

# VINTAGE RADIO

By RODNEY CHAMPNESS, VK3UG



## Jim Birtchnell and his radios

**This month, we meet a keen collector of vintage radios and discuss some of his favourite sets, or rather, what could be anyone's favourites. The sets range from the early 1920s right up to the 1960s and most have been restored to a high standard. Meet Jim Birtchnell.**

Vintage radio collectors and restorers all start their hobby – or is it a passion? – from a point of not knowing much about it. Many start through reading columns such as this in electronics magazines, others through friends or just happening to go to an event where vintage radio may be one of several activities featured.

Interests will probably change from the time of taking up the hobby, as the collector gets firmly established in the pastime. Often one wonders what other collectors do and would like to

know a little about them, and how they go about various activities within the hobby. This is the reason for this month's article.

Jim started to get serious about vintage radio in about 1990. He has had a working knowledge of radio all his life, stretching back to an earlier time when Howard Radio of Richmond in Victoria manufactured radios. Jim has certainly seen many developments in radio during his life. He admits to being 84 and I'd say a youngish 84 at that, being fit and keen on his many

hobbies. He was a bit camera-shy, so the reader won't get a look at this handsome fellow.

Many collectors are members of vintage radio clubs and Jim is no exception. He is a member of the Vintage Radio Club of North East Victoria Inc which has about 30 members. Jim joined the club in around 1994 and this is where I got to know him. He has been a regular at the meetings and contributes in various ways with interesting equipment he brings along for the "show and tell" sessions or getting involved in the buy, sell and general horse-trading that goes on between members from time to time.

### Jim's Collection

His collection features around 65 sets that have been restored, ranging from an Atwater Kent model 20 5-valve TRF (tuned radio frequency) set from the 1920s to HMV Little Nipper 5-valve sets from the 1960s. A few wrecked sets are a source of parts for some of the restoration work. I asked him what his favourite set was, to which he replied "I don't have any particular favourite set". However looking at the beautiful, lovingly restored Atwater Kent 20, it would be hard for me not to say that set would be my favourite, and from the photograph you can see why I might think that way.

This model consists of five triode valves, with the first three as tuned stages with a separate control for each tuned circuit, plus two audio stages. I described one of its stablemates, the Atwater Kent 7-valve model 32, in the February 1999 issue of SILICON CHIP. Atwater Kent had progressed to single-knob tuning in this later set.

I asked Jim if he had any particular theme in his collection, to which he replied, "anything that comes along



Radiograms produced in the 1950s were fine pieces of cabinetwork, as demonstrated by this example. What's that PC monitor doing on top of the gramophone?



If you're seriously into vintage radio you need a spacious workbench and a reasonable line-up of test equipment. Included here is a valve tester, RF generator and a vacuum tube voltmeter (VTVM).

lar sets of the era and the larger the antenna connected to it, the better it will go.

at the right price". I gather from talking with Jim that he can sniff out a bargain at 100 paces. He said that it is a matter of keeping your eyes open for sets from various sources, such as antique and secondhand dealers, deceased estates, letting it be known around the area that you collect this "old junk, I'll save you a trip to the tip", etc, and horse-trading with other collectors. Auctions, he believes, are a dead loss, at least in his area.

From the photographs it can be seen that the wooden cabinet sets in particular are extremely well restored and in some cases the cabinets have been made, which he really enjoys doing. One of Jim's other hobbies is wood working and restoring old furniture, so no wonder the quality of restoration is so high. Cabinets are sometimes polished with French Polish but more commonly Mirrortone lacquer is used to finish them off.

I asked Jim if he did all of the restoration of his sets, to which he replied

that he did most of it. He restores the cabinets and does the routine chassis clean ups, replacing valves and capacitors. The alignment of the IF stage(s), oscillator and RF stages he gets a mate to do. This attitude is a wise one. Don't try and do something that isn't your cup of tea. It's so much better to get someone skilled in that area to do the job and maybe you can help that person with something they are not so good at.

One particularly interesting set of Jim's is a replica Rice Neutradyne. I asked Jim why he built this radio and he replied that he saw it in an early wireless magazine and decided he would like to build a replica. Most of the pieces came from the USA as he said the bits he wanted were generally cheaper and more readily available over there than here.

The Formica panel was obtained in Melbourne and the actual construction time was around two months. The unit performs on a par with simi-

## Test equipment

Jim's workbench can be seen in one of the photographs. It is not a particularly big bench but big enough for any restoration work on receiver chassis. It occupies an area towards one corner of what is really his woodworking centre. The instruments can be seen at the back of the bench, with the latest set being restored towards the front of the bench. Work on cabinets is done on a different bench within his rather large workshop.

Jim has quite a useful range of test equipment and tools to aid in getting his collection up and going. Aside from the normal run of hand tools, he has a vice for small metal bashing jobs. The electronic test equipment consists of a test speaker, a vacuum tube voltmeter, a Leader LSG11 signal generator, analog and digital multimeters and a Calston 223A Valve Tester/Multimeter.

The test speaker is a handy device as it can substitute for the speaker and



To many collectors, an Atwater Kent receiver is the "holy grail", as typified by this model 20 5-valve TRF set from the 1920s.



Jim's interest in vintage radio is wide ranging and his collection ranges from valve sets produced in the 1920s through to the 1960s.

speaker transformer in a set to find out what is going on in the audio output stage. The combination of the vacuum tube voltmeter, the analog multimeter and the digital multimeter allows testing various sections of a set at the same time and in assessing what is going on. I use short insulated leads with a small alligator clip on each end to connect the test probe of the meter

to a specific part of the set I want to monitor. These can often be bought ready made up in a pack of several leads at some of the stores that cater for electronics buffs.

The Leader LSG11 signal generator is ideal for doing alignments and generally sending signals through the set. These have been a very popular generator here in Australia. The Calston

valve tester is in itself a vintage piece of test gear. It will test for valve emission and shorts and is particularly handy if no replacement valve is available when a set is being restored.

Most restorers will not require more elaborate test gear than this, unless they are trying to find quite elusive faults. You can always ask a mate for some assistance under those circumstances.

Spares are kept in small drawers and boxes and quite a reasonable supply of bits and pieces is on hand.

## Other activities

Jim has other hobbies too, snooker being one of his main pastimes, and the snooker table and the vintage radio display share the one room. In addition to his wood working, CB radio and old gramophones hold his interest. I asked him how he repaired broken springs in wind-up gramophones to which he said he didn't, as there was someone more skilled at the task in Adelaide. Certainly the people with particular skills are spread far and wide.

Sometime not too far in the future Jim can be expected to be heard on the amateur radio bands as a Novice Amateur Radio operator. He is busy doing a correspondence course on amateur radio with the Wireless Institute of Australia. His existing radio knowledge along with what he is currently learning will soon make this a reality. Once Jim has his licence, his Yaesu FT101 amateur high frequency transceiver will be put to good use on transmit as well as receive. Good luck with your exams Jim.

## Insuring your collection

An interesting point came out of the this visit with Jim Birtchnell. He has taken photographs of his collection for insurance purposes and maybe many of us should do the same thing, particularly where valuable items are concerned. Valuable pieces may need to be valued independently and placed on the insurance documents; something to think about. We don't like to think that someone would want to steal our pride and joy but it could happen, or maybe a fire could destroy your collection.

My thanks to Jim for the opportunity to see and write about his collection and to talk about what collecting means to him.

SC