

This narrative by ASD was provided to the Defence Honours and Awards Appeals Tribunal (DHAAT) on 18/10/2013 for the DHAAT's Inquiry into recognition for service with 547 Signals Troop in Vietnam from 1966 to 1971.

Appendix D: ASD Narrative on the deployment of 547 Signal Troop to Vietnam, 1966 to 1971

CAVEAT: This narrative is drawn from records created by or controlled by ASD (formerly DSD). These do not include messages between 547 Sig Tp and its parent unit, 7 Signal Regiment, or its command element, the Directorate of Military Intelligence, unless DSD was copied on such correspondence.

Introduction

Formal planning for the deployment of a Signals Intelligence (Sigint) support unit to Vietnam commenced immediately upon the announcement by the Prime Minister, Mr Harold Holt, in late February 1966, that Australia's contribution to the defence of South Vietnam would be increased to approximately brigade strength (two battalions, an SAS squadron, artillery and support elements). It was judged that a deployment of that size should be supported by an autonomous AMF element to provide Sigint support to the Commander, 1st Australian Task Force. Its role would encompass the interception of enemy (Viet Cong) communications, and the identification and location of enemy radio transmitters through direction-finding from air-borne and ground-based facilities, from which tactical intelligence could be derived for the ATF Commander.

The matter was initially canvassed with the AMF through the Directorate of Military Intelligence (DMI), which was highly supportive. However, as the US was the principal provider of military support to the government of South Vietnam, the matter could not be progressed unilaterally and there were extensive discussions with the US Sigint authorities (most notably the National Security Agency), through DSD's Liaison Officer at Fort Meade, before the necessary arrangements could be finalised. The US authorities were enthusiastic about the proposal to deploy a Sigint unit comparable to their own Direct Support Units (DSU), which supported US contingents of comparable size (i.e. brigade strength) and committed to full support.

The deployment

By mid-April 1966, the AMF's Chief of the General Staff (CGS) had agreed in principle to the deployment of 15 AMF personnel to constitute an Australian DSU. The deployment could be no larger, as the AMF force level in South Vietnam could not exceed the ceiling figure set by the Prime Minister. Captain Trevor Richards of 7 Signal Regiment was selected as the troop commander, and a senior DSD officer at the time commented that DMI 'could not have made a better choice for the Vietnam task'. In early May it was envisaged that Richards and seven other ranks would deploy to South Vietnam on 12 June, with the others to follow at a date to be determined later. In approving the deployment, the Minister for Defence queried why the deployment was in two phases, and a month later, following discussions in theatre with the US commanders, the original proposal was scrapped and all fifteen members of 547 Sig Tp would be deployed in the first instance. It was agreed

that to enhance the overall Sigint effort against the Viet Cong and NVA, 547 would work as part of an integrated, cohesive effort with US DSUs when not engaged in providing direct support to Commander 1ATF. It was accepted that 547's direct support role would be pre-eminent.

547 was on the ground at Nui Dat, co-located with HQ 1ATF, on 14 June 1966. The formal AHQ (DMI) Instruction No. 1/66 Comint Support for 1 ATF Vietnam (see Appendix A) was issued by DMI on 17 June.

First operations

Richards moved quickly to get 547 operational. By 24 June, he had two or three manual morse positions working general search tasks against high-frequency (HF) Viet Cong targets on the basis of technical data provided by 175 Radio Research Company, which maintained tasking direction and operational control for 547 when the latter was not in a direct support role. Secure communications were not yet in place, and secret material had to be moved between Australian and US DSUs by helicopter. Co-operation and help from the US had been 'superb', according to Richards on 29 June. There were, however, some teething problems noted by both DSD and NSA as the US system had to be re-configured somewhat to accommodate the requirements of the Australian DSU. These related, in the main, to the establishment of secure communications, and by mid-July they had still not been resolved.

Captain Richards was a practiced Sigint professional with previous operational experience in conflict zones and his signals from the field reflect these characteristics. On 2 August he bluntly reported to DSD his view that the overall allied Sigint effort lacked direction, professionalism and steerage. He regarded the US' ARDF effort as sub-standard, with 90 per cent of targets being unidentified as to transmitter, and inaccurate by more than six kilometres as to location. Later in August, Richards expanded on this theme in a hand-written letter of DMI. Since his unit has introduced the idea of strict tasking for ARDF missions, the US results were improving, but Richards reported that standards had been such that 1ATF Commander Brigadier Jackson and his staff were 'very disenchanted' with ARDF at that time. (By the end of October, in contrast, Jackson was telling senior DSD and DMI visitors that Sigint – that is, ARDF fixes from 547 – were his only reliable intelligence.) Richards also reported that the unit would need augmentation if Commander 1ATF's requirements for timely intelligence were to be met.

In this letter Richards also drew DMI's attention to the experimental ARDF work being carried out by Defence's Weapons Research Establishment, and queried if the new equipment and a trial team could be deployed to Nui Dat for a temporary period. This seems to be the first suggestion that WRE could be engaged to assist with DF against the Viet Cong target – an engagement which was to pay off to very considerable effect in the years that followed. Richards envisaged a purely Australian or at least Australian-controlled effort using WRE's innovative designs. Subsequently, on 27 September, DMI wrote to both Commander 1ATF and Commander Australian Forces Vietnam (AFV) regarding the quality of ARDF results reported by Richards, and advising them that it was intended to explore the possibility of deploying the WRE experimental equipment to 1ATF.

Increase in personnel

The requirement for an augmentation of 547 personnel was picked up by DMI in the wake of a visit of DSD and DMI seniors to Nui Dat in late October 1966. In a report prepared for Deputy CGS in mid-November, the value of 547 to AMF operations was described as follows:

This small independent capability has been so successful that both the Commanders AFV and 1ATF have stressed that his unit is providing the most, and in many cases the only reliable intelligence and that any means that can be found to increase this capability would be greatly appreciated and fully supported.

The report stressed that 1ATF would not be able to rely on US elements to provide the support required by the Commander in terms of early warning of Viet Cong movements, which were the usual indicators of hostile action, and that without augmentation the service which had proved so invaluable could not be sustained. A doubling of 547's strength to 30 was recommended to enable 1ATF to maintain an ARDF capability under its own control. Such an increase would enable 547 to cover all enemy communications in 1ATF's tactical area of operational responsibility (TAOR), and undertake essential search and development tasks against suspected but as yet undiscovered enemy transmitters.

The augmentation of 547 Sig Tp, which required an adjustment to the AMF's overall force ceiling for operations in Vietnam, was agreed by the Minister for Defence in early January 1967. The US Sigint authorities had been strongly supportive of the proposal, as the reputation of the Troop, and particularly of its commander, was already at a very high level in US circles. Indeed, the US' official view was that 547 'had demonstrated a professional competence beyond that which is normally predictable for initial operations in deployment of a given DSU.'

By the first half of 1967 it seems clear that 547 Sig Tp had established itself as a lead DSU in the overall allied effort against the Viet Cong. A senior DSD visitor to the unit in early March commented that the unit 'was still very highly regarded by [US Sigint authorities] and very good liaison and support both ways. Station is being used as guinea pig for various new concepts and believe experiences of station largely instrumental determining new policy proposed for other DSUs.' The Troop's experiments with briefing and steerage of US ARDF aircraft had led to better results against high-value targets and US stations were following its example. Indeed, the US Sigint seniors were very keen for 547 to undertake development work on targets outside 1ATF's TAOR because of the Troop's ability to achieve results based on close analysis, good record-keeping and co-ordination between analysts and set room collection personnel. 547's expertise and success was also briefed to the overall US Commander.

In March Richards identified the need for a further augmentation to 547's manning, this time an additional five signals operators. The OC estimated that these personnel were required, in addition to the previous minimum level determined the previous October (which had added 15 to the Troop's complement), in view of the forthcoming deployment of an Australian ARDF capability and the impending departure of 103 Signal Squadron. In response, DMI indicated that such an augmentation could be granted only if requested by Commander 1ATF to Commander AFV, and would require the strongest justification. Such a request was made by 1ATF on 18 July and agreed by mid-September 1967.

'Business as usual'

A year after 547's initial deployment, DSD records indicate that the unit had settled into a general pattern of hard work, close collaboration and highly effective outcomes. Captain Richards was withdrawn in early May 1967 on completion of his tour, and he and the Troop were lauded by Director NSA for their 'professional approach, exceptional expertise and outstanding performance of a difficult task' in a complex and adverse environment. NSA judged Richards to have demonstrated 'exceptional performance as a commander and a liaison officer', a judgement with which DSD whole-heartedly agreed. It was noted that Richards and 547 had earned the highest respect of the US intelligence authorities in South Vietnam.

These levels of performance were maintained on the ground. 547's analytical skills were instrumental in the identification and location of various Viet Cong battalions, which materially assisted both Australian and US forces in operations against the enemy, and consolidated the reputation of Sigint DSUs as significant force multipliers for Australian and US commanders. [Specific examples have been provided to the Tribunal.]

From early August 1967 interaction between 547 and its US counterpart was facilitated and enhanced by the appointment of a DSD civilian as a liaison officer and integrated element within 175 RRC. The first such appointee, Mr Clive Luckman, was particularly highly regarded by his host unit, effectively re-organising and re-vitalising their analytic effort against the Viet Cong along lines derived from 547's experience. DSD maintained liaison officers in theatre until 547 was withdrawn from South Vietnam in December 1971. All maintained the high standards of support established by Mr Luckman.

In August 1968, DSD's liaison officer in Washington summed up 547's performance in the following terms:

[Its] intercept efforts are primarily directed against stations serving the VC 5th Division and its subordinates, COSVN [North Vietnam's Central Office for South Vietnam] rear services group 8A, and unidentified communications believed to serve these entities or sub-region 4. [547] has actively developed many of these communications and is responsible for about 60 per cent of the total intercept. [547] traffic is normally complete and is highly accurate. Material provided by [547] is accurately prepared and generally reflects all pertinent activity. ARDF results provided by [547] account for about 60 per cent of the total fixes provided on entities under their purview.

Single station location (SSL)

A major innovation introduced by Australian forces into theatre was the WRE-developed ARDF capability first flagged by Richards as a critical enhancement to allied direction-finding efforts against the Viet Cong. A number of experimental equipment suites were trialled by 547 before a satisfactory suite was developed. In May 1970, DSD Assistant Director Bob Botterill summarised the equipment and its success as follows:

The equipment used by [547] for both ARDF and medium range target location is different from that employed by the U.S. and was in each case designed, developed

and tested (in Vietnam) by Ionospheric Studies Group, Weapons Research Establishment, South Australia (which provides scientific support to DSD in the interception and target location fields). The ARDF system is designed for use in light aircraft operated by the task force (originally Cessnas, now Pilatus Porters); an operator from [547] flies on each mission. The target location system uses the 'Single Station Location' (SSL) principle, whereby the equipment measures not only the bearing of the signal being received (as in a normal direction finding system) but also its angle of arrival; the height of the ionosphere (from which the signal has been reflected) is estimated from ionosonde readings and it is therefore possible to calculate the range of the target transmitter and, hence (knowing both bearing and range), to determine its probable location.

The Sigint material produced by [547] (based primarily on ARDF results, traffic analysis and exploitation of low-grade cyphers) has provided 1 ATF and the U.S. authorities with regular information on identification, location, movements and unusual activities of Viet Cong units down to regimental and sometimes battalion level. It has been used in planning and carrying out all Task Force operations and has, on occasion, furnished fairly precise foreknowledge of VC intentions, leading for example to the avoidance of a major ambush. The value of Sigint (which is of course available to 1 ATF both from [547] and from U.S. sources) has been acknowledged by each Task Force Commander.

As late as June 1971, 547 was reporting that ARDF was still the most useful intelligence source available to Commander 1ATF – confirming the reputation that had been speedily established under Captain Richards' leadership as far back as October 1966 was maintained throughout the whole period of 547 Sig Tp's deployment. A report from July 1971 outlining the typical use of ARDF in support of Commander 1ATF is attached to this narrative.

Withdrawal

Planning for the withdrawal of 547 commenced immediately following the Prime Minister's announcement of the end of the AMF's engagement in South Vietnam in August 1971. It was proposed that 547 would relocate to Vung Tau in September. Nevertheless, operational activity continued without let up during that month, and ARDF fixes and intercepted messages enabled Commander 1ATF to position SAS patrols between the Viet Cong's 274 Regiment HQ and subordinates, resulting in a clash which resulted in seven enemy killed, including 274's assistant chief of staff.

The set room at Nui Dat closed on 30 September 1971 and opened at the same time that day at Vung Tau; routine tasks continued to be prosecuted from the new location until November, when special intelligence tasks were discontinued. Records of archival value were prepared for despatch to DSD by safe hand, and other material was destroyed by fire. Director NSA's commendation (provided to the Tribunal) was received on 30 November. Other commendations followed in the ensuing days.

547 Signal Troop ceased operations in South Vietnam at 0400 hours (ZULU) on 13 December 1971 and the unit returned to Australia.