

DISPOSITION FORM

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(AR 340-15)

REFERENCE OR OFFICE SYMBOL

SUBJECT

AVDDH-CM

Operational Reports Lessons Learned
(1 Feb 68 - 30 Apr 68) (U)

TO CO, 29th Mil Hist Det

FROM Div Cml Officer

DATE 4 May 68

CMT 1

SECTION I - General Narrative (U)

1. (U) The Division Chemical Section and 43d Chemical Detachment continued to support combat operations within the division during the reporting period by employing riot control agents (RCA), supervising the defoliation program, operating and maintaining the division's Airborne Personnel Detectors (APD), rendering technical advice on use of flame munitions, operating a chemical ASP, and inspecting unit CBR procedures, equipment, and supply.

2. (C) DEFOLIATION. The amount of defoliants utilized in the division AO decreased to about half that of the previous reporting period. This was partially due to fact that C-123 aircraft were not available for TRAILDUST missions for a one month period while they supported airlifts into the Khe Sanh area. High winds and further decline in plant growth also contributed to the decrease in defoliation activity.

a. A total of 65 TRAILDUST sorties were flown in the division AO spraying 65,000 gallons of agent ORANGE. Of these, 21 were flown in the Plei Trap Valley in an attempt to expose antiaircraft gun sites, bivouac areas and truck parks along the NVA road in that area.

b. Ground based defoliation was negligible because suitable targets (enemy crops, grass, small trees) were in a dormant state during the dry season and not susceptible to growth regulator type herbicides. A total of 615 gallons of defoliant were used in the ground based missions compared to 1450 for the previous period and 14,725 for the period before that. Rainfall during the latter part of April is expected to stimulate plant growth and cause an increase in defoliation activity.

c. The AGAVENCO spray system received in January was tested as a helicopter mounted defoliation apparatus. The results of this test are in Section II. See Inclosure 1 for further data concerning defoliation.

3. (U) RCA EMPLOYMENT

a. Bulk Agent. A total of 20,080 pounds of CS-1 powder were dropped using 14 CH-47 sorties. Five of these sorties (8,600 pounds) were employed against the NVA road in the Plei Trap area to impede repair of damage by B52 strikes. The division supported the 24th STZ with two CH-47 sorties on rocket launching sites NE of Kontum which effectively halted further launchings from the target areas. See Inclosure 2 for data concerning RCA employment.

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By SF NARA DDC 2/20/05

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b. E-158 CS Cannister Cluster. A total of 39 E-158 munitions were expended in the division AO, the majority of which were used in preparing landing zones (see Section II).

c. CBU-19's were employed by Air Force fighters in the division AO for the first time and proved to be a very effective supplement to the use of E-158's which are in munitions, were employed during the reporting period.

d. E-8 Tactical CS Launcher. The E-8 was demonstrated for the USARV and 4th Division Provost Marshal, division cavalry and infantry units, the division ICC, the division Signal and Engineer officers, and the 937th Engineer Group Commander. All showed great interest in the munition. Two hundred and fourteen munitions were issued to subordinate units.

e. 4.2" mortar and 40mm M79 rounds were used effectively throughout the division AO during the reporting period.

4. (C) Airborne Personnel Detector (APD)

a. One APD was operated daily in the division AO except when non-availability of aircraft prevented flights. Six personnel in the Division Chemical Section are trained and qualified APD operators, each also being a fully qualified maintenance man.

b. A total of 122 missions were flown totalling 130 hours and 10 minutes of operation.

SECTION II - Observations and Recommendations (U)

(U) RCA Employment (U)

Item (U): Preparation of LZ's with CS.

Discussion (U): Riot control agent CS can be utilized effectively in preparing landing zones to substantially decrease the effectiveness of enemy small arms and automatic weapons fire. Grenades and E-158 munitions dropped from UH-1 aircraft and 4.2" CS mortar rounds are the most effective munitions presently available for this purpose.

Observation (U): The 1/8th Infantry employed 4 E-158 munitions on a 200x400 meter LZ at YB816247. As soon as the CS cloud had dissipated, the landing was made. Three NVA, one forward observer and two snipers, were encountered on the LZ, each armed with an AK-47. The NVA, although at extremely close range (20-30 meters), could not place effective fire on the helicopters or assaulting troops. Results were 3 NVA KIA while taking negative friendly casualties. The 1/8th has prepped all LZ'S since then with CS and have met very little small arms resistance.

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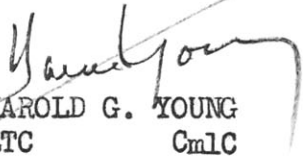
(U) Defoliation (U)

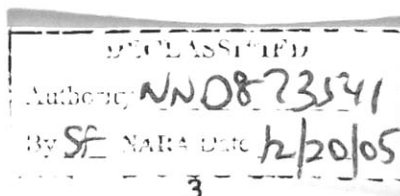
Item (U): AGAVENCO Spray System

Discussion (U): The AGAVENCO spray system was received in the division on 22 January. This system enables the UH-1 helicopter to carry and disseminate 200 gallons of defoliant. Additionally, the rate of flow can be controlled by an internally controlled valve lever and externally by interchangeable nozzles with varying orifices. The system is controlled by II Corps Advisory Group and temporarily allocated to ARVN and US units upon request. A problem lies in the availability of the system when needed for defoliation missions. Frequently, missions are scheduled with very little lead time. This necessitates getting the system from II Corps providing it is not being utilized by an other unit.

Observation (U): The AGAVENCO is an effective system and has the potential of extensive use. Additional systems should be made available and permanently allocated and controlled down to division.

2 Incl:
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HAROLD G. YOUNG
LTC CmlC
Div Cml Officer



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(C) Inclosure 1 - Defoliation Date (1 Feb 68 - 30 Apr 68) (U)

1. (C) The following TRAILDUST missions were flown by Air Force C-123's utilizing 1000 gallons of agent ORANGE per sortie:

<u>DATE</u>	<u>SORTIES</u>	<u>TARGET</u>
4 Feb	7	YA9301-YA8508 YA9203-YA8409
6 Feb	5	YA8802-YA8618
17 Mar	6	YV9200-YV9283
20 Mar	6	YV9183-YA9101
23 Mar	5	YA9001-YV9084
23 Mar	3	BR2252-BR2747-BR3146
29 Mar	3	AQ9954-AQ9266
7 Apr	3	YA6983-YA5970
9 Apr	3	YA7384-YA6671
14 Apr	3	YA7285-YA6572
18 Apr	3	YA7284-YA6571
22 Apr	3	YA8901-YV8984
23 Apr	3	YB7404-YA7488
24 Apr	6	YA7244-YA7226
25 Apr	3	YB7404-YA7488
26 Apr	3	YB7404-YA7488

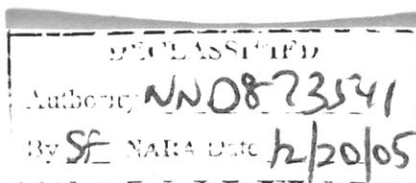
2. (C) No crop destruction missions were flown in the division AO due to lack of enemy crop growing activities during the dry season.

3. (C) Perimeter defoliation was conducted as follows:

<u>DATE</u>	<u>UNIT</u>	<u>COORDINATES</u>	<u>METHOD</u>	<u>GALLONS</u>	<u>AGENT</u>
12 Feb	II Corps	AR763515	Truck	50	BLUE
30 Apr	4th Div	AR813359	Truck	165	BLUE

4. (C) Roadside defoliation was conducted as follows:

<u>DATE</u>	<u>HGWY</u>	<u>COORDINATES</u>	<u>METHOD</u>	<u>GALLONS</u>	<u>AGENT</u>
23 Mar	19E	BR0855-BR1752	Truck	400	ORANGE



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(C) Inclosure 2 - RCA Employment (1 Feb 68 - 30 Apr 68) (U)

1. (C) Bulk CS-1 agent was delivered by CH-47 helicopter during the reporting period as follows:

<u>DATE</u>	<u>SORTIES</u>	<u>POUNDS CS-1</u>	<u>TARGET</u>
8 Feb	1	480	BR014412
8 Feb	1	480	BR019387
8 Feb	1	480	BR013361
8 Feb	1	320	AR956319
18 Feb	1	1720	YA983257
19 Feb	1	1720	YB747018
13 Mar	1	1600	AR983345
13 Mar	1	1600	AR982349
1 Apr	1	1600	ZA068385
1 Apr	1	1600	ZA055373
14 Apr	1	800	AR849966
14 Apr	1	800	AR839958
15 Apr	2	3440	YB746018
15 Apr	2	3440	YB776032

2. (C) E-158 Canister Clusters were delivered by UH-1 aircraft as follows:

<u>DATE</u>	<u>SORTIES</u>	<u>MUNITIONS</u>	<u>TARGET</u>
8 Feb	1	4	YB873294
9 Feb	1	6	ZB006257
10 Feb	1	4	ZB006257
21 Feb	1	4	ZA041718
3 Apr	1	3	YA0498
5 Apr	1	6	YA956859
9 Apr	1	6	YA997827
22 Apr	1	6	YA918808

3. (C) CBU-19 CS munitions were employed by Air Force aircraft as follows:

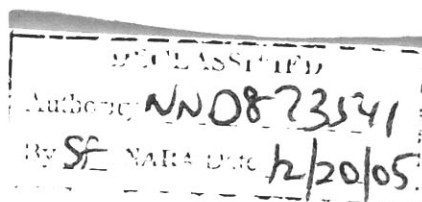
<u>DATE</u>	<u>MUNITIONS</u>	<u>TARGET</u>
5 Feb	2	ZB019259
5 Feb	2	YB9717
6 Feb	16	AR8093
7 Feb	9	AR8193
24 Feb	4	ZA179761
25 Feb	8	ZA185765
27 Feb	4	AR850964
28 Feb	8	AR824970
3 Mar	8	AR854976
7 Mar	4	ZA205722
15 Mar	8	ZA0499

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<u>DATE</u>	<u>MUNITIONS</u>	<u>TARGET</u>
15 Mar	4	ZA215660
16 Mar	4	ZA146946
16 Mar	2	AQ753136
17 Mar	4	ZA0498
23 Mar	4	ZA155957
4 Apr	12	ZB035003
16 Apr	12	YA935935



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