Vintage Radio

By RODNEY CHAMPNESS, VK3UG

Brian Lackie's Wireless Museum

Many people are enthusiastic about vintage radios and some amass a huge collection but few people go on to turn their collection into a museum. But that's just what Brian Lackie of Urunga, NSW did, after collecting vintage radios over many decades.

BRIAN LACKIE has been a collector of early radio paraphernalia since his early working days. He became interested in radio when he was in high school in the 1950s, although he wasn't able to pursue this interest until after he had finished his schooling. A correspondence course run by the Australian Radio College in Sydney helped Brian gain his amateur radio operator's ticket (VK2DLM) in 1970.

He became a builder after leaving school and did radio service in his spare time. He often worked in the country, particularly in farming areas. He was often offered an old radio or two and remembers once being given five Atwater Kent receivers.

Collectors were considered a bit odd in those days. However, he accepted these offerings and gradually the lower floor of his home became filled with multitudinous old radios – obsolete, unloved and faulty; radios that others didn't want.

This view shows some of Brian's early horn and cone speakers. They date from around 1924 for the horn speakers to around 1928 for the moving-iron balanced-armature type cone speakers.

At that stage, Brian didn't have any particular direction in his collection; he just collected because he liked old radios and felt he needed to save and preserve these pieces of our history. He believed that he was the only one with this interest and as collectors of old radios were considered "a bit odd", he didn't advertise his interest widely. Then he went to an amateur radio field day and met another collector, Lou Albert of Newcastle. Lou invited Brian to come and see his collection and having seen it, Brian was hooked.

He has enthusiastically collected, restored and retained any item of radio history he could obtain since that day. But like most collectors, he didn't display his "treasures" to advantage. Sets were stacked everywhere, on top of each other, jammed tight – there was no room to even walk around the sets. As well as radios, he collected publications, leaflets, servicing equipment, components, valves, electronic novelties and advertising signs – in fact, anything that appeared to have anything to do with our radio heritage.

Establishing the museum

Brian could see that he couldn't share his passion for our radio history if he couldn't show people what he was so passionate about. So around 20 years ago he believed he should move towards establishing a museum containing the most significant items within his collection of many hundreds of sets. Time was a problem but planning went ahead and work started on a completely separate building on his property in 2001.

The building took about six months to bring up to the fitting-out stage. It

All types of vintage radios are on display, ranging from very early (and very collectable) sets to later sets. Some of these early radios are now quite rare.

had to have provision for display as well as a workshop area for restoration work. Facilities were provided to operate the equipment, like an aerial/antenna system, an earth leakage protection circuit and for imported radios, a 115V AC supply using a 240V to 115V 17A power transformer purchased for the princely sum of $10.

Like most projects it took longer than expected. It was officially opened by Lou Albert on the 17th March, 2002.

Touring the museum

An inspection of Brian's museum can take hours, because there is just so much to see. He has an encyclopedic knowledge of our radio heritage so you only have to ask to learn a lot about individual items or the general philosophy of radio development. Only recently, he obtained a large number of newspaper cuttings from the era around 1910 concerning Father Shaw and his radio works. They seem to paint a different picture of some of the things that happened in radio/wireless at that time to what we have seen in some publications.

A David Jones single valve regenerative receiver, circa 1924. It has three basket-weave, moveable coils and sold for fifteen pounds ten shillings – a large sum of money in those days.

Also in Brian's museum is this early PMG sign which dates from around 1900.

This enamelled HMV sign dates from around 1925 and is still in quite good condition.

There are many books on various aspects of vintage radio in the museum that can be consulted to check that information gleaned from various sources is correct. As with most subjects, it pays to get as many publications as practical, so that various statements can be tested for accuracy.

Interesting signs

Some readers will remember the enamelled signs that were made early last century to advertise various products. For example, one of the photos in this article shows a typical advertising sign (circa 1900) that was used at post offices. In those times, trunk line telephone calls were booked in advance – there were no STD phone calls then. It may have taken the telephonist an hour or two to be able to connect you to the person you wanted to speak to in the next state and it cost a fortune compared to phone calls today.

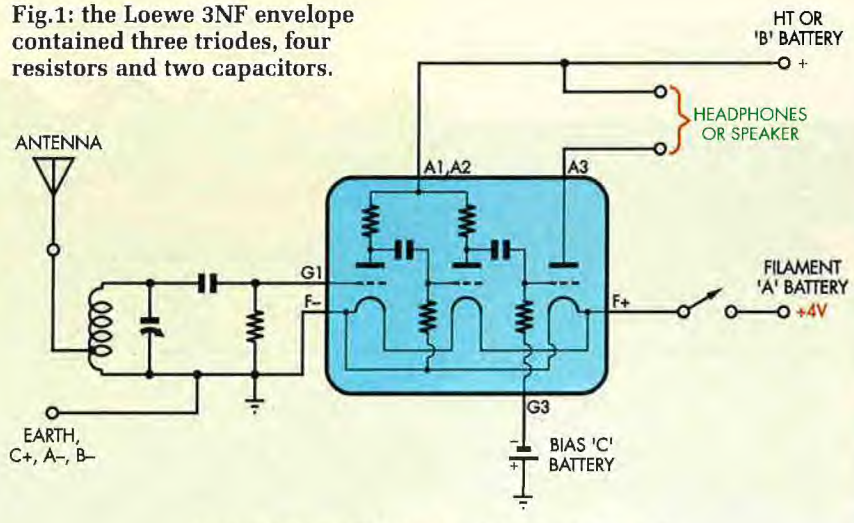
Telegrams were also a fairly quick method (for the era) of getting a message to people interstate. The message was handed in at the post office counter and then sent by Morse code to a post office near where the recipient lived, where it was typed up and then delivered by a delivery boy.

Another interesting sign is a good-quality example produced for His Master's Voice (HMV) around 1925. People tended to know organisations by their signs and HMV was always known as a quality producer of radio and record playing equipment. There was a lot more brand loyalty in those days.

Radio gear

A beautiful display of polished horns and slightly later speakers can be seen on a high shelf. They date from around 1924 for the horn speakers to around 1928 for the moving-iron balanced-armature type cone speakers. Another photo shows an early Stromberg Carlson 9-valve TRF Model 633 coffin style receiver from 1927 with its floor standing cone speaker (not complete) in the background. On top of the receiver is a Browns horn speaker on the left and a Ferranti on the right, with a more modern air-cooled transmitter

Fig.1: the Loewe 3NF envelope contained three triodes, four resistors and two capacitors.



SIMPLE RECEIVER USING LOEWE 3NF VALVE

Right: the Loewe 3NF triple-triode valve, circa 1926. It's probably one of the first integrated circuits ever made!

The museum features a good collection of early receiving and transmitting valves, all displayed in a large glass cabinet.

This rare set is a Stromberg Carlson 9-valve TRF Model 633, circa 1927. Its floor-standing cone speaker (not complete) is in the background.

valve alongside them. The receiver even has a meter so that the filament voltage can be checked.

Also on display is a 1924 "David Jones" one-valve regenerative receiver. The price was fifteen pounds ten shillings, a large sum of money in those days. It has three basket-weave, movable coils which could be moved in relationship to each other to obtain best signal input and regeneration control. It was a very simple set and featured very neat wiring using square busbar. Listeners in those days didn't get much for their money.

There are a variety of other sets on display, from an early cathedral style wooden cabinet set to several coffin cabinet styles, several AWA "Empire State" receivers from the 1930s, and many Bakelite and wooden cabinet sets from the 1940s and early 1950s.

Brian has tended to keep the older sets on the lower shelves in the museum, with later and smaller sets on the higher shelves. Quite a number

A selection of very early vintage radios and small kitchen (mantel) receivers.

of these sets have not been restored. It does take a long time to restore hundreds of sets. One of the sets still awaiting restoration and display is Brian's favourite, a rare Traeger 36/40 Flying Doctor Radio.

A glass case houses Brian's collection of early receiving valves and a few transmitting valves. Note the blue coloured Arcturus valves. Supposedly the colour somehow magically improved the valve's performance and life! Valve design and manufacture advanced considerably from the time of the valves in the display.

One extremely interesting valve in the museum collection is a 1926 Loewe 3NF triple-triode, complete with four resistors and two capacitors all within the one rather large envelope, which measures 160mm in height and 45mm in diameter. This would have been a glass-blower's work of art.

Perhaps this triple-triode valve with its components could be considered one of the first integrated circuits ever made. The supply to the valve consists of filament current of 0.3A at 4V and a high tension (HT) supply of 135V.

You may wonder why were three valves built into the one envelope when the valves of that time were not particularly reliable. The reason was that the German government of the time taxed radios on the number of valves used in them. One valve envelope attracted a third of the tax that three valve envelopes did.

Information on this and other Loewe valves is contained in the book *Saga of the Vacuum Tube* by Gerald F. J. Tyne, published Howard W. Sams & Co. Inc, USA.

A receiver of the 1920s using this valve would have required very little extra circuitry to make a complete receiver – see Fig.1. In fact, other than the power supply, an input tuned circuit and a pair of headphones were all that was needed as far as the electronics were concerned. If the plate of the first valve had come out to a terminal on the valve base it would have been possible to use regeneration and thus achieve even better sensitivity from the receiver.

Summary

Like any museum, nothing remains completely static as new items become museum pieces. I had a fascinating and instructive time being shown through the museum, seeing equipment and parts of our radio heritage I didn't know about.

Brian Lackie's Wireless Museum is at 60 Yellow Rock Road, Urunga NSW. Phone (02) 6655 6135. It is open most days from 9.00 AM to 4.00 PM. Admission is free, to foster interest in vintage radio. **SC**

Photo Gallery: Peter Pan BKM (1948)

Manufactured in 1948 by Eclipse Radio, South Melbourne, the Peter Pan BKM was a 4-valve reflex superheterodyne broadcast-band receiver housed in a modern (for the time) bakelite cabinet. The unit pictured here is housed in an "amber" cabinet, which was one of the less common colours used for these radios.

The valve line-up was as follows: 6A8-G frequency changer; 6B8-G reflexed IF amplifier/first audio amplifier/detector/AVC rectifier; 6V6-GT audio output; and 5Y3-GT rectifier.

Photo: Historical Radio Society of Australia, Inc.