



The  
**Historical Wireless Society**  
of  
**South East Queensland**  
Inc. in Qld 1A33018

# Wireless Review

Volume No. 22 Issue No. 2

Published quarterly

December 2019



**Reports, auctions, meetings**

**Members' Contributions**

**A Member's Restoration**

**Technical Articles**

## President's Report

Greetings everyone.

The AGM for the HWS-SEQ was held on Sunday 15<sup>th</sup> September at Wynnum State School. I'm pleased to be representing you as the President in the forthcoming year.

In late September, I attended the HRSA Canberra Radio Fest. I noted that many of our members also made the journey. There were plenty of nice items presented for the quality auction and some pieces went for quite a few \$\$\$. There were also lots of offerings on the general sale day. Just about everything imaginable was available.

Several club members travelled to the annual HRSA Northern NSW Group meeting on September 28<sup>th</sup>. It was a fine day weather wise and the radio auction included around 100 items. Plenty of bargains were on offer.

The Crystal and TRF Constructors Group Meeting at Eric Allen's residence on Sunday 10<sup>th</sup> November was well attended. I brought along my BBC No. 3 crystal set which I acquired in Canberra. To my surprise it worked. Many other items were also demonstrated and there was plenty of chit chat during morning tea time.

Our annual Christmas function is just around the corner so get your tickets and I look forward to seeing you on December 7<sup>th</sup>. As usual there will be a Quality Auction of radio related items and you will only be admitted if you have bought a lunch ticket. Please contact our Treasurer to obtain your tickets.

Once again, I'm calling on members who are prepared to showcase their collection to contact a committee member. I currently have two offers and ideally need another one or two offers from the inner north or south side.

Thank you,  
Rob  
President

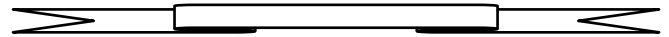
## Club News from your Committee

The meeting at Ferny Districts Fishing Club on the **5th April** will be a Swap Meet and a Show and Tell. The **Show and Tell** must be radio related and limited to 3 minutes. There will be a prize for the best presentation as voted by the attending members.

The **2020 Club Competition** will be judged at the December 2020 Christmas Function. It will be a construction competition and the details, rules and guidelines will be presented in the March Edition of Wireless Review.

The **Club Calendar for 2020** has been finalised and can be found at the end of this magazine and on the club website. Remember, the club website always has the most up to date information.

<http://www.hws.org.au/events.html>



## Publications Received

Recently received publications are:

*HRSA – NSW North Coast Group "Radio Happenings"*  
July 2019 issue. *Kriesler 3K01/3K03, AWA Radiola Stereophone, Lord Kelvin cell tester, AWA Radiola Transistor 8, Philips Oscilloscope GM5650, DC-DC stepdown (Buck) regulator, Stromberg Carlson 88.*

*HRSA – NSW North Coast Group "Radio Happenings"*  
August 2019 issue. *Ron Barlow's Collection & Workshop, HMV Little Nipper J4-17 & J6-19.*

*HRSA – NSW North Coast Group "Radio Happenings"*  
September 2019 issue. *RadioFest in Canberra.*

*HRSA – NSW North Coast Group "Radio Happenings"*  
October 2019 issue. *Mystery Monarch Radio, Emerson 522, Arvin 422A, EKCO Mariner U834, Philips 3552, Stromberg Carlson 87, Tenma 72-2690 PSU, Historical Info.*

To view these or other publications please contact the club Librarian.

# AGM and Auction - 15th September at Wynnum State School

## HWS-SEQ Member of the Year, 2019



At the AGM, President Rob presented the HWS-SEQ Member of the Year Award. Congratulations go to our Member of the Year for the continued assistance he gives our members with their projects and for constantly hosting our Restoration Workshop sessions.

A good turn out for the AGM and Auction saw some 70 plus items go under the hammer. There were some interesting club items from a deceased estate including a rare Toshiba transistor radio and a not often seen Calstan portable valve set.



## Mystery Box - 15th September at Wynnum State School

Peter and Rob brought along a "Mystery Box" which had been handed on to them by our Life Member. The mystery was revealed to show a radio chassis constructed from what could be loosely de-scribed as domestic rubbish. Rumour has it this radio was constructed in Booval or Brassall during the war years and demonstrated at the RNA show around 1946/47.

Closer inspection shows the use of various cans including baby powder, barbed wire, razor blades, bottle tops, galvanised iron, a clock face and of course, half a kerosene can. The club is investigating donating the relic to the Qld Museum.

The Mystery Box certainly sparked some interesting conversations.



## HRSA RadioFest - 21-22 September at EPIC, Canberra

The HWS-SEQ had a healthy showing at RadioFest 2019 with some dozen or so members attending. It is a sensory overload of radios and all things related. The Canberra group did a great job of hosting this event with the Saturday quality auction always an eye opener, both in terms of the items on offer and the prices realised. There were many specialised and rare or even unique items for sale. The list of auction results has been widely circulated by now, but a couple of items require comment.



- Firstly the CAV tortoiseshell pattern translucent petal horn speaker. This item was estimated to sell from \$825 to \$1050. Hammer price was \$1625. Of interest is that the exact same item sold for \$950 at the 2014 RadioFest.
- Next, the Genalex 600 series push button tuning radio which fetched \$700. One of our members commented that 7 years ago he swapped this exact radio with another member for a Genalex Dapper Five. A Dapper 5 sold for \$250! You win some, you lose some!
- The de Forest type Audion: an example of the very first triode manufactured. An extremely rare item. \$900
- A 1927 4QG microphone amplifier made by STC in London. This is a unique item relating to the beginnings of 4QG. \$375.
- An AWA C87 for \$2,000 and an AWA C105-110 for \$3,700.
- At the other end of the scale AWA Empires, a Big Brother and a Fret and Foot all sold for prices lower than we have seen at our club auction in the past 12 months. Go figure!

On Saturday afternoon while some set up their tables for Sunday's market, other members took advantage of the free bus tour of Canberra organised by the HRSA.

Saturday night was the Fest dinner with quizzes, good food and wine and guest speaker Alex Sloane—retired ABC personality. Alex entertained us with a brief career highlights tour littered with great anecdotes. I found her time as a volunteer in Papua New Guinea most interesting. Back in Oz she forged a respected career in radio encountering Bob Brown and the Greens in the wilderness of Tasmania amongst other notable events. As a retired ABC employee she felt comfortable in commenting on the “Canberra Bubble” and when asked, the sad and short sighted demise of the ABC shortwave services which were part of our lives.



Sunday saw the Fest market, open to members at 8:00 and the public at 9:00. Again there was a plethora of radio related items on sale. Workshops were also conducted throughout the morning focussing on transistor radios and refurbishing timber cabinets.

This was the second RadioFest I have attended and will definitely be attending future ones. The opportunities to broaden your circle of radio related friends, to swap ideas and stories and to share our common interest are truly valuable.

# HRSA RadioFest - 21-22 September at EPIC, Canberra

## A Selection of Auction Items



## A Selection of Market and Display Tables





### CHRISTMAS LUNCH

The Society's Annual Christmas luncheon will be held on **Saturday 7<sup>th</sup> December 2019**. The function room opens at 8.30 to book in your quality auction items. Auction commences at 10.00. No junk accepted, quality items only. This is your chance to buy quality items at a price better than you could on eBay. Lunch commences around 12.00 and we will finish by 2.30pm. We always have a great time at Christmas.

The cost is \$20.00 for members and \$36.00 for other guests. All are welcome, especially our newer members. To make your booking please send your money to the Treasurer. All cheques must be made payable to the **Historical Wireless Society of South East Queensland Inc.**

Alternatively you may directly credit your payment to the club's bank account at the Heritage Bank. Please state your **Surname and Member No** as a reference for the payment.

Kindly email the Treasurer to advise the date of your direct credit, and details of the persons attending or return the attached remittance form.

**All bookings and payments must be received before Friday 29<sup>th</sup> November 2019** as we have to advise the caterers of numbers and pay in advance.

A meal ticket must be purchased to attend this event.

Hope to see you on the day.

.....will be attending the Christmas Dinner

I will be accompanied by.....

I enclose cheque/cash \$.....

I have directly credited the club's bank account \$.....

.....No of Members      .....No of guests

**Return to: The Treasurer, no later than Friday 29<sup>th</sup> November 2019**



## STC 658A, Chassis 65A

The next radio that I worked on after the STC 257 in the last issue was another STC, this time a model 658A from 1934. Back then, STC had a slightly different model number system, with the first two numerals indicating the chassis type and the third one indicating the cabinet style. In this case there is an "A" suffix, presumably indicating a modification from the original 658. Again, it took some effort to identify the model number, as STC identifies their radios only by chassis type, not the model number.

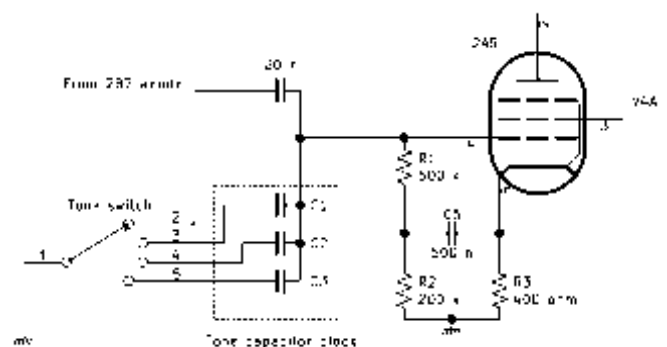
The 658A is a fairly conventional superhet with an R.F. stage. It uses 6 valves in all; 58 R.F. amplifier, 57 autodyne converter, 58 I.F. amplifier, 2B7 detector, AGC rectifier and audio amplifier, 2A5 output pentode and of course an 80 rectifier. The I.F. frequency is 460 kHz. Autodyne frequency changers of course can't be controlled effectively by AGC but with two other stages to control, AGC is effective. Four valve plus rectifier radios using autodyne changers cannot have an effective AGC system, as only the I.F. amplifier can be controlled, which is why they usually don't have AGC. This was one of the attractions of the 2A7 and 6A7 pentagrid converters, already widely used by 1934; they could be controlled by an AGC voltage.

## Restoring it

The restoration was fairly straightforward, and consisted mostly of just replacing the paper capacitors, resistors gone high, etc. The 2A5 was missing, but the owner had one that he took from another radio. However, that was a dud, so I had to use one from my own meagre stock.

## Unusual tone control

This radio used a switched tone control, with four positions. Wired to this was something quite unusual. It looked like a normal small paper capacitor, but had four wires coming from it, with three of the wires connecting to three of the switch positions as shown on the diagram below and the fourth to the control grid of the 2A5. This fourth wire was thicker than the others. This component had no markings.



This is where things get a bit difficult, as try as I might, I couldn't find a circuit diagram for this radio anywhere, so I had no clue as to what was in this four leaved component. I surmised that it was some sort of multi section capacitor, and guessed that internally it had the equivalent of three capacitors as shown. Capacitance measurements didn't seem to make sense, probably because the capacitors were very leaky.

Once I had the radio going, I did some experimenting, and came up with the values of 220 pF, 470 pF and 1.0 nF for C1, C2 and C3 respectively, as denoted on the diagram.

## Unusual bias circuit

Another curious circuit detail was in the 2A5 cathode circuit. It is a type of bootstrap circuit. Presumably the idea was to eliminate the need for an electrolytic bypass capacitor for the cathode bias resistor, R3. I have seen this idea used before, on a Raycophone that I have, except that in place of R1 on that radio is the secondary of an audio driver transformer. The idea is that the signal from the preceding stage is effectively applied between the grid and cathode, rather than grid and chassis, thus eliminating the need for a cathode bypass.

In this case, with resistance-capacitance coupling, it won't work in the same way. This is because the input signal is referenced to the H.T. line, which is in turn connected to the chassis as far as the signal is concerned, via the various H.T. bypass capacitors. What it will do is eliminate the 500 k grid leak from the load on the audio amplifier, increasing its gain, but only slightly.

The anode load is 250 k, so the total load, which would otherwise be  $250k/500k = 167k$  is increased to 250 k, increasing the gain by 1.5 by my calculations. This does not make up for the gain loss of omitting the bypass capacitor, which reduces the gain by two, for a 2A5 in this circuit. I don't know why STC used this circuit, as the 500 nF paper capacitor and extra resistor I though would cost at least as much as a 25 uF 25 volt electrolytic.

## Cranky Oscillator

After replacing heaps of capacitors and resistors the set was working well, except for one thing. It would stop working on the lower third of the dial. This was a common problem with autodyne converters, as I have mentioned previously. A solution was to heat up the oscillator coil, either by inserting a soldering iron through the centre for a few minutes, or removing the coil and heating it up by other means. Putting it in the oven, or in a pot of hot wax are possibilities, both of which I have used. In this case, I used a hot air gun to get the coil bubbling. This worked, and the set was then performing well.

## Kriesler "Compact" 3K06A

The next radio restoration to come up in my log book was the Kriesler model 3K06A made in 1940. It was an interesting variant, with light green knobs and one light green speaker grill bar. The restoration of this set did not present any problems, in fact it was easier than most. A new power cord and plug, a new rectifier, a dial restring, six capacitors and an alignment had it going really well.



However, it represents an interesting part of history. This radio has the same case design as the earlier (1939) compact model 3K04 but it has a short wave band. With the start of hostilities in Europe there was a greatly increased interest in short wave listening, so people could get news directly from the affected countries. This encouraged some radio manufacturers to add a short wave band to even their most humble sets, more as a sales feature than anything else. The result

for Kriesler was the 3K06 and the 3K06A, which were advertised as Australia's cheapest "world range" radio, at £13/9/6. I can't find much information on the 3K06, except that it may have used side contact valves for the converter and output stages. Only the 3K06A circuit seems to have been published.



Now the cabinet design allows for only two knobs, so how does one add a short wave band switch? Simple; one adds a switch on the coil unit at the back. This means that the operator has to reach behind to switch bands. Quite a compromise, but it worked OK.



Shown above is the wave change switch on a 3K06.

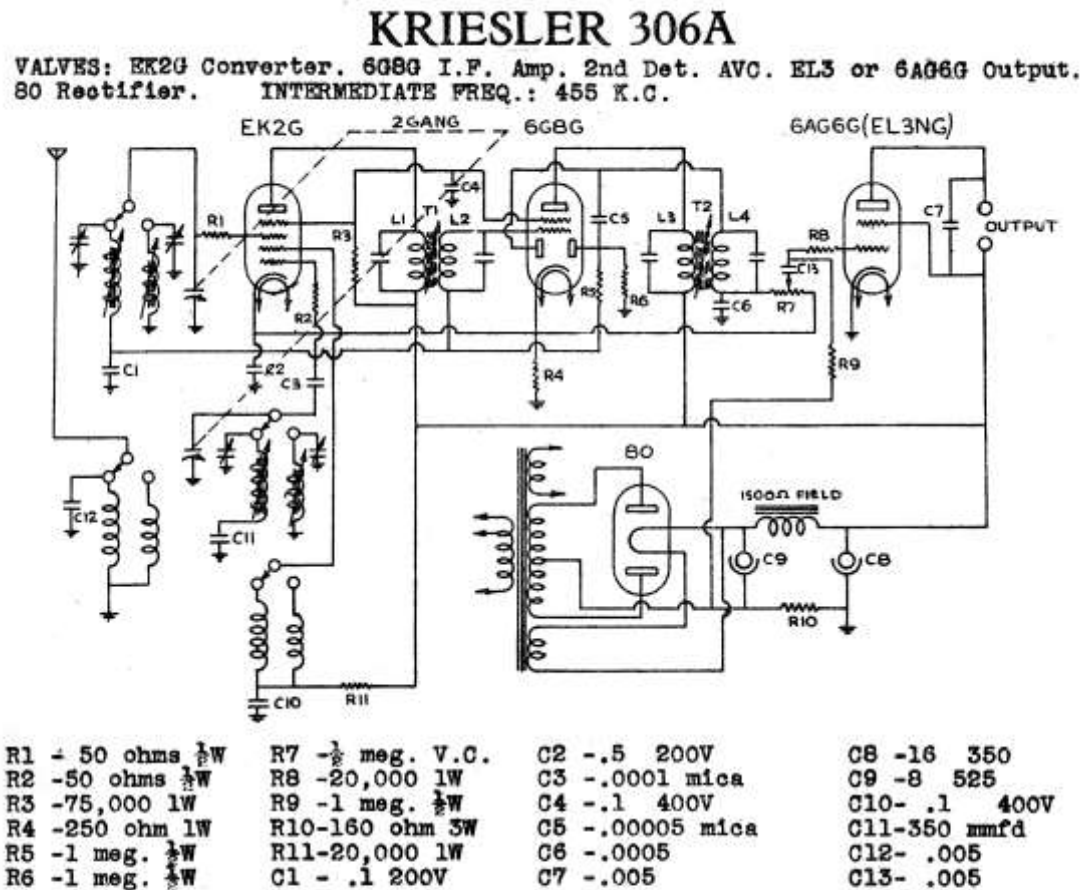
## Simple Short Wave Receiver

The set is only a simple one, with four valves; EK2G converter, 6G8G I.F. amplifier and detector/AGC, EL3NG or 6AG6G output and 80 rectifier. Reflexing is not used; the grid of the output valve is fed directly from the detector so one would not expect much performance but I must say the sensitivity was surprisingly good. I measured 50  $\mu\text{V}$  at 600 kHz and a little worse at 1500 kHz, which is very good for this sort of simple four valve set. I didn't record the short wave sensitivity, and it is usually considerably worse than that on the medium wave band, but must have been considered adequate at the time, under good SW listening conditions. Kriesler also catered for the other end of the market at the time, with the "XP" range of multi-band short wave sets. These used an R.F. stage and two I.F. stages, so would have offered communication receiver levels of sensitivity.

## Astor also

This wasn't the only modest radio to receive the addition of a short wave band at the beginning of the war. Astor was selling the Mickey model DL and responded by making a model in the same case but with short wave; the model CN. The valve line up was changed; 6J8G, 6U7G, 6B6G and 32L7GT. The last valve was a combined output tetrode and rectifier, so the set was the equivalent of a five valve radio. Again, the wave change switch was accessible from the back, (I think). This model seems to be quite rare now. After the war, the 32L7GT was unobtainable, but the 117L7/M7GT could be procured. Astor made available a kit containing the replacement valve and a new transformer with a 117 volt heater winding to suit. I imagine this would have been expensive, leading to many CNs being scrapped rather than repaired, which may explain its rarity now.

By the way, I have an empty cabinet for one of these Kriesler "Compacts", so if anyone has a chassis for one of these models, any condition, I'd be interested.



D.C. VOLTAGE USING 1000 OHMS. P/V. METER

	EK2	6G8G	EL3	80	METER SCALE USED
Plate	250	250	230		250
Screen	75	75	250		250
Osc. plate	180				250
Fixed grid bias			7		10
Cathode Bias	2.7	2.7			10
Filament A.C.	6.3	6.3	6.3	5	10 A.C.

SPEAKER: 1500 ohms field

Kriesler 3K06A circuit from AORSM. Note, erroneous heading for model 306A.

## Restoring a 1939 Philips Console ~ Model 1852

It started, as these things sometimes do, with a chance find in an online marketplace.



I was idly browsing and came upon a dilapidated console radio, but of an unusual design and from a brand I was keen on. An impulse buy for \$30 – actually \$50 but the vendor threw in a \$20 painting easel – turned into a year's tinkering, a very interesting journey through radio history, lots of DIY woodworking and finishing, and a delightful culmination in Rob's garage when the previously mute wooden box came back to life.

I emigrated from New Zealand in 1978, leaving behind a beautifully made and finished 1934 Philips console (the model sadly unknown to me now), P-base valves, magic eye and all, that I'd acquired from a junk shop for \$10. It was overhauled by an elderly radio technician who, it transpired, was dying of cancer. He was so delighted with what I'm sure was his last job that I left the radio with him for several weeks so he could enjoy the results of his work.

I thought that another Philips might be a nice replacement, though there was nothing around like the one I'd had. But a trip to the backblocks of Caboolture saw me the proud owner of a very weather-beaten Philips Model 1852, a 1939 model (according to Radiomuseum) costing a princely 26 guineas when sold new, that had evidently spent a good many years in a barn. What could possibly go wrong?

On closer examination in the cold light of my garage, it was evident that lots of things had to be done. The cabinet needed re-bracing, stripping and refinishing, the speaker cloth replacing, the podium of the console repairing and reattaching, and the chassis, if the perished rubber wiring insulation was a guide, hadn't seen expert help in years. It turned out that it had probably never been serviced in its life, so had spent a long time in the barn!

Taking things apart is quite easy. Putting it back together is a little harder. With the chassis, speaker and the dial with its fiddly wire harness that moves the dial pointer removed, the extent of the woodwork repairs needed was evident; not too bad. The good craftsmen of Ricketts and Thorp in Rockdale, NSW, had built a good shell, but the hide glue holding assembly wedges and internal shelving was giving up.

A quirk of the design of Cabinet Design Number 18 (available separately for £4/10/0 in 1939 according to Philips) was that the speaker panel was effectively not removeable, as it was behind the glued-in-place radio shelf. So the damaged silk cloth could only be replaced by dismantling the shelf. This was an opportunity to modify the cabinet with runners so that the chassis could be slid out of the cabinet attached to its shelf, and the speaker panel then unscrewed and removed to replace the cloth in the future.



I know nothing about fixing the potentially sparky, smoky bits, so I heeded all the advice about never switching it on (perished rubber-insulated wiring seemed to strongly support that idea) and confined my work on the chassis to neutralising the rust and removing the dirt; it's not pretty but it will last. Over to Rob for an overhaul.



Over a period of many months, working in a friend's huge shed that had every woodworking tool I could ever want, including an experienced woodworker, I methodically scraped the old shellac off the veneer, and was pleased to find very little wrong with the key decorative panels. The time it took to strip the entire surface told me a lot about the declining enthusiasm among society members for consoles!

Reinforcing and regluing the podium with modern polyurethane glue restored much needed stiffness to the structure and most of the internal bracing was remade and reglued. There were pencil marks inside the cabinet, presumably put there by the original makers, and these were masked to prevent them being painted over with the matt black chalkboard paint used to refinish the interior; likewise the remains of the Ricketts and Thorp transfer.



I pondered doing the refinishing in old school techniques, but decided for this first project to use wipe-on polyurethane. After lots of scraping, particularly in the distinctive fluted timber highlight strips, and some very light sanding, the refinishing began, with what I think are pretty good results.

When new, I imagine the radio had a soft sheen rather than a high gloss, and this is what the wipe-on poly delivered. The grain of the veneer really started to 'pop' as the finish went on, the finish was nice and smooth, and the figuring in the wood looked great. Not perfect, you understand, but great in my eyes, and this is going to be my radio. Yes, in bright daylight some imperfections are visible but it looks nice in its new location inside my home!

I sought members' advice about authenticity of the final finish. Originally it had a japanned finish on the vertical and horizontal fluting but I wanted a brighter look, and a period advertisement I found suggested that perhaps

Philips had offered a version with lighter highlights. The best advice was that if this is the only one of its kind left then do it exactly as it was done originally. But it probably isn't that rare, or a milestone model in radio history, so some individual interpretation was forgivable. And it can always be redone if it turns out to be worth thousands if turned back into the drab-coloured thing that I got from the barn.

The original cloth was a coarse textured silk, but this proved too far gone to save. I went a different route and bought some decorative speaker cloth from the USA. It looks very smart and is probably more at home on a Zenith than an Australian-made Philips, but it too could be changed if the market for Model 1852s takes off!



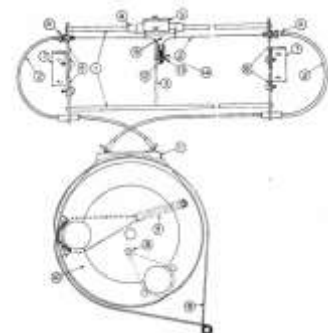
The Rola speaker that came with the radio was almost certainly repairable, but not with my current skills. Ray came to my aid and very kindly gave me three Rolas of the right size to show Rob, telling me I could pay him later when we worked out which one would be used to complete the restoration. The radio now sports one of Ray's reconditioned Rolas that sounds magnificent. Support like this from society members has been wonderful for a newbie like me.

Then, the day. Rob had responded to my sentimental wish to have the radio working again in its 80th year, and on the 14th of October the cabinet and chassis were reunited. Rob had replaced three valves, the electrolytics, several capacitors and resistors, and lots of perished wiring. The radio had two major issues, one being a faulty section of the band change switch that made the short-wave band inoperable, and the other being an open-circuit output transformer. We agreed that the effort to make the short-wave band operable wasn't worthwhile as I am looking forward to experimenting with an AM transmitter connected to a global radio station app in my phone, and Rob wound a new output transformer to drive the speaker. I heard quite a few of Rob's thoughts on the way Philips did things differently from other makers, but he was gracious in his persistence.

Reattaching the broken wire that runs through a Bowden cable to each end of the dial to move the dial pointer proved a bit tricky. Philips offered the cables for 5d in 1939 but I think they might be out of stock by now! The elegant solution of a few dollars' worth of 20-pound breaking strain, nylon-coated, braided steel fishing leader wire from BCF did the job. It slipped easily into the outer cable and now works beautifully.



**Chassis before and after restoration**



**Chassis ready to install, and dial wiring diagram**

The first power up was a nice moment indeed. When plugged in – I hadn't realised that the 1852 has no on-off switch – and after the requisite few seconds for everything to warm up, the radio came to life. Some tweaking of the tuning and experimenting with the antenna revealed a glorious tone from the new speaker and I was a happy man. Members reading this must be laughing, as you've done this dozens, if not hundreds of times, but this was a happy first for me.

With everything screwed down, speaker wires rerouted and resoldered, the radio was ready for the journey home, where it now sits looking very handsome. And back in service! I wonder if the people who made it back in Sydney 80 years ago ever imagined their work surviving into the next century?

Grateful thanks to Rob for the chassis work, Ray for the speaker, Grant for his help with the cabinet, and Anita for needling me when I slacked off the scraping and sanding (and who thought that a Queensland-themed pineapple pattern on the speaker cloth would look nice. Um, no).



## Restoration Workshop 13th October

July's restoration topic was Soldering and De-soldering. Our capable tutor Peter discussed the merits and history of various types and brands of soldering irons then moved on to solder types. "Normal" solder is made up of combinations of lead (Pb), tin (Sn) and sometimes small amounts of silver (Ag). Lead free solder is 99.7% Sn and 0.7% Cu (copper).

An excellent reference for good soldering is the NASA Soldering Standard. Have a look at [NASA Hand Soldering Training](#) and [NASA TECHNICAL STANDARD: SOLDERED ELECTRICAL CONNECTIONS](#).

### Peter's "Top Tips for Soldering".

- Choose the right solder.
- Choose the right gauge.
- Choose the right machine (iron).
- Keep your equipment clean.
- Re-tin your iron tip.
- On PCBs control the temperature.
- To de-solder it may help to add some solder first.
- Use good lighting and glasses.



Following the soldering session we had a look at a receiver chassis brought in by Ray. It was a Stromberg-Carlson 833 from 1933. A top of the line receiver in its day with 8 valves including two 45s in the output driving two speakers. After replacing a faulty 80 rectifier which gave an entertaining blue internal spark show, we discovered that it needed both speakers and their field coils before we could apply HT to the rest of the circuit. Ray

hadn't brought them so the Stromberg-Carlson is yet to be fully restored.

Dave's black and white "girl friends" also provided some entertainment during morning tea.



### ***The Queensland Times Saturday 28 Aug 1937 Page 7*** **RECEIVED RADIO SET**

A fine of £3 in default imprisonment for a month was imposed on John William Taylor (26) labourer by Mr. M. J. Hickey Acting P.M. in the Brisbane Police Court yesterday, when he pleaded "Guilty" to having on August 1 received a radio set, the property of F. Tritton Pty. Ltd. which had then lately been stolen.

Detective-Sergeant T. W. Harold said that when detectives interviewed the defendant he said he had bought the radio set from a man for £5 and at the time knew it had been stolen. Tritton's had no record of the sale of the set.

*Submitted by Rob Zanchetta*

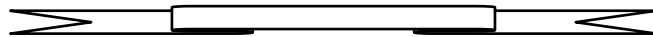


# The Diary of a Service Technician

## The Boom Box That Didn't Go Boom.

The complaint was that "the CD function didn't work". When the CD lid was closed, it did not close properly, and the inserted CD did not play. The cause was a mechanical switch did not latch correctly thus did not operate the electronics to play the CD. It was repaired by replacing it with a unit from my "graveyard". It worked.

As normal practice, a physical inspection was done, several repairs were effected. I replaced the broken telescopic aerial for FM reception, reconnected the wiring to the telescopic aerial, re-joined a loose wire to the power supply, replaced the faulty power supply cord. On test, it was noticed that only one channel did work, nothing on the second channel on any position of the function switch. A quick swap of the plugs of each speaker box found the fault followed the speaker box swap. The multi-meter solved the problem, an intermittent and variable open circuit, located near the plug. The moulded plug was cut off and a replacement soldered on to the speaker cord. It now tested OK with the multi-meter. The problem solved. A function test of the complete boom box was done along with a "soak test". No more problems. Another happy customer. How many faults could be found in one unit ?



Friday, December 11, 1936 WIRELESS WEEKLY Page 1734

THIS SINGLE VALVE  
B & B  
**RADIO**  
RECEIVING SET  
GIVEN AWAY **FREE**  
For 10 simple Reasons  
This Offer is  
open to Boys and Girls  
16 years of age and under



All you have to do is to sit down quietly and write out briefly the five reasons why a valve set is better than a crystal set for the "home-use". Then write the reasons why you consider it best to purchase a Radio Valve Set which has been built in Australia, in preference to a foreign imported set.

**NO ENTRANCE FEE**  
Write clearly in ink, on one side of paper only, and address your entry to Bennett, Bridgland & Co., makers of B & B Radio Sets, 57 William St., Sydney.

All Entries must reach us on or before November 25th. It is advisable to sit down now and write out your five reasons.

There is no catch—no spare parts to buy—no sticky waxy varnish that causes why it is better to buy an Australian made Radio Valve Set, and to the best or get submitting the set last reasons, we are presenting the B & B Single Valve Radio Receiving Set, as illustrated above.

Name and address of prize winner will be published in this magazine on December 12th, 1936.

**Bennett Bridgland & Co**  
Makers of Radio Sets  
57, WILLIAM STREET - SYDNEY

Here it is—the **Smith Portable Radio!**

This radio will make your trip a pleasant one



EVERYTHING CONTAINED IN A SOLID LEATHER CASE

**ONE DIAL CONTROL**

**Chas. F. Smith**  
CONSULTING ENGINEER  
Designer of High Grade Radio Apparatus  
51 CASTLEREAGH ST., SYDNEY - Phone - B W 7495  
CASH OR TERMS

**£25**

# Crystal Set & TRF Constructors Group Meeting 10th November

**Submitted by Ray**

Seven members of the “Crystal Set, TRF Constructors Group” turned up at Eric’s home for our morning get together.

Dave can’t stop building these sets as can be seen by the photographs depicting front and back. The curved cathedral one was very impressive being made out of the top cover of an old portable sewing machine.

In all the reception was astounding, as if you were listening to a modern transistor.



The last 2 photos were of crystal sets displayed by Fred and Eric. Most of the morning was taken up with connecting up the sets, discussing construction and marvelling at the reception. Mid-morning saw us retreat to Eric’s play-room for morning tea and further chit-chat before departing for home. Good to see Fred on his feet again. Thank you to Eric for his hospitality.



## Letters to the Editor

### Valves in Output Stages

In my recent article about using valves for output stages, it has been drawn to my attention (by only one person) that the Kriesler 11-99 AC portable, thru its changes, always used a 6GV8 in the output, never a 12AT7. Possibly the maker had a bunch of B/W TV valves to use up. The 6GV8 does a good job here.

Thank you to that esteemed and exalted personage, the critic. Somebody has to read these things.

In fact there was a "Codar" kit SW receiver presented in the magazine by Stuart Irwin. It had a 12AT7 as an output valve and could generate half a Watt audio. I had absorbed the idea but, when the opportunity arose a few years later, attributed it incorrectly. This reminds me of Oliver Sachs's essay on fallible memory (The River of Consciousness, a must read).

### WIA and ARRL

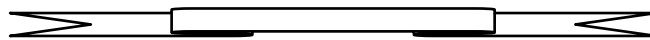
In reply to Dave Brownsey in the September edition, "Where are your quotes, Peter?"

WIA 1910 (not 1919)

RSGB 1913

ARRL 1914

Ref AR Mar, Aug 1970



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**ASTOR** *Mickey Mouse*

**FIVE VALVE SUPERHET** for... **13 GUINEAS**

FULLY COVERED UNDER HAZELTINE PATENTS

The smallest, lightest electric receiver on the market (dimensions only: 7 in. high x 10 1/2 in. long 3 1/2 in. wide; weight 10 1/2 lbs.). . . . Guarantees perfect interstate reception.



... available also with **AUDITORIUM CONSOLE ATTACHMENT** *Minnie Mouse (illust.)*

Great audiotone volume. The Mickey set plugs into the occasionally perfect circuits and operates as normal.

Best Price for Minnie attachment 18/6.

Outstanding performance is achieved by new 2-to-one double purpose valves: Hexode (6A5) and Diode-Grid Pentode (6BE). You share NO INCREASE IN PRICE.

**No aerial . . . . no earth required . . . . just plug into nearest light socket**

Also Mickey Mouse introduces the new audiotone radio mechanism . . . . Automatic volume control which overcomes "fading" and stops "blasting." Fluorocyanite coating . . . . Jumbo dynamic speaker . . . . It has no more current than one ordinary household lamp. A self-powered five valve superheterodyne with patented mixer and noise reducing circuit. In cabinet of exceptional dignified simplicity. Price 13/6.

**TRACKSON BROTHERS PTY. LTD.**  
157-159 ELIZABETH STREET, BRISBANE

**DAVID JONES'**  
FOR RADIO SERVICE



*Sale Prices*  
and 2/- in the £ Discount

**RADIO SETS**

Now is the time to secure your Wireless Equipment. Sale Prices and the Discount save you Pounds.

**THIS** is our standard 2-Valve Set greatly reduced. Complete with all accessories—but not including loud speaker; ready to instal. Every set thoroughly tested, guaranteed to give satisfaction. Usually £12/10/-. Now reduced to . . . . £10/10/-

Standard 1-Valve Set with all accessories, not including loud speaker. Usually £8/12/6. Sale Price . . . . . £6/15/-

Accuraturn Dials. Usually 26/-. Sale Price, 17/6

Fails Neutrodyne Kit, consisting of 3 matched autotransformers, 3 variable condensers, 2 neutralising condensers. Usually 8 gns. Sale Price . . . . 7 gns.

2/- in the £ Discount for Cash

**RADIO DEPARTMENT, 22 YORK ST.**  
**DAVID JONES' SALE**

# Members' Market Place

Members can advertise Items for Sale, Items Wanted and Members' Services for free.

Contact the Editor to place your advertisement.

**REMEMBER** to advise the Editor before each edition whether you want to continue your ad.

## Wanted

A.W.A. Radiolette (Empire State) chassis. Does not matter which year/model nor that it is working, as long as it can be restored and essential components are there (valves not a problem). If you have one or know of one please contact me with photos if you have any.



## Wanted



I am looking for one of each type of KNOB in the photos – Switch knob & Tuning knob. **NOTE: Not after the tuning pointer (seen on the RHS), just the knobs.**



## Valve Bases and Pins WANTED



I intend to *repurpose* old valve bases and pins in several projects. I am looking for **DEAD** or **GASSY** valves or valve-bases with 4, 5, 6, 7, 8/ Octal or more pins.

If you have any dead-valves or bases that you no longer need, I would be pleased to put them to further use.

**NOTE: ONLY valves that have pins set in a plastic base. Types such as 6146 with a metal band are good.**

**NO NEED** to remove the glass envelope, as I can do that. See you at the next meeting, otherwise, please contact me.

## Wanted



Original copies of Silicon Chip  
November 1987 Vol 1,  
December 1987 Vol 2,  
January 1988 Volume 3.

Original copies of Radio Waves No 91.

A round clear plastic dial 100mm diameter to suit an Astor Transistor BRP or FSW

A set of knobs, Vol, Tone, Tuning, to suit an AWA 208P Transistor radio.

Looking for a National Panasonic RF 3000 radio in good condition, has a slot type dial and a front lid.



## Members' Market Place

### WANTED

#### Can you help with these items?

5 knobs & escutcheon for 1935 AWA 334 or 244

2 knobs & dial for 1936 Bandmaster 547 or M656E

4 knobs for Technico 1947 751

2 knobs large acorns & dial centre badge for STC 1936

Dial glasses for STC 1946

2 knobs for STC 1947 250



2 knobs small acorns for Croydon 1939

2 dial glasses for Peter Pan 1947 BKJ

Escutcheon magic eye type for Airzone 1936 556 or 750 console

1 knob for Astor 1949 GJ

2 knobs for Mullard 1949 1107

3 knobs for HMV 1952 4271

2 knobs grey or gold for HMV 1951 63-51

### Wanted

1940/50s 78 RPM record player, steel turntable with rolled edge, bakelite arm using steel needles, direct drive geared motor by Collaro, Garrard etc with cast housing.

### Wanted

Does anyone have a copy of "CALLS"?

It is an A5 size booklet printed in 1929 (?) from the 'Listener In' series.

Also 'The Wireless Weekly Monster Hobby Radio Gadget Book for Boys 1939'

I wish to borrow and scan if agreeable.

### FOR SALE Radio Knobs.

Some hundreds of radio knobs of all eras, twenties to modern. Bakelite, plastic, aluminium, military, domestic, chicken head pointers etc. Way too many to list.

Are you one or two specific knobs short or do you need a full set? Send requests via email including an image of the knob needed or quote a reference and page number from one of the following publications, The Radio Chronicles by Savell, or Radio Days by Sheridan and Singer.

If I don't have the knob that you need, I'll give it to you free! 😊

## Members' Market Place

Free

**TWO Display cabinets to give away located in Woombye.  
Display your prized radios in two purpose built cabinets.**

Solid silky oak with glass panels. 1310 wide, 1985 high and 525 deep (mm). There is no room in the house and they are too tall for under the house. We bought them home in one trip in our 7X4 trailer. Whilst they are heavy, I am able to move them on my own using dollies and a furniture trolley. If you can enlist helpers at your end we can load them at my end. But many hand make light work.

The front and two side glass panels have a groove along the bottom and a keyed lock at the top. Whilst there are no keys, I found standard furniture keys we had in the house did the trick. The whole thing fits together very snugly, almost air tight with felt beading around the joins. The rear of each cabinet also opens, which means you have access to all four sides. The bottom cupboard also locks .

There is one 240 volt fluorescent light installed along the top front of each cabinet with the lead coming out of the top of the cabinet.

There are four industrial type metal brackets holders (two for each cabinet) but no brackets or shelves. The insides are painted white (as you can see) and the rear is cork board coated with lots of map pins still intact.



**Pick up only.**

Mike

### **“Single Digit Table”**

All general auctions feature a “Single Digit Table”. The purpose of this table is to remove cheap items from the auction list and make them available to other members without tying up auction time.

\* There will be **no fee** to place items on this table. \* Items must be **clearly marked with a price** which **must be less than \$10**.

\* The **seller's name must also be clearly marked**, and interested buyers will pay the seller directly.