



6 BC 48466  
1937



GOLDEN KNIGHT model BTR 48466

## AN INTERESTING PROJECT

Paul Woodcock

An item in a local neighbourhood newsletter caught my eye a little while ago. The Secretary for Huia Settlers Museum (West Auckland) had been donated a 'Golden Knight' valve radio by S. B. (Sam) Fletcher a life time resident of Huia and former President of the Museum. Is there anyone who could fix it?

After a few weeks went past I got round to phoning the writer, Norm Laing, about the radio and "no", he hadn't had any other response to his article. Hoping I hadn't let myself into a heap of trouble I offered to take it away and look into getting it running again. Thinking that I might be able to get it going with my limited knowledge if nothing too serious was wrong or, if necessary, get more help from other club members.

The radio turned out to be a handsome tombstone, broadcast only, model BTR 48466 circa 1937. (Radio Limited manufacture). The valve line up, according to the valve sockets, was 6S7G, 6K8G, 6S7G, 6T7G, 41 and 80 rectifier. As can be seen in the photo there is an extra power cord running from the transformer to a socket on the back of the chassis marked 'vib' This would allow a battery/vibrator power supply to be simply plugged in.

The once remote little settlement of Huia (Western side of the Waitakere Ranges on the Manukau Harbour) didn't get a mains power supply until around 1954. A discussion with Sam's brother revealed that the radio was bought in 1939 from the Farmers Trading Co. for a price of 16 pounds, and was used for 15 years or so powered from a battery/vibrator power supply.

There wasn't that much wrong with the radio. I replaced both power cords - the old rubber insulation was hard and brittle. I took the old electrolytic capacitors out of circuit and fitted replacements underneath the chassis. I changed a couple of original wax coated paper capacitors. Previous work on the set had already replaced most of the original paper capacitors.

The power supply transformer seemed to be intact. I ran the set with the rectifier valve only in place for a few hours using a 25W light bulb in the circuit. At this stage I was relieved to find a switch on the back of the set turned on the dial lights. The switch would have given the operator the option of reducing the drain on the battery power supply. With all the original valves back in place a variac was used to slowly liven things up. Two valves remained cold and two others weren't true to the valve socket labels. Ross Paton was able to help out with the correct valves and soon the set was up and running. It performs very well, has low background noise and a nice clean sound. Murray Stevenson was able to supply the circuit diagram.