

Jul 68

COMMUNICATIONS REPORT - OPERATION TOAN THANG
25 APR - 5 JUN 68

Reference. A. Maps VIETNAM Series L7014, Sheets 6430 III and IV (1:50,000).

Introduction

1. This report covers the period of Task Force Operations extending from 25 Apr - 5 Jun 68; Operation TOAN THANG (Final Victory). Although one operation, it can be subdivided into two distinct periods:

- a. 25 Apr - 12 May 68 HQ 1 ATF (Main) located at BEARCAT (GR 165005). AO shown at Annex "A".
- b. 12 May - 5 Jun 68 HQ 1 ATF (Main) located at FSPB CORAL (GR 932291). AO shown at Annex "B".

2. The emphasis in this report is given to the second period. During this part of the operation the elements of 104 Sig Sqn at CORAL (Designated Fwd Op Sig Gp - Annex G) came under direct, sustained mortar and rocket fire and suffered the first Unit operational casualties of the VIETNAM Campaign.

3. Some new lessons were learnt and others re-emphasised during the period at FSPB CORAL. The lessons are recorded in this report for the benefit of successors.

4. Operation TOAN THANG was the largest operation yet mounted by 1 ATF. The AO for the second period of the operation was the farthest that the Task Force has operated from NUI DAT, being a distance of 80 Kilometres.

5. The area of the FSPB was of flat terrain, open Savanna interspersed with disused rubber plantation. The Sig Sqn area was within rubber, opening out on to a grassy strip on the perimeter some 70 metres wide. A belt of rubber extended on from this strip, To the right, the area (TFMA), was flat and grassy. A variety of weather conditions prevailed throughout the operation varying from hot, humid and dusty to hot and wet. The climate was very enervating.

Narrative

6. Period 25 Apr - 12 May 68. During this period of the operation HQ 1 ATF (Main) was located at BEARCAT, a US Army Base Area. The two battalions with appropriate support were located EAST of BEARCAT (Annexures A and B) their mission being to destroy VC/NVA Forces in the AO.

7. The site occupied by 1 ATF (Main) had previously been the HQ of 1st US Bde

Command Post. Office and accommodation buildings were thus readily available.

8. The communications were virtually the same as those provided on previous operations such as COBURG. On this occasion however, it was not necessary to deploy a Radio Relay Detachment from 53rd US Sig Bn, the 2 FFV channels being provided to our BEARCAT location by tails from the fixed area systems. The Sig Instr (3/68) is attached at Annex "C".

9. Period 12 May - 5 Jun 68. On 12 May 68 a small advance party was airlifted into an area (to be known as FSPB CORAL) with the task of laying out the TF HQ area and to commence the establishment of the HQ. This party included the TF Sig Offr, Dvr Batman, two Radio Operators and two Linemen Field. A sub-station on the TF Comd Net was set up at the proposed HQ location and operated from 121100H May 68. The sub station (RT-524) with RC-292, 150 AH batteries, 300 watt charger, AN/GRA-39 remote control and one AN/PRC-25 was man packed some 1500 metres from the LZ to the HQ site.

10. Early on the morning of the 13 May the advance party came under attack from enemy mortar, rocket and small arms fire. Sig R. E. GAMBLE sustained a wound to the right calf. Damage occurred to the RC-292 and battery charger and some personal equipment was destroyed. Temporary repairs kept the station operative. It is of some significance that this station was the means through which "flare ships" (DC-3) and light fire teams (helicopter gun-ships) were called in to the support of units under attack.

11. On 13 May, at approximately 1130 hours the Main Body (HQ 1 ATF, TFMA, 1 Fd Sqn, A Sqn 3 Cav Regt) arrived at FSPB CORAL by road convoy, without incident. (Sig Instr 5/68 Annex "D"). The Fwd Op Sig Gp immediately deployed, the main emphasis being placed on establishment of communications and the construction of the CP/Comms Con bunker, and two perimeter weapon pits. By stand-to this work had been completed. In addition all personnel had dug individual pits to below ground level. This need to establish concurrently the communications system and a defended locality places a severe physical strain on personnel who are then required to do their normal shift duty and sentry duty.

12. By 1700 hours 14 May the holes for the Sigcen and VHF Radio bunker had been bulldozed to a depth of 7 feet. At this stage only limited defence stores, particularly sandbags, timber and roofing iron were available. As a consequence roofing and end walling of the two bunkers was not able to be completed before nightfall. A similar situation applied to the Task Force CP, A/Q bunker and in fact to the majority of bunkers in the FSPB.

13. During the night 14/15 May an unpredicted and unexpected rainstorm deluged the area of the FSPB. In a period of 15 minutes the radio bunker flooded to a depth of 5 feet of water, swamping most of the equipment. The Task Force Command Net Control Station immediately switched to emergency AN/PRC-25 located in the Task Force CP maintaining communications of the Comd Net. All but two of the RT-524, when inverted and drained of water, operated satisfactorily. Within approximately 30 minutes of the flooding the Comd Net NCS reverted to a RT-524. No equipment suffered permanent

damage.

14. The Signal Centre flooded to a depth of 2 feet, which although making working conditions difficult, did not cause damage to equipment. Both the Signal Centre and the VHF Radio were established in tents above ground level adjacent to the original bunkers.

15. The Task Force CP and A/Q office were also re-located following the flooding of those bunkers. This temporary re-location necessitated additional line laying and modifications resulting in heavy workload on linemen and technicians. As a consequence the unit labour available for developing defences was reduced. Never the less by stand-to on 15 May a staked double danned wire perimeter fence had been completed, weapon pits dug and fire lanes cleared. This work was not accomplished without casualties, two cases of exhaustion having occurred. The aim to have overhead protection in sleeping and working areas by night 15/16 May had not been achieved.

16. The vehicle mounted Radio Relay shelters were still above ground. The engineer effort, which by this time would normally have been available to prepare vehicle scrapes and bunkers, was directed to the construction of a new Task Force CP.

17. At 0240 hours on 16 May 68 a NVA regimental attack was launched against FSPB CORAL. The attack was initiated by mortar/rocket barrage which swept from the Sigs perimeter through the TFMA to 102 Fd Bty. The barrage lasted for 50 minutes during which time in excess of 100 82mm and 62mm mortars and some 60 RPG-2 and RPG-7 rockets fell in the Sigs area causing casualties to both equipment and personnel. The barrage was followed up by ground attacks. At one stage a group of enemy had reached to within 50 metres of the Sigs perimeter.

18. During the remainder of the period covered by this report new bunkers were constructed for the Signal Centre, VHF Radio and CP/Comms Con and strong defences developed. The Radio Relay vehicles were lowered and bunkered. Three more mortar/rocket attacks occurred resulting in damage to soft equipment and exposed cables.

19. FSPB CORAL was evacuated by airlift and road convoy on 5 Jun 68, Operation TOAN THANG 1 having concluded (Sig Instr 6/68, Annex "E").

Fwd Operations Sig Gp

20. Composition. The outline organisation is shown at Annex "D".

21. Major Equipments

a. **Radio,**

5 x RT-524

TF Comd Net NCS
Eagle Heights NCS (Air Net)
2 FFV Comd Net Sub-Station
Spare (2)

6 x AN/PRC-25 TF Comd Net Emergency (Loc TF CP)
Sub Sta Local Def Net (Sigs CP)
Comms Con Monitor
TF Cp Monitor/Section Set
Spare (2)

AN/GRC-106 RR Back-up (Det 110 Sig Sqn)

2 x AN/PRC-47 TF Comd Net (HF) - was not activated

4 x Antenna RC-292 Comd Net
Eagle Heights
Comd Net Emergency
2 FFV Sub-station

b. **Radio Relay,**

AN/MRC-73 (53rd US Sig Bn) 2 FFV channels
AN/MGC-17 (53rd US Sig Bn) 2 FFV Comcen
AN/MRC-69 (Det 110 Sig Sqn) 1 ATF (Rear) channels

c. **Sigcen,**

AN/MRC-17 (Equipment dismounted)
AN/MTC-7
Plus associated cipher equipment

d. **Line,**

55 x Telephone Sets "K"
15 miles D10
1000 feet 5 pair plastic
1500 feet 26 pair
1 Intercom system (TF HQ)

e. **Vehicles,**

1 x 2¹/₂ Ton AN/MRC-73 (53rd US Sig Bn)
1 x 1 Ton AN/MGC-17 (53rd US Sig Bn)
Plus power trailers
1 x 5 Ton AN/MRC-69 (110 Sig Sqn Det)
1 x 3/4 Ton AN/GRC-106 (110 Sig Sqn Det)
1 x 2 1/2 Ton AN/MGC-17 and AN/MTC-7
4 x 3/4 Ton Stores/Personnel/Tech Maint

f. **Weapons,**

3 x M60
2 x M79
2 x SLR (Heavy Barrel)
35 x M16, F1 and SLR (Personal Weapons)

22. Sigs Area Layout See Annex "F"

23. Casualties

- a. KIA Sig A.H. YOUNG - 16 May 68
- b. WIA Sig R.E. GAMBLE - 13 May 68
Sig J. F. KOOSACHE - 16 May 68
Sig I.P. CROSTHWAITE - 16 May 68

Communications

24. The communications provided throughout the operation are detailed in the Sig Instructions attached as Annexures C, D, and E. The communications were effective and reliable at all times.

25. Radio

- a. **VHF.** The RT-524 again proved particularly suitable as a control station set. It was necessary to reduce the operating temperature of the set to maintain its performance. Electric fans blowing air over the top and rear of the sets were used (the ambient temperature at this time of the year very high). By elevating the Comd Net RC-292 to a height of 45 feet using 6 Deeko Hast sections, VHF communications were maintained to NUI DAT (80 Kilometres) without employment of a re-transmission detachment.
- b. **HF.** No major difficulties were experienced with the AN/GRC-106 RR back up. The need did not arise to activate the AN/PRC-47 Comd Net HF.

26. Batteries Secondary

- a. Prior to the operation some of the radio batteries had been replaced by 12V, 150AH types (Cat No 6140-66-018-3334). Although obtained as an in lieu item due to non-availability of 75 AH, these batteries were ideal. Carrying handles are fitted. One bank of four batteries powered three RT-524. A second bank of two supplied power to the Monitor/Section Set.
- b. To avoid the presence of fumes in the bunker whilst batteries are on charge, the battery banks were located in separate sandbagged enclosure on ground level. The battery charger was in an adjacent enclosure.

27. Battery Charging Equipment. The current 300 Watt charger is inadequate. It does not operate satisfactorily in hot weather even in good condition. A 28V DC

generator, recently purchased in theatre to power the AN/GRC-106, was ultimately used as the prime battery charger.

28. Sigcen

- a. The AN/MRC-17 did not prove successful due to its small size (See Quarterly Report 30 Jun 68). The equipment was dismantled and set up on tables in the bunker. The problems of heat, humidity and dust were again evident. Fans were used to blow air across the KW-7s and TH5/TGs to reduce the operating temperature. Even so, periodic changes of KW-7s were necessary to allow equipments to cool down.
- b. The average daily formal traffic passed totaled 15 messages in and 13 messages out. The provision of reliable RR Telephone circuits has reduced signal traffic to those classified messages which cannot be passed over the telephone.

29. SDS/ADS/Air Courier Services

- a. The demand for air support within the Task Force has always prevented the allocation of a helicopter specifically for ADA. Use is invariably made of aircraft primarily concerned with administrative support, which never operate on a firm time schedule. Much time is wasted by DRs waiting for aircraft. Further, where a DR cannot be carried on the aircraft, reliance for the safe custody of the SDS bag has to be left to the crew.
- b. Three local SDS runs operated daily commencing 0900 hours, 1300 hours and 1600 hours.

30. Radio Relay

- a. Both the 53rd US Sig Bn system to 2 FFV and the 110 Sig Sqn system to HQ 1 ATF (Main) provided good channels with little circuit outage.
- b. The tails of the circuit channels (1 ATF CP to 2 FFV TOC) were duplicated at CORAL, one run being overhead, the second being buried. Both runs were cut on the 16 May however, the overhead by shrapnel and the UG by direct mortar hit. The effort involved in burying cables to a depth where direct mortar hits do not cause damage would be beyond the resources available in the Sig Sqn. The possibility of fitting a narrow trench digging bucket chain to a "Howard" Rotary Hoe type machine could be worthy of investigation.
- c. There is a need to carry ample 26 pair cable to allow flexibility in positioning the RR Terminals in relation of the Sigcen and the line frame. On this occasion cable had to be loaned to 53rd US Sig Bn to enable the AN/MRC-73 to be located in the most favourable position.
- d. Similarly additional aerial co-axial feeder should be carried to enable the

best placement of the aerials in relation to the shelter.

e. The antenna erected for the Aust RR System was located in the open perimeter strip and protruded above the general tree line. From the mortar base plate position used by the enemy on 16 May, the antenna was clearly visible. It is possible that the antenna was used as a general aiming point which could explain why the Sigs area received the initial barrage on 16 May attack. Then again it is possible that a deliberate attempt was made to disrupt communications vital for the calling of fire support.

31. Line

a. Approximately 15 miles of D10 was used on the operation. The usual problems of line being cut by APCs, tanks and engineer plant occurred during the early build up of the FSPB. The effort required to bury cable is not initially available when the Task Force deploys (See Para 30b). The Sqn currently uses five pair plastic cable to run to key feeder points in the area of FSPBs.

b. The line patch frame in future will be located next to the switchboard in the bunker. This will avoid the need to construct a sandbagged frame enclosure and light can be used for repair work by night.

c. The remote lines between the VHF Radio Bunker and the Task Force CP were cut by shrapnel during the attack on the 16 May. New lines were run and communications via the RT-524 restored in a very short time. During this interval the emergency AN/PRC-25 in the Task Force CP was used. A duplicate set of remote lines is normally buried. There had not been sufficient time to carry out this task prior to the attack.

32. Suspected Enemy Jamming. On 15 May at approximately 1515 hours following a contact report the Task Force Comd Net was affected by what appeared to be a noise generated signal. The signal was of 100 Kc/s bandwidth and low power. None of the sub-stations on the net replied to a call from the control station. A frequency change was broadcast (by designator). The frequency change was also passed on the artillery net. All sub-stations responded to the change. Within five minutes the noise signal re-appeared on the new frequency. An immediate change to the original Comd Net frequency was instituted. No change to the original Comd Net frequency was instituted. No further interference occurred on the Comd Net. However, on the same day at approximately 1730 hours a similar signal affected the local defence net. The frequency was changed and further interference did not occur.

33. Subsequent investigation revealed that where as the RT-524 Control Station could over-ride the noise signal the AN/PRC-25s on the sub-station could not. The sub-stations could thus hear control but control was not able to hear the sub-stations.

Lessons Learnt

34. a. Sleeping/Weapon Pits. Individual sleeping/weapon pits were dug

initially. It is perhaps desirable in a unit where the majority of personnel are young and inexperienced to use two man rather than one man pits. In this way mutual moral support can be given and a better opportunity to discern the stage at which the mortar/rocket attack has passed and the ground attack has commenced.

- b. **RR Antenna Sitting.** Where possible care should be taken in the sitting of large RR type antenna to ensure that they are backed by foliage from the enemy direction of view.
- c. **Defence Structure Stores.** Where lift capability exists it is preferable to carry basic defence structure stores (timber, roofing iron) with the equipment. In the initial build up of a CORAL type base there is insufficient material of this type to meet all needs. Timber beams, PSP, and roofing iron is gradually being obtained for this purpose in future. The use of "CONEX" type shelters referred to in Quarterly Report of 30 Jun would mollify this requirement.
- d. **Defence and Employment Section.** On future operations it is proposed to raise a D and E Section of one NCO and ten to twelve men. The role of this section will be to provide a force whose sole purpose is to construct defences and man the perimeter pits. This section will ease the pressure on the remaining personnel of the Fwd Op Sigs Gp in the first few days of deployment. Once satisfactory defences are completed the section would return to NUI DAT. If sufficient notice of deployment is given it is proposed that the D&E Section would undergo concentrated weapon handling and practice firing course.

Lessons Re-emphasised

- 35. a. **Area Layout.** The layout of the Sigs area must provide for defence in depth. The layout at FSPB CORAL although reasonable in this regard, will be improved in future operations (See Annex F).
 - b. **Alternate Cable Routing.** The establishment of alternate cable routes for the command links as soon as possible after deployment could avoid the requirement to run new lines under the hazardous conditions during an attack.
36. **Emergency CP Control Set.** Where a remote Radio Bunker is used it is essential to provide an emergency radio set in the Task Force CP.
37. **Protective Cover.** To reduce the risk of casualties to the minimum it is essential that each individual be accommodated below ground level by stand-to on the first day of deployment. Furthermore, where humanly possible, overhead cover should be constructed by the same time.
38. **Rapid Deployment.** When deploying for an operation in this theatre the possibility of having to re-deploy at short notice into a completely different situation must be borne in mind. On operation TOAN THANG the requirement arise to deploy from

within an established and protected base camp into an enemy controlled area. Twenty four hours notice was given for the redeployment in this case.

Conclusions

39. Operation TOAN THANG provided the Task Force Signal Squadron with the opportunity to test itself under most of the contingencies likely to be met in the theatre; viz

a. Dual Deployment:

(1) From the NUI DAT Base to another base area.

(2) From a base area into an enemy controlled area in the field.

b. The communications provide, encompassed the full range of facilities available to the squadron and were established over the greatest range yet experienced.

c. Maintenance of communications under enemy fire.

40. The Operation proved an invaluable experience for the Squadron. It is to the credit of those concerned that in spite of the arduous and often dangerous conditions, at no time did a loss of command communications occur.

(N. C. MUNRO)
Maj
OC

Annex A - AO's MURRAY BRIDGE and BELIZE (map overview)

(Murray Bridge - AO Hunter (FSPB Evans), AO Nepean (FSPB Hunt) and AO Swan - AO Belize (FSPBs Wattle and Cedar))

Annex B - AO's SURFERS and SURFERS II (map overview)

(Surfers - AO Manly (FSPB Coogee) and AO Bondi (FSPB Coral) and Surfers II - AO Newport (FSPB Balmoral))

Annex C - Sig Instr 3/68 (Bearcat)

Annex D - Sig Instr 5/68 (FSPB Coral)

Annex E - Sig Instr 6/68 (Evacuation of FSPB Coral)

Annex F - Sigs Area layout (FSPB Coral)

Annex G - Fwd Op Sig Gp

Notes by Denis Hare July 2007

1. Refer Paragraph 9 - Party:
TF Sig Offr - Norm Munro (OC, 104 Sig Sqn)
Driver Batman –Anthony Aikman
Radio Operations - Philip Clohesy and John Koosache (WIA 16 May 1968)
Linemen Field - Rowan Gamble (WIA 13 May 1968) and Terrence Rochester
2. Refer Paragraph 21 - Other Squadron equipment and manpower would have also been at FSPB CORAL as Radio Detachments were operating with the Battalions (1RAR and 3RAR) and other main 1 ATF units. 547 Sig Tp also had an EW Detachment.
3. 1RAR 104 Sig Sqn Radio Det Comd – Ron Lumb
4. 3RAR 104 Sig Sqn Radio Det Comd –Bob Ellis