

## CHAPTER 10

### Waioru W/T

Examination of the relevant files shows quite clearly that as far back as 1935 concern was being expressed by the Commodore Commanding the New Zealand Squadron and later by the Naval Board about the absence of Naval radio facilities in Wellington. Their concern had increased to the point where the Navy had arranged for a 500W radio transmitter to be installed at the Post & Telegraph Receiving Station ZLW on Mt Tinakori in Wellington. Just over 12 months later the Commodore expressed his concern over the Post & Telegraph radio staff unfamiliarity with Naval procedures, and recommending special procedures to overcome the problem.

By 1937, Naval concerns had increased to the point where "it had been thought advisable to enter into negotiations with the Post & Telegraph Dept with a view to the establishment of a naval shore wireless station in the existing Wellington Radio Station in peace as well as in war." Some of the thinking behind this proposal would undoubtedly have been the stated obsolescence of the Philomel radio station's equipment and the increasing electrical interference in the expanding Naval Dockyard but the primary, though unstated, reason was the desire to ensure that any new radio station remained firmly under Wellington's control.

This pressure from the Naval authorities continued until May 1940 when Treasury gave their approval for the expansion of the Mt Tinakori facility. Until then there had been no mention of anyone seeking an alternative location. At a meeting of the War Cabinet some concern had been expressed about the possible dangers of off-shore bombardment of the radio station. These concerns were apparently ignored by the Navy but were as manna from Heaven by the Air Force. The RNZAF had already started on their development at Bulls, some 100 miles north of Wellington and were looking for a low-cost site to establish their own high-frequency transmitting and receiving station. To the War Cabinet this must have seemed like a heaven-sent opportunity, house both services on cheaper land well clear of built-up areas and away from any possibility of off-shore bombardment. This latter fear was heightened after the speed of the Japanese military expansion through the central Pacific became apparent and led to approval for and construction of a joint Naval and Air Force wireless station at Waioru within six months of the attack on Pearl Harbour in December 1941.

The planned accommodation for about 200 personnel and necessary administration area covered about 30 acres in what was then Sinclair's farm at Hihitahi, with an additional 400 acres being earmarked for the receiving station and aerials. To minimise interference the Naval and Air Force transmitter station was built some seven miles to the North.

Scrutiny of the official history of the Public Works Department makes interesting reading:

"Planning for the construction of a combined Naval and RNZAF wireless station with accommodation for about 200 personnel was commenced in June 1942, and, after preliminary investigation to determine the suitability of the site selected, construction commenced in October of that year. Common folklore has it that the site selection was done from a canvas tent occupied by Acting Temporary Warrant Telegraphist Biggs. Mr Bigg's role was not to determine the site of the camp, which had already been negotiated with the

Sinclair family who farmed the land. Mr Biggs' task was to determine the likelihood or strength of any interference from the yet to be built transmitting station, originally planned to be just one mile [1.6km] distant.

The main part of the station occupied an area of 30 acres but the receiver aerials covered about 400 acres. The project was built at an altitude of 2,500 feet [820 metres] and consisted of an accommodation camp with a receiving station  $\frac{3}{4}$  of a mile [1250 metres] away. Two transmitting stations were located some seven miles [11km] to the north of the camp. Water, sewage and electrical reticulation were provided. All the work, with the exception of the aerials, telephone installation and some cable laying was carried out by the Public Works Department.

The receiving and transmitting portions of the station were connected by telephone and with separate exchange systems. Auxiliary power houses were built at both the receiving and transmitting sites with personnel being transported each day from the main camp at Hihitahi. The Chief Surveyor, Lands & Survey Department, co-operated with the Public Works Department and the two Services in fixing the positions of the station aerials, etc.

The principal items of work carried out were listed as:

Buildings erected        58

Floor area of buildings 45,600 sq feet

Roads formed and surfaced 5 miles

Water Mains 36 ch., Concrete Water Tank 20,000 gallons. Septic Tanks 7. Telephones 49..

On 2 September, 1942, WO Iggy Biggs became the first Commanding Officer. During the early life of the camp the Air Force men and women live at the Naval camp but after several complaints about the Spartan conditions the Air Force personnel moved to the Waiouru Military Camp. Finally all Air Force Communications and personnel were moved to Ohakea in June 1946. The station then became known as "The Naval W/T Station, Waiouru.

The total cost of the completed station was 100,000 pounds [\$200,000] although this figure did not include equipment or aerials. When completed, the original station consisted of:

Two Receiving Stations: Air Force Receiver One [AR1] and Naval Receivers Two [NR2]. After the Air Force out in 1946, AR1 remained unused until 1949, when it then became manned by Naval and Army personnel and was renamed NR1.

Four Transmitting Stations: Air Force Transmitters One [AT1] and Air Force Transmitters Two [AT2] were manned by the Air Force until 1946; the buildings were then moved to the old camp and became the married Officers' quarters. Naval Transmitters Three [NT3] was moved to the receiver site and became an addition to the NR2 building in 1955 and Naval Transmitters Four [NT4 building became the Naval stores in 1957.

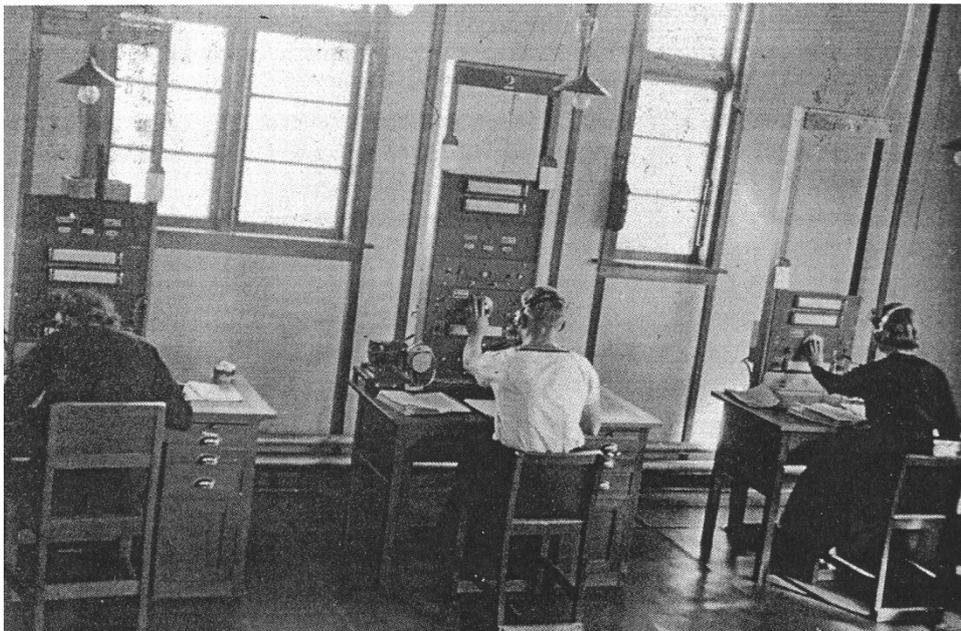
### **Wartime Performance .**

During its wartime peak, W/T Station, Waiouru had an establishment of about 150 officers and ratings, of which more than 80 were WRNZNS who did most of the operating. The station's main achievement was in broadcasting for the British Pacific Fleet in Japanese

waters. It was found that the American radio circuits were too heavily loaded to handle traffic for the Admiralty and this task was taken over by Waiouru. The station handled practically all the traffic between Admiral Sir Bruce Fraser, Commander-in-Chief, British Pacific Fleet, and the British Government, including important messages on political and other questions. In addition, a large proportion of the messages of a similar nature between Admiral Earl Mountbatten, Supreme Commander, South East Asia, and the British Government passed through Waiouru.

The first 4 Wren Telegraphists and 4 Wren Teleprinter operators arrived in August, 1943. According to one of them each watch normally had one male PO Tel in charge,, one Wren Leading Telegraphist, 3 or 4 Wren Telegraphists, one Wren Teleprinter Operator plus one or two male Telegraphists.

One of the male Telegraphists was invariably an older Post Office sparker who job it was to monitor the Japanese signals.[Possibly some of the P & T operators had,earlier in the war,been trained in Katakana [a Japanese variation of the basic Morse code] by Jack Williamson at Navy Office.] Towards the end of the war when traffic levels had increased significantly, the watch strengths were increased to 4 or 5 male Telegraphists and 8 Wrens.



**Three of the 12 bays in the main receiving room showing the NZPO 741 receivers**

Except for some high speed work (which was typed on to tape and then run through a Creed head when conditions were good enough, all of the radio work was done by handkeyed Morse. After the war, all the Wrens were sent to Auckland and Wellington, where most were demobilised. The station's major achievement during the war was in broadcasting for the British Pacific Fleet off Japan, by acting as the link between Admiralty and the fleet when it was found that the American circuits were too heavily loaded to handle the British traffic.



**The landline teleprinter room in the late 1940s with the NZPO simolex line on the left, Navy Office inward in the centre and Navy Office outgoing on the right**

On October 30 1951, the establishment was commissioned as HMNZS Irirangi. The name Irirangi meant "Queen of Song" and was taken from the Maori princess who was noted for her haunting beauty and her voice of mellow sweetness. In 1971, to distinguish between the operational and administrative role of the establishment, a further title was promulgated. The administrative side remained as HMNZS Irirangi and the Naval Communication Station or NAVCOMSTA Waieurua became the operational title.



**L/Tel Jonah Whale on 16 MHz ship-shore with one of the unpopular B40s**

For financial reasons it was decided that support for Irirangi would come from the Army and plans were made to take up occupancy in the Treasury Barracks inside the Waiouru Military Camp. The initial move had been planned for 7<sup>th</sup> December, 1970, but was delayed until 16<sup>th</sup> December, as the barracks were not considered as being up to Naval standards. However, the barracks could only accommodate the Junior rates living quarters. Senior Rates accommodation and the administrative offices remained at the old Hihitahi camp until 1973. The Junior Rates accommodation was then renamed the Frigate Block and was officially opened by Rear Admiral L.G. Carr, CB, DSC, on the 21<sup>st</sup> of January, 1971.

Plans were then drawn up for additions to the Frigate Block to house the Senior Rates and administrative offices, and construction began toward the end of 1972. The final move, paying off the old site and recommissioning of the new, took place on 29<sup>th</sup> June 1973. As a follow-up, the Army Fire Brigade took great delight in burning down much of the old camp for fire exercises on 15 May, 1974, with the exception of the old Quartermaster's Lobby and Cell Block which were taken over as the Irirangi Sports and Social Club. Final renovations to these were completed in 1979 and they were officially opened by the Commodore, Auckland in November, 1979.

During the 1970s the concept of a Joint Radio Project [JRP] was envisioned. This would give one controller, control of all Defence high frequency services, that is all High, Medium and Low power assets, but the initial concept foundered, due largely to a lack of technology at a realistic price. Throughout the 70's and 80's this inability to progress resulted in the existing equipment and buildings becoming obsolete. This obsolescence resulted in temporary repairs to transmitters being carried out and the "JRP" being resurrected.

The project involved the complete rebuilding and re-equipping of both the transmitters and receivers sites. A major restriction with any project of this nature is finance. Whilst sufficient funds were allocated these were spread over the years 1986 through 1991. The solution to this was to undertake the project in two phases.

Phase 1 was the JRP Transmitter complex. This involved rationalisation of the Aerial Farm from the previous remnants of WW2 with the siting of Rotatable Log Periodic Antennas. The use of rotatable antennas was not new. Two earlier types of rotating antennas, 5-element Yagi's had been operated by the Air Force during their time at Waiouru. At the end of the war, these two antennas were sold by the War Assets Realisation Board for one hundred pounds each, which price included not only the antenna and supporting mast but also the GMC-powered generator. One of them was bought by a Taihape farmer and in addition to becoming the mainstay of his amateur radio station he was almost certainly the only farmer in New Zealand to have an all-electric 110-volt shearing shed.

The main broadcast arrays were also changed from Quadrants to an array of horizontal and vertical dipoles to transmit 4 or more channels on seven spot frequencies. The building section of Phase 1 was commenced in September 1986 with work completing in February 1987. This building was constructed in accordance with the latest security requirements and the complete transmitter complex was opened in May 1988 at a cost of \$M11.

Phase II of the project was to rebuild the Receiver building. This was relocated to the site of the original Air Force Receivers One, subsequently renamed Navy Receivers One [NR1] after the departure of the Air Force in 1946. The construction of the building began in January 1989 and it was commissioned in August, 1990 at a cost of \$M8. The building has

a comprehensive security system and is attended 24 hours a day. It has been built so that access can only be gained by personnel inside the building operating gate/door releases. A flexible approach was taken to enable all equipment to be remotely operated from within the main communications office.

The final phase of the project was to enable all the transmitters and receivers to be operated remotely from within the Devonport Naval Base with the result that only a small number of technicians would remain at either site.

But before this came to pass, on 1 November, 1977, some 32 years after the wartime WRNZNS were posted from the station, 10 female Radio Operators arrived back at Irirangi. Having been an "all-male" establishment for so long, the male population were somewhat taken aback. There were no facilities for females so they were accommodated with the WRACS in Faena Barracks until the renovations could be made. On April 20th, 1978, a further 14 female ratings [9 Radio Operators and 5 Communication Centre Operators arrived and became part of Irirangi ship's company and, together with the first 10, took up residence in the Frigate Block. Over the following 15 years the numbers gradually declined until, in 1992 the establishment was: 3 Officers

11 Senior Ratings [1 Female]

27 Junior Rates [13 Female]

8 Civilians [1 Female]

Just one year later, in 1993, HMNZS Irirangi was decommissioned. =AR

## A Closing Tribute

At a dinner held to celebrate 50 years of Naval wireless at Waiouru, when the final closure date for Irirangi was very much public knowledge, local farmer, the late Alan Cozens, was asked to speak on behalf of the local community. His speech was a fitting tribute to Irirangi and the people who had served there in war and peace over five decades. Alan's words provide a fitting tribute to this proud record.

***"My crystal ball didn't tell me when I stood among the guests on the parade ground of Waiouru W/T on a cool October afternoon in 1951 and watched the commissioning ceremony of HMNZS Irirangi that 41 years later I would see the ship paid off.***

***But going back to the beginning. The Navy arrived to build a self-contained wartime signals complex in the middle of nowhere. The local inhabitants [and there were not too many in those days] didn't know quite what to expect of this invasion. However they soon got used to seeing Naval uniforms among the tussocks and learnt quite quickly about Naval customs. Taihape people weren't too happy about the regularity with which bicycles disappeared from the town and were later found in the vicinity of the camp, but it was the easiest way home when the liberty bus had gone.***

*The war ended, all the H.O. [Hostilities only] ratings went home, the station became the hub of N.Z.'s communications systems and the personnel became an integral part of our local community. The sailors learned a lot about the practical side of farming. They made hay, stooked oats and docked lambs. They baby sat. They went rabbiting and deer stalking and repaired farm machinery and in turn they educated the locals who quickly came to terms with matters like the QM's Lobby, the Quarterdeck [even though it was a hunk of tar seal], tot time, going ashore [when you were already on land] the mysteries of the ringing of the ship's bell, the difference between the Wardroom and the Senior Rates Mess and so on.*

*In the early days the arrival of the Navy generated an interest in the Navy League so that a branch was established in Taihape. For many years the Navy League Ball [held in the YMCA building in the old camp] was the highlight of the district's social calendar. In more recent times, Commanding Officers have involved themselves in Taihape activities through membership of Rotary and have made valuable contributions to community life. Commanding Officers over the years have given innumerable ANZAC Day addresses while Trafalgar Night dinners have left the regular civilian attendees amazed at the ability of after dinner speakers to say something different year after year. But then the Navy has been practicing this for the last 187 years.*

*The people of Ohakune were so mindful of the Navy's efforts in the district they granted to "Irirangi" the Freedom of the Borough and it is pleasing to see that, with the change in local body administration, that Freedom was repeated last year by the Ruapehu District Council.*

*The move to Waiouru in the 1970s and the subsequent dismantling of the original buildings meant a loss of contact with a lot of the ratings. But, thanks to the efforts of Lieutenant Commander Vic Fifield, the sporting and social contacts engendered by the establishment of Thorne Park and the Sports Club meant that a part of the original "Irirangi" identity was preserved. Talks to various service clubs and organisations kept the community at large aware of the Navy's presence and up to date on what Irirangi was all about. All the officers concerned did a wonderful P.R. job.*

*And now, after 50 years the establishment bows to modern technology. The White Ensign will lower for the last time and "Irirangi"'s long commission will come to an end. I wonder if a paying off pennant will be flown to mark the occasion. Probably not – because if the actual criteria was applied – length of ship and length of commission – the pennant could stretch from the receivers to the transmitters.*

*We'll be left with a couple of impersonal buildings staffed by about the same number of people who arrived here in those wartime years to plan and build Waiouru W/T.*

*I guess the ZLO callsign will still be heard around the world but those of who have lived through it all will miss the companionship and friendship of the Navy and its contribution to life in the wider field beyond the ship's gangway.*

*It will be the end of an era. But then, that's what service life is all about. You arrive, you serve and you move on.*

***Good luck and God Bless You All.-.-.***