

History of Naval Ships Wireless Systems V

Post WWII Research and Survey – the Early Years

Research

The former Bird Class corvette, HMNZS Tui, was laid up after WWII in 1946 and recommissioned in 1952 as a training ship. She carried out this work until it was decided that Tui would be converted to a fleet auxiliary for oceanographic research. Her conversion started in September 1955 and was completed in March 1956. She became RNZNFA Tui.



RNZNFA Tui

Tui's communications fit as a training ship was a TCS12, Collier and Beale 4125 transmitter and receiver, an 86M and a B28.



W/T office 1954

After conversion, the communications fit changed to an 89M and 691/CUH in the wheelhouse, with the 618 replacing the TCS12 and B40 replacing the B28 in the W/T office.



TCS12 – 1.6-12 MHz AM, CW

Tui decommissioned in December 1967 and was replaced by the second Tui in 1970.

Survey

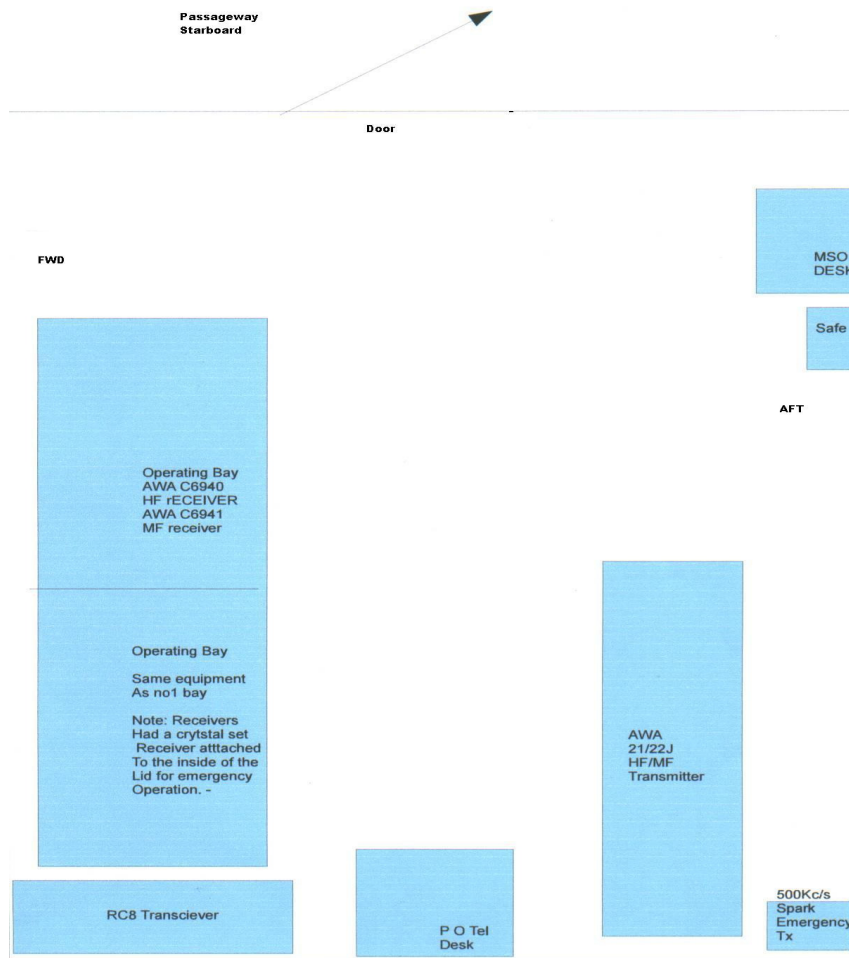
After WWII, NZ was expected to carry out its own survey work and the task was passed on to the RNZN early in 1947.

In March 1948, Cabinet approved the purchase of a seventh Loch Class frigate for survey duties, HMS Loch Craggie. However, plans changed and in February 1949 the government approved plans to build a survey ship in the UK. In the meantime, the three-year “interim” loan of HMAS Lachlan was accepted, commissioned into the RNZN in October 1949 and she began work in November 1949, with loaned survey personnel to set up the Hydrographic Branch.

Lachlan was a River Class frigate built specifically for survey work for the RAN. (What is now known as part of littoral warfare – Lachlan and others were used to survey landing sites during WWII). HMNZS Lachlan became the RNZN’s first survey ship as the seventh Loch Class frigate never eventuated and was purchased outright in 1963. She finally paid off 13th December 1974.



HMNZS Lachlan with enclosed bridge and helo deck added. The W/T office was on the starboard side, 1 Deck of the Bridge superstructure. The MSO, originally in the W/T Office, was situated on O1 Deck just aft of the Wheelhouse, which was below the Bridge.



Lachlan's W/T Office and equipment as delivered in 1949. See above.

2 x AWA C6940 HF receivers, 2 x AWA C6941 MF receivers, 1 x RC8 transceiver, 1 x AWA 21/22J HF/MF transmitter 500 watts – this fed into the four wire main roof. There was also an illegal 500kHz spark transmitter for emergency purposes plus a 500kHz cats whiskers crystal set for reception. When transmitting on the 500kHz transmitter it produced a harsh note which was audible over a wide frequency band!

All transmitting equipment was DC and generators had to be run up using a manual switching control.

Receiving equipment was a mix of AC and DC and there were approximately 50 batteries to be maintained to service the DC receivers in the main office. There was also an emergency position which consisted of a cabinet situated in the Engine Room Flat aft. This contained an operating position with an AT5 50 watt transmitter and an AR8 receiver.

Equipment changes for Lachlan took place in the 1960's as follows:

Type 89M replaced the AWA21/22J and this was replaced in 1968 by the 89Q with GK165 FSK keyer unit. Main Roof was replaced by whips. 89Q fed into an AWG on the port side of the funnel. Type 618H/L/CAS fed into an AWH whip starboard side aft of Flag Deck. 2 x AWA whips for reception sited port and starboard side of the Bridge.

W/T Office – in addition to the 89Q and 618H/L/CAS, there was an 86M, 691/CUH, 2 x B40B/C, 1 x B41, 2 x B40D, 3 x Type 12 creed teleprinters, 2 x AN/URA 17 FSK convertors and 2 x TT10 Tone to Key converters.

Type 689 (International Maritime Mobile) added later.

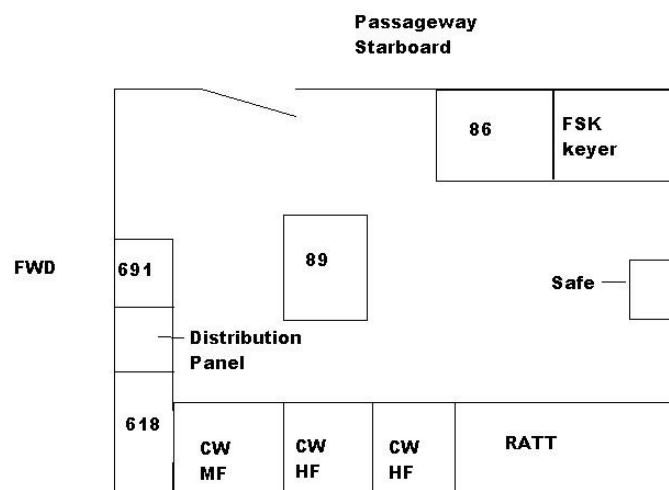


Photo shop 01 Deck Aft – Mururoa 1973 only – RA117 racial receivers and an extra whip (AWN) were flown up to Samoa to be fitted and manned by operators from GCSB.

Radar:

Marconi radiolocator IV replaced by Decca RM916 circa 1968 – navigation radar – foremast.



HMAS Diamantina – one of Lachlan’s survey sister ships. Showing the W/T Office as it is today – a lot different to Lachlan in the later years. Run as a Museum ship on the Brisbane River and the W/T Office is used as an amateur radio station – callsign VK4RAN. The equipment in the foreground to the left is the Australian equivalent of the Type 618 classed as the Type A618 and made by AWA.