

MY CHAU DUC EXPERIENCE

By Paul Stock

My unit, 547 Signals Troop had been tasked with an electronic intercept of the Chau Duc local Force Viet Cong unit which had been off the air for some time, having earlier been successfully ambushed by Australian troops during a re-supply foray into the nearby village of Hoa Long.

I was the 'Duffer' ARDF (Airborne Radio Direction Finding) operator on duty on this particular Sunday morning and duly presented at Luscombe Airfield for a quick trip to the Rung Sat, a swampy plain located not far from our base at Nui (mount) Dat and overlooked by Nui Dinh. We were required to obtain a fix on the target transmitter which had been heard only the previous day after a period of relative quiet. One thing in our favour was that our Processing, or Traffic Analysis (TA) personnel anticipated there would be plenty of traffic (radio message) sent in order for the VC unit to make up for their enforced layoff from normal radio activities. Once again, our TA personnel proved to be accurate in their assessment.

We arrived on station in Pilatus Turbo Porter PC6 call sign Possum 690, (A14-690) our regular bird, 701 (A14-701), being in dock for some routine maintenance. At the appointed hour, 1000hrs, my target came up and launched into radio traffic at a speed and volume which eloquently attested to his having been incommunicado for some time.

I asked my pilot, Capt Bob Smith, to start a run whereupon I discovered that the equipment, having been relocated from [Porter] 701 to 690 the day prior, was totally out of adjustment and unable to do the job for which it was designed.

Knowing the importance of obtaining an accurate fix for 2 RAR (2nd Battalion, the Royal Australian Infantry Regiment) infantry who were in the area, I frantically radioed back to my unit, asking to be met at the airfield by a technician who might render the equipment operable, and then asked my pilot to scurry back while radio activity continued unabated from our target.

Once on the ground, we were met by WO II Frank Watkins, who, although the senior technician was not necessarily up to speed on the ARDF gear. Our Corporal tech, Ross Hutton, who possessed considerable experience and who did know the vagaries of the equipment, had departed for R & R two days earlier, leaving Frank to resolve the problems as best he could.

Frank tried everything he could to solve the problem quickly and pushed and shoved and changed components of the equipment as we sat impatiently on the tarmac. Eventually, we conducted a dummy run with our portable test beacon and got a reasonable picture on the CRO (cathode ray oscilloscope) and decided to head back to the target area.

Imagine our dismay when, arriving back on station the first transmission to be heard from the target transmitter was 'R GA K', translated from Morse code as 'Roger, Go ahead, over'. Having sent all his own traffic, our target was now ready to receive messages from the higher echelon station to which he was working.

We flew around aimlessly for some time waiting to hear from our target again. About two minutes later, he again transmitted 'R GA K'. In a rare, but blinding flash of inspiration, I asked my pilot to select a 'start' point for a run to the north and to await my signal to start that run. About thirty seconds later I asked Capt Smith to start, and away we went, and then about thirty seconds into the run, we were rewarded with a repeat of the Morse signals previously heard. I had taken a punt and gradually moved our receiver pod to compensate for the flight path of the aircraft relative to the (suspected) general location of the target transmitter, and hoped that any bearing I shot would point somewhere in the direction we suspected our man to be. Sure enough, I was able to shoot a bearing about due west of my heading when the transmission came. Twenty or thirty seconds later I requested an end to the run.

We repeated the whole process three more times, with runs successively to the west, south and east, each run producing one cut or bearing at about mid-distance and with me hoping to hell that the single bearing being taken was some indicator of the location of the transmitter.

I had been dismayed, during the last of our runs to hear our target station transmit an acknowledgement to 'close down' from his control station. What I had, was all I was going to get, so I asked my ever-patient and obliging pilot to get me back to Nui Dat so that I could plot the fix and hopefully get a reasonable result.

In the event, I could not believe the end result of my one lucky cut per run: The bearings shot from the runs along the north, south, east and west boundaries of the Rung Sat area intersected at a particular point, giving us an almost perfect fix of the target transmitter.

The ARDF equipment in use at that time was developed at the Defence Experimental facility at Salisbury in South Australia and was designed to provide optimum results when operated at a set altitude (3,000 feet); set speed (100 knots); and on a constant heading, usually pre-determined by previous intelligence, gut feel, or more realistically, and where conditions allowed, by taking some experimental cuts to determine the general direction of the target before commencing a formal run. (See below for an example of a 'true bearing' display on the CRO as compared with a 'phantom' or reciprocal bearing which would place the target in the wrong location).

The aim was to obtain ten or so cuts against the target transmitter during the run, usually of no more than a couple of minutes (see diagram 2 below).

Later, plotting the fix onto the map of the area, using a pilot's compass/computer, a slide rule and taking into account several variables such as magnetic variation, speed, height, heading and duration of the run, it would be hoped that if all came together, an accurate fix could be obtained. After some initial teething problems, the gear proved to be very accurate.

No two sorties were the same and that while much of the job consisted of proving or confirming the locations of targets gained from previous sorties and resultant fixes, nevertheless most ARDF operators did not allow themselves the luxury of too much time spent in preliminaries once a target became active. There seldom was any indication of just how long the activity might continue and therefore, how much time might be devoted to obtaining the sought-after fix.

Armed with a mission of five targets (usually) per two-and-a-half hour sortie, we would attempt to be in position prior to radio sked (schedule) time of hour or half hour to allow the pilot to select a start point for the initial run.

The start and finish of each run was always spectacular. The pilot was required to demonstrate his skill and precision by pivoting the aircraft on a wingtip while reading the ground below for an accurate grid reference, before levelling the aircraft onto the desired heading. The whole process took on a greater degree of excitement and urgency, when on occasion we were obliged to abort a particular run and to try another direction, the CRO picture indicating that we were in front of, behind, or misaligned with the target.

On my return to my unit I plotted the fix obtained over Rung Rat. The results raised a few eyebrows, particularly those of our Operations Officer, the gentlemanly Capt Hugh Nichols, who predictably, and as usual showing great faith in his staff, immediately departed for Task Force HQ, the fix firmly clutched in his hand! An O (orders) Group was in progress at which the CO, 2 RAR was discussing the operation being conducted by elements of his battalion in the area recently targeted by ourselves. Hugh explained that although the fix was obtained in less than ideal circumstances, he felt that the fix warranted closer inspection. The battalion CO was sceptical; stating that his troops had been unable to find evidence of enemy activity in the area, but that he would, as a show of faith, undertake a helicopter-borne visual reconnaissance.

From his hospital bed in Vung Tau some time later, the Lt Colonel advised 547 Sig Tp that the bullet wound to his left buttock, for which he was being treated, was sustained when the helicopter, piloted by Lt Terry Hayes, of 161 Independent Recce Flight (Aust Army Aviation Corps), and in which he was a passenger, was shot down while carrying out a low-level investigation of the very area indicated as the location of the (Chau Duc) radio transmitter.

I am unaware of the results of the follow-up by troops of 2RAR during their continued, and now with some vigour operation in the area. I do know, however,

that Terry Hayes, after completing a loss and damage report for the destruction of one Bell 47G Sioux helicopter, returned to the air later that day in another, slightly more serviceable aircraft.

It might have proven to be a strange way of testing the efficiency of the ARDF operation: From the effectiveness of the prototypical equipment; to the training and ability of the operators; to the efficacy of the Pilatus Porter as the platform for the whole operation. I do know, however, that from a purely personal professional point of view, that I was greatly encouraged by the events of that day to trust my instincts and my ability to handle experimental equipment with confidence.

I also was reminded that without the skill, daring, professionalism and co-operative good nature of the fixed-wing pilots of 161 Indep Recce Flt, the best equipment and operators might just as well have stayed on the ground.

After all these years, I am still profoundly moved by the skills, dedication and single-mindedness of the people with whom I was privileged to serve. Apart from my operator colleagues alongside of whom I served on a daily basis at home, in Singapore and in South Vietnam, I was particularly impressed with the skills and application of the pilots of 161. Capt Bob Smith and Lts Damian Aird, Ian Synnott, John McGhie, 'Smokey' Dawson and especially Dennis Coffey remain as wonderful contributors to my experiences of South Vietnam 1970-1971.

The following maps/plots were produced by Bob Hartley for his DVDs and are inserted to give an example of how the plot may have looked.

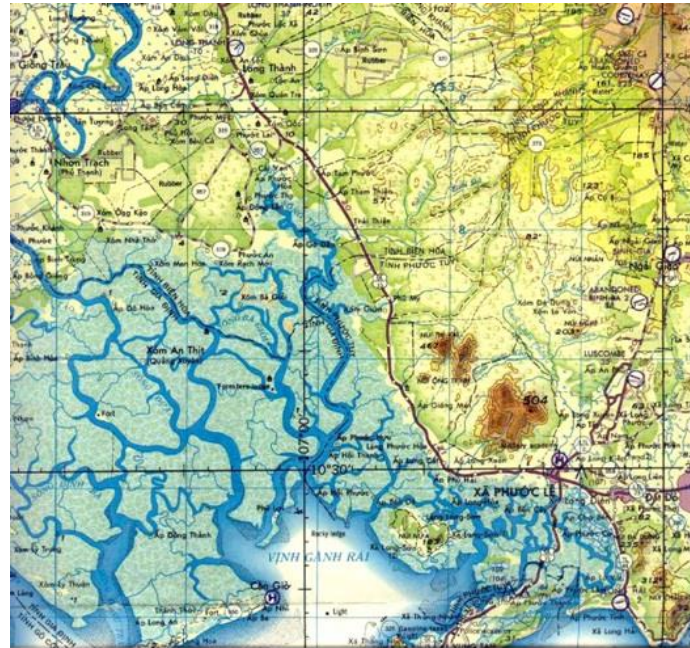


Figure 1: Rung Sat Area



Figure 2: Track #1



Figure 3: Track #2



Figure 4: Track #3

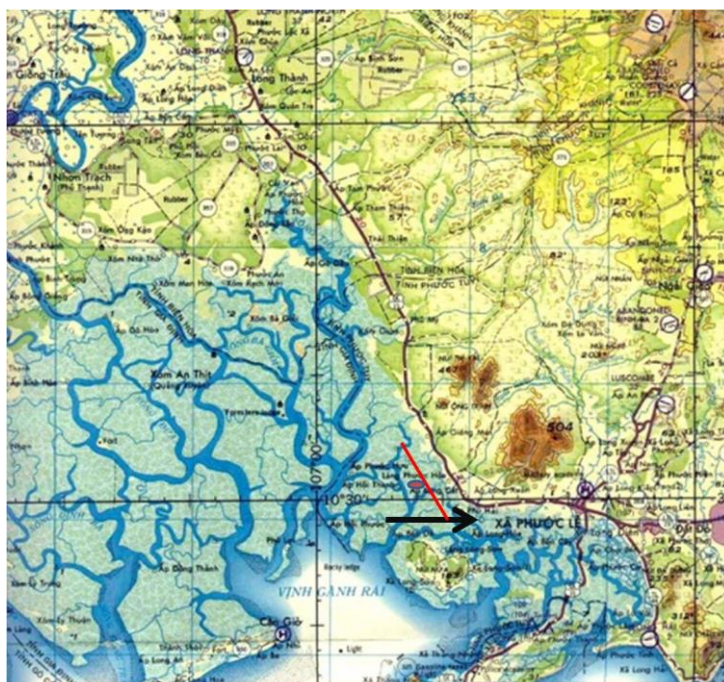


Figure 5: Track #4

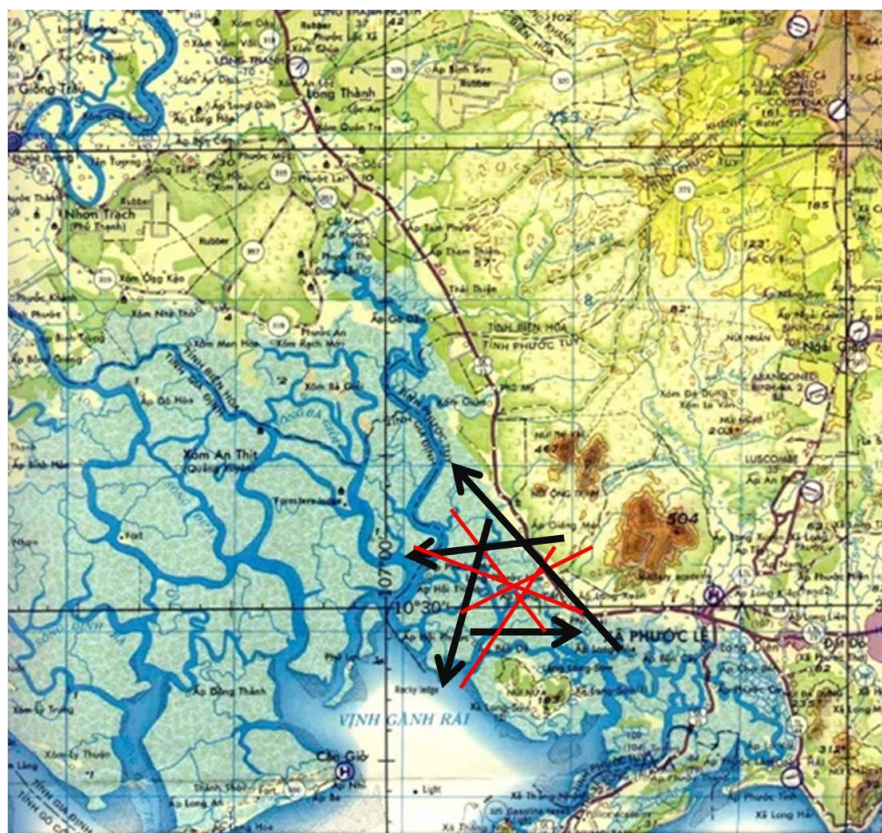


Figure 6: Full Plot

Inserted by Editor:

The 1 ATF SUPINTREP 45/70 for the period 9 Nov – 15 Nov Incl dated 17 Nov 70¹ reported the event as:

CHAU DUC. No confirmed contact has been made with CHAU DUC. However on 9 Nov a Special Agent report was received which indicated that an important element of CHAU DUC had moved from the NUI DINHs into the RUNG SAT north of LONG SON Island. Reacting in response to this report the Commanding Officer of 2 RAR/NZ was shot down in a reconnaissance helicopter, presumably by CHAU DUC. Recent discovery of extensive and well-constructed bunker systems in this area lend further credence to earlier assessments that a number of enemy groups, besides CHAU DUC, have re-located from the general Route 15 area into the RUNG SAT. Probable indications of movement of elements of CHAU DUC in the area just north of the NUI DINHs can be deduced from track patterns and Sniffer reports. A group of CHAU DUC are still believed to be near NGAI GIAO.

Figure 7: Extract from 1 ATF SUPINTREP

Note the use of Special Agent report for 547 Sig Tp information

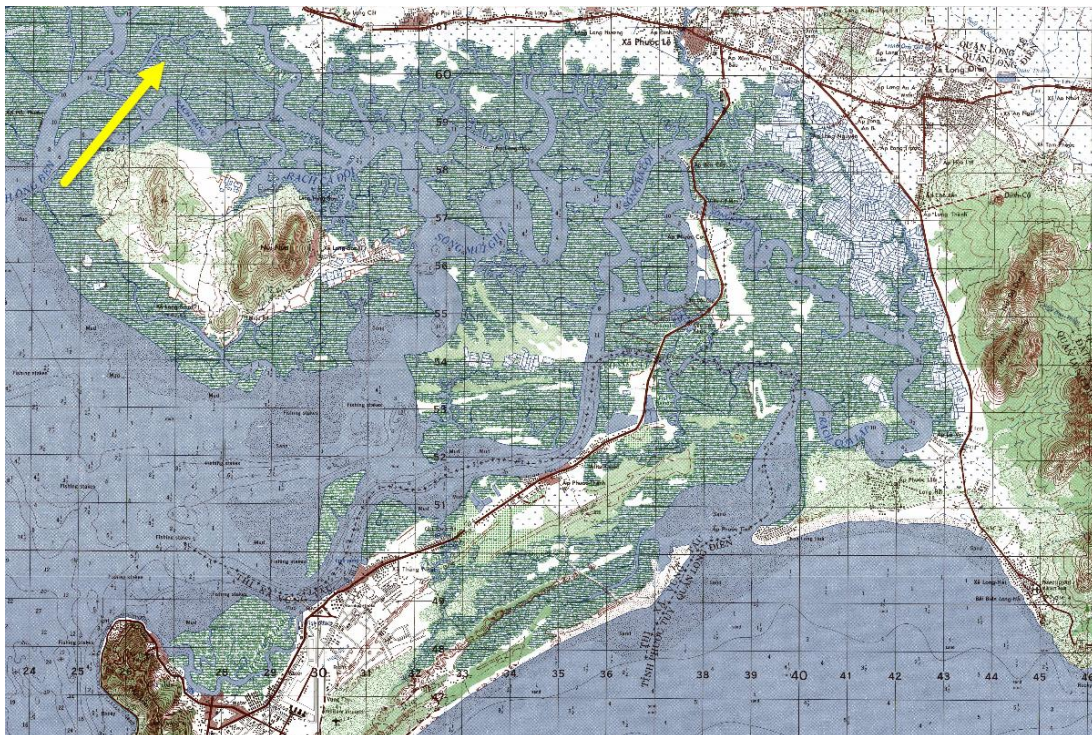


Figure 8: Location of crash site #1

¹AWM RCDIG1028097

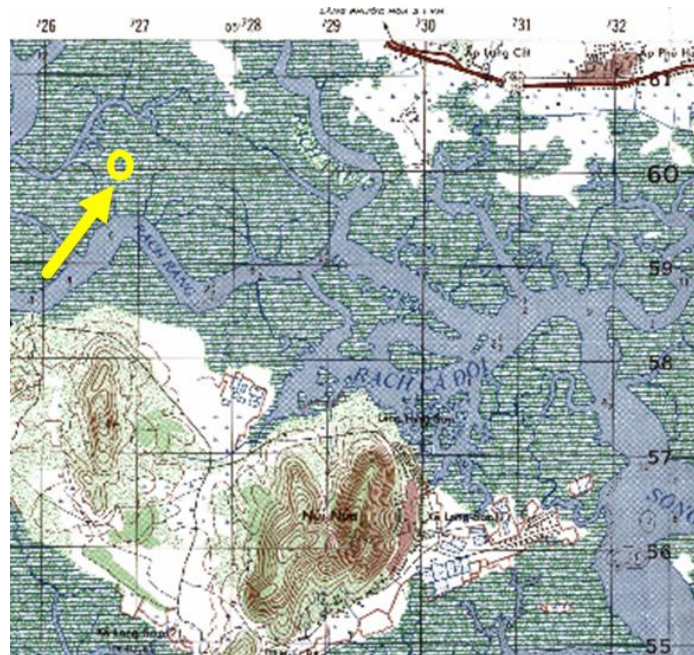


Figure 9: Location of crash site #2