

## CHAPTER 6

### Shore Signal Offices

**From the 1940s**, regardless of their size, most shore signal centres were organised in a similar manner. The basis of this organisation was prescribed within the then bible for message handling, the famous, or infamous AFO S9, "Naval Message Handling" and all its subsequent editions and amendments. The offices were planned to receive and transmit messages utilizing a hand message system with messengers hand carrying messages to the various shore authorities and electronic and hand messages to ships, remote shore establishments as well as distributing messages to addressees within their respective establishments and to maintain signal "logs" in accordance with the above mentioned publication.

Each area within the N.Z. geographical zone had such an office for the dissemination of information contained in "signals". The main office for the Auckland area from the mid-1940s was:

#### **The Auckland Main Signal Office.**

Located on the ground floor of the Dockyard Central Office Block, [almost directly opposite the spot where "New Daventry" first appeared] the MSO was across the passageway, just to the left of the main entrance. The complex had 4 offices:-

1. **Main Signal Office**
2. **Teleprinter Room**
3. **Cryptographic Office**
4. **Signal Communications Officer's office**

**Main Signal Office** was manned by Signal ratings and WRNZNS ratings. The male staff comprised one Chief Yeoman of Signals, 1 Yeoman of Signals, 4 Leading Signalmen and 8 Signalmen. The WRNZNS staff were led by a PO Signals Wren and sundry Wren signal staff as day workers. The office was manned 24/7 with signals being collected by ship's staff messengers at intervals prescribed in Auckland General Orders. In an effort to limit unauthorised entry, messengers were obliged to collect and sign for their signals from a hatch in the wall, though it must be admitted that this did not prevent "the MSO" being a favourite hideaway for local signal staff.

The MSO processed all signal traffic within the Auckland command. The Chief Yeoman "looked after" the Naval Officer in Charge, Auckland, who, initially, was also Philomel's Commanding Officer. The Yeoman's primary responsibility was the checking and maintenance of the various logs and check sheets to ensure that no signals had, inadvertently become "lost in the system." The Leading Signalmen acted as the senior hand of their respective watches, logged all traffic in and out, supervised teleprinter and cryptographic activity and supervised the Wrens typing and distributing messages within the command. Duplication of messages involved the production of an ORMIG master from a coated sheet similar to heavy grade purple carbon paper, fitting the resultant master to a

circular drum where it was moistened by a methylated-spirit soaked pad. The drum was rotated by hand and often covered the operators with bright purple stains on hands, cuffs and clothes.

**Teleprinter Room:-** Using a torn tape system there were direct simplex teletype links to Port Wireless, HMNZS Tamaki [Motuihe Island], the Volunteer Reserve Headquarters HMNZS Ngapona and a duplex landline to Navy Office, Wellington. Navy Office was also the forwarding post for Waiouru W/T [later to become HMNZS Irirangi, ships at sea and all overseas destinations as well as Wellington, Christchurch and Dunedin Volunteer Reserve Headquarters.

The major station for the NZ area was Wellington and all traffic was routed to addressees from there. There was also a Telex link in the office which connected to the Post Office network but was seldom used. The tea room – at the back of the TP room – was originally a broom cupboard but now boasted [among other things] a hot water urn, a temperamental toaster, sugar, tea and coffee containers, sour milk, cracked teacups [marked RNZN of course] and no sink, the dishes being washed in the bathroom along the corridor.

Communications were primitive but efficient, at least until the advent of A.M.S.S. [automatic message sorting system] otherwise known as Fred , in the mid 50s.

**Cryptographic Office -** As all landlines were leased from the NZ Post Office they were unclassified which meant all classified traffic had to be off-line encrypted.. This involved off-line cipher machines, sets of inserts, basic books and frames, one-time-pads and sundry other publications. The systems appeared to work reasonably well considering the machines had to deal with encryption errors, decryption errors as well as transmission and reception errors. Indeed, the guesswork of a decrypting operator was often more correct than the originator of the message intended. Nevertheless, the basic book, pad and frame methods were extremely tedious and avoided like the plague. This room was also the secure stowage for all the classified material issued to the MSO. In the interests of accuracy it has to be recorded that the Crypto office also served as the unofficial bunkroom during the silent hours when the traffic allowed the duty watch to “relax”.

**S.C.O.’s Office –** During this era, the Port Communications Officer, or POCO as he was generally known, was usually a Commissioned or Senior Commissioned Communications Officer and often, to the chagrin of the Signals-based MSO staff, a former Telegraphist but still responsible for all communications matters in the Auckland Command. He was also the Divisional Officer for all communications ratings and often, to a degree assisted with the posting [or drafting, as it was then known]. He tended not to interfere too much in the workings of the various offices – probably thought there was enough chaos therein without adding to it. But in his office there were magnificent whiteboards with the location of every communicator, cross referenced with every ship and its staff. These kept him and his Chief extremely busy, remembering the “Navy” at that time boasted six Loch class frigates, one operational and one reserve cruiser, one survey ship, two corvettes and sundry small ships as well as the shore establishments, Tamaki, Wakefield, Waiouru W/T, plus any Communications rating in Reserve HQs. In conjunction with the Drafting Office, this magnificent board often determined the career path of communicators, scheduling overseas advancement courses and drafting requirements necessary to keep the fleet manned..

**Comauck M.S.O.**

In the early 1950s the appointments of Commanding Officer Philomel and Naval Officer in Charge Auckland were separated and N.O.C.A.'s appointment was upgraded to Commodore Auckland with his headquarters in the houses just East of the Wardroom at the top of Monowai Hill. Comauck's MSO was at the back of his headquarters, where his staff comprised 1 Chief Yeoman or Yeoman of Signals [or a Petty Officer WRNZNS Signal rating plus two Communications Ratings and was manned in working hours only. A duplex teleprinter line was used to clear unclassified traffic with classified traffic being handled by the Auckland MSO. Comauck's office was later fitted with on-line cryptographic equipment but remained part-time except for major exercises. Eventually, the Commodore Auckland became Maritime Commander [MARCOM] before in turn surrendering his title with the establishment of the Headquarters Joint Force New Zealand located at Trentham in July 2001

## **Command Comcen Auckland**

Located next to the old Cookery School which was alongside the drydock, the Command Comcen was built in what used to be the dockyard showers and bathroom building. This was the Comcen which provided hand message facilities for ships alongside, all classified signal delivery and off-line relay for the ships and shore establishments. The Command Comcen was a 24-hour communications centre directly linked into the Defence Communications Network. Over time it had teleprinter relay links (simplex or drop printer) to SNSD, DSE, Ngapona, Kauri Pt, and Tamaki. The facility later became NAVCALS Auckland and in 1993 became the current NAVCOMSTA Auckland.

## **Philomel MSO**

This was a message distribution centre for Philomel and operated on hand messages to and from the Command Comcen. The MSO was located on the ground floor of the Philomel Administration Building where the Base Land Facilities Management team are now located. The facility was managed by a Leading Hand [LSG] with one additional junior rate. The facility closed in the mid to late 1970s.

## **Command Signal Tower**

This was the existing Philomel Signal Tower with the addition of signal projectors and Semaphore flags. Ships entering harbour or alongside could pass messages through the tower for relay to Comauck or the Command Comcen for input to the Defence Communications Network. The Philomel MSO staff manned the Signal Tower during working hours with Command Comcen staff manning it as required out of hours. The tower had an intercom to the Philomel MSO downstairs and operators simply dictated the messages as they read them. After the Philomel MSO closed the facility reverted to "as required" and was manned as necessary by Command Comcen and NAVCALS staff.

## **Tamaki MSO Motuihe Island 1940-1950s**

Before 1948 the Tamaki signal organisation was the responsibility of the administration staff in the ship's office. Neither trainees nor their instructors were involved, though as duty watch one night in 1947 I have a clear recollection of being asked [told] by one of the M.L.'s coxswains to deliver an envelope of signals to the Officer of the Day. In 1948 a Signal Office

was opened in an annex to the Training Division dining hall. This office was equipped with a TCS12 transceiver, a typewriter but no ormig, [distribution being rarely more than 4 plus 1 for the log. A signalman was drafted to Tamaki to man this facility. Schedules were arranged every three hours from 9 a.m. to Sunset, between Tamaki and the Philomel Signal Tower, where there was an ex USN Hallicrafters Radiophone transceiver. This was the main method of passing signals during daylight with any priority traffic outside this time being phoned to the Tamaki Quartermaster. If the sole Signalman was on board he would deal with the signal, otherwise it would pass to the Officer of the Day.

About mid-July 1949, the Tamaki signals complement was doubled to TWO signalmen. There was no major change to the system, but because there was an additional signalman the seaman branch quite happily handed over the maintenance of the three signal masts. One on the parade ground to fly the White Ensign, two training masts, each containing two flag lockers and five halyards. It was considered an ideal draft for young buntings, incorporating swimming, sailing, and fishing.

By 1950 the MSO was still in the same place but was now the proud possessor of a teleprinter and its complement had been increased to a leading signalman and two able rates. The radio was retained in case there was ever a failure of the undersea cable from Auckland. The reason for the increase in staff was due to the expansion of the Signal School following the introduction of Compulsory Military Training. The MSO had tasks such as book corrections, transmitting and marking of practical exercises, supervising trainees at Colours and Sunset and cleaning out the Comms Officer's Office which was off-limits to trainees.

In 1950 the MSO was relocated to the space below the water tower which used to be the Signal Boys classroom. The room measured approximately 4 metres x 4 metres between the legs of the water tower and a teleprinter, reperforator and TCS for emergency use. The teleprinter was connected to the MSO in the Dockyard Central Office building. Visual watch was maintained whenever HMNZS ships were in the vicinity, with the Aldis lamp being used for communication. On the eastern end of the island there was 10-inch signalling projector which was used for communications when ships left or entered port via the eastern channel. Comment from one of the users described it as being a long run from the Water Tower to Cemetery Point.

### **Tamaki Comcen [Fort Cautley]**

This was similar to the Philomel MSO with an unclassified teleprinter link operated part time into the Command Comcen/NAVCALS. It was manned by one leading hand and one operator. Originally located in the main administration building at Narrow Neck it was moved into the old Tamaki Management Office building next to the Regulating Office. In 1992/1993 it was moved yet again, this time to the North Yard where the Command School is now situated. It closed when the LAN signal system came on line in 1998.

### **Naval Comcen Wellington**

Before 1955 the office was known and functioned as Navy Office MSO and was on the roof of the Defence Building, making it effectively the 8<sup>th</sup> floor of the Defence HQ in Stout St, Wellington. As well as the MSO, other offices on that floor relating to the branch were those of the Director of Navy Signals [DNSC], the Deputy Director of Navy Signals [DDNSC], the

Main Signal Office, Yeoman's Office, Cryptographic Office, Teleprinter Room, Wireless Office, and Online Crypto Room. Before 1955 the complex was manned by 1 Yeoman, 1 P.O. Wren, 4 Leading Signalmen, 10 assorted Signal and Telegraphist staff and about half-a-dozen WRNZNS staff as day workers.

The advent of the Automatic Message Switching System marked the beginning of the "electronic age" and was intended to save manpower and thereby reduce staff. In practice, it increased the staff during 1956 to the extent of having a Chief Communicator and many more hands drafted in to fulfil the need for checking all circuits for signals that were swallowed by the system and failing to reach the intended addressees to such an extent that staff numbers actually doubled within ONE year.

After 1955, the naval broadcasts – both CW and off-line radio teletype were controlled from Wellington as well as the Local Command Net on 3192kHz, necessitating a further significant increase in the number of Telegraphists required to control them as well as the additional overseas circuits which were also being controlled from Wellington. These were Vancouver and Canberra, the American circuit to Honolulu as well as landlines to Deepfreeze HQ, HMNZS Olphert, Navcommsta Waiouru, NCC Auckland, Army Comcen at Buckle Street, the RNZAF Comcen on the 3<sup>rd</sup> Floor and the Naval HQ MSO on the 2<sup>nd</sup> floor.

The office kept a constant watch on all landlines and schedules with the overseas stations, although during the Vietnam War and during Operation Deepfreeze the circuits to Honolulu became almost continuous. The Comcen was administered by DDNSC but the general administration of the staff was under the umbrella of HMNZS Wakefield, commanded by a Commander on the Naval staff. Senior rates and WRNZNS staff were accommodated [separately of course] at Forst Dorset, the Army barracks at Seatoun while Leading rates and below were billeted in the former HMNZS Cook at Shelly Bay

Ex CRI Jim Blackburn recalls some memories from his early days at Navy Office.

"Before 1955, Leading Rates and below lived in HMNZS Olphert, the RNZNVR Headquarters in a wharf shed off Aotea Quay near the inter-island ferry terminal in what has been described as "spartan" or even "appalling" conditions. The inhabitants did their own victualling and cooking and whenever the Reservists had parade training nights or at weekends the communicators were forced to vacate their mess

In those days Wellington City "Closed" between 1730 Fridays and 0830 on Mondays except for the bars. There were no shops open, no milk bars, and few cafes with the city resembling a "ghost town". From 1500 Friday through to Saturday midday was the busy period as the naval staff on the second floor cleared their out-boxes for the weekend. The bane of the communications staff over the weekends were the thousands of groups of cypher comprising the Far East Intelligence report with its irritating corruptions. Before the shops closed on Fridays, one of the Wrens would collect 10 cents or so from each of the staff and go out to buy steak and veges etc., which, they then used to produce really first class meals which we would enjoy when the work load eased off around 1900. This meal was usually the last decent meal of the weekend for the duty watch which ran from 0800 Friday until 0800 Monday. Regardless of the work load the Wrens all had to leave the Comcen before 2000 in order for them to catch the last tram back to Fort Dorset

Breakfast for those on watch, usually bacon and eggs, in a hotbox, was delivered to the front door of Stout Street by the RNZAF from Shelly Bay at about 0700. For lunch on Saturdays and Sundays staff had to walk to Olphert and back in two watches for the Comcentre to remain continuously manned. Suppers were generally non-existent, or a packet of biscuits. For some strange reason which I was

never able to get to the bottom of we were not allowed to wear uniform except on the Tuesday at the end of each month.”.

**RNZNVR Headquarters** – All the Volunteer Reserve Headquarters were connected to the Landline system but were manned by permanent instructors and staff who were not necessarily communicators.