Ultra U930 Restoration

I bought this radio in a local auction. It came with a Roberts RT-1 in the same lot. It was one of the first that I did, and indeed was the first with VHF.

The model came out in 1956 making it one of the first British sets to have VHF.

When I first connected it to the mains I did so via a 100W lamp. This came on briefly, went out and then started to get brighter again as the set warmed up. I thought it was getting too bright and as I heard a crackle which I couldn't be sure was coming out of the speaker switched off PDQ.

I then put a 15W lamp in the limiter and let the set have ten minutes or so with that before reverting to the 100W. All was then well and I got good reception on Medium Wave but not a peep on Long or VHF.

Somebody has obviously worked on the set before as two of the screws holding the back on were ordinary wood ones. The only sign of anything having happened within is that the shaft of the volume pot has hack-saw marks on and is still in fact a bit too long. Whoever fitted the replacement has done a good job though.

My first job was to change the AF coupling capacitor. This proved to be a brown Hunt's thing and as it had melted at one end looked even more like a rat-dropping than usual. There were four wax capacitors of which I changed three. The fourth one looked like a lump of candle and was also a Hunt's. It was a value I hadn't got and I was actually a bit loath to change it as I thought it formed part of the tone control circuit which is the best one of those I'd yet come across on a valve, and most, transistor sets. Perhaps it had 'Unique tonal qualities.'

I found a broken contact on the wave switch but fixing that made no difference to VHF or LW. I then found an electrolytic capacitor with a lead which had broken off right next to it's body but changing that had no effect either.

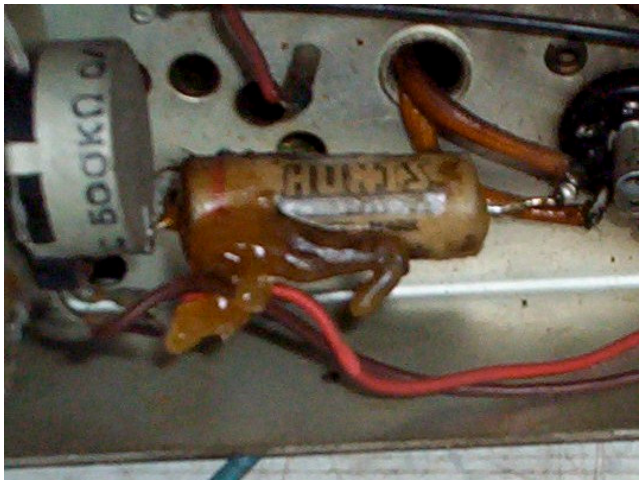
I checked the resistance of the aerial coils and found the LW one to be 250KΩ, which seemed just a smidge on the high side. I fitted one off a scrapped transistor set and that sorted that.

A most pleasant side-effect of LW and VHF not working was it giving me a chance to enjoy the silence when these were switched in. I do mean silence as there was NO hum.

The case cleaned up nicely and, for all that I hadn't been too keen on it, it quickly grew on me.

I then used it for a few weeks but then its performance seemed to drop off; I could only get Virgin (or Absolute Radio as it is these days) as that is a very strong signal here but it still sounded poor unless I stuck a jump lead on as an extra aerial.

The first thing I saw upon getting the back off was that the large wax capacitor I'd left in place had been badly dripping.



A closer look revealed that it had nothing to do with the tone control but was in fact the mains filter. I'd looked for this before doing anything else with the intention of sniping it and had assumed that whoever had changed the volume pot must have beaten me to it. It also shows how difficult relating circuit diagrams to the real nuts and bolts of things can be until you learn your way around.

I now did what I should have in the first place and changed all the Hunt's capacitors and quite a lot of the resistors. This not only sorted out the operation on Medium Wave but also VHF which was a very nice bonus.

It proves the validity of the standing advice that just because a set works it doesn't mean that all is well with it. The bit of use I gave it following acquisition must have pushed these already ailing components into outright failure. Out of curiosity I meggered the old capacitors and the best one read 100MΩ.