



CHAPTER 4 - TASK FORCE SIGNALS

103 Signal Squadron

1 Signal Regiment in Ingleburn formed 103 Signal Squadron in 1965. It had an advantage over 709 Signal Troop as it was known that 103 Signal Squadron was to train for service in South Vietnam.

At that time the squadron was approaching full strength but it had equipment problems. It held UK C11/R210 and C42/C45 radios but had to change to the AN/PRC-25 VHF manpack radios and the AN/PRC-47 and AN/GRC-106 HF radios only about a month before departing for South Vietnam.



Photo 4.1 - C42/C45 Radio Set



Photo 4.2 - Two AN/GRC-125 Radio Sets in retransmission configuration. Note Vehicle mounted version of the AN/PRC-25 Radio Set





Photo 4.3 - AN/PRC-47 HF Radio Set



Photo 4.4 - AN/GRC-106 HF Radio Set

After unit training, formation training was held with HQ 1 Task Force, 5 RAR, 6 RAR and supporting units in the Gaspers area (North of Sydney, South of Singleton) for about 10 days. This exposed several problems, amongst them, the hard top Landrovers, which did not go overseas with the squadron. Switchboard and line capacity proved to be inadequate so extra capacity was taken to South Vietnam.

Although scheduled, because of insufficient time before deploying most of the unit members did not receive jungle warfare training. Only the units dozen or so National Servicemen receive the training at the Canungra Jungle Training Centre (JTC). This made life difficult in the early period in South Vietnam for the unit.





Move to South Vietnam

Major Peter Mudd, Officer Commanding 103 Signal Squadron, with Lieutenant Bill Elliott and Sergeant Gary Fizzell went by air to arrive a few days before Sergeant Vincent Good and a party of 20, with unit stores arrived in May 1966 on HMAS Sydney. Loading the vehicles emphasized a major unit problem - of the 22 FFR (Fitted-for-Radio) Landrovers, 8 had to be towed onto HMAS Sydney because they were unserviceable. Another group of about 10 men arrived by air the day after HMAS Sydney arrived. A couple of day's later, Captain Duncan Spencer and the remainder of the squadron arrived by air.

The Task Force occupied what was known as the Back Beach at Vung Tau. Although 103 Signal Squadron had its communication centre fully operational other activities were mainly the deployment of some radio detachments. The squadron became acclimatised and familiar with their very new radios.

After about a month on Back Beach the Task Force moved up to Nui Dat in Phuoc Tuy Province in early June 1966. Some of the squadron went in their unit vehicles but mostly movement was by Chinook helicopter landing on the inter-provincial road (LTL/2) that run pass the position and walked across the creek into the rubber plantation. Each member of the unit carried a piece of tentage as well as their normal personal equipment. On arrival the unit deployed in the rubber for some time as the Task Force Officers considered the layout. The unit setup into an area that faced what was soon to be known as Kangaroo Pad - immediately in front of the squadron's lines, guarded and patrolled by the squadron and its successors for years to come.

The wet season had arrived when Nui Dat was occupied which added to the problems of getting established. The Squadron Sergeant Major, Warrant Officer Class Two Clifford King recalls when laying out the line for the dannet wire, Sergeant Alan Turner was the escort as they move along the edge of the rubber. Alan heard a noise in the scrub and let go a burst from his Owen Machine Carbine (OMC) only to see a poor startled bird take flight. Clifford did not need any laxatives on that day! In the early stages, men of the squadron worked more then 16 hours a day to establish the defenses and provide communications for the Task Force.

Setting Up

Nui Dat was a small hill. A pimple on a large flat area, it offered excellent VHF radio communications over the area of operations of the task force. Radios were set up on this feature and remotely controlled from the headquarters over more than a kilometre of cable.





The squadron immediately established the VHF voice command net using the ubiquitous AN/PRC-25, and the HF telegraph net, essentially as envisaged by the unit establishment. The linesmen became possibly the hardest worked men in the squadron and by June the SB-86/PT switchboard had 56 subscribers.

Vehicle SDS began with 4 runs a day as soon as the task force occupied Nui Dat. Each run took two DRs as the area was not completely secure and one had to ride 'shotgun'. There was also a DR commitment to the aerial dispatch service. As Major Mudd said at the time ***"Our two DRs are stretched rather thin and the two bicycles do not fully cope with the requirement"***.



Photo 4.5 - 103 Signal Squadron COMM-CEN (tent) on left and HQ 1 ATF on right (1966)

The shelter telegraph terminal, AN/MGC-17, did not prove to be as useful as was intended. Both telegraph machines and crypto machines had a high fault rate and the confined space did not allow for a technician to repair some equipment while an operator was using other equipment. Also the AN/MGC-17 did not have the capability for the facilities which quickly became necessary so the equipment was dismantled and set up in a tent.

The first two of the many non-standard radio facilities were needed immediately. One was to the US Army advisors at Baria. The other was to alert the casualty evacuation helicopters (Callsign 'Dust Off') at night when they were withdrawn to Vung Tau.

The US procedures and field codes were new to the squadron but were adopted for conformity. Monthly Signal Operating Instructions (SOI) were issued to give the information necessary to operate the various signals facilities in the task force. The US operations code and their numerical/authentication code were also adopted. All radio operators and other users suddenly found they were not using voice procedure as in Signal Training All Arms Pamphlet 7 but instead used ACP 125.





There was much heart burning amongst RA Sigs officers, including the SO Sigs, because call signs, address groups, codes and so on did not change daily, but by order of Commander 1 ATF change only once a week. The argument was that the enemy could not react in any strength in less than a month whilst daily changing call signs, codes etc, reduced simplicity and speed. Within about a year the changes were only made monthly.



Photo 4.6 - 103 Signal Squadron Kitchen at Nui Dat (1966)

The adoption of ACP125 and the US codes had wide ramifications for RA Sigs and other corps, especially for training.

Over the first few months in Nui Dat task force operations were aimed at gaining dominance of the TAOR (Tactical Area of Responsibility) so radio communications were mostly over ranges of only 5 or 6 kilometres, presenting no difficulties to 103 Signal Squadron. A requirement had arisen to retransmit using AN/PRC-25 radios and this worked well except for a high fault rate in the interconnecting cable, a problem that continued a long time.

The first major task force contact occurred near Long Tan on the 18th August 1966. The base at Nui Dat received some 60 mortar rounds in the early hours of the morning and that day and the next, company size patrols of 6 RAR patrolled and searched for the enemy. D Company bumped a force thought to be on its way to attack the base camp. It consisted of a VC battalion, a North Vietnamese battalion and another VC battalion nearby but not in the firefight. The enemy dead totalled 245 whilst D Company 6 RAR suffered 18 dead and 25 wounded. Throughout the battle communications on the task force, 6 RAR and artillery nets were good. Artillery was able to give very close fire support and there was good control over the dispatching and movement of reinforcement for D Company - important contributions to the success of the battle. This action is now known as the Battle of Long Tan and





Vietnam Veterans day is now held on the 18th August each year to commemorate the battle and service of Australian Veterans in South Vietnam. See chapter 5 for details of 547 Signal Troop radio intelligence work before the battle.



Photo 4.7 (left) - Long Tan battle site next morning (19 August 1966)

Photo 4.8 (right) - 105mm field guns and good VHF radio communications helped save D Company, 6 RAR at the Battle of Long Tan

Settling Down

Nui Dat began to look more like a garrison than a forward field base. Concrete was poured. Tentage was gradually replaced by wood and galvanised iron huts. Spiral 4 was installed, especially to provide remote control lines from the signal centre area to the 103 Signal Squadron radio bunker on top of Nui Dat. AN/GRC-106 medium power HF radios were received for use on the task force telegraph net, although this net was rarely used operationally.

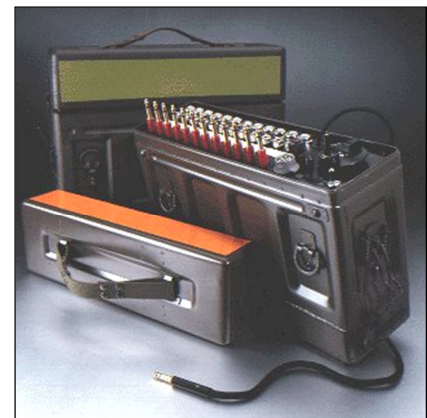


Photo 4.9 (left) - Signalman Reginald Dando operating Ebony Switchboard AN/MTC-7 Shelter (1966)

Photo 4.10 (right) - SB-22 Switchboard

Task force operations were taking place a little further out and in some more difficult country. Retransmission was more frequently used, often with a detachment on VC





Hill in Vung Tau. Aerial rebroadcast was introduced via a pair of AN/PRC-25 radios fitted in a Cessna 180A fixed wing aircraft of 161 Recce Flight; as an ad hoc procedure it did the job but faulty retransmission cables continued to plague this form of communications. Retransmission capabilities from ground radio improved greatly when the AN/VRC-12 series radios were received later on in 1967 and the air capability was most satisfactorily provided later still with a different radio fitment in the Sioux helicopters. The higher powered transmitter and better receiver of the RT-524 of the AN/VRC-12 equipment also reduced the need for retransmission.

During a cordon and search operation at Hoa Long, between Nui Dat and Baria a few kilometres to the south, it was decided that HQ 1 ATF would deploy a tactical headquarters for the first time. 103 Signal Squadron had only to provide a radio detachment to communicate the short distance to Nui Dat and there were no difficulties. This was the start of a new phase of communications for the squadrons, a phase that had been concerning Major Mudd because his squadron was almost fully committed in the base and there was little left to provide for a main task force headquarters away from Nui Dat.

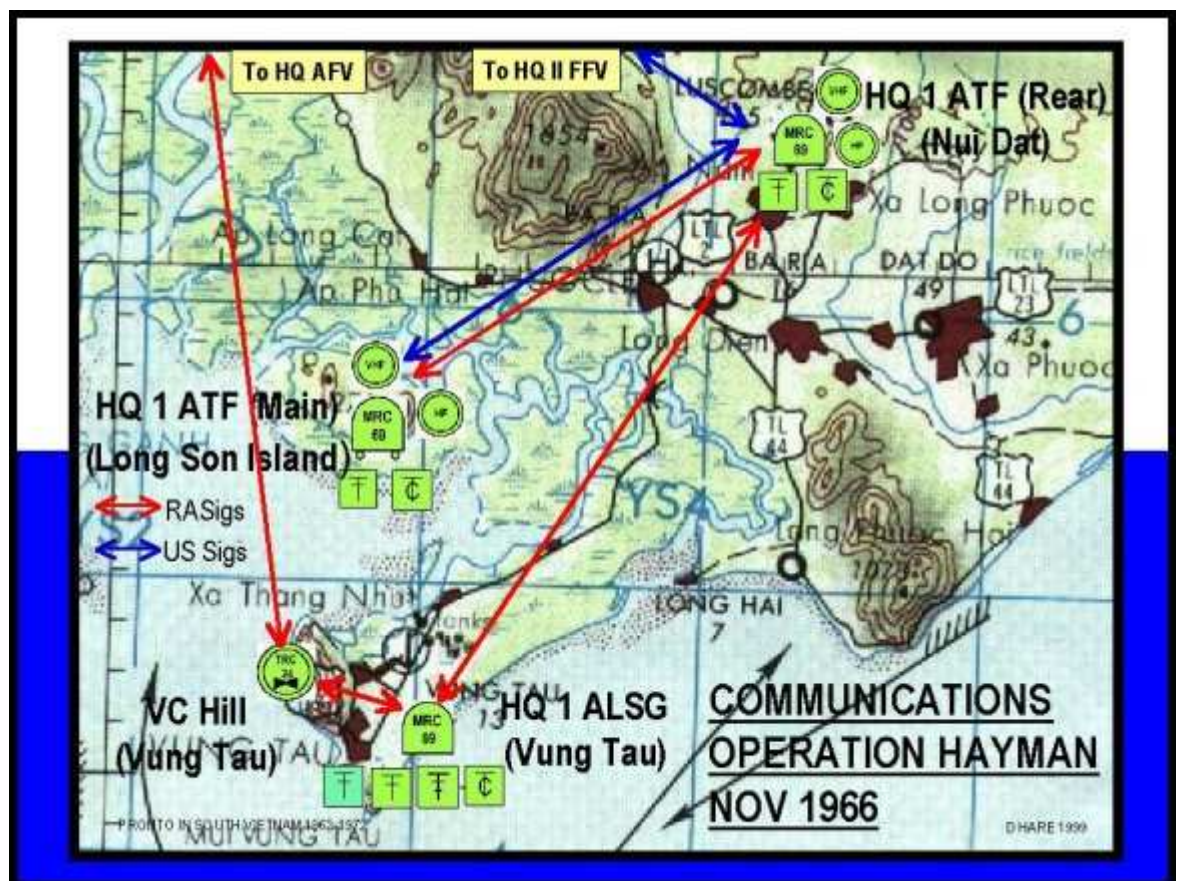


Diagram 4.1 - Communications Operation HAYMAN (Nov 1966)

Early in November 1966, HQ 1 ATF (Main) deployed on Operation HAYMAN to Long Son Island just off the coast to the west of Nui Dat. It was a search and destroy





mission lasting 5 days. Voice and telegraph circuits were provided to HQ AFV, 1 ALSG, II FFV (the US headquarters which operationally controlled 1 ATF) and HQ 1 ATF (Rear) at Nui Dat. Radio relay rear links were provided by a 4 man detachment from 145 Signal Squadron and a 10 man detachment from US 53 Signal Battalion, the latter to II FFV. At HQ 1 ATF (Main) two SB-22/PT switchboards were used but these did not prove as convenient as the larger SB-86/PT used for later deployments. With a small squadron headquarters, kitchen and technical maintenance detachment, 39 all ranks went forward in 8 Chinook helicopter loads, four being required for US 53 Signal Battalion equipment and vehicles. There were no communications difficulties but the operation highlighted the squadron's shortage of telegraph and cipher machines.

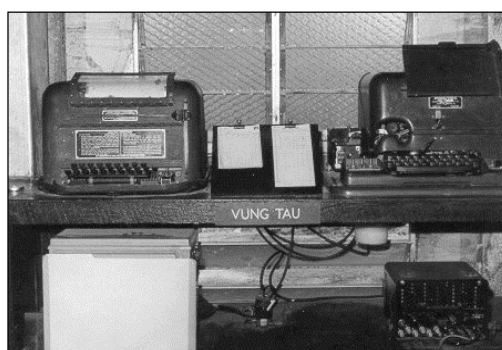


Photo 4.11 (left) - Early 103 Signal Squadron more permanent COMMCEN positions (1966)

Photo 4.12 (right) - Vung Tau circuit position - TT-4/TG (Left) and TT-76 (Right)
103 Signal Squadron (1966)

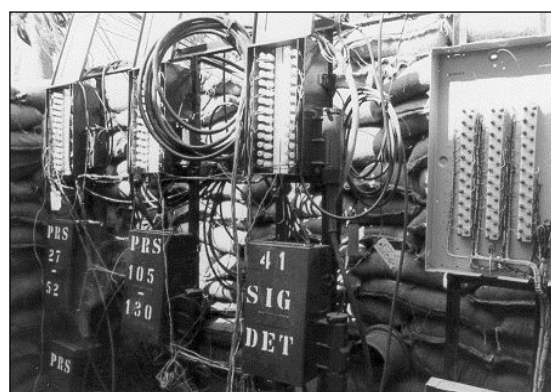
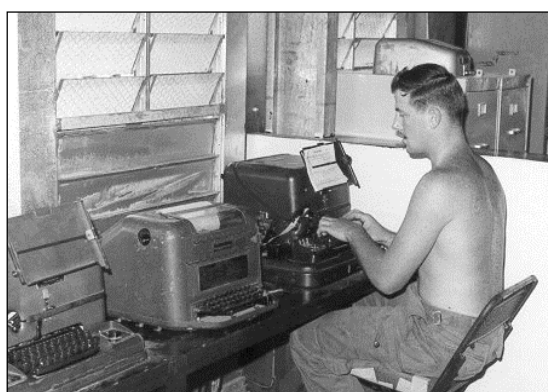


Photo 4.13 (left) - 103 Signal Squadron operator preparing a message (1966)

Photo 4.14 (right) - Part of 103 Signal Squadron Main Distribution Frame (1966)

By December 1966 the installation of a permanent signal centre was well under way. It provided for eight send and receive positions plus two tape preparation positions. Communications facilities of a task force signal squadron were becoming somewhat





removed from the expectations of the planners of the establishment and equipment entitlements of such a squadron.

Even the area switchboard had grown by this time to two SB-86s with a total of 77 locals and trunks.

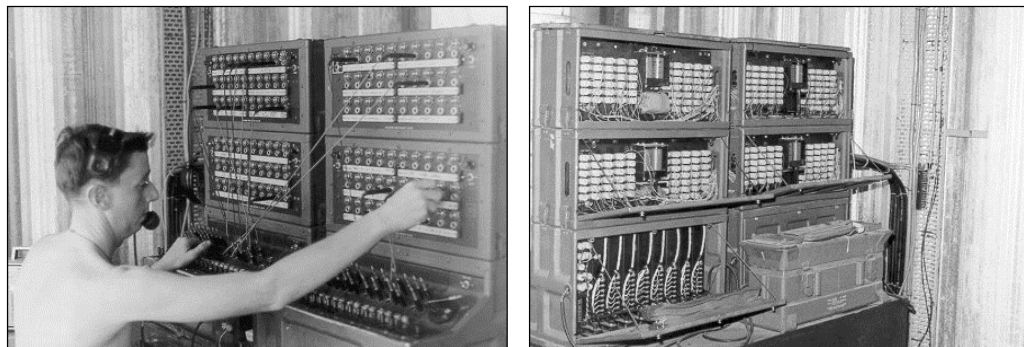


Photo 4.15 (left) - Switchboard operator Lance Corporal Kevin Chipchase manning dismantled Ebony Switchboard (2 x SB-86's) 103 Signal Squadron (1966)

**Photo 4.16 (right) - Rear of Ebony Switchboard (2 x SB-86's)
103 Signal Squadron (1966)**

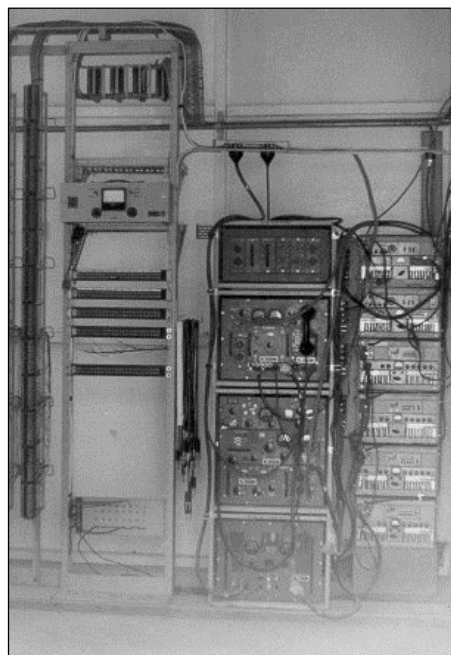


Photo 4.17 - Dismounted AN/MRC-69 Radio Relay Equipment - AN/TRC-24 Radio Set in the centre and the F1830 FDM Multiplexing Equipment on the right - 103 Signal Squadron, Nui Dat (1966)

One set of radio relay and channeling equipment (AN/MRC-69) operated by 145 Signal Squadron was dismantled from the shelter and moved into the equipment





room of the new signal centre building.

Meanwhile the AN/MGC-17 (telegraph) and AN/MTC-7 (switchboard) shelters were set up with sandbagged walls and roof to provide a basic minimum alternative telegraph and telephone facilities.

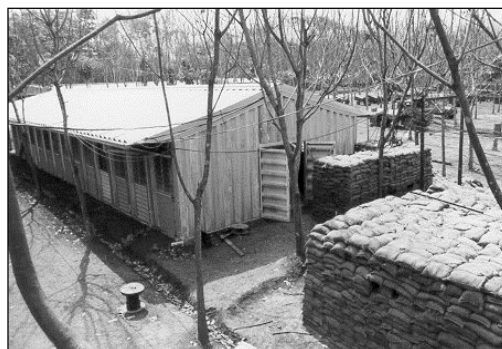


Photo 4.18 (left) - AN/MGC-17 and AN/MTC-7 sandbagged at the back of the 103 Signal Squadron COMMEN - Note the line poles (1966).

Photo 4.19 (right) - AN/MGC-17 and AN/MTC-7 sandbagged (bottom right) at the back of the 103 Signal Squadron COMMEN (1966).

To Sergeant Vincent Good of the task force signal squadron the highlight of his service in South Vietnam was in the first two weeks at Nui Dat. There was only off line cipher and the office needed 3 on duty whilst one slept. He and the other cipher operators were working at their maximum, doing very well the job they were trained to do.

For others such as Lieutenant Bill Laurie, the highlight of service with 103 Signal Squadron came later, around November 1966, when the earlier problems and lack of experience had been overcome. Communications were reliable with alternatives available - now the whole unit was operating on the professional basis for which all ranks had been trained.

104 Signal Squadron

When Major Gerry Lawrence took his first parade of 104 Signal Squadron at Enoggera camp in Brisbane in September 1966. He wondered how he was going to turn the 50 men, some of whom were not suitable for active service, into a full strength, well trained task force signal squadron in 6 months.

Apart from being nearly 100 men short, their personal equipment and clothing was not of the type used on active service; they did not even have some of the current weapons. Unit equipment for communications training was not in all cases the same





as that being used in 1 ATF. 104 Signal Squadron did however have the benefit of 103 Signal Squadron monthly reports.

In the end it was done and on 16th April 1967 preparation completed, the advance party of 14 all ranks moved to Brisbane's Eagle Farm airport where they joined other units' advance parties and boarded a Qantas DC6 for Darwin. This was not an occasion of many relatives' farewelling at quaysides and streamers breaking as a ship sails away (although many did go to Vietnam on the troop carrier HMAS Sydney). Brisbane was not the home of many of the men and they had made their farewells during pre-embarkation leave at their hometowns.

After staying overnight at Darwin the parties were loaded into RAAF C130 Hercules transports which flew direct to Vung Tau. Their first contact with the theatre was to be greeted by cans of soft drink coming out of 44 gallon drums of ice. The 104 Signal Squadron party then boarded a 35 Squadron RAAF Caribou for the short flight to Nui Dat. A very happy Major Mudd greeted a very tired Major Lawrence and drove him in one of the few serviceable squadron vehicles to the task force signals squadron lines opposite the task force command post.

The main body of 104 Signal Squadron began arriving in Nui Dat on 26th April 1967 and the remainder of the squadron with Second in Command Captain Ren Hinton arrived by 3rd May 1967.

Reports omit what quickly becomes routine. 104 Signal Squadron was not really prepared for the permanent air of the whole base, nor was it prepared for the constant gunfire - outgoing - especially from the US 175mm Howitzers, only a couple of hundred metres from the signals area and invariably firing overhead which violently rattled the Kingstrand huts after the deafening sound. But they quickly adapted and took over from 103 Signal Squadron.

As with 110 Signal Squadron who replaced 145 Signal Squadron about the same time, the communications which 104 Signal Squadron provided suffered from almost all ranks being replaced at the one time so that there was a lack of background and experience to cope sufficiently quickly with some problems. Fortunately task force operations imposed no special strains on 104 Signal Squadron at the time, but it was the last occasion that the task force signal squadron was relieved as a unit.

The death knell to HF radio in the task force was rung in May 1967 when the telegraph net was closed. The AN/PRC-25 radios had proved to be so reliable that an alternative net to the task force voice command net was not required and units did not want to be slowed down by the telegraph detachment. Also, the nature of operations was such that there was almost no administrative traffic.

Apart from closing the task force telegraph net, 104 Signal Squadron picked up where 103 Signal Squadron had finished and continued construction of huts, rebuilt defences. Installed additional cable for new and alternative circuits, especially the





remotes to the Nui Dat feature, continued wiring in the signal centre and continued complaints about worn out or unreliable equipment particularly telegraph machines, cipher machines, generators and the SB-86/PT switchboards. Dust caused excessive wear in the telegraph machines (at Vung Tau, 110 Signal Squadron had a similar problem with sand) and heat caused a high fault rate on cipher machines; air-conditioning the signal centre finally overcame these problems. The generators were by no means new when 103 Signal Squadron brought them to the theatre and the continuous use just wore them out. The unsuitability of the SB-86/PT was overcome by replacement with a 200 line World War II TC-10 switchboard, resurrected from 133 Signal Squadron (base signal park in Penrith) - another one was installed at Vung Tau.

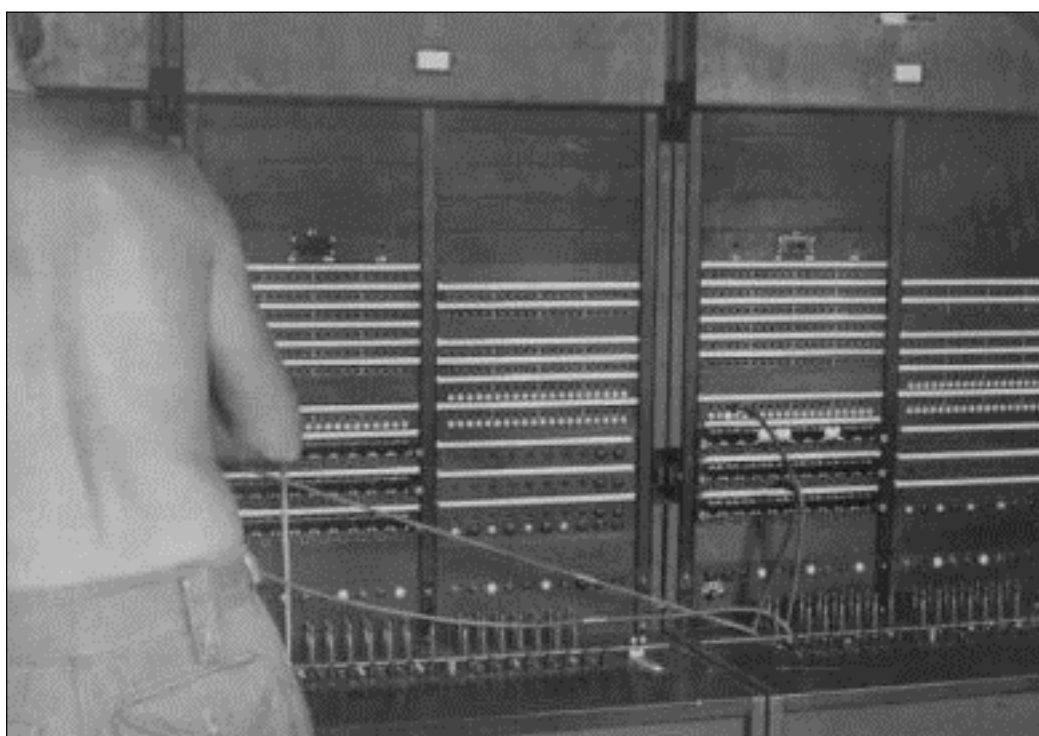


Photo 4.20 - TC-10 (Ebony) manned by 104 Signal Squadron Switchboard operators at Nui Dat (1967)

It also kept task force communications operational with the main headquarters moving out several times to greater distances than before although generally operations remained within Phuoc Tuy Province. Seldom was a unit of 1 ATF more than 40 kilometres away from the Nui Dat base so that VHF radio and radio relay coped with all needs.

The squadron received its long fought for theatre increment bringing its total strength to 150. With the detachment from 110 Signal Squadron, the detachment for US 53 Signal Battalion, 547 Signal Troop (EW) and the detachment of 152 Signal Squadron (SAS), over 200 all ranks were now engaged in direct signals support to the task force.





This was a time of consolidation and many improvements were introduced but the task force and its signal squadron were becoming entrenched in a substantially fixed system of communications. For example in mid 1967 there were 32 rear links operating out of the task force. However, mobility in field communications was retained and this enabled the outnumbered task force to conduct operations away from the base leaving it defended mainly by administrative personnel; the highly reliable field communications would allow immediate reaction to a threat to the base.

104 Signal Squadron in July 1967 had its first soldier WIA, when Signaller Reginald Armstrong, a radio operator on LO duty with the US Army 1 Bde HQ at FSPB Bill, near Thia Tich, was hit by fragments from a tree burst during a mortar attack. In August 1967 Corporal D. J. Donnelly was accidentally killed at Nui Dat while cleaning his F1 Sub Machine Gun.

139 Signal Squadron

Back in Enoggera 139 Signal Squadron had been formed as the squadron to support 6 Task Force and it then became the main source of replacement for 104 Signal Squadron. Time was a critical factor for 139 Signal Squadron especially where National Servicemen were concerned since they had to do recruit training and corps training, which left little time for unit training, if they were to complete a 12 months' tour in Vietnam.



**Photo 4.21 – 139 Signal Squadron at Enoggera, Brisbane, Queensland (1968)
Feeder unit for 104 Signal Squadron in South Vietnam**

