

# Vintage Radio

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## Ray Kelly and the HRSA

**The Historical Radio Society of Australia (HRSA) is the national association of vintage radio enthusiasts in Australia, with approximately 1100 members. It is by far the largest group representing vintage radio enthusiasts in Australia. Ray Kelly was instrumental in its founding and continues to be a crucial member to this day.**

In the late 1960s and early 1970s, some Australians came to realise that we, as a nation, were destroying the records and artefacts of our nation's history and heritage. For example, old sailing ships were left to rot, to be burnt or dismantled. "They are useless, so let's get rid of them", was the attitude of most people at that time.

Many other aspects of our history were also considered irrelevant and many references and physical examples of those aspects were discarded if not destroyed. However, there were

enough people throughout Australia who could see that this was totally wrong and our history and heritage was worthy of retaining and restoring, so they set about raising the level of interest in our past.

Our radio heritage was also being lost at an alarming rate, with most superseded and defective radios ending up in the local municipal tip after being replaced. However, a number of individuals decided that our radio heritage was worthy of retaining and set about collecting and restoring old

radios. Doing this in isolation is not very effective as there is only so much any one person can do. One person on their own cannot know all there is to know, or needs to be known, to preserve a representative offering of our radio heritage.

A small number of collectors became known to each other and communicated on an ad hoc basis. Len Davenport in Alice Springs was keenly interested in vintage radio and even established his own museum in Alice Springs. Called "The Magic Spark", it attracted quite a lot of interest until Len's death, whereupon it was closed. However, some time before his death, Len was keen to see the establishment of a national radio society. He believed that Alice Springs was not suitable for the activities of such a group.

Len and Ray Kelly could see that there could be room for a national vintage radio association. Ray contacted Morris O'Brien in San Remo to obtain a list of people who had obtained valves to restore old radios. Morris used to advertise valves for sale in magazines such as *Radio & Hobbies*, so he had a good contact list. Ray contacted the people on that list, as well as the list supplied by Len, a total of around 35 people.

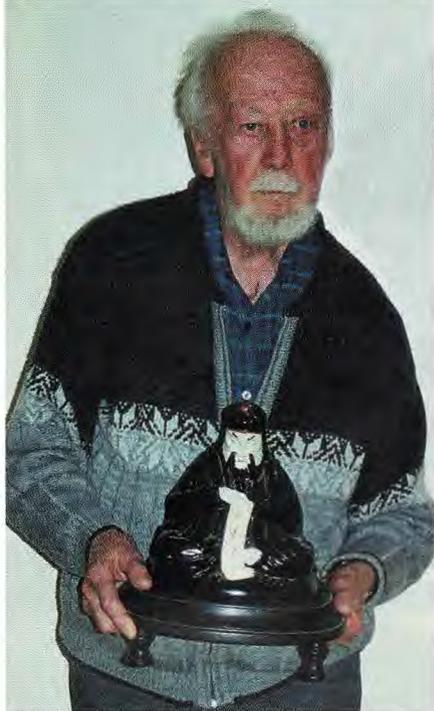
There were sufficient replies from around Australia to warrant convening a meeting, held at Ray's home in Melbourne on the 17th April, 1982. The HRSA was born on that day, with Ray taking on the position of Secretary and member number 1. The initial membership was 25.

### Ray Kelly

Without Ray's enthusiasm and drive, the HRSA may not have been established or it may have been delayed for some years, during which much of our irreplaceable radio history



**This rather decorative piece is a 1937 Weldon clock radio. Pieces like this are highly collectible.**



Ray Kelly with his English-made "Chinese Scribe" horn speaker.

may have been lost. Ray's life history itself shows why the HRSA got off to such a good start.

Ray Kelly was born in Cessnock, NSW, in December 1920 and spent his formative years there. At school, he obtained sub-intermediate standard, which was quite a high standard for the 1930s. His interest in radio started when he built a crystal set as a 12 year-old. In fact, most young lads started by building a crystal set. They were the cheapest radios to build and cost nothing to run. Their reception range was limited but Ray put up a good enough antenna and earth system so that several stations were received.

Neighbours and the local radio shop (though they weren't always aware of it) helped this enthusiastic young lad by supplying him with valves and other odds and ends. The radio shop routinely threw out valves that they considered unserviceable and Ray "rescued" them from the rubbish.

Over the next few years, he was to build one and 2-valve sets and ultimately, a 7-valve superhet receiver, as described in an issue of *Wireless Weekly* in 1933. As Ray remembers it, the set had an RF stage, autodyne converter, a 175kHz intermediate frequency amplifying section, a 55 as a second detector and audio stage, and a pair of 59 valves in push-pull. It was



This rather unusual horn loudspeaker is branded "Dictogrand" and was made in the USA.



A collection of Morse keys, sounders and other telegraph equipment from Ray's time in the Post Office.

a popular, good performing receiver, as Ray remembered it.

On leaving school, Ray started work as a telegraph messenger at the Cessnock Post Office. This was a temporary position and when he turned 16, the only opportunity to join the permanent staff was to become a male telephonist at the West Maitland telephone exchange. This was a manual exchange employing around 25 women as telephonists. However, the PMG did not consider it right for them to work through the night so they employed young men to man the switchboard from around 10.30pm to 7.30am.

On alternate weeks, the young men worked a short shift with the women. "At the age of 18, perhaps they were considered a hazard to the ladies", according to Ray, so they were given other jobs and Ray was transferred back to Cessnock as a postman.

### RAAF enlistment

In 1941, he saw an advertisement in a paper for enlistment in the RAAF as a radio mechanic. He believed that his interest in radio should be of value when he applied. He was accepted but he found that they really wanted people to learn about the very "hush-



Here are just some of the items in Ray's collection: (1) top row left to right – Ethovox “Junior” horn speaker, Claritone horn speaker, G. A. Vanderveldt type Allison horn speaker, RCA model 103 cone speaker with tapestry grille, Bullphone horn speaker, an Ericsson horn speaker, a Marconi 9A11 UK horn speaker and a Philips cone speaker. (2) middle row left to right – Udisco 3-valve battery radio, a Keogh radio (a rare Australian brand only made in 1928), a Hartman American battery radio and a little RCA Radiola III 2-valve battery set (circa 1924). (3) bottom row left to right: an RCA model 17 (their first AC model using 26s a 27 and currently a 171A output) and a Udisco 5-valve neutrodyne.



An Ericsson Magneto telephone (circa 1905). It reminds Ray of his working days in telephone exchanges.

hush” radar, not radio. He trained at what is now called RMIT in Melbourne and then at Richmond in NSW.

The RAAF subsequently sent Ray to postings in Australia, New Guinea and several of the Pacific Islands. When he was on Goodenough Island (between us and the Japanese!), the operators could detect the Japanese aircraft about 130km away, soon after they took off from their base.

The radar had a range of up to 130 miles (200km) and they would track the Japanese planes and alert Australian forces on the mainland of the likely target of the Japanese attack, via coded radio signals. As a result, in many cases, it was the Japanese fliers who were surprised and not the Australian populace. According to Ray, the Japanese never woke up to the fact that the Australians had very effective radar, which in fact worked better than the American radars of the time.

After the war, he was sent back to the post office as a postman; not quite

the job for a keen and experienced radio/radar man. After some months, he got the opportunity to go into the telephone section of the PMG. Back until the early 1970s, the post office and the telephone system all came under the control of the PMG (Postmaster General’s) department and it was possible to shift between the two sections of the organisation.

The opportunity then presented itself to apply for the radio section of the PMG. During the war Ray had met his prospective wife and in 1947 they married. At this time, Ray obtained a position at the ABC radio studios at the corner of William and Lonsdale streets Melbourne. He worked as a control booth operator (CB operator) and later in the recording section, dealing with disc recordings. This was before the era of tape recorders, which did not achieve any real quality until the mid-1950s.

Acetate recordings were difficult to make. There was only one “take” when

making the recordings so you had to be right first time, whether you were the artist or the technician. Most of the radio serials in the 1940s and 50s were on 16-inch transcription discs.

In addition to the recording work, Ray worked in what was called the switch-room where the programs were switched between studios, land-lines and transmitters. A stint in the PMG Material Testing Laboratory also proved to be interesting for Ray.

## Radio Australia

Around 1950, Ray got a promotion to Radio Australia at Shepparton, where he was a shift supervisor. At that stage, there were three transmitters which were labour-intensive to run and operate. Each shift consisted of five people, as these transmitters were not frequency-agile. About 15 minutes was allocated for the five on shift to prepare a transmitter for operation on another radio-frequency band. Coils and capacitors for each stage had to be changed, a fresh crystal selected for the radio frequency oscillator and a fresh antenna selected, if need be.

Today, at Shepparton, a total of two minutes is allowed for antenna and frequency changes for up to three transmitters at one change, with perhaps only one operator in attendance.

Ray's wife did not like the amount of shift work involved at Radio Australia so, after about five years, Ray obtained a position with the Australian Broadcasting Control Board (ABCB). While this didn't involve shift-work, it did involve trips away from home



A few more of the horn speakers in Ray's collection (left to right): an Amplion AR19 horn speaker, an Amplion AR111 horn speaker, an American Electric horn speaker with possibly ebonite petals, and an S. G. Brown (English) model H horn speaker.

for extended periods. Ray stayed with the ABCB until he retired on health grounds around 1976, three years after the death of his wife Betty.

Ray had many interesting jobs in the ABCB, doing field strength tests on broadcasting stations, station inspections and field surveys for new stations, all of which was very interesting work for an enthusiastic radio man.

Ray remembers that it was usual to notify a radio station of an impending station inspection. Often the inspection would be made and all would be

working well. But after the inspection had been completed, the operators would take out the new valves and the old weak valves were refitted, to wring the last bit of life out of them.

Spot checks would have caught many radio stations with equipment well below expected performance levels!

One particular field test for a new television station transmitter was done near Cairns in Queensland, where access to suitable mountain tops was not possible by road or track. To do the



This is the frame only from an American "Pirate Ship" cone speaker. It makes an interesting wall hanging.



The Philips "Theatrette" was made in England. A version was produced in Australia by Briton Electrical and Radio.

## Photo Gallery: A.G.E Bandmaster Duette



The medium-wave A.G.E. Bandmaster Duette receiver was manufactured by AWA around 1935. It used an identical chassis to the model 28 "Empire State" and came in a walnut veneer cabinet. The valve line-up was as follows: 6D6-G, 6A7-G, 6B7-G, 42 and 80. The name "Bandmaster" was in later years also attached to the "Hotpoint" brand, both being made by AWA. Restored by Maxwell L. Johnson; photo by Ross Johnson.

speakers, particularly horn speakers of which he has quite a collection.

Ray's favourite set is an AWA Radiola 45E Console from 1931 which is a TRF with two RF stages, detector/first audio and audio output. Other favourites are a "Buddha Speaker" (which although not completely original is nearly so), a tapestry speaker and a circa 1905/7 Ericsson wall telephone. The photographs accompanying this article show many rare pieces of radio history that he has collected.

But while Ray Kelly is still a keen collector, his main activity over the last 20 years has been the HRSA. As noted above, he was the inaugural secretary of the HRSA and he did take his turn as president later on.

Over the 20-plus years that the HRSA has been in existence, he has always been highly involved in the running of the association and providing information to members. He has been a technical editor for the newsletter for many years and provides copies of circuits to other members. Ray must have the most extensive collection of circuit information of any vintage radio buff.

He was also the editor of the Newsletter which was produced four times per year, commencing in July 1982 with seven pages. It was produced using a Gestetner machine (does anyone remember these rather messy machines)?

By 1985, it was an A5-sized publication of up to 24 pages and was being produced on a typewriter and then copied; computers were not all that common at that time. In October 1994, the Newsletter was succeeded by *Radio Waves*, an A4-sized magazine which typically has 40 pages.

To further assist HRSA members, Ray compiled about 12 books of circuits and other helpful information for vintage radio collectors.

### Summary

Ray's life outside of his family has revolved around radio and television. He enthusiastically embraced each new technology and experience in the field of electronics as it came along. He has also made sure our important Australian radio heritage has not been lost, hence his contribution to vintage (heritage) radio is well recognised by his peers. Ray Kelly may not consider himself the father of the HRSA but many do. **SC**

tests a DCA aircraft was hired and a 100-watt VHF transmitter fitted to it. A monitoring receiver was used at a number of critical spots over a period of time and the transmitter was left running while the aircraft flew over the top of the mountain at 500 feet. When the mountain was being crossed, Ray called the monitoring site to take a signal strength reading.

This was a ground-breaking procedure in Australia at that time but has become more common now as it saves time and money. Although the site proved to be excellent for a television transmitting station, access was so difficult that it was not used.

### Ray's collecting history

Around 1972, in the course of

his work with the ABCB, Ray Kelly inspected 3BA Ballarat. It was the station's 40th anniversary and there was a display of sets from the time of its inception. The station operators had advertised for old radios of the era and many listeners provided them with suitable sets. This sparked Ray's interest in the collection and restoration of old radios, although this remained dormant until after he had retired from the ABCB.

Ray seriously started to collect and restore sets from around 1978. He visited auctions and other sales and bought many sets at quite low prices, although some sets did require digging into his pocket rather deeply. His initial and continuing interest was and is in 1920s and 1930s receivers and old