</td>
</tr>
<tr>
<td>AH-1G/UH-1C Airframe</td>
<td>93</td>
<td>T-55-L-7 Engine</td>
<td>39</td>
</tr>
<tr>
<td>CH-47 Airframe</td>
<td>69</td>
<td>T-63 Engine</td>
<td>76</td>
</tr>
<tr>
<td>CH-47 Paint Supervisor</td>
<td>75</td>
<td>Armament</td>
<td>124</td>
</tr>
<tr>
<td>Tech Supply</td>
<td>104</td>
<td>Weaponry</td>
<td>30</td>
</tr>
<tr>
<td>Tech Inspection</td>
<td>112</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

e. New Activities:

(1) Mission support for the following units was transferred from the 611th Trans Co to the 383rd Trans Co in an effort to equalize supply support requirements: 121st ASHC, 221st RAC and 336th ASHC (Soc Trang), 244th SAC and 271st ASHC (Can Tho). This transfer reduced the number of aircraft supported by the 611th to 403 and increased the 383rd's support load to 284.
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(2) A total of three test pilot classes for the VNAF 74th Wing were held during Nov and Dec 69. The course provided VNAF pilots with the proper procedures in conducting maintenance test flights on UH-1 helicopters. Total students graduated were six pilots and eight mechanics.

(3) A test of THROUGHPUT EDP issues from USAMC to customer units was initiated in conjunction with the USAMC and with the 164th CAG. The goal of this program is to decrease OST by eliminating the physical handling of parts by a DSSA. Reduction in OST will alleviate the EDP situation more quickly and increase aircraft availability.

(4) The battalion has instituted a program whereby various supported units, at the request of the supported battalion and company commanders, are given a courtesy assistance visit. The team consists of all elements of this battalion involved in aircraft maintenance and supply, and in armed units, armament personnel. This program is designed to improve customer relationships as well as assisting the units in problem areas. Units visited thus far seem quite receptive to the program.

(5) PA&E began work on facilities to house the Kahn Fuel Control Test Stand in the 330th Trans Co shops on 11 Nov 69. The project was completed in January 1970. The facilities provide a dirt free, controlled environment for operation of the test stand. This work represents the culmination of seven months effort to gain approval and accomplish construction of the facilities and will allow the 30th to resume fuel control repair under the TARP program.

(6) The 765th assumed Installation Coordinator responsibilities for Vung Tau Army Airfield on 15 Jan 70. A supplementary TDA has been authorized for creation of a Deputy IC's office, which is in the process of consolidating and transferring to the airfield certain of the previous Vung Tau Sub Area Command assets. Additionally, the battalion has assumed defense responsibilities for the entire Vung Tau Special Zone. Defense operations are being handled through the battalion S-3 section.

f. Civic Actions: Battalion civic actions, by unit location, were as follows:

(1) Vung Tau: Battalion personnel (HHC, 317th, 388th, 330th) participated in a number of varied civic actions projects. Among them were: support of two orphans' beach parties, conducted in conjunction with the local US Army Service Club; construction and repair of refuse dumpsters; donation of salvage lumber; provision of a UH-1D helicopter during a search for several Vietnamese swimmers. At present, all battalion civic actions at Vung Tau are being coordinated through the 2nd Civic Actions Platoon.

(2) Vinh Long: The 611th Trans Co continues its comprehensive support of the Good Shepherd's Convent.
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(3) Long Thanh: The 303rd Trans Co (Inactive) and the 56th Trans Co participated in several projects: movement of buildings from neighboring Bearcat to the airfield and improvement of them for the use of local nationals working on post; donation and delivery of construction items such as culverts, cement and bricks; various visits to the Long Thanh Orphanage, during which supplies such as baby food and clothing were donated.

2. Lessons Learned: Commander’s Observations, Evaluations and Recommendations.
   a. Personnel. None.
   b. Intelligence. None.
   c. Operations.
   (1) R-1340 Engine Maintenance.
   (a) OBSERVATION: The R-1340 engine is used on the U-1A and UH-19. The engines appear to be identical when stripped of their accessories, however, there is an internal modification on the engine used for the UH-19 which is not discernable by a study of the engine workmanship or the Technical Manuals.
   (b) EVALUATION: The 56th Trans Co has had to change the R-1340 engine on several of its supported U-1A aircraft. The requisitions for R-1340 engines using the federal stock number from TM 55-1510-201-35P (U-1A) yielded an engine which would not properly function on the Otter. The engine itself performed properly, however, the propeller would not change pitch. The first trouble shooting measure utilized to locate the propeller problem was to test the prop governor. This was not successful nor were any of the other trouble shooting procedures, i.e., replacing the dome and the oil sump. After many exhaustive days of work on the engine it was found that oil circulation from the engine to the prop shaft was not free in both directions. The engine had an internal block which prevented the oil from leaving the dome, thereby preventing the propeller from cycling. The engine had to be replaced because the block was in the nose case of the engine and could not be replaced on the aircraft. The installation and removal of the oil return block from the engine is a depot function.
   (c) RECOMMENDATION: The R-1340 must be inspected before assembly to determine if it is designed for U-1A operation. This inspection may be accomplished by placing a pressure gage on the oil inlet on the accessory case and by pressurizing the prop shaft oil return passage. A reading on the gage indicates that the engine is useable. No reading would indicate that the engine is not useable on the U-1A and should be returned to stock.
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(2) TACAN Repair.
(a) OBSERVATION: More effective utilisation of Army TACAN equipment, AN/ARN-52 can be achieved by increasing emphasis on flight evaluation of system operations.

(b) EVALUATION: The AN/ARN-52 TACAN is a relatively new item of equipment and considerable difficulty is being experienced both by aviators and repairmen at the DS level. This difficulty is a result of a lack of understanding of the system or a failure of the pilot to communicate meaningful 'word' pictures in his writeup to the repairmen.

(c) RECOMMENDATION: That a TACAN check list and instruction letter for pilots and repairmen be published. The 56th Trans Co has experimented with one, and found that it contributes to greater understanding and utilisation of the system.

d. Organisation.
(1) Inadequacy of MTOE 55-457G in Responding to Supported Units' Aviation Supply Requirements.
(a) OBSERVATION: MTOE 55-457G provides 23 personnel to operate the Direct Support Supply Platoon (DSSP) yet does not state the mission capability of the DSSP.

(b) EVALUATION: Field experience in RVN shows that mission requirements in support of aviation fluctuates as supported units relocate in keeping with the tactical situation. It has also been found that the 23 personnel authorized the DSSP are not sufficient to accomplish the mission. Civilian augmentation is required.

(c) RECOMMENDATION: That a yardstick be developed to equate mission requirements with personnel requirements and that paragraphs 02 and 03 of MTOE 55-457G be changed, preferably adopting a cellular concept which can accommodate fluctuating workloads.

e. Training.
(1) U-21 Engine Rigging.
(a) OBSERVATION: The 56th Trans Co provides direct support and backup direct support maintenance for 38 U-21's. Neither the 56th nor the customer units have qualified engine rigging personnel.

(b) EVALUATION: The U-21A has a PT6A two stage, free turbine engine that requires skilled personnel to perform the tedious job of throttle rigging, which is not covered in any maintenance manual. Only after trial and error can a mechanic begin to understand this most complicated task of marrying up power performance, percent RPM, torque and throttle correlation. The present maintenance manuals for this type of engine are very basic in descriptions of solving power performance problems and do not deal with complicated problems encountered in fine tuning the PT6A.

(c) RECOMMENDATION: That a special ground maintenance course

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on the rigging of twin PT6A engines installed in the U-21A, supervised by factory trained technical representatives be established at the AARTS. This instruction should not be limited to just direct support type activities, but should also include the using organisation's maintenance personnel so as to eliminate maintenance turn around time for scheduled type maintenance being accomplished by a DS organisation. Special equipment required to accomplish the initial phase of training would be limited to a turbine engine test stand and general mechanic's tool kits. The goal of the course would be to train proficient mechanics by an actual throttle rigging problem solved on PT6A engines.

(2) Surveillance Camera Repair, MOS 41G20.
   (a) OBSERVATION: Repairmen are unable to repair electronics components of the Photographic Camera System KS-61 and the Still Picture Camera KA-76.
   
   (b) EVALUATION: The camera repairmen received neither basic electronics or schematic analysis of the photographic system nor any formal training on the KA-76 camera in the curriculum of the camera repair course.
   
   (c) RECOMMENDATION: That the United States Army Signal School, Fort Monmouth, NJ be asked to consider including these subjects in its program of instruction for camera repairmen.

(3) Navigational Equipment Repair, MOS 35M20.
   (a) OBSERVATION: Navigational equipment repairmen have been unable to repair the Airborne Radio Navigational System (TACAN) AN/ARN-52 at the GS level.
   
   (b) EVALUATION: Repair of the AN/ARN-52 has not been included in the curriculum of the navigational equipment repairmen.
   
   (c) RECOMMENDATION: That the US Army Southeast Signal School, Fort Gordon, Ga, be asked to consider including AN/ARN-52 maintenance in its program of instruction for navigational equipment repairmen.

(4) Repair of Internagator Set AN/APX-44.
   (a) OBSERVATION: Ground control approach radar repairmen have been unable to realign the I-F Strip of the Internagator after repairs have been completed.
   
   (b) EVALUATION: Enough practical experience has not been given to GCA repairmen in alignment of the I-F Strip.
   
   (c) RECOMMENDATION: That the US Army Signal School at Fort Monmouth, NJ, be asked to revise the GCA repair course to include more practical exercise on the alignment of the AN/APX-44 I-F Strip.

(5) TAERS and Records Management in Avionics.
   (a) OBSERVATION: Avionics repairmen are unable to establish PLL's for individual pieces of equipment or establish and maintain
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records on these items.

(b) EVALUATION: Insufficient training has been given to technical personnel regarding the uses of TM 38-750, AR 711-16 and AR 735-35.

(c) RECOMMENDATION: That the US Army Signal School, Fort Monmouth, NJ, the US Army Southeast Signal School, Fort Gordon, Ga and the US Army Combat Surveillance School, Fort Huachuca, Ariz, all be asked to revise programs of instruction to include more emphasis on TAERS and records management.

f. Logistics.

(1) Reparables Control.

(a) OBSERVATION: Supported units require control measures to provide adequate emphasis on reparables. Commander to Commander contact is an effective tool toward acquiring proper command emphasis from the supported unit.

(b) EVALUATION: Unit commanders of operational aviation companies and detachments are the key to the success of the reparables program. Combat arms commanders are highly sensitive about aircraft availability while only paying lip service to maintenance and supply programs. The reparables provisions of AR 711-45 cause some interest in the supply and maintenance field, however, the only effective support for the program comes from personal contact between the commander of the DSU and the commander of the aviation unit. The possibility of losing aircraft availability generates strong command action toward the early return of reparables. The 56th Trans Co, in addition to the letter requirements of AR 711-45, publishes a bi-weekly delinquent reparables list. The list is hand carried by the DSU commander to the units concerned. The effects of the personal contact are showing excellent strides toward the goal of 100% return of reparables. It is felt that it is necessary to institute control procedures at the user as well as the supplier end of supply channels.

(c) RECOMMENDATION: The 56th Trans Co is attempting to assist supported units to set up reparables control procedures at their level. The first suggested step is to designate one man in the supported unit's tech supply as the unit reparables clerk. This man will keep a document register of all transactions involving receipt or turn-in of reparable items. In addition, a file should be maintained for turn-in documents to include the customer copy of the 2765-1 unserviceable turn-in receipt and both parts of the reparable "statement and credit" form which are both returned to the customer by the DSSA at the time turn-in credit is given by the reparable control clerk. In addition, when a reparable part is ordered on a required delivery date requisition and then held for use for longer than 7 days after receipt by the customer, the customer is encouraged to coordinate with the DSSA reparables clerk. The DSSA reparables clerk will inform the DSSA platoon leader daily of reparables returned which are or will be delinquent.

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OPERATIONAL REPORT - LESSONS LEARNED, 765TH TRANSPORT BN, PERIOD ENDING 31 JAN 70, RCS: CSFOR-65 (R2)

(2) TEST SETS, CRYOGENIC REFRIGERATORS, HD-723/AAS-14A.

(a) OBSERVATION: Two complete sets of new test equipment were shipped to the 317th Maint Co during August, 1969: Gaseous Nitrogen Service Unit, Airesearch PN 901754-6-1; Crystal Test Unit, Airesearch PN 901762-2-1; Closed Cycle Cooler Test Set, Airesearch PN 273902-1-1; Cylinder Leadage Fixture, Airesearch PN 904976-1-1; Vacuum Manifold Oven, Airesearch PN 273920-1-1. The parts never arrived and cannot be accounted for. These tester units would have given the 317th depot level overhaul capabilities.

(b) EVALUATION: Lack of early knowledge of the shipment has prevented the 317th from tracing the location of the parts. So far, only the vacuum manifold oven has been located.

(c) RECOMMENDATION: That when new items are shipped, the unit to which they are being shipped be given prior notification of the shipment, date and mode.

(3) RECEIVER-TRANSMITTER AN/ARC-54.

(a) OBSERVATION: Modules of the AN/ARC-54 have been damaged due to use of incorrect hardware when mounting these modules, i.e., mounting screws.

(b) EVALUATION: The correct mounting screw has an incorrect FSN.

(c) RECOMMENDATION: That a complete study be made to determine the correct FSN for all of the mounting hardware, and new FSN's issued where appropriate.

(4) ASL ACCURACY.

(a) OBSERVATION: During the past five months the 388th Tech Supply inventoried 70% of its ASL, consisting of 13,418 lines as of 10 Dec 69. After the inventory of FSC 1560 a 20% error was discovered.

(b) EVALUATION: The error was accredited to the issuing of EDP's and hand carry requests while the FSC was under inventory.

(c) RECOMMENDATION: That DSSA's evaluate their location and inventory procedures to determine feasibility of the following cyclic inventory method, as a means of reducing such errors:

TRANSIT: 91 cards (1st count) inventory cards depart from stock control section and arrive at location deck. (Machine time utilised to prepare first count cards, 8 hours)

HOLD: 91 cards (1st count) inventory cards are held for a three day period for the purpose of cleaning out the pipeline (MRD's, receipts, etc.), establish a holding action on all non-EDP requests and to establish a passing action on EDP's in effected class(es).

WORK: All existing stock and incoming stock from depot and serviceable turn-ins from supported units in effected class(es) is held,

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paperwork and parts. Locations are then established on 91 cards (1st count) inventory cards. The location deck is then secured in a locker to prevent unknown issues during the inventory.

**TRANSPORT:** 91 cards (1st count) inventory cards are sent to inventory and location survey teams.

**WORK:** 91 cards (1st count) inventory cards are counted, unit of issue and nomenclature are posted to the cards. The cards are then checked to see if the amount of cards present are the same as the print-out located in the stock control section.

**TRANSPORT:** 91 cards (1st count) inventory cards are sent to the stock control coordinator. (Machine time procedure as above is used on 2nd count, 3-4 hours) 3rd count is not taken unless the value of the items being inventoried exceeds $10.00 per unit of issue.

### (5) **Invalid Dues-In on Small Item Shipments.**

(a) **OBSERVATION:** In several instances, NCR-500 computers were holding invalid dues-in on small item shipments. If stock were to go to zero balance during such times, the computer would not re-order because of the invalid due-in. Such errors are not detected until reconciliation, which could cause up to a 30 day delay in ordering.

(b) **EVALUATION:** All small items received are packed in a console box which causes items to become separated from the DA Form 1348. Because of this, the warehouse personnel were expediting the receipts by processing the documentation in the following manner: 1) Comparing the quantity actually received against the quantity shipped on the 1348; if a deficiency was found then the quantity on the 1348 was changed. 2) Upon receiving more of the same item later in the day (without paperwork) a hand written 1348 was initiated showing the quantity received, but no document number. 3) Both the first 1348 and the hand written one would then be sent to the stock control section (NCR-500) for posting. The 1348 with the document number was posted against the due-in document number as a partial shipment while the hand written 1348 was posted as a receipt not due-in.

(c) **RECOMMENDATION:** That locator deck personnel set aside items with deficiencies in quantity until the complete console box has been processed. When the remainder of the stock with no 1348's is found, it can be consolidated with the items that were previously set aside. If the quantity is then correct, it can be put on location and the 1348 sent to the stock control section for posting. This would effectively eliminate invalid dues-in on small item shipments.

### (6) Communications

None

### (7) Material

1. **Side Looking Airborne Radar, AN/APS-94C.**

(a) **OBSERVATION:** The locating holes and pins on the Indicator...
Radar Target, IP-516/APS-94, have been breaking during connection of the recorder to the indicator.

(b) EVALUATION: Jacks J6 and J7, which mate with plugs P5 and P6, have been seating incorrectly, breaking the frame of the IP-516.

(c) RECOMMENDATION: That an engineering study be made to modify the centering units with longer locating pins or that stronger material be used to manufacture the IP-516 frames.

1. Other. None

GERALD E. ROYALS
LtC, TC
Commanding

CF:
1-CO, 34th GSG, APO 96309
2-CG, US.RP.C (GPOP-DT) APO 96558
3-CG, US.RV (AVHGC-DST), APO 96375
AVGP-B (13 Feb 70) 1st Ind

SUBJECT: Operational Report - Lessons Learned, 75th Trans Br., Period 1st Qtr.
31 Jan 70, RCS CSFOR-65 (R2)

HEADQUARTERS, 34TH GENERAL SUPPORT GROUP (AM63), APO X300 \ 4 MARCH 70

THRU: Commanding General, United States Army Vietnam, ATTN: AVHCC-DST, APO X300

TO: Department of the Army, ATTN: ACSFOR, Washington, D.C. 20310

1. This Headquarters has reviewed the Operational Report - Lessons Learned for the quarterly period ending 31 January 1970 from Headquarters, 75th Transportation Battalion (AM63)(GS).

2. Comments follow:

a. Reference Section 2, Lessons Learned, Operations, paragraph c(2), concerning TACAN repair; concur. An evaluation of the "TACAN Checklist or Instruction Letter" is being made for possible inclusion in the 34th General Support Group Newsletter. At the present time, there are no Dash 10 TACAN Manuals for use by aviators.

b. Reference Section 2, Lessons Learned, Organization, paragraph c(1), concerning inadequacy of MTOS 55-457G in responding to supported units aviation supply requirements; concur. A yardstick should be developed to equate mission requirements with personnel requirements. The 34th General Support Group Supply Assistance Team will make a study of these requirements as a basis for recommended changes to the MTOS.

c. Reference Section 2, Lessons Learned, Training, paragraph e(1), concerning inadequacy of U-21A throttle rigging training; nonconcur. The procedures outlined in TM 55-1510-203-35 are considered adequate although not a substitute for experience. An apparent deficient area is training personnel to correlate both engines on the aircraft. Due to the training aid requirements, it is felt that it would be more beneficial to allow all 17G course students to perform this work on aircraft at Fort Eustis, Virginia.

d. Reference Section 2, Lessons Learned, Training, paragraph e(4), concerning repair of Interrogator Set AN/AFX-44 should read "Repair of Interrogator Set AN/TPX-44."

e. Reference Section 2, Lessons Learned, Logistics, paragraph f(1), concerning repairables control; concur. This procedure is in agreement with USARV Supplement 1 to AR 711-45. A similar procedure has been initiated in the other DSSA's.

f. Reference Section 2, Lessons Learned, Logistics, paragraph f(2), concerning test sets, cryogenic refrigerators HD-723/AAE-14A; nonconcur. Reference shipment of test equipment was shipped in four (4) boxes, At the
time, only the oven was needed and shipped to the 765th Transportation Battalion in one box. The remaining three (3) boxes of test equipment were sent to SAAD for stockage.

5. Reference Section 2, Lessons Learned, Logistics, paragraph 1(4), concerning ASL Accuracy; concur. This procedure will be further evaluated by the Aircraft Supply Assistance Team, streamlined, and incorporated into the SOP's of the DSSA's.

h. This Headquarters concurs with the remaining observations, evaluations and recommendations and has no additional comments.

FOR THE COMMANDER:

W. L. DAMPIE
CPT, AGO
Adjutant
AVHC-DST (13 Feb 70) 2d Ind
SUBJECT: Operational Report—Lessons Learned, 765th Trans Mn, Period
Ending 31 Jan 70, RCS: GSFOR-65 (E2)

HEADQUARTERS, UNITED STATES ARMY VIETNAM, APO San Francisco 96375
TO: Commander in Chief, United States Army, Pacific, ATTN: GPOP-DT, APO 96558

1. This headquarters has reviewed the Operational Report—Lessons Learned
for the quarterly period ending 31 January 1970 from Headquarters, 765th
Transportation Battalion (AM8) (GS) and concurs with the comments of
imuring headquarters.

2. Comments follow:

a. Reference item concerning “B-1340 Engine Maintenance”, page 7,
paragraph 2e(1); concur. The pressure check cited in the recommendation
is a desirable procedure to insure that B-1340 engines have been modified
for use on U-1A aircraft. It has been determined that B-1340 engines
overhauled by the Spartan Company have not been so modified. Action has
been taken by AVCON to remove the Spartan overhauled engines from the
supply system, and to replace them with those overhauled by Canadian Pratt
and Whitney. The Logistics Division, USAV Aviation Section disseminated
the above information to using units on 21 February 1970.

b. Reference item concerning “U-21 Engine Rigging”, page 8,
paragraph 2e(1), and paragraph 2e, 1st Indorsement; concur with the
1st Indorsement. A Beech Aircraft Company technical representative,
stationed with the 56th Transportation Company (ADS), has been providing
U-21 engine rigging instructional assistance, on a requested basis, to all
units having U-21 aircraft. As long as a qualified technical representative
remains assigned to USAV, it is not considered necessary to establish a
separate course of instruction at the AANTS. However, to preclude the
continuing requirement to conduct in-country training, it is recommended
that more training in U-21 engine rigging be included in the 67C course
at the Transportation School, Fort Rustis, Virginia.

c. Reference item concerning “TAMS and Records Management in
Avionics,” page 9, paragraph 2e(5); nonconcur. Avionics Communications
and Electronics Repair Parts Specialists (NOS 760) are school trained in
the duties of establishing and maintaining a PLL. These personnel are
assigned to avionics repair units and detachments. No action by higher
headquarters is recommended.
d. Reference item concerning "Receiver/Transmitter AN/ARC-9", page 11, paragraph 2f(3); concurs. The 76th General Support Group is conducting a study to determine the correct federal stock numbers for the mounting hardware. The data resulting from this study will be furnished to all units of the 76th General Support Group. No action by higher headquarters is recommended.

e. Reference item concerning "Side Looking Airborne Radar", page 12, paragraph 2h(1); concurs. The 765th Transportation Battalion has been advised to submit an RER to achieve the recommended engineering study. No action by higher headquarters is recommended.

FOR THE COMMANDER:

Cy from:
76th General Support Group
765th Transportation Bn
GPOP-DT (13 Feb 70) 3d Ind.

SUBJECT: Operational Report of HQ, 765th Transportation Battalion (AM&S) (GS) for Period Ending 31 January 1970, RCS CSPOR-65 (R2)

HQ, US Army, Pacific, APO San Francisco 965588 APR 70

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

This headquarters concurs in subject report as indorsed.

FOR THE COMMANDER IN CHIEF:

[Signature]

D.D. CLINE
2LT, AGO
Asst AG
Operational Report - Lessons Learned, HQ, 765th Transportation Battalion

Experiences of unit engaged in counterinsurgency operations, 1 Nov 69 - 31 Jan 70.

CO, 765th Transportation Battalion

13 February 1970

N/A

N/A

OACSFOR, DA, Washington, D.C. 20310