SUBJECT: Operational Report on Lessons Learned (U)

TO: Commanding General
1st Infantry Division
ATTN: AVDB-R
APO US Forces 96345


2. (U) In compliance with referenced regulation, the following report, for the period ending 31 January 1968, is submitted:

ITEM: Identification of Bagged Ammunition

Discussion: Frequently it is difficult to determine the types and amounts of artillery ammunition on hand immediately after completion of the air lift.

Observation: Tagging the 422 bags will facilitate identification. The tag should indicate the type, lot number, and quantity of ammunition and/or fuzes contained therein.

ITEM: Forward Observer versus Air Observer: Who should control a contact mission?

Discussion: Occasionally, this question may arise due to an apparent conflict of interest.

Observation: When using an air observer in conjunction with a ground maneuver element, control of artillery fires is a three-way proposition. The forward observer (FO) must keep the air observer and the controlling artillery headquarters constantly advised of the situation on the ground. The use of smoke normally assists in identifying friendly locations. However, a concise and complete description of the situation on the ground provided by the forward observer to the air observer/firing battery team is essential for the proper placement of artillery fires. The air observer should normally be the one to adjust these fires. Additionally, the air observer often is a vital communications link between the element on the ground and the supporting artillery. Immediate response to rapidly changing situations can be provided only if the controlling artillery fire direction center has a feel for the situation and team work between the forward observer, air observer, and fire direction center is at its maximum.

INCL 6
AVDB-RAT
14 February 1968

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ITEM: Use of rifle grease on the breech block of the 105mm Howitzer.

Discussion: During periods of sustained firing common to this theater of operations, breech blocks of 105mm Howitzer tend to bind.

Observations: During the periods of heavy firing, coating breech blocks with rifle grease (FSN 9150-754-0063) in lieu of PL Special, the lubricant normally used, virtually eliminates the problem of binding breech blocks.

ITEM: Direct Fire Illumination

Discussion: During an enemy attack on fire support bases it becomes imperative that the US ground commander has at his disposal a close-in illumination capability for silhouetting the enemy, thereby producing targets for friendly ground fires.

Observation: The 105mm Howitzer illumination shell fired in the direct fire mode with a 2 second fuze setting provides illumination on the ground similar to a trip flare. If fired into a tree line, the illumination parachute usually clings to the branches giving a light source above ground level. (Charge 1 should be used) The 155mm illumination shell fired high angle, QE1272, Charge 1, Time 0.8 to 1.0 second also provides similar close-in lighting for the fire support base.

FOR THE COMMANDER:

Michael A. Paolini
Major, Artillery
Adjutant

DECLASSIFIED PER EXECUTIVE ORDER 12356, Section 1.3, NARA, Date 2-26-53.
SING: Operational Report on Activities and Lessons Learned (V)

1. (V) Reporting period: 1 November 1967 to 31 January 1968.

2. (C) Listed below are the activities of the Division Chemical Section during the reporting period 1 November 1967 to 31 January 1968.

   a. 1 November 1967 - A CS drop team dropped thirty (30) drums of CS-1 on a base camp, vic X0927067.

   b. 2 November 1967 - A CS drop team dropped thirty (30) drums of CS-1 on Viet Cong garden plots, vic X0936212, X0992118, and X0962118.

   c. 3 November 1967 - A CS drop team dropped thirty (30) drums of CS-1 on a base camp vic X0940099.

   d. 4 November 1967 - A CS drop team dropped thirty (30) drums of CS-1 on a supply loading site, vic X0920319.

   e. 5 November 1967 - A Mambach Personnel Detector (MPD) team conducted a search of two areas, one east and one west of LOC NH1H. A total of fifty-one (51) hotspots were recorded and reported to the 22 Air and the 1st Brigade. A CS drop team dropped thirty (30) drums of CS-1 on a base camp, vic X0939159.

   f. 6 November 1967 - An MPD team conducted a search of two areas, one east and one west of LOC NH1H. A total of sixteen (16) hotspots were recorded and reported to the 22 Air and the 1st Brigade. The II FFV CGO conducted a liaison visit with the Division CoD concerning retaliation. A CS drop team placed thirty (30) drums of CS-1 against a trail junction, vic X0939159.

   g. 7 November 1967 - An MPD team conducted a search of four areas, two east and two west of LOC NH1H. A total of twenty-three (23) hotspots were recorded and reported to the 22 Air and the 1st Brigade.
8 November 1967 - An HPD team conducted a search of two (2) areas, one northeast and one southwest of LOC NHM. A total of fourteen (14) hotspots were recorded and reported to the G2 Air and the 1st Brigade. A defoliation team sprayed the southern and western perimeters of the DI AN Base Camp. A CS drop team dropped thirty (30) drums of CS-I on a well used trail, via XU921052 to XU939599.

9 November 1967 - An HPD team conducted a search of one (1) area northeast of LOC NHM. A total of sixteen (16) hotspots were recorded and reported to the G2 Air and the 1st Brigade. A CS drop team dropped thirty (30) drums of CS-I on a base camp, via XU939520. A defoliation team commenced defoliation operations on the LAI KHE perimeter.

10 November 1967 - An HPD team conducted a search of one (1) area southeast of LOC NHM. A total of twenty (20) hotspots were recorded and reported to the G2 Air and the 1st Brigade.

11 November 1967 - An HPD team conducted a search of two (2) areas, one west and one northeast of CHIN NAM. A total of ninety-eight (98) hotspots were recorded and reported to the G2 Air and the 1st Brigade. A CS drop team dropped thirty (30) drums of CS-I on VC structures and fortifications, via XU930123.

12 November 1967 - An HPD team conducted a search of three (3) areas, one west and one northeast of LAI KHE and one west of QUAN IAI. A total of sixty-two (62) hotspots were recorded and reported to the G2 Air. A defoliation team conducted a drop destruction mission against VC structures via XU928395. (Sporadic Learnings this report). A CS drop team dropped 30 drums of CS-I on a river crossing via XU921052.

13 November 1967 - An HPD team conducted a search of four (4) areas west of LOC NHM. A total of thirty-six (36) hotspots were recorded and reported to the G2 Air. A defoliation team conducted defoliation operations around the perimeter of the DI AN Base Camp.

14 November 1967 - An HPD team conducted a search of four (4) areas, three west of AN LOC and one west of CHIN TIANN. A total of eighty-five (85) hotspots were recorded and reported to the G2 Air. A CS drop team dropped thirty (30) drums of CS-I on a bridge and cross-crat trail, via XU929978.

15 November 1967 - An HPD team conducted a search of three (3) areas, two west of CHIN IAII and one southwest of AN LOC. A total of thirty-nine (39) hotspots were recorded and reported to the G2 Air. A CS drop team dropped thirty (30) drums of CS-I on a base camp via XU9397187.
SUBJECT: Operational Report on Activities and Lessons Learned (U)

p. 16 November 1967 - An NPD team conducted a search of three (3) areas, one west of QUAN LOI and one north of LOC XII. A total of twelve (12) helicopters were recorded and reported to the G2 Air. A defoliation team conducted defoliation operations around the LAI KHE base camp perimeter. A CS drop team dropped thirty (30) drums of CS-1 on a base camp andpopup area, via X592013b.

q. 17 November 1967 - An NPD team conducted a search of two (2) areas west of QUAN LOI. A total of twelve (12) helicopters were recorded and reported to the G2 Air. A defoliation team conducted defoliation operations against Viet Cong crews via X5605395b. A CS drop team dropped thirty (30) drums of CS-1 on a fortification area and popup landing site, via X59210123.

r. 18 November 1967 - An NPD team conducted a search of three (3) areas west of QUAN LOI. A total of forty-three (43) helicopters were recorded and reported to the G2 Air. A defoliation team conducted defoliation operations against Viet Cong crews via XT7018. A CS drop team dropped twenty-four (24) drums of CS-1 on bunkers and tunnels/wedges, via X579959b.

e. 19 November 1967 - A defoliation team conducted defoliation operations around the DI Air Base Camp perimeter. A CS drop team dropped twenty-four (24) drums of CS-1 on a popup landing site, via X590135b.

f. 20 November 1967 - An NPD team conducted a search of three (3) areas, one west and west of QUAN LOI and one west of QUAN TANH. A total of twenty-six (26) helicopters were recorded and reported to the G2 Air. A defoliation team conducted defoliation operations around the perimeter of the LAI KHE Base Camp. A CS drop team dropped twenty-four (24) drums of CS-1 on bunkers and tunnels, via X590065b.

h. 21 November 1967 - An NPD team conducted a search of two (2) areas, one west of QUAN LOI and one west of LOC XII. A total of twenty-four (27) helicopters were recorded and reported to the G2 Air. A courtesy chemical inspection was conducted for A Btry, 2nd Battalion, 33rd Artillery at LAI KHE. A CS drop team dropped twenty-four (24) drums of CS-1 on a regrouping area, via X590138b.

w. 22 November 1967 - An NPD team conducted a search of five (5) areas, one west of PHONG VEN, one west of LOC XII, one northwest of AD LOC, and the northeast of LOC XII. A total of forty-two (42) helicopters were recorded and reported to the G2 Air. A courtesy chemical inspection was conducted for B and D Batteries, 2d Battalion, 33rd Artillery at LAI KHE. A CS drop team dropped twenty-four (24) drums of CS-1 on a base camp, via X765098b.

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x. 23 November 1967 - An HPD team conducted a search of two (2) areas, one north of 30°10' N and one west of CHON THAI. A total of forty-nine (49) hotspots were recorded and reported to the G2 Air. A CS drop team dropped thirty (30) drums of CS-1 on a base camp, via XT685999.

xi. 24 November 1967 - An HPD team conducted a search of one (1) area west of CHON THAI. A total of eighty (80) hotspots were recorded and reported to the G2 Air. A CS mini-drop was conducted against Viet Cong garden plots, via XT652422, XT653108, and XT656135 (See Lessons Learned this report). A defoliation team conducted defoliation operations around the LAI KHE base camp perimeter.

xii. 25 November 1967 - An HPD team conducted a search of two (2) areas west of CHON THAI and one northwest of PHUC VINH. A total of fifty (50) hotspots were recorded and reported to the G2 Air. A CS drop team dropped thirty (30) drums of CS-1 on a base camp, via XT623924.

xiii. 26 November 1967 - An HPD team conducted a search of two (2) areas west of CHON THAI. A total of twenty-nine (29) hotspots were recorded and reported to the G2 Air. A CS drop team dropped thirty (30) drums of CS-1 on a base camp, via XT682222. A CS drop with two 525B canister clusters was made in support of the 3/17 Cav, via XT745107.

xiv. 27 November 1967 - An HPD team conducted a search of two (2) areas, one southeast of LOC NTH and one southeast of AN LOC. A total of one hundred and eleven (111) hotspots were recorded and reported to the G2 Air.

xv. 28 November 1967 - An HPD team conducted a search of three (3) areas, two southeast of AN LOC and one northeast of 30°15' N. A total of seventy-three (73) hotspots were recorded and reported to the G2 Air. A CS drop team dropped thirty (30) drums of CS-1 on a base camp, via XT629922.

xvi. 29 November 1967 - A test was begun on the southeast perimeter of DI AN base camp to determine the stability of thickened fuel (See Lessons Learned this report).

xvii. 30 November 1967 - An HPD team conducted a search of two (2) areas, one west of LAI KHE and one northeast of 30°10' N. A CS drop team dropped thirty (30) drums of CS-1 on a base camp, via XU905130.

xviii. 1 December 1967 - An HPD team conducted a search of two (2) areas, west of PHUC VINH. A total of thirty-eight (38) hotspots were recorded and reported to G2 Air. A CS drop team dropped
OPERATIONAL REPORT ON ACTIVITIES AND LESSONS LEARNED (I)

thirty (30) drums of CS-1 on a base camp, via XU931158.

2. 2 December 1967 - An HPD team conducted a search of three (3) areas, one in the west of LOC NHVN and one west of QUAN LOI. A total of one hundred and five (105) hotspots were recorded and reported to the G2 Air. A courtesy chemical inspection was conducted for the Long Range Reconnaissance Patrol at LAX VIEH. A CS drop team dropped thirty (30) drums of CS-1 on a base camp, via XU931158.

3. 3 December 1967 - An HPD team conducted a search of the (2) areas northeast of LOC NHVN. A total of thirty-six (36) hotspots were recorded and reported to the G2 Air. A gas chamber exercise was conducted for the 29th Maintenance Group at LONG Binh. A CS drop team dropped thirty (30) drums of CS-1 on a base camp, via XU930136.

4. 4 December 1967 - An HPD team conducted a search of four (4) areas, one in the northeast of LOC NHVN. A total of sixty-five (65) hotspots were recorded and reported to the G2 Air.

5. 5 December 1967 - An HPD team conducted a search of five (5) areas, northeast of LOC NHVN. A total of sixty-five (65) hotspots were recorded and reported to the G2 Air.

6. 7 December 1967 - An HPD team conducted a search of six areas, five northwest of LOC NHVN and one southwest of HUN Comb. A courtesy destruction mission was attempted with White Phosphorus and thermite grenades (See Lessons Learned this report).

7. 8 December 1967 - An HPD team conducted a search of six areas northeast of LOC NHVN. A total of thirty-five (35) hotspots were recorded and reported to the G2 Air. A courtesy destruction mission was conducted for the Support Dams and Replacement Training School on Chemical equipment. A CS drop team dropped sixty (60) drums of CS-1 on VC infiltration routes, via XU925820 and XU925295.

8. 9 December 1967 - An HPD team conducted a search of six (6) areas, three northeast of LOC NHVN and one southeast of QUAN LOI. A total of twenty-five (25) hotspots were recorded and reported to the G2 Air. A CS drop team dropped sixty (60) drums of CS-1 on VC infiltration routes, via XU925805 and XU925219.

9. 10 December 1967 - An HPD team conducted a search of one area west of HUN. A total of thirty-six (36) hotspots were recorded and reported to the G2 Air. A courtesy Chemical inspection was conducted for the 1st Battalion, 18th Infantry at QUAN LOI.
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11 December 1967 - An MPD team conducted a search of two (2) areas, one northwest of LOC PHINH and one southwest of AN LOC. A total of thirty-nine (39) hotspots were recorded and reported to the G2 Air. A defoliation team conducted defoliation operations around the DI AN Base Camp perimeter.

12 December 1967 - An MPD team conducted a search of four (4) areas, one northwest of LAI KEK and three northeast of PHUC BINH. A total of fifty-three (53) hotspots were recorded and reported to the G2 Air.

13 December 1967 - An MPD team conducted a search of three (3) areas, one west of CHON THANH, one east of AN LOC, and one northeast of PHUC BINH. A total of fifty-two (52) hotspots were recorded and reported to the G2 Air. A defoliation team conducted defoliation operations around the LAI KEK Base Camp perimeter.

14 December 1967 - An MPD team conducted a search of six (6) areas, three northwest of PHUC BINH, two southeast of LOC PHINH and one northeast of PHUC BINH. A total of fifty-eight (58) hotspots were recorded and reported to the G2 Air.

15 December 1967 - An MPD team conducted a search of three (3) areas, one west of PHUC BINH, one northwest of AN LOC, and one west of CHON THANH. A total of forty-nine (49) hotspots were recorded and reported to the G2 Air. A CS drop team dropped thirty (30) drums of CS-1 on a fortified area, via XT953600.

16 December 1967 - An MPD team conducted a search of three (3) areas, one west of PHUC BINH and one southwest of AN LOC. A total of fifty-one (51) hotspots were recorded and reported to the G2 Air.

17 December 1967 - An MPD team conducted a search of three (3) areas, one west of CHON THANH, one east of PHUC BINH, and one west of PHUC BINH. A CS drop team dropped thirty (30) drums of CS-1 on a fortified area, via YU913136.

18 December 1967 - An MPD team conducted a search of one (1) area, northeast of PHUC BINH. A total of seventeen (17) hotspots were recorded and reported to the G2 Air. A test on Pileo Field expedients (Fougesol) was conducted at the DI AN Base Camp (See Lessons Learned this report). A CS drop team dropped thirty (30) drums of CS-1 on a base camp, via YP199989.

19 December 1967 - An MPD team conducted a search of three (3) areas, two southeast of AN LOC and one northwest of PHUC BINH. A total of twenty-six (26) hotspots were recorded and reported to the G2 Air. A CS drop team dropped thirty (30) drums of CS-1 on Viet Cong gardens, via XM925164.

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1. 20 December 1967 - An HPD team conducted a search of three (3) areas, one each, north and northeast of PHUOC BINH and one west of QUAN LOI. A total of eighty-one (81) hotspots were recorded and reported to the G2 Air.

2. 21 December 1967 - An HPD team conducted a search of three (3) areas, northeast of PHUOC BINH. A total of seventy-six (76) hotspots were recorded and reported to the G2 Air. A CS drop team dropped thirty (30) drums of CS-1 on a base camp, vic XU919101.

3. 22 December 1967 - An HPD team conducted a search of four (4) areas, three northwest of PHUOC BINH and one west of PHUOC BINH. A total of seventeen (17) hotspots were recorded and reported to the G2 Air. A CS drop team dropped thirty (30) drums of CS-1 on a base camp, vic XU919101.

4. 23 December 1967 - An HPD team conducted a search of three (3) areas, one northwest of LOC MINT, three north, east of PHUOC BINH, and one northeast of LOC MINH. A total of nine (9) hotspots were recorded and reported to the G2 Air. A CS drop team dropped thirty (30) drums of CS-1 on a base camp, vic XU919101.

5. 24 December 1967 - A CS drop team dropped thirty (30) drums of CS-1 on a base camp, vic XU919101.

6. 25 December 1967 - An HPD team conducted a search of six (6) areas, one northwest of AN LOC, three northwest of PHUOC BINH, one northeast of PHUOC BINH, and one northeast of LOC MINH. A total of thirty-six (36) hotspots were recorded and reported to the G2 Air.

7. 26 December 1967 - An HPD team conducted a search of two (2) areas west of PHUOC BINH. A total of four hotspots were recorded and reported to the G2 Air. A courtesy chemical inspection was conducted for the 1st Battalion, 28th Infantry at QUAN LOI. A CS drop team dropped thirty (30) drums of CS-1 on a base camp, vic XU928328.

8. 27 December 1967 - An HPD team conducted a search of two (2) areas, one north of PHUOC BINH and one southwest of AN LOC. A total of one hundred and nineteen (119) hotspots were recorded and reported to the G2 Air. A CS drop team dropped thirty (30) drums of CS-1 on a base camp, vic XU928328.

9. 28 December 1967 - An HPD team conducted a search of five areas, three south of PHUOC BINH, and two east of AN LOC. A total of seventy-nine (79) hotspots were recorded and reported to the G2 Air. A CS drop team dropped thirty (30) drums of CS-1 on a base camp, vic XU928328.
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111. 29 December 1967 - An HPD team conducted a search of three (3) areas, west of CHON THANH. A total of thirty-five (35) hotspots were recorded and reported to the 62 Air. A CS drop team dropped thirty (30) drums of CS-1 on Viet Cong gardens, via XU955116.

113. 30 December 1967 - An HPD team conducted a search of three (3) areas, west south of PHUOC HIE and one west of CHON THANH. A CS drop team dropped thirty (30) drums of CS-1 on a base camp, via XU665065.

114. 31 December 1967 - An HPD team conducted a search of four (4) areas, three west of CHON THANH and one southeast of AN LOC. A total of fifty-one (51) hotspots were recorded and reported to the 62 Air. A CS drop team dropped thirty (30) drums of CS-1 on a base camp, via XU970407.

115. 1 January 1968 - An HPD team conducted a search of three (3) areas, one west of LAI ME, one northeast of LAI MIE, and one west of SONR RE. A total of thirty-one (31) hotspots were recorded and reported to the 62 Air.

116. 2 January 1968 - An HPD team conducted a search of three (3) areas, one west of LAI ME, one northeast of LAI MIE, and one west of CHON THANH. A total of eight (8) hotspots were recorded and reported to the 62 Air. A courtesy chemical inspection was conducted for A Battery, 29th Artillery at MIE KHE. A CS drop team dropped thirty (30) drums of CS-1 on a base camp, via XU965569.

117. 3 January 1968 - An HPD team conducted a search of one (1) area, west of AN LOC. A total of twenty-three (23) hotspots were recorded and reported to the 62 Air. A CS drop team dropped thirty (30) drums of CS-1 on a base camp, via XU971099.

118. 4 January 1968 - An HPD team conducted a search of two (2) areas west of AN LOC. A total of forty-seven (47) hotspots were recorded and reported to the 62 Air. A CS drop team dropped thirty (30) drums of CS-1 on a fortified supply area, via XU965792.

119. 5 January 1968 - An HPD team conducted a search of three (3) areas, two west of LAI ME and one west of CHON THANH. A total of forty-five (45) hotspots were recorded and reported to the 62 Air. A CS drop team dropped thirty (30) drums of CS-1 on a supply route, via XU955117.

120. 6 January 1968 - An HPD team conducted a search of one area west of AN LOC. A total of thirty (30) hotspots were recorded and reported to the 62 Air. A CS drop team dropped thirty (30) drums of CS-1 on a base camp, via XU665565.

121. 7 January 1968 - A CS drop team dropped thirty (30) drums of CS-1 on a base camp, via XU665565.
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ppp. 8 January 1968 - An ADP team conducted a search of four (4) areas, one west of AN LOC, one west of CHAN THAN, one west of LAI KHE, and one east of LAI KHE. A total of ten (10) hotspots were recorded and reported to the G2 Air. A smoke team provided a smoke screen for an air assault conducted northeast of CHAN LOI (see Lessons Learned this report). A CS drop team dropped thirty (30) drums of CS-1 on a base camp, vic XT667732.

qqq. 9 January 1968 - An ADP team conducted a search of two (2) areas, one east of CHAN LOI, and one west of AN LOC. A total of forty-nine (49) hotspots were recorded and reported to the G2 Air. A smoke team provided a smoke screen for an air assault conducted north east of LAI KHE. A CS drop team dropped thirty (30) drums of CS-1 on a base camp, vic XT664566.

rrr. 10 January 1968 - An ADP team conducted a search of three (3) areas, two west of AN LOC and one east of CHAN LOI. A total of twenty-six (26) hotspots were recorded and reported to the G2 Air. A smoke team provided a smoke screen for an air assault conducted southeast of LAI KHE. A CS drop team dropped thirty (30) drums of CS-1 on Viet Cong wire lots, vic YN601710.

ss. 11 January 1968 - An ADP team conducted a search of one (1) area north northwest of LAI PHU. A total of thirteen (13) hotspots were recorded and reported to the G2 Air. A CS drop team dropped thirty (30) drums of CS-1 on a base camp, vic XT667789.

ttt. 12 January 1968 - An ADP team conducted a search of two (2) areas, one east of CHAN LOI and one west of LAI KHE. A total of sixty-one (61) hotspots were recorded and reported to the G2 Air. A CS drop team dropped thirty (30) drums of CS-1 on a base camp, vic XT668763.

uuu. 13 January 1968 - An ADP team conducted a search of two (2) areas, one east of CHAN LOI and one west of LAI PHU. A total of fifteen (15) hotspots were recorded and reported to the G2 Air. A courtesy chemical inspection was conducted for 2 Battery, 2d Battalion, 13th Artillery at PHI LOI. A CS drop team dropped thirty (30) drums of CS-1 on a base camp, vic XT668856.

vvv. 14 January 1968 - An ADP team conducted a search of three (3) areas, one east of CHAN LOI, one north of LAI KHE, and one west of CHAN THAN. A total of fourteen (14) hotspots were recorded and reported to the G2 Air. A CS drop team dropped thirty (30) drums of CS-1 on a base camp, vic XT670950.

www. 15 January 1968 - An ADP team conducted a search of three (3) areas, two west of CHAN THAN and one north of BING XAI. A total of five (5) hotspots were recorded and reported to the G2 Air.
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16 January 1968 - An HPD team conducted a search of four (4) areas, three west of CHON TYPH and one south of QUAN LOI. A total of eighteen (18) hotspots were recorded and reported to the G2 Air. A smoke team provided a smoke screen for an air assault.

17 January 1968 - An HPD team conducted a search of three (3) areas, one east of CHOM LOI, one north of QUAN LOI, and one west of CHOM TYPH. A total of eight (8) hotspots were recorded and reported to the G2 Air. A CS drop team dropped thirty (30) drums of CS-1 on a base camp vic XT663507.

18 January 1968 - An HPD team conducted a search of three (3) areas, one north of QUAN LOI, one north of DOI XDAL, and one east of QUAN LOI.

19 January 1968 - An HPD team conducted a search of three (3) areas, two north of LAI KHE and one north of QUAN LOI. A total of sixty-four (64) hotspots were recorded and reported to the G2 Air. A CS drop team dropped thirty (30) drums of CS-1 on a river crossing, vic YWI7079.

20 January 1968 - An HPD team conducted a search of three (3) areas, one north of LAI KHE, one east of LAI KHE, and one east of QUAN LOI. A total of fifty-five (55) hotspots were recorded and reported to the G2 Air. A CS drop team dropped thirty (30) drums of CS-1 on a river crossing, vic XT869194.

21 January 1968 - An HPD team conducted a search of three (3) areas, two east of CHOM TYPH, and one north of LAI KHE. A total of sixteen (16) hotspots were recorded and reported to the G2 Air. A smoke team provided a smoke screen for an air assault.

22 January 1968 - A CS drop team dropped thirty (30) drums of CS-1 on a river crossing, vic XT863601.

23 January 1968 - An HPD team conducted a search of six (6) areas, three east of QUAN LOI, one east of CHOM TYPH, one south of QUAN LOI, and one west of DOI XDAL. A total of five (5) hotspots were recorded and reported to the G2 Air. A smoke team provided a smoke screen for an air assault conducted northeast of LAI KHE. A CS drop team dropped thirty (30) drums of CS-1 on a base camp, vic XT945856.

24 January 1968 - An HPD team conducted a search of four (4) areas, two west of AN LOC, one west of CHOM TYPH, and one south of QUAN LOI. A total of nine (9) hotspots were recorded and reported to the G2 Air. A CS drop team dropped thirty (30) drums of CS-1 on a base camp, vic XT971856.
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Sggs.  26 January 1968 - An MTD team conducted a search of
four (4) areas, one west of QUAN VYH, one east of QUAN VYH,
and one west of QUAN LOI, and one west of AN LOC. A total of fourteen
(14) hotspots were recorded and reported to the 92 Air. A CS drop
team dropped thirty (30) drums of CS-1 on a base camp, vic XT970870.

hthh.  27 January 1968 - An MTD team conducted a search of two
(2) areas, north of LAL NNA. A total of fourteen (14) hotspots were
recorded and reported to the 92 Air. A search was conducted of a new
MTD mounting system. (See Lessons Learned this report).

illl.  28 January 1968 - An MTD team conducted a search of
three (3) areas, two east of QUAN LOI and one east of LOC NUN. A
total of twenty-five (25) hotspots were recorded and reported to the
92 Air.

iilll.  29 January 1968 - An MTD team conducted a search of
three areas, two southeast of QUAN LOI, and one east of LOC NUN. A
total of fifteen-five (55) hotspots were recorded and reported to the
92 Air.

rrr.  30 January 1968 - An MTD team conducted a search of
four (4) areas, one east of QUAN LOI, two southeast of QUAN LOI, and
one west of LOC NUN. A total of fourteen (14) hotspots were recorded
and reported to the 92 Air.

3.  (c) During the reporting period, LTC D. F. Longo, served
as the Division Chemical Officer. A summary of activities during this
reporting period shows:

  a.  235 Bloodhound missions flown.
  b.  82.8 Tons of CS-1 dropped on enemy targets.
  c.  50 Defoliation sorties flown.
  d.  6 Smoke sorties.

2.  (c) Listed below are the activities of the 242d Chemical
Detachment (CBRC). The Detachment was commanded by LT Robert B.
Montgomery throughout the reporting period.

a.  The detachment continued to process 1st Infantry Division
defoliation requests and monitor the status of defoliation programs
of the 1st Infantry Division and those of 3IV Corps which lie within
the 1st Infantry Division area of interest.

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b. The detachment provided personnel as crew members on defoliation missions conducted around the perimeters of the base camps in the 1st Infantry Division's Tactical Area of Interest.

c. The detachment provided personnel as crew members for the CS drum drops conducted by the 1st Infantry Division Chemical Section.

d. The detachment provided personnel as MFD operators on the personnel detection missions flown by the Division Chemical Section.

5. (c) Listed below are the activities of the 266th Chemical Platoon (26). The platoon was commanded by LT Richard B. Haley throughout the reporting period.

   a. The platoon provided personnel as crew members for CS drops. They also continued to store and modify CS drums with fuzing and bursting systems for CS drops.

   b. The platoon continued its mission as the Ready Reaction Force for the DF AN Zone Expo. Throughout the reporting period, the platoon conducted search and destroy, road runner, convoy escort, road block clearing, and tunnel clearing operations.

   c. The platoon provided personnel to inspect, repair, and service portable flame throwers for the battalions of the 2d Brigade.

6. (c) Lessons Learned

   TITLE: Flame Fuel Test

   DISCUSSION: Members of the Division Chemical Section and the 266th Chemical Platoon conducted a test to determine the life expectancy of thickened fuel used for flame field expedients under climate conditions experienced in Vietnam during the dry season.

   Four (4) cans of H-1 thickener were mixed with 50 gallons of water, strained, gasoline to yield a six percent (6%) thickened fuel mix. The thickened fuel was placed into ten, 5 gallon metal cans. The containers were sealed and placed inside a bunker to simulate employment as a flame field expedient.

   The day after the fuel was mixed and every seven days thereafter, one can of the thickened fuel was opened, checked for fuel stability and detonated as a flame field expedient.

   OBSERVATION: The fuel remained stable and functioned properly as a flame field expedient for six full weeks (42 days). At the beginning of the seventh week the fuel started to separate and at the

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End of the seventh week the fuel had completely broken down.

The results of the test indicate that when thickened fuel is made from strained, water free gasoline, it can be expected to last approximately six weeks. The fuel should be kept in closed containers to prevent humidity breaking down the thickened fuel.

**ITEM:** Flame Field Expedient (Fougasse) Test

**DISCUSSION:** Personnel from the Division Chemical Section experimented with flame field expedients to determine what type container, igniter, and burster would make the best fougasse. Primary considerations were facility of construction, availability of materials, stability of the thickened fuel, and the range and spread of the flame when the fougasse was detonated.

**OBSESSION:** The fougasse as described in enclosure 1 has a range up to 75 meters, is easily constructed from available materials and thus fits all the criteria which the Division Chemical Section established for a good fougasse munition.

**ITEM:** Smoke Missions

**DISCUSSION:** When the "Smoky Bear" smoke aircraft which normally provides smoke cover for air assault operations was declaimed because of hostile action, the Division Chemical Section provided the material, techniques, and personnel for LZ smoke screening operations. After a few missions were flown the techniques for employing smoke pots for LZ screening were refined so that all future air assault operations can be assured of a protective smoke screen.

**OBSERVATIONS:** Smoke screens are provided by using sixteen 30 pound GC smoke pots. One man sits at each door of a C-47 aircraft igniting smoke pots and rolling them out the doors, while a third person keeps them supplied with smoke pots. The aircraft flies at an altitude of 50 feet and a speed of 50 knots. The resulting smoke screen can be expected to cover an area of from 500 to 1500 meters and length of 100 to 1000 meters in width depending on weather conditions. Because the smoke pots can not be extinguished, extreme care must be taken in judging wind speed, wind direction, and temperature gradient to prevent the smoke from covering the LZ. Four additional smoke pots are taken on the mission and are used when necessary to fill any gaps which may occur in the smoke screen due to non-functioning pots.

**ITEM:** New GC Drum Firing System

**DISCUSSION:** Since the concept of employing bulk GC on enemy positions was developed by the 1st Infantry Division Chemical Section, the Chemical Section was plagued by an unacceptably high dud rate. The
Division Chemical Section initiated a program of experimenting with new bursting systems decreasing the dual rate with each new improvement. Finally, a new bursting system was developed during this quarter, which is almost completely dual proof.

OBSERVATIONS: Since the development of the new CS drum bursting system on 5 November 1967 (See Inc 2), the Division Chemical Section has dropped a total of 1000 drums with only 5 duals. This represents a dual rate of only .275, a significant decrease from 3% to 5% dual rate inherent in the former bursting system.

ITEM: New Mounting of CS3 HFD in UH-1D Aircraft

DISCUSSION: Until the latter part of this quarter the Division Chemical Section was using two HFD's on personnel detection (Bloodhound) missions and carrying a third HFD as a spare in the event of mechanical failure. Due to the lack of spare parts, especially printed circuit boards, the Division Chemical Section currently has twelve (12) HFD's in a deadlined status, and only four (4) HFD's operational. Since no spare parts will be available in country until April FY68, it was necessary to economize on the number of HFD's used on Bloodhound missions thus limiting the number of hours each HFD is actually used and prolonging the life of the printed circuit boards in the HFD's which are still operational. A new mounting system is currently being evaluated which will permit the use of one HFD instead of two, an additional spare is still being carried on missions, but is not utilized unless there is a mechanical failure in the operating HFD.

OBSERVATION: Although the new mounting system is still undergoing evaluation (Sec Inc 3), it promises to be just as effective as the original mounting method using two HFD's with their probes mounted on either aircraft landing skid.

ITEM: Destruction of Viet Cong Rice by Degradation

DISCUSSION: From 11 to 17 November 1967, members of the Division Chemical Section conducted a destruction mission against Viet Cong brown rice in an area east of LAI PHU commonly known as RACH THI. During this period twenty-one (21) cordites of 3-l water and blue defoliant mix, about 3100 gallons, were sprayed over the rice crops. The defoliant was sprayed from a UH-1D aircraft at an altitude of 25 feet, utilizing a 200 gallon fiberglass tank, salvage APC bilge pump and swivel boom mounted on the landing skid of the aircraft.

OBSERVATION: Of 750 acres of land sprayed, over 250 acres of rice were destroyed. This is sufficient rice, 4.1 tons per acre, to feed 5000 Viet Cong for one year. Convincing evidence that the rice destruction program hurt the Viet Cong food supply is the fact that on
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nearly every sortie made over the rice the Viet Cong placed snipers in the treeline who fired small arms and automatic weapons at the defoliation ship and suppressive fires had to be continually placed into the treeline by the light fire team which accompanied the mission.

ITEM 1: Rice Contamination using Five Gallon Plastic CS Containers

DISCUSSION: Acting on a visual reconnaissance report that the Viet Cong were harvesting rice in an area northwest of LAI KHE. Members of the Division Chemical Section attempted to contaminate the rice by a CS mini-drop since the area and the amount of rice was too small to warrant a full scale 30 drum CS drop. The mini-drop was conducted from a HELD aircraft at an altitude of 1500 feet and a speed of 10 knots utilizing twenty (20) five gallon plastic containers of CS wrapped with a double strand of detonating cord and double fused with igniters, time fuse, and blasting caps.

OBSERVATION: Since each container held only eight (8) pounds of CS, sufficient CS could not be put on the rice to obtain adequate contamination. The containers were also too light in weight to overcome wind resistance, and it was extremely difficult to place the containers accurately on the target area. It was estimated that only about 25% of the target area was effectively contaminated.

ITEM 2: Rice Destruction with WP and Thermite

DISCUSSION: When harvested Viet Cong grown rice was sighted by Visual Reconnaissance in an area east of LAI KHE, the Division Chemical Section was requested by the Division G2 to destroy the rice. Since the area in question was again too small for a full scale CS drop, and the CS mini-drop proved relatively ineffective, it was decided to attempt to burn the rice since it had been harvested and left in piles to dry. A team from the Division Chemical Section supplied with one case each of WP and thermite grenades flew over the area in an HHLD aircraft at an altitude of 50 feet and a speed of 50 knots and threw the grenades into the piles of drying rice.

OBSERVATION: The WP and thermite grenades successfully ignited individual piles of rice, but the rice paddies were still to wet to keep the fire spreading. The Division Chemical Section recommended to the Division G2 that the area be targeted for a napalm airstrike after the paddies had been given a few more days to dry.

HERBERT P. OHM
LTC, CmlC
Division Chemical Officer

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AVDS-51: 3 January 1768

SUBJECT: FOJCASSE

1. Materials required.
   a. 2 Claymores.
   b. 1 WP grenade.
   c. 1 Complete 55 gallon drum filled with 60% napalm mix.

2. Results - 75 meter range.

3. Special instructions.
   a. At least three layers of sandbags for tamping.
   b. Place bung hole on the upper side of drum. Loosen plug to allow for expansion.

4. Illustration.

   diagram of WP grenade and Claymores (2) pointed toward enemy
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TO: Commanding General
1st Inf Div
ATTN: AOO-T
APO San Francisco 96345

13 February 1968

SUBJECT: Operational Reports-Lessons Learned

1. Section 1. Significant Activities

A. The 1st Aviation Battalion continued to furnish general aviation support to the 1st Infantry Division throughout the period of this report. A UH-1D was missioned on a daily basis to provide seven (7) MI-16s for the Division C2, Division Artillery, Support Command, the 1st Engineer Battalion, G-2 surveillance operations (bloodhound), psychological operations, and logistical and administrative lifts in support of divisional maneuver elements. The Company also provided tactical support through limited five (5) aircraft airborne operations and by providing highly responsive, discriminatory, aerial fire support with armed helicopters. The Company provided light observation helicopters for convoy control, liaison, and significant assistance to the brigade aviation sections in the form of looted aircraft. The Aerial Surveillance and Target Acquisition Platoon supported the C-2's intelligence-gathering efforts by providing extensive electro-optic surveillance of the Division TAC. Increased emphasis has been placed on the visual and photographic reconnaissance capabilities of the OV-1 aircraft. The 1st Pathfinder Detachment performed extensive air-traffic control operations for Division forward airfields and supported troop and logistical helicopter moves.

b. Battalion command structure at the end of the reporting period:

LTC Robert H. Siegert, Jr., Commanding

Upt Lee C. Poindexter, CO, HHC

Maj Donald D. Wilkes, XO, 3-3

Maj Clyde H. Bryan, GO, Co B

Maj Larry E. Love, S-3

c. Narrative of tactical Operations and problems encountered:

(1) The reporting period is characterized by a continuation of Operation Shenandoah II. By upper contingency operations, Route 13 security operations, and operations in the Lam Son Tunnel. Support rendered was typical of that listed in Section 1 above.

(a) Aviation support rendered during Shenandoah II was characterized by extensive use of armed helicopters in fire support roles during Viet Cong initiated attacks. Two light fire teams were provided by a 6th, 1st Aviation Battalion on a continuous basis. Each fire team (one positioned at Quan Loi and one at Phu Loi) was held in a five minute reaction status ready to respond when needed. The "heloes" responsiveness, proximity to the LEV High area, and ability to deliver large volumes of accurate fire resulted in their being credited by ground commanders with breaking up several attacks. As the operation progressed, light fire teams from 5 tro (Air), 1st Squadron 4th
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SUBJECT: Operational Reports—Losses Incurred

Covertical and teams from 11 FFV augmented the efforts of the "Rebels" in the Shenandoah II North area. Extensive night resupply and medical evacuation missions were also performed in support of the committed maneuver elements. A Company augmented elements of the 11th Aviation Battalion with five (5) UH-1D's on three (3) air mobile operations and executed one (1) five ship lift to secure a downed 0-10 during Shenendoah II North. The 1st Pathfinder Detachment was employed at Quan Loi and Lec High airstrips to assist in landing control and staging air mobile operations. During the first day of the buildup at Quan Loi aircraft operations exceeded those normally handled during a full month. Traffic control problems were further complicated by a mixture of rotary wing and Air Force fixed wing aircraft. During assault operations it was necessary to hold cargo aircraft for as much as one (1) hour prior to permitting them to land. Traffic was expedited once priorities were established and coordination made with both Army and USAF operations.

(b) Aviation support provided by the 1st Aviation Battalion during the Bu Dop contingency operation was very similar to that provided during Shenandoah II North. The Rebel light fire team positioned at Quan Loi actively supported the committed infantry battalions in a direct fire role. The 1st Pathfinder Detachment was moved to Bu Dop to assist USARV combat control teams with the control of the airstrip. Two (2) Pathfinders received minor wounds as a result of Viet Cong mortar attacks during the action. One (1) air mobile operation was conducted by the 1st Aviation Battalion utilizing lift elements of the 11th Aviation Battalion.

(c) Operations in the Lao Cai area continued to be characterized by cordon and search operations of villages. Extensive use was made of UH-1D loudspeaker aircraft in conjunction with village seals and psychological warfare operations.

(d) Route security operations on Highway 13 utilized the bulk of the flying hours available for the OH-13 light observation helicopters of B Company, 1st Aviation Battalion. The (2) aircraft were committed daily to the Division Provost Marshal for convoy control. Additionally, light fire teams were employed on a standby basis to provide fire support should a convoy be engaged by the Viet Cong.

(e) During each of the operations listed above the UH-1D UIC helicopters proved invaluable to the 03, ABC's and brigade commanders in controlling their tactical elements.

(f) Throughout the period increased utilization was made of the visual and photographic reconnaissance capability of the OH-13 aircraft. Cooperative photography was used extensively to attempt to detect changes and reconnoiter heavily used infiltration routes. The greater utilization of the visual and photographic capabilities of the OH-13's resulted in approximately a 30 per cent increase in flying hours which was supported without difficulty once aviator and maintenance personnel strengths were brought up to authorized manning levels.

(g) Statistical data for the quarter:

1. Rotary wing hours flown: 11,016
2. Rotary wing sorties: 24,980
3. Fixed wing hours flown: 884
4. Fixed wing sorties: 6,113
5. Passengers moved: 38,954
6. Cargo moved (tons): 212

Date: 12-31-73

By: NARA, Date 2-16-73
CONFIDENTIAL

SUBJECT: Operational Reports - Lessons Learned

2. Section II General Comments, Observations and Recommendations.
   a. Personnel:
      (1) Item: Aviation experience level.

      Discussion: The predominance of replacement aviators received during the quarter were on their initialavy assignment, other than school and were new graduates of basic. The general decrease in experience level resulted in the assignment of Lieutenants with no little as five months flying experience as addition Company platoon leaders and warrant Officers as fire team and section leaders.

      Observation: Lack of experience on the part of replacement aviators has affected aviation support provided, not only in the operation of the aircraft but also in appreciation of the support unit's requirements.

   b. Intelligence:
      (1) Item: VC air defense techniques.

      Discussion: The majority of main force Viet Cong forces operating in the 1st Infantry Division will employ passive air defense measures while in base camp areas in order to avoid detection. During Viet Cong initiated attacks, however, maximum use is made of large caliber automatic weapons. Generally the Viet Cong will employ their heavy antiaircraft weapons along likely approach paths between 500 and 1500 meters from the point of contact. Although largely ineffective at night their pattern has been to engage supporting armored helicopters as the firing pass is broken off and the aircraft is turning away from the target area.

      Observation: The effectiveness of the VC anti-aircraft fire against supporting aircraft has been reduced by operating with only rotating beams marking the aircraft. Heavy cover has also been successfully engaged and neutralized by carrying the position into firing at aircraft operating with all lights on at a higher altitude while the searchlight of the fire team operates completely blanked out, positions itself at low level to support the first aircraft.

   c. Operations:
      (1) Item: Dry season operations.

      Discussion: The greatest single factor affecting operations during the recent period has been dust or smoke. The down wash created by helicopters operating in dusty cross-jamming equipment and personnel as a result of loss of ground reference.

      Observation: Planning for and actual preparation of surfaces with a dust palliative on helipads, assault landing, and refueling areas must begin immediately prior to the onset of the dry season. Selective burning of landing zones well prior to conducting operations can often reduce dust to levels enabling aircraft to approach from positions at the point of contact by using armament and operational hazards caused by smoke and ash as a result of fires started by the aircraft or artillery preparations.

      (2) Item: Sustained Armed Helicopter Operations.

      Discussion: The greatest difficulty in sustaining armed helicopter operations during periods of above normal utilization has been in maintaining the weapons systems in operating order. Excessive down time has been experienced as a result of mechanical and hydraulic failures of the weapons system. Subsystem failures of the weapons themselves (i.e., 20mm Nudipana) are normally operator induced or minor material failures are due to the necessary maintenance.
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SUBJECT: Operational Reports-Lessons Learned

Normally easily correctable. Pylon failure requires evacuation to direct
Support maintenance for repair and often have to be referred to General Support
level maintenance. As organizational maintenance usually only installation and
removal of the pylon and adjustment of bore sight is permitted.

Observation: Units authorized armed helicopter platforms
should be permitted to maintain one backup armament pylon at unit level.
Under normal circumstances a pylon can be removed, replaced, weapon system
mounted, and boresighted, and returned to service in approximately one hour.

(3) Item: Forward Airstrip Control:

Discussion: During operations requiring rapid build up
of a logistical base and simultaneous performance of tactical helicopter moves
from the same airfield, extensive coordination is required between logistical
and operational planners. During the build up at Khan Neshir for Embedded Air
North it became apparent that air traffic control agencies must also be aware
of plans and time schedules so that traffic priorities can be established.
On occasions during that operation it was necessary to hold large aircraft for
as long as one hour before landing to avoid interfering with the rapid
completion of logistical mobile operations.

Observation: Early liaison and coordination must be estab-
lished between all principals when extensive logistical and tactical operations
are planned from forward airstrips. It may be necessary to position an officer
knowledgeable of all phases of the operation and with authority to designate
individual priorities with air traffic control personnel in order to prevent
delays that could possibly be caused by a single tower operator, concerned
only with the safe operation of the airfield.

C. W. SLOVITZKI

IN, Int

Commanding

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CONFIDENTIAL
SUBJECT: Operational Report - Lessons Learned

TO: Commanding General
   1st Infantry Division
   ATTN: AGOD-TT-MID

1. Reference: USARV Reg. 1-19, 3 Nov 1967

2. Section I. Significant organizational or unit activities
   a. (1) Number of days engaged in training - 20
   (2) Number of days engaged in troop movement - 3
   (3) Number of days engaged in operations - 69
   b. No major difficulties were encountered during tactical movement.
   c. Changes in technique:
      (1) After the Infantry has gone into a Landing Zone, the engineer platoon is normally send to enlarge the LZ or clear fields of fire. Difficulties develop when the LZ team is committed without an engineer reconnaissance or accurate description of the vegetation. Since a limited amount of tools and demolitions can accompany an LZ team, advance information regarding the type of vegetation and purpose of the LZ is essential. For example, in a heavily forested area, chain saws and demolitions are most effective. In thick bamboo areas, chain saws are almost useless, and Bangalore torpedoes, machetes, and brush hooks are utilized. The weight lifting capacity of the aircraft precludes taking sufficient material and equipment to handle all types of vegetation.
      (2) It is suggested that mine detectors not be accounted for by serial number. Because of large scale road opening operations, the demand for mine detectors has increased. Engineer personnel are rotated between base camps and NDP's with the detectors remaining at the NDP for the replacements to use. When deadlined, the detectors are sent to support maintenance by the unit to which the mine sweeps are attached. The supported Infantry unit often furnishes a replacement detector. Accountability is further complicated when supported infantry units exchange locations while engineer mine sweeping parties remain in assigned NDP's. Consequently the number of detectors in the hands of the mine detecting teams remains constant, but the detectors are normally not the ones with which the detecting teams began the operation. It is extremely difficult, if not impossible, for units to account for detectors by serial number.

3. Section II
   a. Part I. Observations
      (1) Personnel: None
      (2) Operations:
         (a) Item: SOP for NCOIC of mine sweep parties

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10 February 1968

Discussion: When mine sweep parties (NCOIC, six men and three detectors) are attached to Infantry units, they are sometimes hurried and pushed to keep a schedule. This is usually the fault of leaders at company level and below. It is difficult for a Sergeant E-5 or E-6 to explain to a higher ranking NCO or Officer that the road cannot be swept safely at the desired speed. It is not understood that the length of time needed to sweep a portion of road varies greatly according to road surface, amount of metallic pieces in the area, weather conditions, and enemy. Recently B Company, 1st Engineer Battalion, conducted a series of tests in which Viet Cong firing devices for electrically detonated non-metallic mines were buried at depths ranging from two to twelve inches. The results showed that an experienced man moving rapidly could detect the device buried at six inches with difficulty, but he could not detect it buried at twelve inches. Further, an inexperienced man usually did not detect the device buried at six inches if hurried. When operating at a slow pace an experienced man could detect the device buried at twelve inches with difficulty, and the inexperienced man could detect the device buried at six inches with difficulty.

Observation: When not hurried, mine detecting team efficiency is increased, and the number of undetected mines is reduced.

(b) Item: Constructive use of demolitions

Discussion: On a recent operation, the site preparation of a 70' timber trestle bridge was accomplished with demolitions. This technique proved to be advantageous in that construction time was reduced by one day and eliminated the need to move engineer construction equipment to the site.

Observation: Demolitions can be used for construction purposes as well as for destruction purposes.

(c) Item: Expedient Road Repair

Discussion: During a recent operation on Route 21C, numerous 3'x4'x4' checkerboard cuts were found in the road. Because of the wet weather and long haul distance from a laterite source, filling the holes with laterite would not be a reasonable solution. Instead, the holes were filled with locally cut timber and capped with laterite. A stable passable road bed was produced in a short period.

Observation: Timber can be used to fill cuts in enemy damaged roads where quick repairs are required and long term use of the road is not envisioned.

(d) Item: Eiffel Bridge Removal

Discussion: Eiffel bridges up to 120' long can be removed intact and without damage by removing the decking, raising one end off the abutments, applying grease on the panel bottoms, and dragging the bridge out with the winch of a D-7C dozer. The bridge can then be towed from the site and left to be dismantled by the local Vietnamese Department of Public Works for future use.

Observation: Removal of Eiffel bridges intact improves Vietnamese-US relations and eliminates debris at the construction site which would result if demolitions were used.

(c) Item: Air lifting of precut timber trestle bridge components

Discussion: This unit has flown precut timber trestle bridge components to field sites with excellent results. Initially, a ground reconnaissance is conducted and accurate measurements are obtained.
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SUBJECT: Operational Report-Lessons Learned

Stringers, caps, sills, footers, and deck can be precut at base camps. All timbers are flown to the construction site externally loaded on CH-47 aircraft. In one instance, a 70-foot Class 50 bridge was constructed in this manner in one day.

Observation: With detailed planning and coordination, this technique can save valuable time, requires minimum construction equipment at the bridge site, and does not require extensive road clearing operations to obtain access to the site.

(3) Training and Organization

Item: Method of instruction for ARVN training.

Discussion: Classes were initially given by a US committee through an interpreter to ARVN Officers and NCO's. Vietnamese leaders then gave the class to their personnel while the committee observed. After classroom instruction, practical exercises were conducted with emphasis on leadership and task organization.

Observation: In addition to increasing the pride and knowledge of the ARVN leaders, this method helped the ARVN enlisted men understand the instruction better.

(4) Intelligence - None

(5) Logistics

Item: Use of flexible hydraulic hoses as field expedient.

Discussion: Frequently metal hydraulic hoses on engineer equipment require replacement while in the field. By taking various sizes of high pressure rubber hose to the field and cutting it to the desired length, rubber hose is an effective substitute for the metallic hose. This method cuts repair time and eliminates the waiting period if specific hoses are not on hand.

Observation: This is a field expedient, but it will suffice until repair parts arrive.

(6) Other - None

b. Part II - Recommendations: None other than those already stated in Paragraphs 2a and 3a.

FOR THE COMMANDER:

JOHN A. STEPHENSON
1LT. CE
Adjutant

DECLASSIFIED PER EXECUTIVE ORDER 12356, Section3.3, and 873-341
TO: COMMANDING GENERAL
1st Infantry Division
APO: AVDB-TT-MD
APO 96345

1. (C) Part I. Introduction

a. During this reporting period the 121st Signal Battalion continued to provide communications support for Operation Shenandoah II, which terminated on 19 November 1967.

Upon conclusion of Shenandoah II, the 121st Signal Battalion continued to provide communications support for divisional elements at Loc Ninh, Bu Dop and Song Be.

The Forward Area Signal Center Platoons continued to support their respective brigades at their forward and rear locations.

During this period, the 1st Forward Area Signal Center Platoon discontinued service at Phuoc Vinh and established its signal center at Quan Loi in support of the 1st Brigade.

b. Component Unit Disposition and Commanding Officers:

| 121st Sig Bn | LTC Francis J. Sheehan | Lai Kne |
| Company A | CPT Earl D. Weeks | Lai Kne |
| Company B | CPT Harvey J. Reynolds | Phu Loi |
| 1st Platoon | CPT Peter F. Brawu | Phooc Vinh |
| 2nd Platoon | 1LT William H. Brown | Di An |
| 3rd Platoon | 1LT Kenneth W. Kopecky | Lai Kne |
| Company C | CPT James A. Oliver | Di An |

2. (C) Part II. Narrative of Tactical Operations

a. During the past quarter, the Battalion provided communications support for a division operation - Shenandoah II.

b. The communications for Shenandoah II was a continuation of the support which was established for Operation Portland. Additional systems were established to support elements of the 1st Brigade operating out of Loc Ninh, Bu Dop and Song Be. The 12 channel radio relay systems for these locations were provided by Company A.

c. The AN/ARC - 112 radio relay system which was installed from Chom Thanh to Loi Khe remained in place to support 2/2 Inf.

3. (U) Part III. Intelligence: None
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SUBJECT: Operation Report on Lessons Learned (RG 0 CSFOR-63)
for the quarter 1 November 1967 - 31 January 1968 (U)

4. (c) Part IV. Personnel

a. Strength:

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b. Replacements: Replacements were slow in arriving during the Christmas holidays and resulted in a drop in troop strength to 83%. These losses, however, were quickly made up in the four weeks following the holidays.

c. Discipline: The following judicial and non-judicial punishments have been administered during this reporting period:

(1) Punishments under Article 15, UCMJ.

(a) Censure: 18
(b) Insubordinate conduct towards NCO: 4
(c) Failure to obey Regulations: 10
(d) Dereliction of duty: 3
(e) Assault: 1
(f) Drunk on Duty: 3
(g) Disorderly in public places: 2
(h) Discharge of weapon: 1
(i) Improper uniform: 1
(j) Misappropriation of Government property: 1

(2) Special Courts-Martial:

(a) Noncompliance: 1

d. Civic Assistance.

(1) The Battalion continued to receive support from individuals and organisations in the United States in support of the Battalion's Civic Action program. This assistance consisted of money, clothing, hygiene, school supplies, toys and candy.

(2) During this reporting period, the Battalion supplied the
     Orphanage with approximately 10 gallons of gas, 4 tons of food stuffs,
     1 ton of clothes, 200 pounds of soap, 250 pounds of toothpaste and over
     700 toothbrushes. Ten ambulance runs were made and 150 orphans were brought
     into the DA’s Dispensary for treatment.

(3) The water pump which was installed last quarter was
     repaired. Future plans for the orphanage include the installation of a
     new water pump.

(4) The Battalion had a Christmas party for the orphanage in
     Saigon. It was attended by the Commander and other officers and enlisted
     men of the Battalion.
3 February 1968

SUBJECT: Operation Report on Lessons Learned (RCS CSFOR-65) for the quarter 1 November 1967 - 31 January 1968 (U)

e. Morale and Personnel Services: Morale continues to be high, there have been 74% R&R in and out of country during this period. Major personnel services provided that have been processed during this reporting period are as follows:

- Application for extension of overseas tour: 64
- Application for special and ordinary leave: 10
- Application for reassignment: 43
- Application for ID cards: 70
- Assignment preference statements: 120
- Reclassification action: 30
- Application for curtailment of tour: 1
- Allotment authorization: 227
- R & R and leave request: 101

f. Civilian Employees: This unit presently has 40 Vietnamese Nationals employed on a permanent basis. They are classified as follows:

- TGs: 31
- Craftsmen: 5
- Laborers: 2
- Secretaries: 1
- Clerks: 1

5. (c) Part V. Logistics

a. The overall logistics picture has continued to improve due to new pick up procedures at the 3 & 7 Battalion yard at Di An and due to the fact that the 3 & 7 Battalion has delivered many bulk items such as tentage and mess furniture.

b. Supply

1. Supported strength (average during quarter) Personnel.

2. 26 pair cable continues to be in short supply. Short lengths have been received in small quantity, but 250 foot lengths have not been received.

c. Transportation - The Battalion still receives excellent cooperation in air and water movements.

d. Service

1. Deadline rate of vehicles and equipment continues to be low.

2. Repair parts continue to be received at an acceptable rate.

3. P0 balance is under 25%. The Battalion is striving to attain an overall average of 15%.

v. Construction - The following buildings have been constructed during the reporting period:

- 23 Troop billets (WABTOC)
- 3 Supply rooms (WABTOC)
- 1 Wardroom
- 1 Barracks
- 1 Officer's billet
- 1 Photo Lab
6. (C) Part VI. Chronology:

2 November - Established system 54-80 to support 1st Bde elements at Loc Minh.
4 November - Established system 54-D1 to support 1st Bde elements at Song Be.
6 November - Discontinued system 54-05 1st Bde elements withdrew from Song Be.
15 November - Established system 72-81 to support 2/2 Inf at Chu Thanh.
15 November - Established 77 switch to provide a sole-user 12 line switchboard for the Commanding General.
19 November - Discontinued system 54-00, 1st Bde elements withdrew from Loc Minh.
22 November - Discontinued system 54-77, 2d Bde Forward returned to Di An. Established system 50A-72 for support of 2d Bde.
5 December - Established system 50A-00 to support 1st Bde elements at Bu Dop.
12 December - Established system 50A-81 to support 2d Bde elements at Song Be.
20 December - Discontinued system 50A-80, 1st Bde elements withdrew from Bu Dop.
10 January - Discontinued system 50A-01, 2d Bde elements withdrew from Song Be.
21 January - Established system 50A-76 in support of 1st Bde Forward at Chu Thanh.
27 January - Discontinued system 50A-76, 1st Bde Forward returned to Quan Loi.

7. (C) Part VII. Discussion and Recommendations:

(Lessons Learned):

ITEM: Establishment of a 12 line, sole-user switchboard for the Commanding General.

DISCUSSION: An SB-22 switchboard was used to interconnect the CG, on a sole-user basis, with his major subordinate commanders and the Division Main switchboard.

CONCLUSION: The establishment of this facility provided the CG with an excellent, rapid, and self-contained telephone system for instantaneous contact with his major subordinate commanders. This was supplemental to the existing division telephone network.

ITEM: The completion of the outside plant for division communications at Lai Khe.

DISCUSSION: An outside plant for division communications at Lai Che was completed in early November. This outside plant consist of 270 pair and 90 pair cables interconnecting the wire head at Buon Ma Thuot Signal Center and the Division Headquarters Area, to include DDC. The wires run over two separate routes.

CONCLUSION: The establishment of the outside plant greatly enhances the flexibility of the system and decreases its vulnerability to mortar/rocket attacks.

FOR YOUR COMMANDER:

[Signature]

Confidential
SUBJECT: Commander's Note #20

TO: See Distribution

1. The level of proficiency of our 81mm mortars is a matter of continuing concern to me. Recent experience has shown that the employment of organic mortar sections in close support of maneuver elements has caused numerous casualties to friendly forces. Additionally, few, if any, VC have been killed as a result of these fires.

2. To reduce the number of friendly casualties attributable to close-in support of friendly mortar sections, mortars will not be employed in this role except in combat emergency situations.

3. A related problem is the inexperience of our mortar crews and fire direction personnel within the battalions. As a means to correct this shortcoming, a mortar test team is currently being employed to reveal specific deficiencies within units. Commanders will take maximum advantage of the training afforded by this team. Further, they will supplement testing with a continuous training program both in base camp and field locations.

DISTRIBUTION:

"A"

This letter will be filed in the unit Command Policy File

Incl 13
15 November 1967

SUBJECT: Commander's Note #21

TO: See Distribution

1. Recently, in an NDP of one of the battalions of this division, an OP was fired upon by a VC causing 3 personnel to be wounded. Subsequently, the same VC infiltrated through the security elements, fired an RPG into the NDP and sprayed it with small arms fire resulting in another man wounded. Investigation revealed that the individuals on the OP had comic books, letter writing material, etc., at the OP site and therefore were not properly performing their duties.

2. Actions of this type are inexcusable and reflect a lack of command attention and supervision. Henceforth letter writing materials, books, radios, or any other item which detracts from the individual's ability to perform OP duty will not be taken to the OP location. Additionally, to insure that the security element is doing its job, frequent checks will be made by all members of the chain of command on a continuous basis. Personnel found to be derelict in the performance of their assigned duties will be punished under Article 15, UCMJ, 1951.

[Signature]
J. H. Hay
Major General, USA
Commanding

DISTRIBUTION:

This letter will be filed in the unit Command Policy File