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QUARTERLY RANCH HAND HISTORY

12th Special Operations Squadron

1 January 1969 --- 31 March 1969

TAB C
In K-UK-315-MI Jan - Mar 1969
AFSHRC

Chapter II
Operations

Tactics. (C) No two targets are exactly the same, but the ideal spray environment is flying at 130-135 knots indicated airspeed, 100 feet over the target area. Usually 3 or 4 aircraft and at times 9 aircraft will be in a loose trail formation, and each aircraft will spray a swath 80 meters wide and about 16 kilometers in length. If the spray pattern is one straight run, the entire "Spray On" time will be about 4 minutes. However, in the event of mountain crop targets, always hard to get at, the mission usually runs about 45 minutes while flying up and down the mountain side. Here the FAC can be of great help to the Ranch Hand crews by telling them where the most lucrative crop is located in the overall target complex.

(U) Fighter tactics are determined by the amount of resistance in the area. On a cool target the fighters may fly top cover for the spray flight while circling over the area, conserving their fuel for a more lucrative target. On other targets, low level dry runs are sufficient to keep the guns quiet. In the event of a hot target in a free bomb zone, the fighters may pre-strike with either CBU, 20 MM, or Napalm or even all three. The spray aircraft like to start their run just a few seconds after the strike takes place to get maximum benefit from the ordnance. Most frequently, the FAC will call in a post strike on the positions marked after the spray aircraft have left the scene.

Herbicide. (U) Three types of defoliant are now in use:

Orange: Used on a broad spectrum of foliage, composed of 24D and 245T. This is quite volatile because it is in ester formulation.

White: Sometimes called Tordon, a little heavier than orange and more reliable when used near areas of friendly crop or plantations.

Blue: Best chemical for use against narrow leaf crop and composed of a cacodyllic acid base.

An important point to emphasize is that the defoliant chemicals are completely non-toxic and not harmful to any form of animal or human life. The aircrews are in contact with it daily and the ARVN loaders have been exposed to it for several years with no ill effects.

Combat Operations. (C) For the period 1 January through 31 March 1969 the 12th Special Operations Squadron flew 1,543 combat sorties, dispensing 1,237,525 gallons of herbicide and 17,835 gallons of insecticide. In accomplishing these combat operations the Ranch aircraft received 95 hits from hostile ground fire.

(C) Throughout the January-March quarter, Ranch Hand missions made periodic use of the "turn-around" facilities at NhaTrang and Phu Cat Air Bases. These "secondary" operation points are used for reservicing of aircraft whenever targets are fragged in the northern areas of II corps. The procedure is to fly the first of two missions out of Bien Hoa, land at the "turn around" location, be on-loaded with fuel and herbicide and then proceed on the day's second mission with final landing and mission completion at Bien Hoa. This arrangement greatly increased the squadron's range of targets in the II corps area.

(C) Bien Hoa Air Base, RVN, was expecting an enemy offensive the latter part of February. In order to protect the aircraft of the Ranch from enemy action while on the ground, all that were in commission were moved to Phan Rang Air Base, RVN on 22 February 1969. Crews and maintenance personnel accompanied the aircraft, and missions were flown as scheduled. Administration was handled at Bien Hoa AB. The Ranch would leave Phan Rang AB in the mornings, fly the mission scheduled, stop at Bien Hoa AB to re-fuel and re-herbicide, then fly the second mission of

the day, again coming back to Bien Hoa to re-fuel and re-herbicide before proceeding on to Phan Rang to RON. This procedure continued until 3 March 1969, at which time the airplanes were brought back to Bien Hoa AB.

Statistical breakdown of the 12th Special Operations Squadron for the period 1 January 1969 to 31 March 1969 is as follows:

a. Sorties

1.	Defoliation	1,486
2.	Insecticide	58
3.	Non-Productive Air Aborts	240
4.	Survey and Coordination Meetings	10
5.	Test Hops	31
6.	Rotation of aircrews between DaNang AB and Bien Hoa AB	142

b. Gallons Dispensed

1.	Herbicide	1,237,525
2.	Insecticide	17,835

c. Flying Time

1.	Defoliation	2,501.45
2.	Insecticide	119.30
3.	Airlift	0.0
4.	Others	400.0

d. There were 95 hits on 46 sorties.

End 1 March total hits [redacted] 3545

1st 1 Year total 3450