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AUTHORITY

AGO D/A ltr, 29 Apr 1980

AD 862092

DEPARTMENT OF THE ARMY
OFFICE OF THE ADJUTANT GENERAL
WASHINGTON, D.C. 20310

IN REPLY REFER TO

AGDA (M) (5 Nov 69) FOR OT UT 693181 19 November 1969

SUBJECT: Operational Report - Lessons Learned, Headquarters, 394th Transportation Battalion, Period Ending 31 July 1969

SEE DISTRIBUTION

1. Subject report is forwarded for review and evaluation in accordance with paragraph 4b, AR 525-15. Evaluations and corrective actions should be reported to ACSFOR OT UT, Operational Reports Branch, within 90 days of receipt of covering letter.

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

KENNETH G. WICKHAM
Major General, USA
The Adjutant General

1 Incl
as

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DEPARTMENT OF THE ARMY
HEADQUARTERS, 394th TRANSPORTATION BATTALION (TERMINAL)
APO San Francisco 96238

AVCA QN-TTU-S3 11 August 1969

SUBJECT: Operational Report for Headquarters, 394th Transportation Battalion (Terminal) for Period Ending 31 July 1969 (RCS CSFOR-65)(R-1)

THRU: Commanding General, US Army Support Command, Qui Nhon, ATTN: AVCA QN-GOpH, APO 96238
Commanding General, 1st Logistical Command, ATTN: AVCA GO-O, APO 96284
Commanding General, United States Army, Vietnam, ATTN: AVHGC-DST, APO 96375
Commanding General, United States Army, Pacific, ATTN: GPOP-OT, APO 96558

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

1. Section 1, Operations: Significant Activities.

a. The 394th Transportation Battalion (Terminal) engaged in mission and non-mission operations for 92 days from 1 May to 31 July 1969. During this reporting period, the 394th Transportation Battalion (Tml) continued to be composed of the units listed at inclosure #1. Principal missions assigned to the 394th Transportation Battalion (Tml) were unchanged since the last report.

b. There were two organizational changes to the 394th Transportation Battalion (Tml):

(1) On 31 May 1969, the 387th Transportation Company (Terminal Service)(Civilianized) was released from its temporary duty to the United States Army Depot, Qui Nhon. On this date, the Local National labor force of the company was commited to the Installation Defense Coordinator (IDC).

(2) In accordance with HQS, USASUPCOM, QN, General Order #1025, dated 25 July 1969, the 540th Transportation Detachment (BARC) was released from attachment to the Tuy Hoa Detachment, 593d General Support Group, and attached to the 304th Supply and Service Company. Attachment was for all purposes except operational control and UCMJ.

FOR OT UT
693181

Inclosure

c. The 1098th Transportation Company (Medium Boat) engaged in cross training of 15 ARVN troops in boat handling. This training is valuable in the development of ARVN capabilities.

d. Improvements were made by the 285th Transportation Company in stacking, stockage and accountability of dunnage lumber, Dunnage is separated, banded into uniform bundles, and stacked according to size. This prevents mildew and rot, and makes it possible to load and carry dunnage with a forklift. Uniform bundles make it possible to maintain closer accountability of the dunnage.

e. MTO&E's were submitted in May by the terminal service companies in this Battalion to obtain authorization for the 40 ton cranes, 10 ton tractors, and 60 ton low bed trailers. TO&E 55-117G does not authorize this equipment.

f. Towards the end of the reporting period a program was established with Qui Nhon Area Civilian Personnel Office to train Local Nationals to operate forklifts.

g. A review of the logistics history of this Battalion since its arrival in Vietnam in August 1965 was made and is at inclosure #2.

h. The following personnel were assigned key duty positions during the reporting period:

WHITE, F.D.	MAJ	346-30-3209	1 Jun 69	XO, 394th Trans Bn (Tml)
McFERRIN, G.W.	CPT	425-92-9938	23 May 69	ADJ, 394th Trans Bn (Tml)
WILLIAMS, C.F.	CPT	420-56-0337	10 Jul 69	S3, 394th Trans Bn (Tml)
*CROMER, L.G.	CPT	490-44-5324	13 May 69	S4, 394th Trans Bn (Tml)
WARNER, J.	CPT	548-54-3905	17 Jul 69	CO, 540th Trans Det (BARC)
EYNARD, S.	1LT	499-48-7386	21 Apr 69	S2, 394th Trans Bn (Tml)
THOMAS, W.A.	CSM	248-42-9539	13 Jun 69	CSM, 394th Trans Bn (Tml)

* Reassigned from position as CO, 264th Trans Co (TS).

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

a. Personnel: none

b. Operations:

(1) Local National Forklift Operators:

(a) Observation: Hiring Local National forklift operators to implement the civilianization program was difficult due to non-availability of such trained personnel in the Qui Nhon area. This problem resulted in delay of the total implementation of the civilianization program.

(b) Evaluations:

1. Qui Nhon civilian port facilities had not developed adequate number of Local National forklift operators. Units must train their own operators.

2. Qualified Local National Forklift instructors were not available in the Qui Nhon area.

(c) Recommendations:

1. Supervisors must be alert to detect qualified Local National personnel who have potential to become forklift operators.

2. Qualified instructor personnel be requested and obtained, and a sufficient number of students be selected in order that each class will produce a significant number of qualified graduates.

3. Units provide emphasis and support for the training program in order to ensure that optimal results are obtained.

c. Training: Orientaion Training.

(1) Observation: Personnel arriving in-country, even though POR qualified, are unsure of conditions in Vietnam in general, and are uninformed about conditions and policies of the local command to which they are assigned.

(2) Evaluation: Troops must be made aware of their unit and its place in the overall situation, local policies and procedures.

(3) Recommendation: All incoming troops be thoroughly briefed so that they can better appreciate their role in the unit and perform their mission more effectively.

d. Logistics: none

e. Intelligence: none

AVCA QN-TTJ-S3 11 August 1969
SUBJECT: Operational Report of Headquarters, 394th Transportation Battalion (Terminal) for Period Ending 31 July 1969 (RCS CSFOR-65)(R-1)

f. Organization: TO&E 55-117G.

(1) Observation: Equipment authorized under the 55-117G series TO&E for terminal service companies in the 394th Trans Bn is not adequate for providing the equipment necessary to move and lift retrograde equipment in the port area.

(2) Evaluation: Equipment moved in the port area for transport to Okinawa weighs from 1 to 40 tons. TO&E 55-117G authorizes terminal service companies 20 ton rough terrain cranes and 5 ton tractors with 25 ton low bed trailers. This equipment is not adequate for the job.

(3) Recommendation: MTO&E's be submitted by all units for this additional equipment.

g. Other: none

3. Section 3, DA Survey Information: none

Merrill Owen

TEL: QNL 3879

MERRILL R. OWEN
LTC, TC
Commanding

3 Inclosures
1-as
2-as
3-Quarterly Tonnage Analysis

AVCA QN-TTC (17 August 69) 1st Ind
SUBJECT: Operational Report of Headquarters, 394th Transportation Battalion (Terminal) for Period Ending 31 July 1969 (RCSCSFOR-65) (R-1)

DA, HEADQUARTERS, 5TH TRANSPORTATION COMMAND, APO 96238

TO: Commanding General, USASUPCOM, QN, ATTN: AVCA QN-GO-H, APO 96238

This headquarters has reviewed the Operational Report - Lessons Learned for the quarter period ending 31 July 1969 from Headquarters 394th Transportation Battalion (Terminal) and concurs with the report as indorsed.

FOR THE COMMANDER:

R. G. TAYLOR
CPT, AGC
Adjutant

TEL: QNL 2127

Cy Furn:
394th Trans Bn

AVCA QN-GO-H (11 Aug 69) 2d Ind
SUBJECT: Operational Report for Headquarters, 394th Transportation Battalion (Terminal) for Period Ending 31 July 1969 RCS CSFOR-65 (R-1)

DA, HEADQUARTERS, US Army Support Command, Qui Nhon, APO 96238 1 SEP 1969

TO: Commanding General, 1st Logistical Command, ATTN: AVCA GO-O, APO 96384

1. The Operational Report, Lessons Learned of the 394th Transportation Battalion for the quarterly period ending 31 July 1969 has been reviewed by this headquarters and the following comments are submitted:

a. SECTION 2, paragraph b: Concur. At the present time a class is being presented by two qualified instructors from the Civilian Training Institute, in the 5th Transportation Command port area. This course has been underway since early August 1969; a total of nineteen local nationals are receiving training. The course will last approximately eight weeks and arrangements will be made for the presentation of a second course if sufficient nominations are received and a need for additional training is established.

b. SECTION 2, paragraph c: Concur. Increased command emphasis is currently being placed on orientation during replacement training for newly arrived personnel. Materials of a similar nature are being incorporated into the command information program.

c. SECTION 2, paragraph f: Concur. MTOE's have already been submitted proposing restandardization of the terminal service companies, to include the required equipment which was deleted by the G-series MTOE's. The 1st Logistical Command, however, has advised this headquarters that USARV/USARPAC is not in agreement with this proposal. Therefore, the required equipment has been added to the USASUPCOM, QN TDA by message from 1st Log Cond. Formal notification of this action is expected in the near future.

2. The report is considered adequate as modified by the above comments.

FOR THE COMMANDER:

Richard A. Daniels

TEL: QN 2161

RICHARD A. DANIELS
CPT, AGC
Asst Adjutant General

AVCA GO-MH (11 Aug 69) 3d Ind
SUBJECT: Operational Report - Lessons Learned of the 394th Transportation Battalion for Period Ending 31 July 1969 RCS CSFOR-65. (U)

DA, Headquarters, 1st Logistical Command, APO 96384 [illegible] 1969

TO: Commanding General, United States Army, Vietnam, ATTN: AVHGC-DST, APO 96375

1. The Operational Report - Lessons Learned submitted by Headquarters, 394th Transportation Battalion for the quarterly period ending 31 July 1969 is forwarded.

2. Pertinent comments follow: Reference item concerning TO&E 55-117G, page 4, paragraph f. Concur. This headquarters has received authorization for 40 ton cranes to be used in terminal service companies. A message was submitted by this headquarters to USARV on 16 August requesting authorization for 28 additional electric forklifts for use by terminal service companies in USASUPCOM QNH. Subsequent coordination with HQ, USARV determined that this should be an MTOE action. This headquarters coordinated this matter with representatives of USASUPCOM QNH and 5th Trans Comd on 21 August 1969. Information requested at that time has not yet been received.

3. Concur with the basic report as modified by this and previous indorsements.

FOR THE COMMANDER:

TEL: LBN 4839

C. D. [illegible]
1Lt, AGC
Asst Adj[illegible]

CF:
USASUPCOM, QNH
5th TC Comd
394th TC BN

AVHGC-DST (11 Aug 69) 4th Ind
SUBJECT: Operational Report of Headquarters, 394th Transportation Battalion (Terminal) for Period Ending 31 July 1969 (RCS CSFOR-65) (R-1)

HEADQUARTERS, UNITED STATES ARMY, VIETNAM, APO San Francisco 96375 6 OCT 1969

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

This headquarters has reviewed the Operational Report-Lessons Learned for the quarterly period ending 31 July 1969 from Headquarters, 394th Transportation Battalion (Terminal) and concurs with the report as indorsed.

FOR THE COMMANDER:

B. A. GOODWIN
MAJ, AGC
Assistant Adjutant General

Cy furn:
394th Trans Bn
1st Log Comd

GPOP-DT (11 Aug 69) 5th Ind
SUBJECT: Operational Report of HQ, 394th Transportation Battalion (Terminal) for Period Ending 31 July 1969, RCS CSFOR-65 (R1)

HQ, US Army, Pacific, APO San Francisco 96558 [illegible] 69

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:

C. L. SHORTT
CPT, AGC
Asst AG

ORGANIZATION

1. 394th Transportation Battalion (Terminal), APO 96238, attached and assigned units:

HHD, 394th Transportation Battalion (Terminal)

119th Transportation Company (Terminal Service)

264th Transportation Company (Terminal Service)

585th Transportation Detachment (MHE)

387th Transportation Company (Terminal Service)

540th Transportation Detachment (BARC)

854th Transportation Company (Terminal Service)

1098th Transportation Company (Medium Boat)

272nd Transportation Detachment (Tug)

274th Transportation Detachment (Barge, cargo)

396th Transportation Detachment (Barge, gas)

565th Transportation Detachment (Tug)

566th Transportation Detachment (Tug)

632nd Tramsportation Detachment (Tug)

Detachment #1, US Army Marine Maintenance Activity, Vietnam (Provisional)

2. With the following exceptions, all 394th Transportation Battalion (Terminal) units were located in Qui Nhon, Republic of Vietnam:

a. The 540th Transportation Detachment (BARC) is located at Tuy Hoa Army Base, grid coordinates CQ262358 (approximately).

b. The 854th Transportation Company (TS) is located at Vung Ro Bay, grid coordinates CQ269226.

DEPARTMENT OF THE ARMY
HEADQUARTERS 5TH TRANSPORTATION COMMAND
APO 96238

TRANSPORTATION DATA FOR DOD LOGISTICS REVIEW BOARD

INDEX

DEPARTMENT OF THE ARMY
HEADQUARTERS 5TH TRANSPORTATION COMMAND
APO 96238

TRANSPORTATION DATA FOR DOD LOGISTICS REVIEW BOARD

1. INSTRUCTION:

a. Data contained in this study has been prepared with a dual purpose: First, to provide transportation input data to assist higher headquarters in responding to the Department of Defense Logistics Review Board. Second, to summarize the historical activities of the 5th Transportation Command and the 394th Transportation Battalion (Terminal) in the Republic of Vietnam during the period 7 August 1965 to 1 August 1969.

b. Data contained in the historical portion of the study was extracted from the 5th Transportation Command and the 394th Transportation Battalion (Terminal) historical files which were incomplete in many instances. Whenever possible, data was obtained from primary source documents. Information which could not be verified by records of the historical files has been confirmed by interviewing personnel assigned to the US Army Port, Qui Nhon, during the time periods in question. Even so, it was not possible to establish the attachment/detachment sequence of all units, especially during the period July 1966 to February 1968, when the 159th Transportation Battalion (Terminal) was attached to the 5th Transportation Command (Terminal A).

c. The format used by the study is as prescribed by the initiating directive.

2. MISSION OF THE WATER TERMINAL SYSTEM: To provide trained units, personnel, and equipment to operate water terminals and to conduct over-the-shore operations for the transfer of personnel and cargo in the harbor of Qui Nhon, Republic of Vietnam, and such outports as may be established.

3. HISTORICAL SUMMARY (1965 - Present)

a. August - December 1965

(1) Prior to the arrival of the 394th Transportation Battalion (Terminal) in Saigon, RVN, on 7 August 1965, the Transportation mission was performed by four units which arrived in the Qui Nhon area approximately two months earlier: 1098th Transportation Company (Medium Boat), 155th Transportation Company (Terminal Service), 344th Transportation Company (Light Amphibian), and 597th Transportation Company (Medium Truck). The 5th Maintenance Battalion (then called the 5th Ordnance Battalion) was the controlling headquarters in the area before the arrival of the 394th Transportation Battalion, and CPT Thomas O'Donovan, Commanding Officer, 344th Transportation Company (Light Amphibian) was the senior Transportation Corps officer who controlled transportation activities in the Qui Nhon area from 1 June to 9 August 1965. Available

tonnage figures are contained at Inclosure 1.

(2) Twelve hours after its arrival in Qui Nhon, on 12 August 1965, the 394th Transportation Battalion (Terminal) became operational, providing staff guidance and assistance to Transportation Corps units located in the Qui Nhon Support Area. On 17 August 1965, the 394th Transportation Battalion was placed under the command and operational control of the 4th Transportation Command (Terminal A) with headquarters at Saigon. During August, 1965, the 394th Transportation Battalion organized Transportation Corps resources, developed procedures, developed beach facilities, and relocated attached units in preparation for "Operation Highland", the code name for the receipt and movement of the 1st Cavalry Division from ships in the Qui Nhon harbor across Red and LST Beaches, and into an assembly area at An Khe, RVN. Prior to the start of "Operation Highland," the 4th Terminal Command arranged for the augmentation of terminal services, lighterage, and truck capability which enabled the battalion to attain a satisfactory readiness posture (3000 officers and men with twelve attached companies and ten smaller detachments) prior to 12 September 1965:

(a) 14th Transportation Platoon (BARC)

(b) 71st Transportation Company (Terminal Service), effective date: 29 August 1965.

(c) 58th Transportation Company (Light Truck), effective date: 29 August 1965.

(d) 61st Transportation Company (Medium Truck) (POL), effective date: 2 September 1965.

(e) 119th Transportation Company (Terminal Service), effective date: 2 September 1965.

(f) 2nd Transportation Company (Medium Truck)(Composite), effective date: 2 September 1965.

(g) 117th Transportation Company (Terminal Service), effective date: 4 September 1965.

(h) 151st Transportation Company (Light Truck), effective date: 5 September 1965.

(i) 541st Transportation Company (Light Truck), effective date: 5 September 1965.

(j) 387th Transportation Company (Terminal Service), effective date: 14 September 1965.

(k) 854th Transportation Company (Terminal Service), effective date: 19 September 1965.

(l) Other detachments in the Qui Nhon area at the time were:

1. 160th Transportation Detachment (Movement Control)

2. 168th Transportation Detachment (Stevedore)

3. 169th Transportation Detachment (Floating Crane Maint), attached to the 1098th Transportation Company (Medium Boat).

4. 253rd Transportation Detachment (Supply), attached to the 344th Transportation Company (Light Amphibian).

5. 274th Transportation Detachment (Floating Crane), attached to the 1098th Transportation Company (Medium Boat).

6. 355th Transportation Detachment (Dry or Liquid Cargo Barge, Self-propelled), attached to the 1098th Transportation Company (Medium Boat).

7. 474th Transportation Detachment (Reefer Barge)

8. 585th Transportation Detachment (MHE-HVY), attached to the 155th Transportation Company (Terminal Service).

9. Two Cargo Barges (585th B/T)

10. UNK Transportation Detachment (Small Tug).

(3) The truck units of the 394th Transportation Battalion had the distinction of running the first convoys to An Khe as well as the largest convoys of US Army vehicles in Vietnam. Thousands of tons of equipment and cargo were prepositioned in the An Khe area prior to the arrival of the 1st Cavalry Division. The first ship in support of "Operation Highland" arrived in the Port of Qui Nhon on 3 September 1965, but the major movement began as scheduled on 12 September 1965. By 28 September 1965, "Operation Highland" was completed. Approximately 50,000 L/T of cargo, 16,000 troops, and 477 aircraft, in addition to routine resupply cargo, had been moved across the beach and into the assembly area at An Khe. A total of 39 cargo ships, 10 passenger ships, and four aircraft carriers were discharged during the month of September, 1965. "Operation Highland" was the first LOTS operation of its size where elements of the unit being offloaded were not staged in the area of debarkation. First Cavalry Division troops and equipment were transported by highway and air into the inland assembly area, and, although some problems were encountered, the concept proved to be a valid one.

(4) During the last three months of 1965, the 394th Transportation Battalion engaged in routine cargo discharge operations along with a large unit move, Operation "Goodfriend", 7 October to 1 November 1966, during which 12,298 ROK Tiger Division troops, and 9,624 L/T of cargo were discharged from 21 ships and moved by highway and rail to their assembly area. Relocation of Terminal Service units from Phu Than Valley (Valley "C") to the Qui Nhon beach areas eliminated a 12-mile troop shuttle, requiring up to 1½-hours each way - on top of 12-hour work shifts. In early November, the 119th Transportation Company

(Terminal Service) shifted operations from the LST Beach to the newly constructed floating finger pier, now called the Can Docks, constructed from barge cubes. This new facility had a rated discharge capability of 1500 S/T per day and provided significant reductions in equipment requirements and deadline rates. There were also significant troop list changes during the quarter:

(a) Gains:

1. 27 October 1965:

a. 268th Transportation Detachment (Supply), attached to the 1098th Transportation Company (Medium Boat)

b. 396th Transportation Detachment (Liquid Barge), attached to th 1098th Transportation Company (Medium Boat)

c. 554th Transportation Platoon (BARC)

2. 15 and 16 December 1965:

a. 116th Transportation Company (Terminal Service)

b. 285th Transportation Company (Terminal Service)

3. 22 December 1965:

a. 272nd Transportation Detachment (Tug), attached to the 1098th Transportation Company (Medium Boat)

b. 474th Transportation Detachment (Reefer Barge), attached to the 1098th Transportation Company (Medium Boat)

(b) Losses:

1. 169th Transportation Detachment - date unknown.

2. 27 October 1965 (Probably to the newly arrived 27th Transportation Battalion (Motor Transport)):

a. 2nd Transportation Company (Medium Truck)(Composite)

b. 61st Transportation Company (Medium Truck)(POL)

c. 541st Transportation Company (Light Truck)

d. 58th Transportation Company (Light Truck)

e. 151st Transportation Company (Light Truck)

f. 597th Transportation Company (Medium Truck)

3. 5 November 1965 (TCS - Cam Ranh Bay - 10th Transportation Battalion (Terminal): 155th Transportation Company (Terminal Service)

4. 5 December 1965:

a. 160th Transportation Detachment

b. 161st Transportation Detachment (Movement Control)

5. The 117th Transportation Company (Terminal Service) was detached from the 394th Transportation Battalion sometime between October and December.

(c) 22 December 1965: The Transportation Company (BARC) (Provisional) was constituted from the 14th and 554th Transportation Detachments (BARC).

(5) By the end of 1965, the shipping backlog which built up at Qui Nhon (part of a tremendous import of cargo which affected all Vietnamese Ports) was wiped out; however, heavy monsoon rains and equipment deadlined for lack of parts slowed operations during December. For the period of October-December 1965, the battalion discharged 94,655 L/T and 17,627 troops from 77 ships and 30 shallow draft vessels.

b. January - December 1966

(1) During the first four months of 1966, 394th Transportation Battalion operations stabilized. On 17 January 1966, the 394th Transportation Battalion was released from the command and operational control of the 4th Terminal Command and assigned to the US Army Support Command, Qui Nhon, in order to decentralize terminal operations to the area command level. During January 1966, the 394th Transportation Battalion discharged 59,151 S/T of cargo, or about 2,000 S/T per day, reaching a new milestone. For the period of January - April 1966, the battalion discharged 200,328 S/T, 180,887 L/T, 396,961 M/T from 72 ships and 57 LST's. Several other notable events occurred during this period:

(a) The following units arrived:

1. 485th, 487th, and 488th Transportation Detachments (Reefer) and were attached to the 1098th Transportation Company (Medium Boat).

2. 522nd Transportation Detachment (BARC), attached to the Provisional BARC Company.

3. 544th Transportation Company (Medium Boat) - giving the port a full lighterage capability for sustained operations.

4. 497th Transportation Detachment (Liquid Barge)

(b) A safe haven anchorage was completed on 10 February 1966, for the port Barge Derrick (60-ton floating crane). (The BD 6066 broke loose from its moorings during December 1965, in a period of heavy seas and high winds. It was grounded and sank on the rocky coast at the southern end of Qui Nhon Harbor. The crew was extracted, without casualties, by a helicopter in high winds.) The reefer barge safe haven was also improved.

(c) The Logistical Command entered into a contract with a Korean company, the Han Jin Transportation Company for both stevedoring and trucking services to start in May 1966. Initially, Han Jin started with a stevedore capability of 3000 revenue tons per da, (a revenue ton is the greater of either the short ton weight or measurement tonnage for a piede of cargo) and 50 trucks. By the end of 1966, these capabilities were increased to 5000 revenue tons per day and 220 to 300 trucks per day, plus MHE accessorial services.

(d) The US Army Support Command, Qui Nhon, Director of Transportation started a daily coordinating meeting during March 1966, to bring together terminal operations, military highway operations, and consignees to plan cargo dispositions. This meeting proved to be an effective management tool.

(e) An engineer unit began improvements to the LST Beach during February 1966, which were scheduled for completion by 1 August 1966. Plans called for a 200 foot extension with lighterage, three LST ramps, and much needed storage and work area.

(f) The Local National Civilian Personnel program was implemented in the Battalion during this period with an authorization of 419 spaces, of which 325 were filled by 30 April 1966.

(g) During this period, direct support maintenance units began to receive repair parts resulting in markedly improved maintenance support and equipment operational rates after a repair parts drought since deployment of Battalion units to Vietnam. In addition, Philco-Ford Corporation established a forklift repair operation in Qui Nhon which provided significantly improved MHE operational rates.

(h) During "Operation Bluelight", 16-31 January 1966, the Third Brigade of the 25th Infantry Division was discharged and moved through the Port of Qui Nhon. Poor weather conditions slowed the operation. During the period 14-18 April the ROK 26th Regiment was discharged and moved through the Port of Qui Nhon.

(2) Organizational changes during 1966 reduced the number of 394th Transportation Battalion to the following units:

(a) The 119th Transportation Company (Terminal Service) was placed TDY for 60 days to work in the 48th Quartermaster Company (DSU) in Nha Trang, attached to US Army Support Command, Nha Trang, assigned

to work in Depot activities. The 119th Transportation Company was subsequently assigned to the 10th Transportation Battalion (Terminal) and transferred to Cam Ranh Bay. The unit was transferred to Vung Ro Bay Outport in January 1968, and subsequently reassigned to the 394th Transportation Battalion when the Outport and Tuy Hoa Army Base were assigned to US Army Support Command, Qui Nhon on 1 December 1968.

(b) The 116th Transportation Company (Terminal Service) was reassigned to the 10th Transportation Battalion (Terminal) during May 1966.

(c) The 344th Transportation Company (Light Amphibious), which had a platoon TDY to the Air Force and Marine Corps at Da Nang since 2 July 1965, was reassigned to the 10th Transportation Battalion (Terminal), at US Army Support Command, Cam Ranh Bay. Although battalion historical records are not specific, there are indications that the move was necessitated to consolidate LARC-V (Lighter Amphibious Resupply Cargo) units at the site of their depot maintenance unit until maintenance and supply difficulties were overcome.

(d) On 15 August 1966, the 485th, 487th, and 488th Transportation Detachments (Reefer Barge) were detached from the 1098th Transportation Company (Medium Boat) and attached to the 98th Supply and Services Battalion. The 474th Transportation Detachment (Reefer Barge) was released from attachment to the 394th Transportation Battalion on 6 September 1966.

(e) The 5th Transportation Command (Terminal A) arrived in Qui Nhon during August 1966. Subsequently, both the 159th and the 394th Transportation Battalions were released from attachment to US Army Support Command, Qui Nhon and attached to the 5th Transportation Command effective 6 September 1966.

(f) The 585th Transportation Detachment (MHE - Hvy) was released from attachment to the 71st Transportation Company (Terminal Service) and attached to the 285th Transportation Company (Terminal Service) effective 21 November 1966. Also on 21 November 1966, both the 285th and the 854th Transportation Companies (Terminal Service) were released from attachment to the 394th Transportation Battalion and attached to the 159th Transportation Battalion (Terminal) which reportedly arrived in Qui Nhon during July 1966. It was probably at this time that all the water craft units in Qui Nhon were detached from the 394th Transportation Battalion and assigned to the 159th Transportation Battalion. These reassignments left the 394th Transportation Battalion with only two terminal service companies, the 387th and 71st. The 300th Transportation Company (Terminal Service) arrived in Qui Nhon during the fall of 1965. By June 1966, its personnel and equipment assets had been so widely dissipated to support depot and forward support requirements that the unit was deactivated.

(3) On 15 November 1966, stevedore operations started on the

newly constructed four-berth, deep-draft, DeLong Pier, greatly improving the terminal operations in the Harbor of Qui Nhon. The DeLong Pier, located in the sheltered inner harbor, would be able to discharge vessels under all weather conditions, and greatly increased the port discharge capability.

(4) Formal training was initiated in March 1966, starting with two principal subject areas: Commander's Time, and critical subjects which would immediately improve the individual's job performance. At about the same time, a Battalion education program was initiated. Immediately, 25 men were enrolled in course work, and 184 men expressed a desire to take the GED (General Educational Development) test to attain a high school diploma equivalency.

(5) With the movement of beams and telephone poles across Red Beach in July 1966, it was closed as all operations were transferred to LST Beach and the Can Dock which were reportedly clearing cargo at the rate of 4000 S/T per day.

(6) Beginning in October 1966, there is evidence to indicate that port operations were divided. The 159th Transportation Battalion operated the LST Beach (with its rail-head) and Can Dock (finger pier) with two terminal service units (the 285th and 854th), two medium boat companies (544th and 1098th), and the Provisional BARC Company. The 394th Transportation Battalion operated the DeLong Pier with the 71st and 387th Transportation Companies (Terminal Service) and supervised Han Jin operations on the DeLong Pier.

c. January - December 1967:

(1) The historical data available for the first six months of 1967 contains little significant information. Operations appeared to be relatively stable. The 394th Transportation Battalion continued to operate the DeLong Pier and consolidated the support activities of the two terminal service companies (71st and 387th) located in the vicinity of the DeLong Pier, to include: mess tents, stevedore gear and rigging loft, and MHE shops. There was a noted lack of intransit staging areas as the June 1967 daily average port tonnage discharged exceeded 5000 S/T per day, exceeding 7000 S/T on some days. The stevedore companies experienced considerable personnel problems as unit capabilities were reduced to two and three stevedore gangs per shift of 4-6 men each, compared with a unit TO&E capability of 5 gangs per shift with 12-15 men each. There were some organizational difficulties supervising Han Jin DeLong Pier operations. The 394th Transportation Battalion S3 (with his operations office located on the DeLong Pier) was directed to consider Han Jin as another stevedore unit under the operational control of the Battalion S3, and Han Jin was directed to have a supervisor on the DeLong Pier reporting to the Battalion S3. During this period, the port began to ship retrograde cargo and experienced a shortage of dunnage which resulted in the establishment of a centralized port Dunnage Yard operated by the 394th Transportation Battalion.

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(2) During the period April-September 1967, 525,000 S/T of cargo were discharged from 201 vessels and cleared across the DeLong pier as tonnage increased from 71,400 S/T in April to 113,800 in September and S/T per gang hour increased from 7.1 to 9.4. During September 1967, the port set a new one day port tonnage record of 10,120 S/T discharged, and a port total of 191,399 short tons for the month. These figures include the Han Jin Transportation Company.

(3) On 2 August 1967, operations started at the new 11 point Barge Quay under the operational control of the S3, 394th Transportation Battalion. The new Barge Quay capability rated at 1000 S/T per day, increased the DeLong Pier complex capability to 3600 S/T per day. With the advent of Barge Quay operations, general cargo operations were terminated at the Cen Dock and the LST Beach (except LST and LCU operations) which were used primarily for ammunition discharge.

(4) During this period, some units were moved from tents when four tropical barracks were constructed through Battalion self-help. In addition, other facilities were constructed/improved on a self help basis.

(5) On 1 November 1967, the 285th Transportation Company (Terminal Service) was reassigned, less two shore platoons, from the 159th to the 394th Transportation Battalion (Terminal) to discharge vessels, mostly reefer ships and the station reefer ship, SS Hibueras, at the inner anchorages, utilizing Han Jin barges and military BC (Barge, cargo) barges. The SS Hibueras was used as a refrigerated warehouse which was backloaded and selectively discharged on a daily basis by the 285th Transportation Company. The 285th remained in tents through 1967. In November 1967, the 285th received electric power from the Vinnell power ship located in the inner harbor, eliminating the need for generators.

(6) On 11 November 1967, the 168th Transportation Detachment (Stevedore Gear and Rigging) was deactivated.

(7) SeaLand container ship operations were successfully initiated at the DeLong Pier when the 394th Transportation Battalion discharged 195 containers from the container ship Bienville in 8½ hours, a record for that vessel. At shipside the 20 ton, 35 foot container is placed on a trailer chassis which is towed by a commercial type road tractor to a staging area for later delivery to a consignee.

(8) By the end of 1967, Qui Nhon Port had become one of the primary retrograde ports in Vietnam, and the 394th Transportation Battalion had to establish inventory supply procedures to insure that lashing materials such as turnbuckles, wire rope, and clips were available in sufficient quantities to avoid frequent emergency requisitions. This situation prevailed through August 1969. Sea Train class vessels were found to facilitate the outloading of retrograde vehicles and Roll On-Roll Off trailers because of their 50-100 ton crane capacity

and because of the ease with which vehicles could be moved from the center to either end of the vessel by a prime mover.

(9) No tonnage figures are available for the period October-December 1967.

d. January - December 1968:

(1) Significant activities of 1968 began with the TET (Vietnamese New Year) Offensive which began 30 January-1 February 1968. On 7 February 1968, the 159th Transportation Battalion (Terminal) was deployed to "Wonder Beach" in the Northern I Corps tactical zone, and on 7 February 1968, the 394th Transportation Battalion assumed the missions of the 159th Transportation Battalion: Con Dock, LST Beach operations, lighterage operations, and rail head operations. The following units were reassigned from the 159th Transportation Battalion to the 394th Transportation Battalion on 7 February 1968:

(a) 264th Transportation Company (Terminal Service)

(b) 544th Transportation Company (Medium Boat)

(c) 854th Transportation Company (Terminal Service)

(d) 1098th Transportation Company (Medium Boat)

(e) BARC Company (Provisional)

(2) On 5 March 1968, the 71st Transportation Company (Terminal Service) and the BARC Company (Provisional), consisting of the 14th and 544th Transportation Detachments (BARC) were also deployed to the Northern I Corps tactical zone, less the 540th Transportation Detachment (BARC) which remained with the 394th Transportation Battalion.

(3) At the end of April 1968, the 394th Transportation Battalion was composed of the following units:

(a) 264th Transportation Company (Terminal Service)

(b) 285th Transportation Company (Terminal Service)

(c) 387th Transportation Company (Terminal Service)

(d) 544th Transportation Company (Medium Boat)

1. 274th Transportation Detachment (Floating Crane)(60t-BD6065)

2. 396th Transportation Detachment (Liquid Barge)

3. 485th Transportation Detachment (Reefer Barge)

(e) 854th Transportation Company (Terminal Service)

1. 585th Transportation Detachment (MHE-H VY)

(f) 1098th Transportation Company (Medium Boat)

1. 272nd Transportation Detachment (Tug)(65ft-ST 1995)

2. 565th Transportation Detachment (Tug)(65ft-ST 2108)

3. 566th Transportation Detachment (Tug)

4. 632nd Transportation Detachment (Tug)(100ft-LT1969)

(g) Plus the following water craft assigned to the 544th Transportation Company (Medium Boat) for which no detachments were authorized:

1. Landing Craft, Utility 1522 (11 EM)

2. Landing Craft, Utility 1544 (11 EM)

3. Landing Craft, Utility 1551 (11 EM)

4. 100 ton Barge Derrick BD (6058) (14 EM)

5. Three (3) 36 foot J-boats, 3677, 3682, 3683 (2 EM each)

6. One (1) 46 foot J-boat, 3799 (3 EM)

(4) A major change directed by higher headquarters transferred the functions of the Battalion S3 section to the S3 section, Headquarters, 5th Transportation Command which assumed responsibility for Battalion terminal operations.

(5) Increased security requirements reduced Battalion operational capability by 22%.

(6) The Battalion training program was centralized on 1 April 1968 to reduce duplication. Under the new program, instructors were designated to present training to all units for one month at a time.

(7) The Commanding Officer, 5th Transportation Command initiated the practice on informal command walk through visits to specified 394th Transportation Battalion units on Wednesdays and Saturdays, 1100-1300 hours.

(8) At the time the 264th Transportation Company (Terminal Service) was attached to the 394th Transportation Battalion on 7 February 1968, its 1st Shore Platoon was attached to Task Force Oregon at Chu Lai where it had been since 10 March 1967. On 20 May 1968, the

1st Shore Platoon was attached to the 80th General Support Group, US Army Support Command, Da Nang (Provisional), where the platoon was split up into five (5) detachments working air freight at DaNang, Chu Lai, Phu Bai, Quang Tri, and Dong Ha. The 1st Shore Platoon was returned to the 264th Transportation Company (Terminal Service) at Qui Nhon on 1 April 1969, less personnel and equipment. Also, at the time the 264th was assigned to the 394th Transportation Battalion, the 2nd Shore Platoon was assigned to task force McDonald at Duc Pho/Sa Huynh discharging LCU's, LCM-8's, a fuel barge, and a reefer barge until it returned to Qui Nhon on 1 August 1969. (From 10 March 1967 to November 1967, the 264th Transportation Company (Terminal Service) was located at Duc Pho as part of task force Oregon, which later became task force Gallagher, where the 39th Combat Engineer Battalion, 3rd Brigade 25th Infantry Division, and 1st Brigade 101st Airborne Division were off loaded and supported.)

(9) The 540th Transportation Detachment (BARC) also served at Duc Pho/Sa Huynh from 27 October 1967 until 15 July 1969, when it returned to Qui Nhon. At that time operational control of the port of Sa Huynh was transferred from the 5th Transportation Command to the US Naval Support Activity, DaNang.

(10) Effective 10 June 1968, the 854th Transportation Company was placed under the operational control of the US Army Depot, Qui Nhon, for 90 days, on a special mission which consisted of receiving, storing, inventorying and shipping of Class I and II supplies. The 854th was deployed to the US Army Port, Qui Nhon, Outport Vung Ro Bay, on 10 December 1968. The 264th Transportation Company (Terminal Service) augmented by Han Jin contractor personnel, took over the off shore, LST Beach and Can Dock operations formerly performed by the 854th Transportation Company (Terminal Service) at Qui Nhon.

(11) During the period May - July 1968, the 285th Transportation Company (Terminal Service) assumed the additional mission of operating the port Bulk Break Point at the DeLong Pier Complex. The BBP breaks down consolidated shipments for multiple consignees and sends the cargo to the individual consignees. This 24 hour operation required 20 men. The 285th alsonoperates the port Intransit Storage Yard and intransit storage locations along the 2 miles of port causeways, requiring another 20 men per shift. Records do not indicate when the Intransit Storage Yard Facility was constructed (from dredged land fill); however, there was a critical shortage of staging areas as late as mid-1967.

(12) During July 1968, the 854th Transportation Company moved from tents at the old Red Beach to tropical barracks in the DeLong Pier complex.

(13) During July 1968, the 394th Transportation Battalion was directed to civilianize 210 TO&E positions for the 285th and 387th Transportation Companies (Terminal Service) under Program 5/6 by May 1969.

The project, which assigned 1½ local national employees for each military space deleted, was completed 31 March 1969, when each company had hired its authorized 316 personnel. The two terminal service companies' strength was reduced from 6 officers and 323 EM to 6 officers and 113 EM.

(14) H Q, US Army Vietnam, General Orders number 3355, dated 15 July 1968, awarded the Meritorious Unit Commendation for the period 1 April to 30 September 1967, to the 394th Transportation Battalion (Terminal) and its attached units, the 71st and 387th Transportation Companies (Terminal Service) and the 168th Transportation Detachment (Stevedore).

(15) On 15 August 1968, the 394th Transportation Battalion (Terminal) again assumed responsibility for all operations in the port of Qui Nhon. From mid-August to 4 November 1968, the Battalion supervised and participated in the handling of 428,179 S/T of cargo. Headquarters, 5th Transportation Command (Terminal A), assumed operational control on 4 November 1968.

(16) During August 1968, functional operations within the port were assigned to Battalion units which were required to provide officer supervision on a 24 hour basis:

(a) LST Beach, Can Dock, rail-head - 264th Transportation Company (Terminal Service)

(b) DeLong Pier operations - 387th Transportation Company (Terminal Service)

(c) Intransit Storage Yard, Causeway operations, Break Bulk Point, Barge Quay, and Reefer Operations - 285th Transportation Company (Terminal Service)

(d) Total port security to include four MP gates - 394th Transportation Battalion

(e) Port Dunnage Yard - 854th Transportation Company (Terminal Service)

(17) To alleviate the supporting Engineer R&U backlogs, the 394th Transportation Battalion stressed its self-help program which saw the construction of one tropical barracks, a barbershop/tailor shop, an outdoor theater, a basketball court/tennis court, a softball field, and a volley ball court.

(18) On 6 November 1968, the 544th Transportation Company (Medium Boat) departed Qui Nhon at 60% authorized strength and 10 LCM-8's for assignment to the 159th Transportation Battalion (Terminal) at Vung Tau, RVN under the 4th Transportation Command (Terminal C). 54 personnel spaces of the 544th were retained by US Army Support Command,

Qui Nhon, to finance water craft detachments for the certain water craft (3 LCU's, 1 J-boat, 1 Q-boat, and 100 ton ED), which were attached to the 1098th Transportation Company (Medium Boat). The 474th Transportation Detachment (Reefer Barge) was reassigned to US Army Support Command, DaNang (Provisional). The 396th Transportation Detachment (Liquid Fuel) and the 274th Transportation Detachment (Floating Crane) were assigned to the 1098th Transportation Company (Medium Boat). Additionally, in April 1967, the 565th and 566th Transportation Detachments (Tug - 65 ft) were assigned to the 394th Transportation Battalion for reassignment to the 1098th Transportation Company - without equipment. Eventually the ST 2105 was obtained for the 565th.

(19) On 1 December 1968, the Tuy Hoa Army Base and Vung Ro Bay Port activity were reassigned from US Army Support Command, Cam Ranh Bay, to US Army Support Command, Qui Nhon, along with the responsibility for providing logistical support to Free World Forces in the Tuy Hoa area. The 5th Transportation Command assumed responsibility for operating the port at Vung Ro Bay. Effective 1 December 1968, the 119th Transportation Company (Terminal Service), then located at Vung Ro Bay, was reassigned to the 394th Transportation Battalion (Terminal), and moved to Qui Nhon, less personnel and equipment, on a permanent change of station. The 854th Transportation Company (Terminal Service) was moved, with available equipment and 40 cadre personnel, on a permanent change of station to Vung Ro Bay. Selected personnel of the 119th were reassigned throughout the US Army Support Command, Qui Nhon, and to the 394th Transportation Battalion units at Qui Nhon. The Battalion assistant S3 was made Company Commander of the 119th as an additional duty, in order to maintain the unit property book.

(20) With the initiation of operations at Vung Ro Bay, plans were developed to move the 540th Transportation Detachment (BARC) from Qui Nhon to Vung Ro Bay to transport cargo 18 miles via water from Vung Ro Bay to Tuy Hoa Air Force Base and Tuy Hoa Army Base. At the same time, plans were developed for "Operation Butterfly", a test to determine the feasibility of a Logistical-Over-the-Shore (LOTS) operation off the shore of Tuy Hoa Army and Air Bases. The operation was never executed because of poor stowage on the designated ship.

(21) Available tonnage figures for the last half of 1968 are contained at Inclosure 1.

e. January - July 1969:

(1) The 540th Transportation Detachment (BARC) was moved to Vung Ro Bay on 4 January 1969, where it assimilated the personnel and equipment (including two BARCs) of the 554th Transportation Detachment (BARC) which had been deactivated on or about 1 December 1968. To facilitate discharge and control operations, the 540th was moved from Vung Ro Bay to Tuy Hoa Army Base during the first part of March 1969. On 8 January 1969, BARC #59 lost power off the beach of Tuy Hoa Army Base, was broached ashore in high surf, and was salvaged two months later by United States Army Marine Maintenance Agency (Vietnam), but, sank while in tow by LT 1969 to Qui Nhon.

(2) As a result of successful "TET Offensive" sapper attacks on US Army Support Command, Qui Nhon, ammunition and POL storage activities, 80 military and 250 Vietnamese of the 387th Transportation Company (Terminal Service) were placed on a temporary tour of duty to US Army Depot, Qui Nhon, for 90 days, effective 5 February 1969. Military personnel were utilized in depot operations while Vietnamese personnel were used to improve installation security. At the end of May, military personnel were returned to the 387th to operate unit equipment in port operations, but the Vietnamese work force of 200 was retained under the operational control of the Assistant Chief of Staff for Security, US Army Support Command, Qui Nhon, to continue improving security on various installations within the area.

(3) Personnel spaces of the 119th Transportation Company (Terminal Service) were utilized to constitute a provisional guard company to secure the 184th Ordnance Battalion's Ammunition Base Depot.

(4) Logistical support of the Tuy Hoa area from Qui Nhon, a distance of 60 miles, via rail, LCU, LST, and barge, continued satisfactorily during the period January - July 1969.

(5) Activities of the 394th Transportation Battalion (Terminal) remained essentially unchanged in the Qui Nhon Port. Several expanded staging areas were created along the causeways by filling the shoulders with sand stabilized by laterite.

(6) The 394th Transportation Battalion (Terminal) self-help program completed an enlisted men's club, "The Ship 'n' Shore", on the beach of the South China Sea within the 394th Transportation Battalion Compound. In addition, a fine Chapel of contemporary design was erected for 5th Transportation Command in the DeLong Pier Port complex.

(7) The 394th Transportation Battalion (Terminal) capabilities for its five terminal service companies are currently as follows:

(a) 119th Transportation Company (Terminal Service) - none

(b) 264th Transportation Company (Terminal Service) - two reduced shore platoons for LST Beach operations.

(c) 285th Transportation Company (Terminal Service) - six civilian stevedore gangs.

(d) 387th Transportation Company (Terminal Service) - none.

(e) 854th Transportation Company (Terminal Service) - four stevedore gangs and two shore platoons.

(f) 1098th Transportation Company (Medium Boat) - 19 LCM-8's, one tug boat, three LCU's, one fuel barge, one 60-ton floating crane, one J-boat, one Q-boat, and 5 cargo barges (585 S/T).

(g) 540th Transportation Detachment (BARC) - five LARC LX's.

4. ANALYSIS: The performance of the 394th Transportation Battalion (Terminal) during the initial deployment of Free World Forces in Vietnam, August 1965 - August 1966, was outstanding in keeping with the highest traditions of the United States Army Transportation Corps. In addition to the outstanding accomplishments of the 394th Transportation Battalion (Terminal) during the Vietnam War, August 1965 - July 1969, there were many problems encountered, and lessons learned:

a. Personnel: Accent must be placed on the stamina and brute determination of the stevedore and lighterage units to sustain their mission 24 hours per day, seven days per week, 52 weeks per year. From the initial deployment in August 1965 to August 1969, personnel were the most important element of the 394th Transportation Battalion (Terminal).

(1) Personnel Quality:

(a) Strengths: Stevedore units possessed an indomitable esprit which attained mission accomplishment.

(b) Weaknesses: The quality of personnel assigned to the Battalion varied considerably.

1. During "Project 100,000", approximately one-third of the terminal service company personnel had Army Serial Numbers beginning with "US 67" and "US 68".

2. On one occasion during the summer of 1968, the 9th Infantry Division was levied to provide 75 personnel to alleviate terminal personnel shortages. Fully half of the Battalion disciplinary problems for the next six months involved 9th Divisions transfers.

(2) Personnel Quantity:

(a) Strengths: The units were seldom at authorized strength.

(b) Weaknesses:

1. Unit strengths were continually low averaging approximately 75% with lows of 40% and highs of 90%.

2. Dissipating requirements for personnel and personnel shortages reduced TO&E stevedore company capabilities from ten 15-man hatch gangs per day to an average of five 4 to 6 man hatch gangs per day, or about 20% manpower availability.

3. Requirements to crew harborcraft caused the medium boat companies a personnel shortage as no spaces were allocated to crew harborcraft. They were therefore generally unable to crew all assigned landing craft.

4. Evaluation of available performance data would indicate that few terminal service or medium boat units ever attained or sustained operations at their rated capabilities. At least a portion of this short fall must be atributed to personnel shortages. (Other factors are weather, equipment availability, and total work load requirements which may have been less than existing capabilities.)

5. Requirements for personnel in non-terminal activities frequently resulted in terminal personnel assets being withdrawn either on a TDY or PCS basis.

6. Terminal personnel have been deployed to depot activities to balance depot receiving capabilities with port shipping requirements. Personnel assets have been used to staff higher headquarters, aerial terminal operations, and Port overhead requirements such as security, dunnage yard, break-bulk point, or intransit storage yard operations, PX, NCO/EM/Officer Club activities, and self-help construction crews. All these requirements a re valid, but no personnel have been authorized for their accomplishment.

7. Frequently terminal service companies were levied for personnel and equipment assets to staff and equip FSA's (forward support areas), pointing up the need for TOE SFA teams.

8. Remedies to obtain personnel to perform added mission requirements through MTOE actions are hampered by manpower ceilings and by an unresponsive, cumbersome MTOE approval procedure requiring up to one year for final approval/disapproval actions.

9. The personnel mix fluctuated in that sometimes there were excesses or shortages of NCO's, excess lieutenants with a shortage of captains or vice versa.

10. The replacement system has never been able to provide an adequate number of skilled MOS personnel. See paragraph (3)(c)2. below for a listing of MOS's.

11. Officer rotational and assignment procedures have resulted in four and five company commanders being assigned to a unit during a year's time, adversely affecting the operating effectiveness of the unit. Advance information on programmed officer gains, grade, and date of arrival would eliminate some of the uncertainties of officers' assignments. Under the existing system, officers "just show up" on a random basis.

(3) Training:

(a) Strengths:

1. School trained/experienced troops surpassed non-trained personnel in that they could immediately take charge of hatch gangs/landing craft after a few days on the job.

2. Terminal units which deployed to Vietnam in 1965 were highly tra ined, a factor which contributed immeasurably to their successes during the first months of operation.

3. Transportation Corps officers have been trained and qualified for all command, battalion, and company duty assignments.

(c) Training weaknesses:

1. Both the terminal service and medium boat companies received an inordinate amount of duty soldiers in MOS's 57A10 and 61A10 with little or no training and frequently limited abilities.

2. Thus, in order to sustain operations, it was necessary to continually develop higher skill levels through intensive on-the-job training. Even so, it was not possible to develop highly skilled personnel in such MOS's as 76Q20 (repair parts specialist), 63B20 (motor mechanic), 61C20 (marine engineer/mechanic), 71T20 (equipm ent records clerk), 52F20 (electrician marine), 44K20 (marine welder), 31B20 (radio mechanics), 76Y40 (supply sergeant), and 62B20 (engineer equipment mechanic). For example: OJT radio repairmen or electricians never become qualified to analyze and determine why systems fail; however, once they are told what was wrong they could replace parts.

3. School trained replacements received from Fort Eustis, Virginia, were frequently deficient in their respective MOS skills because personnel were not utilized in their newly acquired skills upon completion of MOS schooling. These personnel were frequently utilized for post details prior to overseas deployment, where their MOS knowledge was forgotten, instead of perfecting their newly acquired skills through OJT.

(4) Effects of Rotational Policy:

(a) Strengths:

1. After four years in a theater of operations, seasonal rotational humps still exist. During one summer an infusion program was used quite successfully.

2. The six-month extension program has been quite successful in Vietnam and has resulted in the extension of many well qualified, key personnel. There was a tendency for undesirable elements to extend; however, a 1969 policy precluded extensions for personnel with Article 15's or court-martials acquired in Vietnam. This policy resulted in an overall reduction of disciplinary actions. Extension inducements appear to be the motivating factor, especially the early out policy.

3. The one-year tour length policy has contributed to individual morale.

(b) Weaknesses: Personnel (officer and enlisted) were receiving second tours in Vietnam within 12-18 months after returning from a first tour.

(5) Promotions:

(a) Strengths:

1. Most enlisted personnel serving a tour in the Command received at least one promotion. Most lower grade personnel received promotions from E2 to E4 with many going on to E5. Rapid promotions have contributed greatly to morale.

2. Junior officer promotions contributed to their morale.

(b) Weaknesses:

1. As the hostilities progressed, the experience level within the Battalion declined substantially among both officer and enlisted personnel.

2. With the new Department of the Army centralized promotion system, senior grade NCO's could no longer look forward to making that next stripe in RVN.

(6) Utilization of Contract Services:

(a) Strengths:

1. Without the increased capability provided by the Han Jin Transportation Company in the US Army Port, Qui Nhon, the troop requirements for TOE units producing at their rated capabilities would have necessitated the deployment of another terminal battalion with five terminal service companies, one harbor craft company, and one medium boat company, and a truck battalion with a mixture of six light and medium truck companies. H an Jin operations have been accomplished with the highest degree of reliability and professional competence. To date the contract services provided by the Han Jin Transportation Company, Ltd., have covered the shortfall created by limited military stevedoring capability. The usual maximum effectiveness of the 285th, 264th, and 387th Transportation Companies is 17,000 S/T per month. As the Port of Qui Nhon has handled a monthly average of 103.013 S/T since the beginning of CY 1969, the contractor has handled an approximate average of 90,000 S/T per month during a like period. The minimum revenue tonnage of 150,000 guaranteed under the contract has been regularly exceeded by substantial amounts in recent months; on one occasion by as much as 72,000 revenue tons, all of which was billed (under a special contractual provision) at 50% of the normal rate. The 685 Korean personnel involved in the performance of the stevedoring contract make up twenty (20) stevedore gangs, related marine personnel, and extra labor gangs. The present tonnage guarantee supports this base of twenty gangs, and thus the port's present capability of

at least 100,000 S/T. The contractor provides an extensive equipment inventory in connection with the performance of his contractual obligations: 12 ten-ton cranes, 2 twenty-ton cranes, electric forklifts to operate four ammunition hatches, R/T forklifts for LST operations, and commercial forklifts for pier operations. Furthermore, contractor supplies his own barge and tug capability enabling him to carry out complete stream operations from ship to barge quay at the normal revenue tonnage rate. There is no military trucking capability under the 5th Transportation Command at the Port of Qui Nhon. The Han Jin Transportation Company provides trucks and drivers to handle 150,000 S/T per month, MHE to load and offload the same tonnage, and reefer and dry vans for line haul of refrigerated and sensitive cargo. Approximately 1,000 Korean nationals work under this contract. It should be noted, however, that only about 66% of the contractor effort is in direct support of port and beach clearance - the remainder goes toward line haul and interdepot commitments.

2. Sea-Land Equipment Incorporated container service to Qui Nhon has effectively increased the port capability without increased personnel requirements in that two military stevedore gangs operating one, twelve hour shift can discharge 180 35-foot container vans (and backload the same number) at a given tonnage rate of approximately 3000 tons per shift.

(b) Weaknesses:

1. Military personnel are still required to provide port overhead services such as security, cargo security, dunnage yard operations, intransit storage, police, and maintenance in support of contractor operations.

2. The Han Jin stevedore contract contains a guaranteed monthly tonnage volume which could idle military stevedore units during slack periods.

(7) Civilian Personnel Operations:

(a) Strengths:

1. The 394th Transportation Battalion employs 825 Vietnamese employees who are used in all facets of the Battalion operation such as: landing craft operators and engineers, forklift operators, vehicle operators, riggers, stevedores, documentation clerks and cargo checkers, latrine burners, carpenters, unit maintenance and police, vehicle mechanics, clerks, cooks, and kitchen police. These personnel very effectively augment Battalion capabilities releasing military personnel for other tasks.

2. Of the Battalion's two Program VI civilianized terminal service units each employing 316 Local National employees, both have demonstrated an ability to stevedore as effectively as military units

while at the same time reducing military personnel requirements by 210 personnel per unit.

(b) Weaknesses:

1. Physical size characteristics of the Vietnamese personnel limit their ability to man-handle some types of cargo such as 55-gallon drums.

2. Program VI civilianization utilizes local national employees in relatively non-skilled jobs, but does not provide for training management and supervisory echelons.

3. Local National employees require mature, responsible military supervision which is not always available from lower enlisted grade personnel assigned to terminal service units.

4. Civilianized terminal service units are unable to provide their proportionate share of personnel for physical security (25%) or for other extra duties; hence, they add to the overhead support burden for other TO&E units.

5. To be effective, civilianized units must be very highly organized with thorough SOP's to administer, organize, and control personnel. Personnel must be organized into definite work units. Lead men must be distinguished - such as by wearing a different color helmet. Personnel must be utilized in jobs according to their classification. Days off must be scheduled so as not to disrupt operations. OJT programs must be established. Military personnel must be closely supervised to prevent abuse to Local Nationals. Unit morale and esprit must be developed to prevent lavor-management problems and work stoppages. LN and military working hours must be standardized. Interpreter translaters must be provided. Extra physical security precautions must be taken.

6. Local National personnel cannot be utilized to discharge ammunition or sensitive, pilferage cargo.

(8) Troop Morale and Welfare:

(a) Strengths: Ample USO, Special Services, clubs, organized sports, movies, and day room facilities are provided for 394th Transportation Battalion personnel in the Qui Nhon area.

(b) Weaknesses: Films are only available five days per week creating voids for troop recreational outlets on Monday and Tuesday evenings.

b. Equipment and Maintenance:

(1) Equipment:

(a) Strengths:

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1. The terminal service units were generally well equipped to perform their missions.

2. The units' cranes and rough terrain forklifts were the two most valuable items of equipment for discharging cargo across the beach. The 40-ton crane was indispensable for discharging LCM-8's.

3. Unit dump trucks a nd bulldozers were indispensible in preparing beach landing and staging areas and for stabilizing them with laterite.

4. On frequent occasions throughout the four years in Vietnam, units of this command were levied to support depot, air terminal, and Free World Forces with MHE and operators for extensive time periods to make up equipment short falls and to balance depot receiving capabilities with port clearance capabilities. The 597th Transportation Company (Medium Truck) reported in October 1965 that most of its trailers remained under load for several weeks at a time for lack of MHE at receiving locations, especially at the ammunition supply point.

5. The two fuel trucks provided to each terminal service company and to the 540th BARC platoon are an absolute requirement in RVN. First equipment fuel requirements were always supported. Secondly, one fuel truck from each company was converted to a water truck to support terminal water requirements which were not supported by the Pacific Architect and Engineers (PA&E) Repair and Utilities operations in Qui Nhon. TOE 400 gallon water trailers were totally inadequate to support terminal service company requirements.

(b) Weaknesses:

1. The stevedore units did not have 4,000 lb electric forklifts, batteries, and battery chargers which were necessary for discharging ammunition ships. They were subsequently obtained, but as of 1 August 1969, were never authorized by MTOE.

2. 6,000 lb gasoline commercial forklifts were obtained to work cargo ships, but it was found that they would not be used in the tween decks because of the mast which w s too high to fit between the decks. To resolve that problem, 4,000 lb low mast (100 inch) commercial gas forklifts were obtained which greatly increased the discharge rates of the tween decks.

3. Medium Truck companies attached to the 394th Transportation Battalion (Terminal) in September 1965 were only 50% effective for a lack of additional trailers because roads were closed at nights. If each unit had been authorized an extra 60 12-ton S&P trailers, the tractors could have dropped loaded trailers at An Khe and returned to Qui Nhon the same day with an empty trailer to be loaded at night and readied for a return trip to An Khe or Pleiku.

4. A greater degree of equipment standardization is required to facilitate equipment repair. For example: In the 30 April 1966, 394th Transportation Battalion (Terminal) Operational Report of Lessons Learned, the Battalion Commander cited the following: "This Battalion has on hand 66 forklifts composed of 10 various makes and models, of these, 33 are in field maintenance, 18 for over three months." The same relative situation applies to 1.5, 3, 5, and 10 KW generators, cranes, and bulldozers.

5. Truck units reported that vehicle engines would not operate properly after sustained low speed operations in Qui Nhon area.

6. Once terminal operations were transferred from the beach to the DeLong Pier, rough terrain forklifts were not found to be particularly satisfactory, and commercial type forklifts were acquired. During early 1966, large quantities of mission equipment (about 53 pieces) were ordered without TOE authorizations in order to accomplish the terminal mission in the most effective method. Here again, the inflexibility of the TOE modification system should be noted.

7. In December 1965, the 344th Transportation Company (Light Amphibious) reported: "There is a serious problem in the maintenance of personal clothing and footwear. The issue in kind system has still not begun, and repair facilities for footwear are non-existent." As late as 1969, delays of one month were not uncommon for a soldier to obtain direct exchange for unserviceable items of clothing during which time the soldier had to do without the items turned in for exchange. There was a tendency not to turn-in unserviceable items if there was any way they could be made to last until an individual's DEROS.

8. Roll/On - Roll/Off trailer operations across Red Beach in 1965 were found to be unsatisfactory for two reasons:

a. First, there were considerable safety hazards discharging the trailers in rough weather.

b. Second, the trailer landing gear was damaged excessively when offloading the trailer from the landing craft, and the trailers got stuck in the sand. The same applied to 12-ton S&P trailers which became stuck 100% of the time and had to be towed with a bulldozer.

c. Roll/On - Roll/Off operations at Qui Nhon were delayed until after the completion of the DeLong Pier.

9. The 119th Transportation Company (Terminal Service) deployed to Vietnam with a 5-ton tractor in lieu of its authorized 10-ton tractor, and reported that it was virtually useless in port clearance operations across a sandy beach.

10. 400 gallon water trailers proved to be inadequate to support terminal service company and medium boat company operations in

multiple locations away from company bivouac areas. In addition, they tied up a 2½ ton truck all day making trips to and from the water points. They could not be used to resupply water to harbor craft. Authorized fuel trucks were converted to water trucks. At a minimum, one 1,000 gallon water truck and four 500 gallon liquid storage pods are required to support each terminal service and medium boat company. MTOE changes were submitted in May 1969.

11. Ice was unavailable upon arrival of the terminal units in Vietnam, and has remained a scarce commodity up to the present. For morale purposes, ice machines should be a part of each unit's TOE equipment.

12. The generation of landing craft, LCM-8's and LCU's, employed in Vietnam are outdated for today's technology. Their complicated obsolete systems create a very low level of reliability. Tug boats, fuel barges and floating cranes are obsolete.

13. LCM-VIII's have very unreliable electrical systems. Because alternators for LCM-VIII's were unavailable through the supply system, they were replaced with generators which were inadequate to operate long range SRC 32 AM radios. Short range AN/VRC 46 FM radios were substituted (because of their relatively low power requirements), adversely affecting communications on coastal line haul operations. None of the radios are satisfactory for a salt water environment.

14. Organic TOE generators authorized for the terminal service units were totally inadequate for even minimal power requirements, let alone perimeter security lighting or mess hall refrigeration requirements.

15. TOE terminal service and medium boat companies deployed in guerilla warfare environment require TOE lighting equipment and power sources to light their perimeters.

16. 394th Transportation Battalion units deployed to Qui Nhon in 1965 experienced difficulties in obtaining shallow well pumps (and parts) to operate unit shower facilities.

17. Available TM's contain little or nothing about operating port dunnage yards, or about operating a stevedore gear and rigging locker to support substantial retrograde operations. The TM's should contain standardized planning factors to be used in determining requirements for dunnage and lashing materials.

18. Several medium boat company historical reports indicate critical shortages of marine paint, (OD, deck gray, and haze gray), nylon line, radio hand microphones, and signal illumination flares.

19. Twice during 1967, the DeLong Pier sank 6 to 8 inches when excessive cargo was stowed on it.

20. Despite high priority requisitions, it has consistently been impossible for this command to obtain replacement bulldozers and cranes (20 ton rough terrain and 40 ton crawler).

21. The boom on 60 ton floating cranes is too low and too short to span victory type ships when discharging heavy lifts. Therefore it cannot discharge cargo directly to the DeLong Pier. Instead, it must pivot and discharge cargo to barges alongside. The 100 ton floating crane will span across a victory type ship increasing its effectiveness and desirability substantially. The spanning capability of flotation cranes should be a factor in establishing performance criteria.

22. 1¼ and 2 inch steel strapping for lashing cargo to trucks and rail cars was frequently in very short supply.

(2) Maintenance:

(a) Strengths:

1. Upon transfer of the 285th Transportation Company (Terminal Service) from the Red Beach LOTS operation to the Con Dock (Finger pier), the need for rough terrain forklifts for that unit was eliminated, and the unit reported that not one day of downtime had been incurred on its cranes since they were out of the sand and remained stationary on the finger pier. Again, the unit did not obtain responsive MTOE action to eliminate excess rough terrain fork lifts.

2. The establishment of the Philco-Ford MHE repair facility in Qui Nhon during late Spring of 1966, greatly alleviated support maintenance and repair parts problems for the Battalion MHE.

(b) Weaknesses:

1. Equipment non-operational rates greatly reduced terminal unit operating capabilities to the point where some units had no operational equipment on Red Beach during the Fall of 1965.

2. Lack of repair parts severely hampered maintenance of equipment after units depleted their initial 15 day supply of prescribed load list repair parts. The situation remained critical from August 1965 until late Spring 1966 when direct support maintenance units began to receive initial shipments of repair parts through the supply system. There were critical shortages of even the commonest repair parts: spark plugs, hot patches, tires, fan belts, oil, fuel and air filters, common hardware, and direct exchange items.

3. Throughout the four years in Vietnam, there has been a tendency for commercial gas forklifts to overheat as a result of inadequate cooling systems and as a result of dust deposits restricting the flow of air through the radiator.

4. From the outset, Qui Nhon, RVN, maintenance and repair parts situation for amphibious, landing craft, and harbor craft has been unacceptable. Reliable repair parts supply was non-existent until December 1968. Out-of-country vessel overhaul requires six months to one year, tying up one-third of a unit's assets. Overhauls were seldom accomplished satisfactorily. Some water craft appeared to have been returned with little more than a paint job. Engines frequently have major defects after shipyard overhaul, such as cracked heads or blocks. Harbor craft attached to medium boat companies created impossible maintenance and administrative burdens on the company overhead support capability; thus, receive inadequate maintenance support. Repair parts supply specialists (76Q) are not provided in harbor craft TOE's. Lacking air silencers (filters) and fuel injectors, the life expectancy of a GMC 671 diesel engine in 1968 was 3 months. Prior to December 1968, repair parts requisitions generally required 3-12 months until receipt of parts.

5. This command has experienced considerable difficulty in keeping its movie projectors operational and in obtaining satisfactory support maintenance since its arrival in Vietnam.

6. Inadequate signal support maintenance and a lack of organizational repair parts for AN/VRC 46 radios has been a critical problem during the entire four years of LCM-8 operations in Qui Nhon, significantly decreasing operational capabilities for outer harbor lighterage operations. Lack of replacement parts for the hand microphone have resulted in a high mortality rate of microphones which have been equally difficult to obtain.

a. Location - of units to meet logistical requirements:

(1) Strengths:

(a) 394th Transportation Battalion units have generally been located appropriately to support US Army Support Command, Qui Nhon, logistical requirements in the Qui Nhon area.

(b) Initial deployment of the terminal units in 1965 resulted in two classical LOTS (Logistical-Over-The-Shore) operations in the Qui Nhon area, one at Red Beach and the other at the LST Beach. The Red Beach operations was a text book employment of amphibians which transported cargo one half mile across Red Beach directly into the depot storage locations; thus, bypassing the beach cargo transfer and staging operations required in conjunction with landing craft discharge operations such as were employed at the LST Beach. When the DeLong pier became operational on 15 November 1966, it alleviated the need for amphibian operations at Red Beach. Amphibious operations at Red Beach were difficult in that surf conditions existing on the unsheltered, sandy beach created hazardous operating conditions, especially during the September-January monsoon season.

(c) LST Beach and Can Dock operations continue through August 1969. Both are essential for ammunition discharge operations. Ammunition is discharged at the outer harbor anchorages for safety reasons and lightered to the Can Docks. The LST Beach, in addition to accomodating LST and LCU operations, is used for two other purposes. One, to receive by LCM-8 and stage ammunition whenever the discharge rate exceeds the 1500 S/T daily Can Dock capability. Two, as a rail-head which was used primarily to ship munitions to Phu Cat Air Base, and beginning December 1968, to ship general cargo in support of Tuy Hoa Army and Air Force Bases. The rail-head is the only one going right to the water's edge in the Vietnamese II Corps tactical zone; hence, it is also utilized to place railway rolling stock into the system from cargo barges by utilizing the 100 ton floating crane. Both the Can Dock and the LST Beach are located in the sheltered inner Qui Nhon Harbor.

(d) The principal port activity centers about the DeLong Pier/Barge Quay Complex located on a land fill in the middle of the inner Qui Nhon Harbor. The land fill is connected to the main land by two causeways, the old and the new. The New Causeway is about 2000 meters long lying generally east and west contains two bridges and encloses a triangular body of water between the 700 meter Old Causeway on the east end and the mainland on the south. The new causeway permits port traffic to bypass the downtown Qui Nhon business district. It connects directly onto provincial highway 441 on the north side of Qui Nhon. Eight kilometers west, Provincial Highway 441 intersects with Vietnamese Highway Number 1 which leads to Vietnamese Highway 19 on the north (the route to An Khe and Pleiku) and to the US Army Depot, Qui Nhon, on the south.

(e) To provide a sheltered ammunition anchorage, the inner Qui Nhon Harbor was dredged during August and September 1968. At the same time, construction was started on an inner harbor ammunition discharge site (a barge quay) at the mid-point of the New Causeway. Completion is scheduled for September 1969. The new facility will permit all weather ammunition discharge operations.

(2) Weaknesses:

(a) During the initial deployment of terminal units to the Qui Nhon area, non-terminal type units occupied critical real estate on RVN beaches and adjacent areas resulting in the initial location of terminal units in the Phu Than valley, 12 miles distance or 1½ hours drive from the beach operations sites. The distant location from the beach operations sites added three hours transportation time to the 12 hour stevedore work day. Area real estate coordinators must determine valid real estate priorities in advance of unit arrivals to insure optimal effectiveness of the logistics flow, to minimize troop transport times incident to daily operations, and to preclude lost construction effort on abandoned bivouac sites.

(b) It was necessary to ship depot cargo from the DeLong Pier

through Qui Nhon, until the US Army Depot, Qui Nhon, (the old 58th Field Depot located on the south side of Qui Nhon) was relocated to Phu Tai during February-June 1969. What was initially an ideal depot location during the 1965-66 LOTS operation at Red Beach, became an undesirable location after the DeLong Pier Complex became operational.

d. Communications:

(1) Impact on Logistical Operations:

(a) Strengths: AM SRC-32 radios provide very satisfactory communications from the Harbor Master's Office to the pilot boat, to tug boats, and to commercial and military ocean going vessels. Under ideal conditions, the effective range approximately 80 miles.

(b) Weaknesses: As indicated in paragraph 4b(1)(b)12, SRC 32 AM radios could not be used on LCM-8's, depriving the port of long range communications with landing craft deployed on line haul coastal missions to Sa Huynh and Duc Pho on the North, and later to Vung Ro Bay on the South.

(2) Distances Involved:

(a) Strengths: Until April and July 1969, when direct land line and telephone and teletype circuits were installed, respectively, between Qui Nhon and Vung Ro Bay, a distance of 60 miles, effective communications with the 854th Transportation Company at Vung Ro Bay were intermittent.

(b) Weaknesses: None.

(3) Special Equipment and Effect of Climate on Equipment:

(a) Strengths: None.

(b) Weaknesses: Both the SRC-32 AM radio and the AN/VRC 46 FM radio are unsatisfactory for utilization on LCM-8's. Waves breaking over the wheel house frequently rendered the radios inoperative because they were not waterproof. These radios also required an excessive amount of operator and organizational maintenance to prevent salt water corrosion - corrosion which frequently created circuit failures.

e. Environment:

(1) Effects of Tropics:

(a) Dusty operating conditions made necessary frequent cleaning of air filters, changing of engine oil, and cleaning of commercial gas forklift radiators.

(b) Operations during the monsoon seasons necessitated frequent lubrication of equipment.

(c) High temperature created very unpleasant working conditions in the holds of ships.

(d) Lack of ice and ice cream created morale problems during initial deployment to Vietnam during 1965 and 1966.

(e) Continued replacement of sand bags on bunkers every six months for four years has proven to be very expensive.

(f) Dust/mud creates a continual inconvenience to personnel.

(g) Monsoon rains and winds hamper vessel discharge operations in the stream when such vessels are not sheltered.

(h) Spoilage is an ever present hazard when discharging reefer cargo.

(i) Except for vessel discharge operations in unsheltered anchorages during the monsoon season, no insurmountable terminal operations problems can be attributed to the tropical environment.

(2) Lack of roads: Not Applicable.

(3) Railroads:

(a) Although railroads move large quantities of materials very effectively, they cannot be relied upon as a primary transport mode in a guerrilla warfare environment. Experience with the rail line between Qui Nhon and Tuy Hoa demonstrated that trains could be blown up with little risk to the enemy, putting the system out of service for a day or two. With even less risk, the enemy blew up rail bridges which put the system out of service for a week or two at a time.

(b) Railway security guards provided from 394th Transportation Battalion (Terminal) terminal service companies have been unable to prevent all theft and pilferage of rail cargo such as cement, lumber, or rations. The trains operated by the Vietnamese National Railway Service are secured by the Vietnamese Army which has the responsibility for security of the train and cargo. As the train travels slowly from hamlet to hamlet, making frequent stops, Vietnamese civilians ride the train unrestrained by ARVN guards. Civilians also pilfer the cargo unrestrained by A RVN guards.

(c) Munitions rail movements from Qui Nhon to Phu Cat Air Force Base are generally quite successful in moving large tonnages. That system is also subject to the limitations described in (a) above. Fortunately, no munitions trains have been blown up to date where the munitions have been ignited. There has been no difficulty with Vietnamese civilians on the Qui Nhon-Phu Cat line.

(4) Utilization of Inland Waterways: Not Applicable.

(5) Variations in operating conditions between logistics areas: Not Applicable.

f. Threat:

(1) Vulnerability and Security Requirements:

(a) Strengths:

1. Both the 394th Transportation Battalion (Terminal) compound and the Port Complex are located in relatively secure areas where the principal threat is from stand off mortar attacks, sapper attacks, and in the Port, swimmers.

2. The responsibility for Port security has changed several times between the 394th Transportation Battalion (Terminal) and Headquarters, 5th Transportation Command which is currently responsible; however, the 394th Transportation Battalion has consistently provided all personnel for the security guard.

3. There is only one recorded instance of a successful attack against either the Port or the Battalion compound. During June 1969 a mine was exploded against the hull of a Vinnell Corporation power ship moored in the inner Qui Nhon Harbor. Starting in October 1968, the Harbor was patrolled by the 458th Transportation Company (Patrol Boat Riverine) under operational control of the 93rd Military Police Battalion. Prior to that time, the harbor was patrolled by LCM-8's and picket boats organic to the terminal and by Coast Guard swift boats and Navy skimmers.

(b) Weaknesses:

1. During the 394th Transportation Battalion's four years in Vietnam, security requirements for personnel have ranged from 18% to 30% of assigned personnel (40% of eligible enlisted personnel in grades E5 and below). As of 30 July 1969, the Battalion was providing 292 enlisted personnel and one officer daily for all security requirements including 69 personnel at Vung Ro Bay. Terminal service companies are large companies with large overheads (approximately 100 personnel) and large quantities of equipment. Employing the equivalent of one terminal service company for terminal security duty wastes the overhead (which remains constant). The Combat Developments Command should explore the possibilities of assigning one TOE terminal security guard company to each terminal battalion operating in a guerrilla warfare environment where excessively large security requirements exist. This approach would save the large overhead required for one terminal service company.

2. Large terminal security commitments require weapons (M-60 machine guns, illuminations mortars, M-79 grenade launchers, and .45

caliber pistols), communications equipment (TA-312/PT telephone sets, PRC 25 radios, AN/VRC 46 radios for security guard vehicles and for net control stations, plus power supply PP-340/MSM, search lights, perimeter security flood lights with power source, sniper scopes, night vision and binoculars), and vehicles, which TOE terminal service companies are incapable of providing.

3. Vung Ro Bay Outport is located on a sand beach backed on three sides by precipitous, rocky, jungle covered mountains which are unsecured. The 1½ mile perimeter with 16 guard posts perched high on the mountain sides provides reasonable security against sapper attacks, but the port is vulnerable to mortar and rocket attacks from higher elevations. The road leading up and over the mountain out of the port is unsecured as is Vietnamese National Highway Number 1, which runs north to Tuy Hoa and south to Nha Trang, passing about 1 kilometer west of the port. Vung Ro Bay came under attack three times between June 1968 and August 1969. The port security detachment, consisting of 69 EM is provided from the assets of the 854th Transportation Company (Terminal Service). The 854th's unit strength ranged between 240 and 280 personnel during the past eight months. After port operational, and unit maintenance and administrative overhead personnel have been subtracted, the unit has about 80 EM available for 24 hour stevedore operations. The Officer-in-Charge, Vung Ro Bay Outport is responsible for the installation security, but assets are provided by the 854th Transportation Company.

4. The 1098th Transportation Company (Medium Boat) is billeted on the US Army Air Field, Qui Nhon, where in addition to its port security guard commitment, the unit provides perimeter security for the southeast quadrant of the airfield. The 1098th Transportation Company also mans and operates an eleven man observation post on a mountain top one kilometer east of the DeLong Pier overlooking the intervening harbor channel. As a result of unauthorized harbor craft manning requirements (41 men) and of security requirements (54 men), the 1098th Transportation Company (authorized 176EM) has been unable to crew all of its landing craft in the performance of its primary mission during its four years employment in RVN. Guard commitments have necessitated the rotation of personnel from LCM-8 to LCM-8 on a daily basis.

5. Other 394th Transportation Battalion (Terminal) guard commitments include six daily Han Jin convoy guards, three train security guards per train, four Red Beach Recreation Area security guards, seven Airfield gate security guards, and 14 Aifforce Cable Detachment Compound security guards.

6. The 5th Transportation Command Commander has security responsibility as sector defense commander for geographical areas in and about Qui Nhon. For these areas, this command has been tasked to provide security reaction forces, area damage control teams and coordination, and a tactical operations center - functions requiring a full time security officer.

g. Construction:

(1) Posts:

(a) Strengths:

1. Development of water terminal facilities at Qui Nhon progressed in the following approximate sequence:

Red Beach, August 1965
LST Beach, August 1965
Can Dock finger-pier, November 1965
Inner Harbor safe haven anchorage, February 1966
LST Beach extension and ramp construction, February 1966
*DeLong Pier, operational 15 November 1966
Barge Quay, 2 August 1967
Port intransit staging area and SeaLand terminal, probably mid-1967
New Causeway, probably early 1968
Sheltered B reak Bulk Point, started mid-1968 - never completed
Expanded staging areas along causeways, August 1968 to August 1969
Inner Harbor ammo anchorage, dredging August-October 1968
Inner H arbor armunition barge quay, under construction October 1968 - September 1969
United Seamen's Service Club, opened 1 January 1969

Along with construction of the DeLong Pier, other development was also required. A 35-foot channel was dredged by the US Army Dredge Davidson from the outer harbor to the inner harbor turning basin, a distance of approximately 4 kilometers. Approximately a 30 acre land fill and 700 meter causeway were created. Records available do not indicate when the 240th QM Battalion POL jetty or the Vinnel Corporation power ships became operational in the inner harbor.

2. For the degree of construction effort required, no single development improved port capacity and efficiency more than did the Can Dock finger pier in November 1965. The degree of improved operational effectiveness merits its development during the very earlies stages of water terminal operations. After four years of operation, the same finger pier is still contributing significantly to the port capability.

(b) Weaknesses:

1. During the initial deployment of water terminal units, critical beach real estate was occupied by non-terminal units depriving the terminal units of critical staging area which was essential for balancing and buffering port discharge capability of the land transport system and depot receiving capabilities.

2. During the first months of operation, faulty real estate priorities were established, and the terminal service companies were bivouaced in Phu Than Valley, 12 miles from the port, requiring that

hundreds of men made the 45 minunte - 1½ hour trip to and from the port in addition to their normal 12 hour stevedoring work day.

3. The 394th Transportation Battalion (Terminal) terminal service units prepared ant stabalized the beach sites with laterite using organic equipment.

(2) Staging Areas: After the DeLong Pier was completed in November 1966, it provided the only available staging area for deep draft discharge operations until the Intransit Storage Yard was opened- probably in late 1967 - constricting peak discharge rate to available port clearance capabilities. As the retrograde export requirement grew from 1967 to the present, it became necessary to stage cargo for ship backload operations in order to avoid ship demurrage resulting because the available land transport system could not deliver cargo as fast as it could be stowed on vessels. Causeway shoulders were used (unsatisfactorily) to stage retrograde cargo until dredging operations - August to October 1968 - provided fill with which the port built staging areas along the causeways using organic capability.

(3) Costruction of Barracks, Shop, and Office Facilities:

(a) Strengths:

1. For units willing to exert the effort, Engineer agencies provided the materials to construct approved barrack complexes on a self help basis beginning in late 1966. By the end of 1967, ten tropical barracks were completed by the Battalion self help construction crew, and the 11th was completed in October 1968, approximately three years after arrival in Vietnam.

2. Vinnel Corporation power was provided to the 394th Transportation Battalion compound about 15 December 1967, after using generators for 28 months. This enabled the Battalion to obtain refrigeration units for its consolidated mess hall and to significantly improve perimeter lighting.

(b) Weaknesses:

1. During the initial deployment of terminal units to RVN, the units bivouaced in tents. There was a gradual evolution of facilities from tents to standardized tropical barracks. Tents were improved with wooden floors and sidewalls and then with cement pads. Many non-standardized bulidings were constructed with dunnage and other materials as could be acquired. Eventually non-sgandardized building were torn down and replaced by standardized tropical barracks completing the costly evolutionary cycle which consumned and wasted both man hours and materials. At a comparable cost and with a considerable reduction in deployed man hour requirements for construction, prefabricated building could be deployed with each unit resulting in the elimination of the two year delay required to move water terminal units (and other units) out of tents and into permanent facilities.

2. No Engineer construction capability was employed to develop the 394th Transportation Battalion compound facilities which were all constructed on a self help basis . In as much as the self help program is the unofficial mode for facilities development, prefabricated "do-it-yourself" barracks and allied building should be tailored to meet specific untt requirements and deployed with each unit to a theater of operations.

3. Standardized minimal building wiring is clearly inadequate to meet the total electrical power requirements of building occupants. The austere power provisions conflict with post exchange policies encouraging the purchase of electric fans, refrigerators, coffe pots, and electronic sound equipment - money which does not flow into the civilian economy.

4. Interface with other systems:

(1) Strengths:

(a) The US Army Port, Qui Nhon interfaces with many systems:

1. Military Sea Transportation Service

2. MACV, Traffic Management Agency, Vietnam

3. Republic of Korea Army Logistics System

4. Republic of Vietnam Logistics System

5. US Army Support Command, Qui Nhon, ACofS, Transportation

6. Local Army, Navy, Coast Guard and Vietnamese Security Elements:

7. Sealand Incorporated, Container Service

8. Han Jin Transportation Company, LTD

9. 8th Transportation Group (Highway)

(b) Mutual cooperation has been the keystone to successful port operations.

(2) Weaknesses:

(a) From the initial deployment of the 394th Transportation Battalion (Terminal) in Vietnam to August 1969, depot receiving/shipping capabilities have not been matched with the greater port discharge/ outload capabilities. Depot capabilities to receive/ship, stock, and account for cargo must be balanced with port clearance requirements. Unit historical files cite many instances when port personnel and equipment assets were diverted to balance operations for extended periods of time. Depot and ammunition supply point MHE shortages were notable.

(b) Much development work remains to be done by TMA and MSTS in scheduling deep and shallow draft vessels into the US Army Port, Qui Nhon in order to obtain optimal utilization of port capabilities, to minimize vessel waiting times, and to minimize port slack time.

(c) The theater logistical system needs to develop better procedures to minimize simultaneous import/export of the same items, i.e. Qui Nhon sending lumber to Cam Ranh Bay, while Cam Ranh Bay sends lumber to Qui Nhon, or the simultaneous import and retrograde movements of asphalt, paint, pipe, lumber,...

(d) USAD receiving capability necessitates that USAD cargo remain in the Intransit Storage Yard for excessive periods of time

5. Evaluation of the Qui Nhon water terminal system for providing the appropriate combat support in terms of the following:

a. Orgainzation:

(1) The water terminal productivity could have been improved by assigning a water terminal security guard company to the port in lieu of one terminal service company.

(2) During the period May-August 1965, the four Transportation Corps units in Qui Nhon lacked a control headquarters. The amphibian company commander functioned in a dual capacity as the Area Transportation Officer, an arrangement which was considered unsatisfactory by all concerned.

(3) After the departure from Qui Nhon of the 159th Transportation Battalion (Terminal) in February 1968, there remained only the 394th Transportation Battalion (Terminal) assigned to the 5th Transportation Command (Terminal A).

b. Doctrine:

(1) The value and contribution of amphibians during the initial Vietnam build-up in terms of their sustained daily tonnage productivity, should be reevaluated. (Reference available statistics at inclosure 1).

(2) A cursory review of terminal service company sustained tonnage productivity indicates that the units were able to sustain only about half their rated TO&E general cargo discharge capability of 720 short tons daily, or 21,600 short tons per month. The only apparent explanations are the nonavailability of personnel, non-operational equipment, and equipment shortages and guard requirements. This explanation would then necessitate that doctrine relative to personnal replacement policies be reviewed to insure that units are kept at certain levels of percentage filled, and that doctrine relative to dissipating port security guard requirements be reviewed.

(3) Experience during the initial deployment of the water terminal units in Vietnam shows that six to nine months elapsed before replenishment requisitions for repair parts were filled on a sustained basis. Doctrine should be reviewed with respect to the current 15-day PLL (Prescribed Load List) of repair parts authorized for terminal survive, medium boat, and amphibian companies. Initial PLL stockage level for units which are subject to be deployed to a theater of operations should be increased to 180 days in order to sustain deployed units until the direct support maintenance systems becomes operational and until the supply system begins to function effectively.

(4) The experience of the US Army Port, Qui Nhon, has shown that a marine landing craft capability was absolutely essential to the deployment of military forces in the Vietnamese Northern II Corps tactical zone. The marine landing craft capability remained essential throughout the four years that forces have been deployed, even after fixed terminal facilities were constructed. Marine harbor craft such as 100-ton floating cranes, 65 and 100-foot tug boats, fuel barges, cargo barges, reefer barges, and picket boats (J and Q), were also absolutely essential during the initial deployment phase and for subsequent sustained harbor operations. The rapidity with which military forces can be deployed and sustained in an underdeveloped country is highly dependent upon the immediate availability of trained marine personnel, modern marine equipment, and most important, an established marine maintenance and repair parts support system.

c. Policies:

(1) The attachment of multiple harbor craft and harbor craft detachments to boat companies significantly reduces the capability of the unit to perform its primary mission. Whenever the number of harbor craft attached to a medium boat company exceeds two, an appropriate command, maintenance, and administrative support detachment should be assigned. If more than five assorted harbor craft are involved, a TO&E harbor craft company should be assigned.

(2) Battalion assets have been steadily dissipated over the past four years in order to support a wide variety of additional mission and non-mission related tasks. When new mission requirements are approved, additional assets should be provided to perform the new mission (for example: the assignment of three LCU's without detachment or property book authority).

d. Procedures:

(1) Existing procedures for processing MTO&E requirements are unresponsive to the needs of dynamic water terminal operations in terms of time frames required to obtain essential modification.

(2) The Roll/On - Roll/Off concept appears to be a marginally effective operation in the Qui Nhon area because Roll/On - Roll/Off ships

are not regularly scheduled and trailers spend excessive time waiting under return load in the port. Because of the revenue tonnage involved, military units usually work Roll/On -- Roll/Off ships.

(3) With certain exceptions (Sealand containers and Roll/On - Roll/Off trailers) there is a tendency to allocate prime tonnage cargo to Han Jin Transportation Company such as ammunition, beer, soda, and cement while military units work cargo such as reefer cargo - one carton at a time, or hatches with less than 100 revenue tons (the point where Han Jin receives the higher extra labor rate other than the commodity rate).

(4) Daily local national employee attendance reports provide indicators as to the level of enemy activity for a given area on a given day.

e. Techniques:

(1) For several years, terminal service units in Qui Nhon were engaged in providing a refrigerated warehousing service from station refrigeration ships or barges because local depot refrigeration facilities were inadequate. Selective discharge requirements were geared to customer consumption and did not maximize stevedore productivity. Often overstow reefer cargo was transferred from one hatch to another in order to selectively discharge overstowed cargo - nonproductive effort. Although not the most effective stevedore operation, the station reefer ship technique did provide class A rations for the troops, and to extent it was most successful.

(2) With the exception of refrigerated cargo which is non-unitized to permit proper air circulation in the hold, US Army Port, Qui Nhon has received negligible amounts of loose stow cargo. The advent of unitized/palletized cargo represents a significant advancement in stevedore operations; however, it necessitates the availability of low mast fork lifts to discharge the tween decks of a ship, items not currently provided in TO&E 55-117G.

(3) Tonnage figures for Sealand container ship operations (inclosure 1) demonstrate the tremendous implications and potential for the Sealand container concept. Two stevedore gangs can discharge 200 containers and backload another 200 containers in one 12 hour work shift, representing 3-4,000 S/T of cargo moved with virtually negligible cargo damage or pilferage. Containerized reefer van service should provide significant advances in the throughput shipment of reefer cargo by eliminating pilferage and spoilage which should more than offset the cost of the service. The Army MILVAN concept (the same as the Sealand concept) about to be tested in Qui Nhon should be carefully evaluated for incorporation into the military physical distribution system. Great care should be taken not to deprive the military test of the time and labor saving devices which have made the Sealand service successful such as shuttle tractors with hydraulicly raised fifth wheels, specialized ships with gantry cranes, a sophisticated terminal staging and control operation at the port,

and scheduled container ship service. Retrograde shipment of empty containers may be too expensive to make the concept realistic unless collapsible containers can be developed or new rate structures developed.

(4) Levels of cargo packing and in wooden shipping crates and boxes are generally marginal in that they do not withstand the handling received without damage to their structural soundness. These same boxes, when subjected to one, two, or three years of open storage, are nearly 100% unserviceable when received back in port as retrograde cargo. They require extensive recouping, and worst of all, they fail to protect serviceable items of supply.

6. LESSONS LEARNED:

a. Whenever several Transportation Corps units are deployed to an area, a controlling headquarters must be deployed at the same time to coordinate their interrelated activities.

b. Personnel and equipment assets authorized by terminal service company and medium boat company TO&E's are inadequate to secure water terminal facilities in a guerrilla warfare environment.

c. Existing procedures for processing MTO&E requirements are unresponsive to the needs of dynamic water terminal operations in terms of time frames required to obtain essential modification approval/disapproval.

d. The support base of a medium boat company is inadequate to support more than two harborcraft or harborcraft detachments.

e. The generation of harborcraft and landing craft currently employed in Vietnam is obsolete, tired, unreliable, and marginally productive.

f. A marine landing craft and harbor craft capability is absolutely essential to the deployment of military forces in underdeveloped countries lacking terminal facilities.

g. Trained marine type units and their functioning logistical support systems must be in existence prior to the time that military forces are to be deployed to a theater of operations.

h. The sustained productivity of amphibians does not warrant their deployment in areas where landing craft can be employed.

i. The boom of 100-ton floating cranes will reach across the deck of a Victory class ship whereas the boom of a 60-ton crane will not.

j. The immediate construction of a floating finger pier in a newly deployed LCTS operation provides substantial and immediate benefits which greatly outweigh the construction effort required.

k. The earliest development of a fixed deep draft terminal facilities is essential to effectively sustain logistical operations where large tonnages are involved.

l. Terminal service companies and medium boat companies deployed in a theater of operations require two organic fuel trucks, one organic water truck and four 600 gallon liquid storage pods in order to sustain terminal operations.

m. Whenever a logistical support system is deployed to an area of operations, great care must be taken to balance capabilities of each element within the system. Specifically, the land transport system must have the capability of clearing the water terminal system. The depot system must have an equal capability (especially upon initial deployment) to receive, account for, and stock cargo at the rate which cargo is cleared through the water terminal system.

n. The Roll/On - Roll/Off trailer concept is unsatisfactory when the trailers have to be discharged to landing craft for subsequent discharge on unimproved sandy beaches.

o. The Sealand container concept, or the new Army MILVAN container concept, provide the most effective container concept to date for employment in a theater of operations as soon as fixed terminal facilities become available.

p. Railroads cannot be relied upon as a primary transport mode in a guerrilla warfare environment.

q. Medium truck companies should be deployed to a theater of operations with twice as many 12-ton S&P Trailers as tractors in order to obtain maximum utilization of tractor transport capability.

r. The present evolutionary self help process where troop billeting facilities and allied buildings evolve through three generations from improved tents to temporary buildings to standardized tropical barracks is very expensive in that both manpower and materials are wasted and the cycle requires too long to complete.

s. The 15-day unit prescribe load list (PLL) stockage level should be raised to 180 days for units subject to deployment to a theater of operations.

t. Equipment standardization is required to reduce the large number of makes and models of forklifts, generators, cranes, and bulldozers.

u. SRC-32 AM radios and AN/VRC 46 radios are inadequate for use on landing craft because they are subject to water damage and failure from waves breaking over the wheelhouse. The equipment also corrodes too easily in a salt water environment.

v. Short mast forklifts (100 inches) are required to discharge the tween decks of ships.

w. Electric forklifts are required to work munitions ships. One battery charger and two batteries must be provided per forklift.

x. Local National employees can be used effectively in water terminal operations.

y. Sound real estate priorities must be established to ensure that non-terminal units do not occupy critical real estate needed for operations and staging areas.

aa. Thorough historical records must be maintained in order to evaluate unit performance and contributions. (Ref paragraph 3b(5).

7. CONCLUSIONS:

a. The performance of the 5th Transportation Command and 394th Transportation Battalion (Terminal) in the accomplishment of the US Army Port, Qui Nhon mission during the period August 1965 to July 1969 was successful.

b. The performance of the Naval Officer-in-Charge of construction in constructing the US Army Port, Qui Nhon facilities was commendable.

c. Doctrine relative to support maintenance procedures and repair parts stockage and supply procedures should be reevaluated to preclude the acute equipment non-operational rates experienced by terminal service companies, amphibious companies, medium boat companies, and harbor craft detachments during their initial six to nine months deployment in Vietnam.

d. Doctrine relative to the provisionment of barracks and support buildings to water terminal units deployed in a theater of operations should be reevaluated to seek ways to improve upon the evolutionary self-help building process experienced by this Command in Vietnam. Prefabricated buildings capable of being deployed with and constructed by tenant units might provide a solution.

e. TO&E modification procedures should be improved in order to be responsive to changing logistical requirements.

f. Doctrine relative to real estate allocation priorities in port areas must be clearly established, and allocations must be clearly planned upon deployment of military units to an area of operations.

g. Doctrine relative to the provisionment of security personnel and equipment to support water terminals (and other combat support units) in a guerrilla warfare environment should be carefully evaluated to preclude the dissipating drain of terminal service and medium boat companies

as has occured within this Command.

h. Personnel assignment procedures and controls must be re-evaluated to ensure that military units are retained at an even level to perform their TO&E mission at rated capability.

i. Doctrine must be developed and resources allocated for TO&E composit logistical forward support units.

j. Doctrine relative to balancing terminal, depot, and land transportation sub-systems of the support command logistical system must be carefully evaluated and revised to provide optimal performance of the total logistics system.

k. Railroads cannot be relied upon as a primary transportation mode in a guerrilla warfare environment.

l. Extensive utilization of the Sealand container concept presents tremendous potential for employment in theaters of operation with fixed terminal facilities.

m. A Transportation Company (Harbor Craft) must be deployed to support harbor craft operations in a port.

n. The value and contribution of amphibious units must be critically reevaluated in terms of their sustained productivity.

o. The present generation of marine harbor craft and landing craft must be retired and new equipment developed.

p. Because the rapidity with which military forces can be deployed and sustained in a theater of operations is contingent upon the existent trained marine craft units and marine maintenance support capability, doctrine relative to the troop list retention priorities for these units must be carefully reevaluated for the peace time army.

q. Transportation Corps control headquarters must be deployed with the initial Transportation Corps companies whenever a logistical support base operation is established in order to coordinate and program the development of transportation systems in orderly manner.

r. The earliest construction of a fixed terminal discharge facility, such as a floating finger pier, is of the utmost importance for it significantly improves cargo discharge operations and improves port capability.

s. Medium truck companies deployed to a theater of operations must be deployed with a second set of 12-ton S&P trailers to maximize the utilization of road tractors while trailers are dropped for off-loading/loading.

t. Equipment standardization is required to rdduce the large number of makes and models of forklifts, cranes, bulldozers, and generators in order to improve repair parts maintenance support.

u. Requirements for communications equipment on marine landing craft and marine harbor craft need to be reevaluated, and equipment must be provided which is corrosion resistant to a salt water environment and water proof.

v. Terminal service company TO&E's should be modified to include 100 inch short mast, 4000/6000 pound forklifts, and electric forklifts. with one battery charger and two batteries to work ammunition ships.

w. Future deployment of amphibians to a theater of operations should be carefully based upon very specialized needs and upon sustained performance records achieved in Vietnam.

x. Unit historical files, complete with statistical performance indicators, must be maintained by units deployed in a theater of operations in order to evaluate unit performance and contributions.

8. RECOMMENDATIONS:

a. Existing procedures for processing for modifing unit TO&E's must be reviewed and improved in order to be responsive to the needs of water terminal operations.

b. Transportation Company (Harbor Craft) (or detachment) must be allocated to support marine harbor craft detachments whenever more than two are assigned to a port.

c. The Army inventory of marine landing craft and harbor craft must be modernized to improve productivity and reliability by taking advantage of current marine technology.

d. Doctrine relative to troop list priorities must be reevaluated in order to ensure that sufficient trained marine landing craft and harbor craft units along with essential maintenance/supply support systems are retained in existance to immediately deploy and sustain future military troop buildups in underdeveloped countries. This capability was slowly phased from the Army during the period between the Korean and Vietnam wars.

e. Doctrine relative to the employment of amphibians must be revised in view of their low sustained productivity while operating in the US Army Port, Qui Nhon. Future deployment must be based on the need to perform missions which cannot otherwise be performed by landing craft.

f. Doctrine relative to real estate allocation priorities in a logistical complex must be developed to ensure that depot, transportation and terminal units are situated to facilitate the flow of cargo.

g. Doctrine must be developed and resources allocated to provide security for logistical complexes operated in a guerrilla warfare environment.

h. Doctrine and techniques should be explored and developed relative to the initial deployment of floating finger pier facilities a along with water terminal units to provide an operating pier within days of their deployment.

i. TO&Es for terminal type companies should be modified to authorize two fuel trucks (one for diesel fuel and one for MOGAS), one water truck, and four 600 gallon liquid storage pods in order to sustain terminal operations in multiple locations.

j. Floating crane design and performance specifications should be modified to require that booms of floating cranes of all capacities be of sufficient length and height to span the decks of the current generation of cargo ships. This added performance capability greatly enhances the flexibility of the crane when operating ships moored to pier facilities by enabling the crane to work from the pier instead of from barges.

k. Doctrine relative to the appropriate mix and capabilities of combat service support units must be revised to insure that the capabilities of each unit within the logistical support is adequate to balance the system and to ensure that supplies flow smoothly from water terminals through depots to direct support units.

l. TO&E composite forward logistical support units should be developed for assignment to support commands based on mission requirements.

m. Roll/On - Roll/Off trailers should not be employed in LOTS operations where vessels must discharge trailers (lift/on - lift/off) to small marine landing craft for subsequent discharge across sandy beaches.

n. The MILVAN container concept should be carefully evaluated for a employment at ports with fixed terminal facilities.

o. Doctrine must be developed relative to feasible techniques for securing railroad operations in a guerrilla warfare environment.

p. Medium truck companies should be deployed to a theater of operations with a duplicate set of trailers.

q. New techniques (such as prefabricated buildings used by the Air Force) must be found to move combat service support units fromtents to buildings immediately upon their deployment to a theater of operations and to bypass the haphazard evolutionary building development process encountered i Vietnam.

r. Repair parts supply procedures and authorized stockage levels for units and direct support units must be improved to provide relatively high assurance that on hand inventories of units deployed to a theater of operations will not be exhausted

before initial replenishment requisitions can be filled.

s. To reduce the repair parts support problem, equipment standardization should be accomplished for forklifts, generators, cranes and bulldozers.

t. Improved radio communications equipment is required for landing craft (LCM-8's) to provide long range communications, to preclude salt water corrosion, and to preclude equipment failures when submerged in salt water.

u. Terminal service company TO&E's must authorize both short mast forklifts to work the tween decks of ships and electric forklifts (with battery charger and two batteries per forklift) to work ammunition ships.

v. Procedures must be developed to ensure that deployed units are maintained at a certain level of strength in order to perform their rated TO&E mission capability.

w. Procedures should be established to ensure that unit historical data and performance indicators are recorded by units during their employment in a theater of operations.

FOR THE COMMANDER:

R. G. Taylor

R. G. TAYLOR
CPT, AGC
Adjutant

394th TRANSPORTATION BATTALION (TERMINAL)
Tonnage for Period 1 May - 31 Jul 1969

MAY	AMMO	SEALAND	REEFER	SEALIFT	GENERAL	TOTAL
264th TC (TS)	2,387	Ø	Ø	Ø	1,350	3,737
285th TC (TS)	Ø	10,959	2,744	981	787	15,471
387th TC (TS)***	Ø	Ø	Ø	Ø	Ø	Ø
854th TC (TS)	6,740	Ø	486	254	6,369	14,349
TOTALS-------	9,127	10,959	3,230	1235	9,006	33,557
JUNE						
264th TC (TS)	2,639	Ø	Ø	Ø	Ø	2,639
285th TC (TS)	Ø	10,636	2,498	Ø	669	13,803
387th TC (TS)	Ø	Ø	Ø	Ø	Ø	Ø
854th TC (TS)	5,539	Ø	602	592	6,039	12,772
TOTALS-------	8,178	10,636	3,100	592	6,708	29,214
JULY						
264th TC (TS)	1,543	Ø	Ø	Ø	Ø	1,543
285th TC (TS)	Ø	15,316	2,727	787	272	19,902
387th TC (TS)	Ø	Ø	Ø	Ø	Ø	Ø
854th TC (TS)	3,621	Ø	340	311	6,064	10,336
	5,164	15,316	3,067	1,098	6,336	30,881
TOTALS FOR PERIOD------	22,469	36,911	9,397	2,925	22,050	93,752

VESSEL TONNAGE

	MAY	JUNE	JULY	TOTALS
540th TD (BARC)	2,052	2,230	1,462	5,744
1098th TC (MB)	5,741	6,332	3,902	15,975

*** 387th Transportation Company (Terminal Service)(Civilianized) has no stevedore capability per Section 1. para b(1).

Incl 3

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