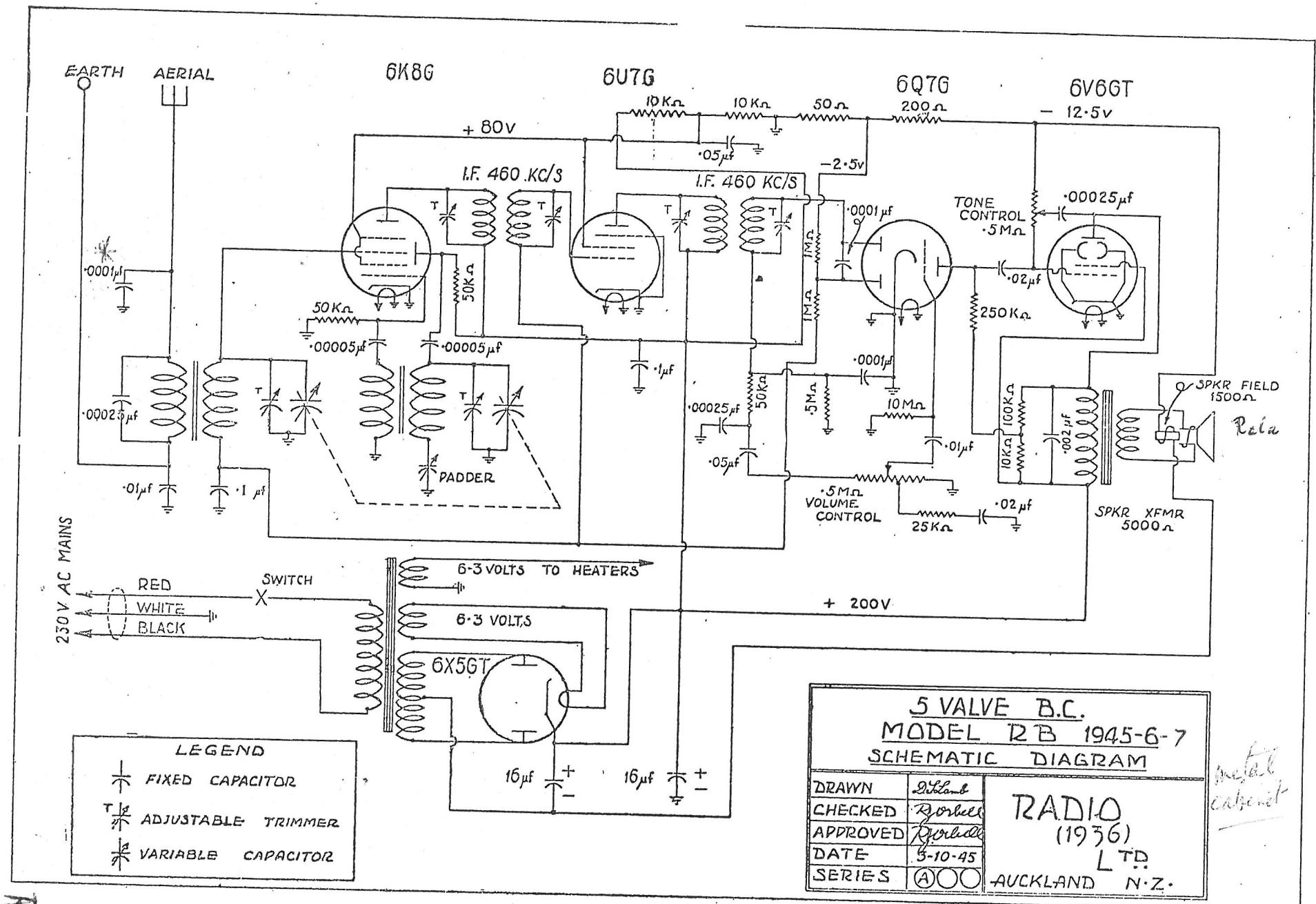


5 VALVE B.C.  
MODEL R B 1945-6  
SCHEMATIC DIAGRAM

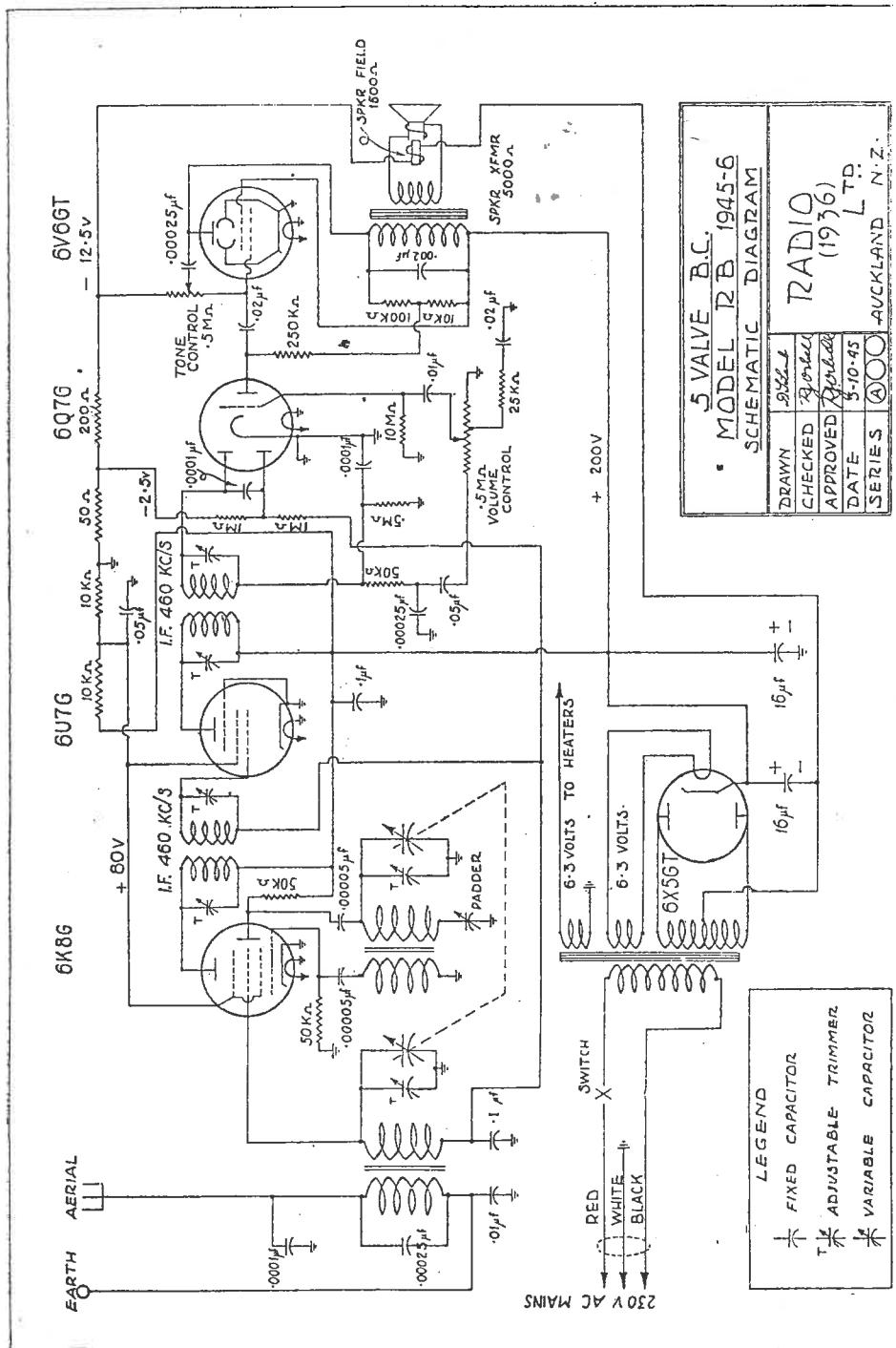
DRAWN	Dickson
CHECKED	Gorbell
APPROVED	Gorbell
DATE	3-10-45
SERIES	(A) ○○

RADIO  
(1936)  
LTD.  
AUCKLAND N.Z.



## RADIO(1936) Ltd - Models RA & RB

**Murray Stevenson**



These radios are often overlooked by collectors yet they have some small significance in the history of radio in New Zealand and Radio(1936) Ltd in particular. The circuit diagram for the RA dual wave is dated 12-9-45 and the RB, broadcast only is dated 3-10-45.

These are the first models designed and built by Radio(1936) Ltd after world war two. and using the new model designations (page 132 of ref. 1) They were marketed under the brand names Ultimate, Rolls, Golden Knight, Courier, and Skyscraper. There was no brand name printed on the dial scale, the naming being done with "badge engineering" ie. small name badges fastened to the front of each radio..

The chassis were available in a console cabinet (page 132 of ref 1) a wooden mantel cabinet (page 127 of ref. 1) and a cream art-deco style metal cabinet which was chosen as just after the war suitable timber and veneer were in short supply ( see note 1).

## Technical Details

The valve line-up is a 6K8G, 6U7G, 6Q7G, 6V6G and 6X5GT. These valves were very plentiful after the war (note 1).

The RA and RB were the first Radio Ltd chassis to use a 6X5 rectifier and a clamp for the mains cord instead of a knot. The aerial coil primary has DC continuity between the aerial and earth fly leads but the earth end of the primary is connected to the chassis through a .01 mfd capacitor: Radio(1936) Ltd did this on the later models RL and RO and on the earlier AC/DC chassis. The metal cabinet used with the RA and RD chassis is electrically isolated from that chassis. The aerial and oscillator coils in the RA have all the short wave windings in series with the broadcast windings. Switching to short wave is very simple and effective - the broadcast coils are just shorted out. Radio Ltd had used this system in earlier chassis.

The local oscillator is plate tuned and shunt fed; the RF valve screen supply is from a voltage divider; both these help stability with varying AVC voltage. The tone control is a feedback type. Back bias is used to obtain grid 1 voltage for the 6V6 output valve and the minimum negative voltage for the RF valve control grids.

The chassis were plated rather than painted as was the previous practice of Radio(1936) Ltd

#### Changes made over the production years (see note 2)

1. Very early on the original electromagnetic speakers were replaced with a filter choke and a Rola permanent magnet speaker with a diamond shape magnet. The later models had the PM speaker with a round magnet.

2 The early chassis had bakelite valve sockets.

3 The valve and component layout was changed.

4. In place of the "canned" screen and bias resistor some chassis were fitted with discrete wire-wound resistors.

5. The 6U7G was replaced with a 6K7/6K7GT.

6. The last chassis had a 7S7 in place of the 6K8G and/or a 7C6 in place of the 6Q7G.

7. Changes in types of tuning capacitors meant that some chassis had 2YA at the top of the dial and others had it at the bottom.

8. On some later chassis the 6X5 rectifier winding on the mains transformer was a "dummy" to hold the terminal board in place. The 6X5 heater was fed from the same 6.3 volt winding as all the other valves.

9. Some RB chassis had four controls instead of the usual three; the extra control was a mains on/off switch which was separate from the usual switch on the volume control.

All in all a radio that deserves a place in your collection.

#### Notes.

1. Bill Farmer supplied this information; he started work at Radio (1936) Ltd in March 1945 when ZC1s were still being made.

2. Model RA, first serial number 84018 dated 24-8-45. Last serial number 105913 dated 9-7-48. Total chassis made 3,391. In the first year of manufacture 2,615 were made.

Model RB, first serial number 84646 dated 28-11-45. Last chassis serial number 108097. Total chassis made 8,499. In the first year of manufacture 6,151 were made. These figures taken from Radio(1936) Ltd's serial record book.

#### Reference 1 More Golden Age of Radio by John Stokes.

The writer has sighted all the models and makes quoted and would appreciate further information. Write into the bulletin with it.

#### SOLDERING TINSEL WIRE.

(Reproduced with acknowledgment to the Wellington Vintage Radio Notes)

Old style headphones and loudspeaker cords which terminate in tips that are soldered to tinsel are notoriously difficult to solder. Here is how it is done. Wrap a piece of fine fuse wire around the tinsel to be soldered: place a little flux on the outside and allow solder to run through. This will make a good permanent connection.

## LETTERS TO THE EDITOR

**Mrs E.H.Scott** (All rights reserved). I am frequently asked what happened to Mrs Scott after the death of her husband, E.H.Scott in 1951. At that time they had been resident in Victoria for some four years, starting in 1947.

Mrs Scott remained in Victoria until about January-February of 1952 attending to the disposition of household effects, the sale of the house and adjacent property as well as matters concerning the probate of Scott's will and the final sale of most of his personal assets. Contrary to other reports, Scott was not a wealthy man even by 1951 standards.

The net worth of his estate was valued at \$45,279.86. About 25% of this was his half-interest in the matrimonial home and adjacent property; \$20,000 in government bonds; a couple of thousand dollars in a bank account and \$1,295 in travellers cheques; his half-interest in the household furniture amounting to \$3,200; \$6,900 in photographic equipment and the value, some \$1,500, of a 1947 Oldsmobile car. Still it was more than Lee deForest reportedly left behind.

Scott's brother-in-law, Charles Tucker and his wife Dorothy as well as Mrs Scott's sister Alison came from New Zealand to help

Early in 1952, Mrs Scott returned to New Zealand and resided with her sister Alison in Nelson on the South Island. We visited Miss Tucker at her home many times during the six weeks we spent in Nelson many years later. In fact, I repaired the 1933 Scott radio which Scott had given her and which hadn't been working for nine years. She was very pleased to "hear it's voice again".

However Mrs Scott couldn't get settled in New Zealand after so many years in Chicago and Victoria and she returned to Victoria in March of 1953. She took up

residence in an apartment block where she remained until her death.

Mrs Scott died suddenly at her home on August 22nd 1953. I feel sure that she died of a broken heart (although no medical people will give you a description of that term) following the death of her husband. She was 64 years old, the same age as her late husband at the time of his death. Her funeral was held on Tuesday, August 25th 1953 in Victoria. However for some reason her remains were not cremated until September 11th 1953. Her ashes are in a garden plot A-308 in the Royal Oak Burial Park which is located about 5 miles North of Victoria.

She tried to buy back her former home but was not successful. She also wanted to edit Mr Scott's films but obtained little help or success.

Both Mr and Mrs Scott were held in high esteem by hundreds of New Zealand servicemen who trained in Canada during the war. They organised clubs for their fellow countrymen and wrote letters to the relatives of every man they met.

Mrs Scott had a lovely singing voice and she was admired by all who knew her for her quiet, sincere personality and exemplary Christian principles. This was the external appearance but her mental and bodily health suffered; she gave up and died.

Jack Rhodes, Victoria, BC, Canada.

## C&B model 5155

(Martin Kimble contacted Bob Blyth who was one of the original designers of the 5155 and he produced the following information. - ED)

I don't remember a great deal about this model after 45 years but can add a little more to what you have found. A lot of effort and thought went into this set to reduce assembly costs and time, the run of 5000 sets was more than we would normally make (1000 to 2000) for a new model but was necessary to spread the plastic tooling costs. The relatively



Ultimate model RB sn 94511. Photo: James Davidson



**CAUTION!**  
DISCONNECT POWER BEFORE  
MAKING ANY ADJUSTMENTS.

220/250 VOLTS A.C. 50 WATTS

R.B. 94-511