

Volume 34 No. 3 December 2024

S.A. Group Newsletter

Inside Story:

<u>100th Anniversary of Broadcasting in S.A.</u>: On November 20th at the Grosvenor Hotel in Adelaide, ABC-891 celebrated the establishment of radio broadcasting in S.A. and we were there!



But who else was there....and what happened?

See inside for the full story.....

Historical Radio Society of Australia Inc. - S.A. Group

Web Site: www.hrsasa.asn.au

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Committee for 2024-25

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Committee Member:	Tony Bell	8269-4095	antony.k.bell@gmail.com

Co-Opted Additional Members/Responsibilities:

Shop Keeper:	Alan Taylor	0417 859 074	<u>shop@hrsasa.asn.au</u>
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Planned meetings for the next few months:

Wednesday 8 January 2025 12 noon for 12:30 start MEMBERS LUNCH

Our bi-monthly lunch is open to all members, partners and guests. We start this year in the northern suburbs, but with a change of venue... *To be held at:*

The Hampstead Hotel 143 North East Rd, Collinswood, SA, 5081

Sunday 19th January (Avoiding Aust. Day on 25th.) 1:00pm to 3:30pm

FIXED PRICE SALE DAY

This is NOT an Auction. Members bring items to sell themselves at prices they set. You then negotiate directly with the seller! Usually lots of bargains and interesting stuff. Table bookings open. *To be held at:*

St. Cyprian's Church Hall, 70, Melbourne Street, North Adelaide, 5007 Sunday 23rd February 1:00pm to 3:30pm (a) Judging of Amplifier Competition. (b) Tony Bell: "In the Beginning" presentation. To be held at: St. Cyprian's Church Hall, 70, Melbourne Street, North Adelaide, 5007 Wednesday 12 March 12 noon for a 12:30pm start **MEMBERS LUNCHEON** Our bi-monthly lunch is open to all members, partners and guests. This month, were back in the Southern suburbs. To be held at: The Earl of Leicester Hotel 85 Leicester St, Parkside, SA 5063 Sunday 30 March 1:00pm to 4:00pm. **CLUB AUCTION** This is a regular club Auction. Members can book a table (max. 20 items) by contacting the Secretary.

To be held at: **St. Cyprian's Church Hall,**

North Adelaide, SA, 5007

Sunday 27 April 1:00pm to 3:30pm 3-D PRINTING AND MODEL MAKING

A guest speaker will be demonstrating use of a 3-D printer to make models and parts useful to radio restoration. Also, he will be demonstrating using casting chemicals and epoxy resins to make replacement parts such as knobs, and broken fretwork for radios.

To be held at:

St. Cyprian's Church Hall 70, Melbourne Street, North Adelaide, 5007

Wednesday 14 May 12 noon for 12:30 start MEMBERS LUNCH

Our bi-monthly lunch is open to all members, partners and guests. Were back in the northern suburbs this month, but remember the change of venue...

To be held at:

The Hampstead Hotel 143 North East Rd, Collinswood, SA, 5081

Sunday 25 May T.B.A. (Reserved for History Month)

May is normally "History Month" in SA and we have a few ideas of activities we can use to help celebrate. To be advised.

To be held at:

To be advised

Sunday 29 June SHOW and TELL: S.A. made radios & equipment

As with our Astor, Philips, AWA and Hallicrafters exhibition days over the past 2 years, this is an opportunity to show off your SA made collection. *To be held at:*

St. Cyprian's Church Hall

70, Melbourne Street, North Adelaide, 5007

Sunday 27th July A.G.M. and AUCTION

This is member's opportunity to re-shape the management and direction of the HRSASA with the election of a new Management Committee for 2025-26. Several members of the current committee will not be standing for re-election this year. The AGM will be followed by a traditional Club Auction.

To be held at:

St. Cyprian's Church Hall

70, Melbourne Street, North Adelaide, 5007





PROGRESS REPORTS:

Centenary Of Broadcasting in S.A. The first of our two exhibitions to celebrate this event is now open. <u>DATES:</u> Friday 8th. November 2024 - Friday 31, January 2025 <u>LOCATION:</u> Adelaide City Library (Adelaide City Council) 3rd Floor, Rundle Place Enter via Francis Street, off Rundle Mall, or DaCosta Arcade (There is a lift to the 3rd floor) 10:00am to 6:00pm Monday / Tuesday / Thursday 10:00am to 7:00pm - Wednesday 10:00am to 8:00pm - Friday 10:00am to 5:00pm - Saturday 12noon to 5:00pm - Sunday

This exhibition features the display cases of radios and tape recorders by Keith Ellison and Ian Smyth. The hosting, display, scripting and artwork is by the HRSA-SA. Please come and look during these 3 months.

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SECOND DISPLAY: State Library of S.A.

DATES: Friday 14th February - Friday 28th March

LOCATION: Institute Building (Corner of North Terrace & Kintore Avenue)

<u>STAFFING</u>: This major event is totally dependant on HRSASA members making themselves available to staff the exhibition every day that the library is open. *This is one of the conditions we must meet, or the exhibition will not go ahead*. Please contact the Secretary (Ian Smyth) to discuss when and how you may be able to assist. A blank Roster document has been sent to all members to help you. Why not roster on with a friend and make a day of it?

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Component Corner

Many are probably wondering where to obtain components and valves. The following is a list in order of preference:

HRSA-SA Group Shop: We now have a new arrangement for our store. Please contact our Liaison Officer, Alan Taylor on 0417-859-074 to enquire, or place an order. Alan's email address is: shop@hrsasa.asn.au AZTRONICS, 170 Sturt Street, Adelaide. Houses the HRSA-SA Group valve bank and modern components. They will source components for members. Great supporters of the HRSASA.

HRSA Melbourne (see *Radio Waves*) Houses the Victorian HRSA valve bank and odd passive components and kits, plus resource books written especially for members.

WES Components, Sydney. The catalogue is viewable on-line, and orders can be placed through the Shop Keeper/Secretary, as the SA Group has an account, through which we get "trade discount". Go to: <u>https://www.wes.com.au</u> to see all their products.

From our President, Graham Dicker.

(Graham's monthly stories from the past, and other ramblings.)



Sadly, we must report that there is no President's Column from Graham this month.

As many of you may know by now, Graham had a very serious motor vehicle accident on or about Sunday 1st December. While driving down Shepherd's Hill Road from Blackwood, it appears that Graham had a medical episode and blacked out long enough to cross into the path of oncoming traffic. It also appears that Graham's seatbelt failed, causing his head and torso hit the steering wheel and windscreen. Subsequently, he has suffered major injuries to his head and chest. He has been in the intensive care ward of one of our major hospitals in an induced coma, while at least two surgeries have been performed so far, to relieve pressure, and to repair some of the damage.

On Saturday at our Christmas Lunch, we heard the good news that he has begun to emerge from the coma and was beginning to recognise members of his family. Clearly, he has a long way to go in his recovery and it may be quite some time before his family and doctors know the extent of any acquired brain injury from such a collision.

From an HRSASA perspective, our Vice-President, Keith Ellison will assume the role of President until the next AGM in July, in Graham's absence.

At this special time of year while many of us are coming together with family at Christmas, our thoughts and best wishes go to Graham's wife and their children who, no doubt will be missing him terribly.

We wish him well and look forward to hearing his dulcet tones over another explanation of something VERY technical in the future.

ITEMS For SALE, and/or HELP STILL WANTED BY FELLOW MEMBERS:

1. WANTED: Philips Transistor Radio – Model No. 198



Contact: Tony Bell on (Home) 8268-4095 or by email at: antony.k.bell@gmail.com

2. <u>WANTED URGENTLY</u>: Tony Bell is preparing radio and transmission exhibits for the upcoming *Centenary of Broadcasting* exhibition at the State Library – He is urgently looking for:

- 1. The brass "*All Transistor*" badge for a Philips Model 198 (see photo above) or 199 transistor radio. It could be a junk radio still with the badge.
- 2. A telescopic antenna of no more than (close to) 9 mm diameter and about 75 mm long. No elbow at the bottom but could be a male or female thread.

Contact: Tony Bell on (Home) 8268-4095

3. <u>WANTED TO BUY:</u> (Submitted by Gary Rosindale-Smith.)

A Motor-Generator set for a R1155 radio (from a WWII Lancaster bomber.) Power input can be 12, 24 or 28 volts - with output at 220 volts and 100 mA. Any brand will do if it has the above power criteria. <u>*Contact:*</u> Gary Rosindale-Smith. (NOTE: Gary is an HRSASA member but has recently moved to Perth.) If you do have a suitable MG to sell, please contact Ian Smyth on 0488 488 776 or <u>ian.smyth@me.com</u> who will liaise with Gary as transport to W.A. will be an issue.

4. WANTED TO BUY: (Submitted by Phil Flaherty.)

I am doing up a Mark 32 Type Japanese transmitter and chasing some missing parts. The radio came from Adelaide and at some stage was modified. I am chasing the 200mA antenna; RF ammeter; the 2 Variometers/ Variocouplers, and the 2 variable capacitors. The variometer No.8 is connected to a 900pf variable capacitor and the No. 17 variometer, and the other capacitor are separate. <u>Contact:</u> Phil Flaherty - Email: <u>pflaherty3@bigpond.com</u> – Phone: 0411 707 176

5. <u>WANTED TO SELL:</u> (Submitted by Warren Lane.)

Downsizing sale of radio, audio and general electronics. Included are quality 1920s radios, valve test equipment, etc. plus many component bins, valves, semiconductors of all types, data and textbooks. Too many items to auction so come and take a look. Here is a broad sample:

- AVO coil and transformer winder
- King Neutrodyne
- Tektronics 1731 video waveform monitor plus 1721 vectorscope
- Philips model 2510 table-top radio (1930) with Sevenette speaker
- Atwater-Kent 1927 console battery receiver with speaker
- Revox A77 tape recorders
- 10.5" reels of tape plus many stereo pre-recorded tapes (7" reels)
- 10-Watt triode mono amplifier
- Thousands of quality components, old projects, etc.

Many next to nothing prices as well. Save them from becoming landfill. Tell me what you're looking for or make a time to come and take a look.

Contact: Warren Lane – Phone: 0400 272 556 or email: warren.lane@internode.on.net

6. WANTED: - (Submitted by George Kis)

A set of 3 knobs for an AWA B-15 Mantle Radio (pictured) - If you only have 1 or two, please contact George anyway as he might get the three that he needs from several members.



Contact: George Kis - Ph: 0437 265 076 or email at: ks grg@yahoo.com.au

7. <u>WANTED TO SELL:</u> (Submitted by Greg Lamey)

- (1) **Metrix** (made in France) high quality signal generator 50Khz to 50Mhz Price: \$80
- (2) 24V linear regulated power supply 30A Price: \$50
- (3) High Voltage **Fluke** power supply with bias function Price: \$150

<u>Contact:</u> Greg Lamey Email: <u>gnjlamey@gmail.com</u>



Above: Metrix signal generator \$80



Above: Closeup of the badge on the FLUKE Power Supply



Above: High voltage FLUKE Power Supply - \$150



Above: 24V linear regulated power supply 30A - \$50

Quick Capacitance Quiz.

Q1. Capacitance acts to store electrical energy as:

- A. Current
- B. Voltage
- C. A magnetic field
- D. An electric field

Q2. When the spacing between plates in a capacitor is made smaller, all other things being equal:

- A. The capacitance increases
- B. The capacitance decreases
- C. The capacitance does not change
- D. The resistance increases

(For the answers, turn to page 11.)

FRONT COVER STORY:

On Wednesday 20 November 2024 we celebrated the 100th Birthday of licensed broadcasting in South Australia. This was the date that radio station 5CL gained the first A-CLASS license in South Australia.



Radio station 5DN had been on-air earlier, from June 1924 under an experimental license, expecting to be the first, but the Government changed its mind and gave them the first B-CLASS license in February 1925. All A-Class stations were funded by the government while B-Class stations were funded from advertising revenue. Later, in 1932, all A-Class licensed stations around Australia were amalgamated to become the ABC Network that we know today.

Radio station 5CL is now known as "Radio National" and only carries national content. However, its sister station, radio 5AN (now known as ABC Radio Adelaide) is still very much a local station. To celebrate the Centenary, Radio Adelaide held a live outside broadcast from the ground floor of the Grosvenor Hotel on North Terrace, which was the site of that first broadcast 100 years ago.

The Radio Adelaide Breakfast Show, hosted by Jules Schiller and Sonja Feldhoff began at 5:30am and our HRSA-SA Vice-President Keith Ellison, and Secretary, Ian Smyth were invited to attend.



<u>Above:</u> A gathering of ABC Local Radio presenters, past and present. *L to R*: Carole Whitelock, Peter Goers, Keith Conlon, Jules Schiller, Sonja Feldhoff and David Bevan.

Ian was interviewed by Sonja and Jules during the breakfast show, and Keith and Ian together were interviewed later by David Bevan during the mid-morning show when they crossed to the Adelaide City Council Library where our current exhibition is being held.

While the day was great fun and very entertaining, with a BBQ breakfast on the footpath outside the broadcast, it was more like a reunion of old personalities from ABC-891 days than a celebration of broadcasting more generally, but that was quite understandable given that they were hosting the event.

A week later, on 27th November, Ian was invited to the studios of local radio station COAST FM and spoke on-air with presenter Rob McLennan about the Centenary, and the exhibition at the Adelaide City Library.

If you would like to listen to the three interviews you will find them on our HRSASA website. From the Homepage, click on the link to "Oral History" then scroll down to the bottom of the page. Or click here: https://hrsasa.asn.au/page-3/

- 1. Ian with Jules and Sonja.
- 2. Keith and Ian with David Bevan.
- 3. Ian with Rob McLennan on Coast FM.

Photo Gallery: Saturday December 14th. - Our Christmas Lunch at the Maid of Auckland Hotel



While slightly down on numbers this year, we still enjoyed a three-course Christmas menu with lots of choices. A great day was had by all in attendance.

Replacing an Open Circuit Speaker Transformer

Adapted & updated from an original article by Rod Humphris in "Radio Waves", October 2017

Speaker transformers for old radios are getting hard to come by, as they often fail, or become open circuit and can be expensive to repair or replace. I've just done up a Phillips mantle radio, and its main fault was an open circuit speaker transformer primary. This transformer was a Rola EI core 7K to 3.5 ohm transformer.

The last one I replaced was rewound at a cost of around \$80 equal to the value of the whole radio!

This time I thought I would try using a 100 Volt, PA transformer, the one I had in stock being an Altronics M1109 at a cost of \$11.95

(*NOTE:* Since 2017, the M1109 has been superceded – in 2024 it is now the M1112 at a cost of \$16.50 each, or \$13.25 for 10.)



Above: The M1112 - 8 Ohm to 0.33W - 5W 100V Line Speaker / Audio Transformer from Altronics

The old M1109 transformer had an 8 ohm secondary, and multiple primary taps. The one I used was the common to 0.5 watt winding. With the 100 Volt line winding, ohms law at 0.5 watt translates to about 10K ohm.

Loading up the 8 ohm winding with a 3.5 ohm speaker will drop the primary impedance to about 5K. I put it in the radio, replaced the 0.01uF coupling capacitor to the output valve's grid, wired up the transformer, turn it on - and no sound!

Fault finding revealed an open 220K x $\frac{1}{2}$ watt IRC resistor. I plugged it in again - the result - really excellent sound ! About what I would expect from a 5-valve mantle model with a five-inch speaker.

There was no discernible distortion, really good treble, (this is an AM radio remember), and about the correct amount of bass that a 5-inch speaker produces, and lots of volume. I didn't even worry about the addition of an air gap.

The result - one happy customer (me) and a radio that works really well.

And no, I do not have shares in Altronics. You can also buy equivalents from Jaycar, WES Components and RS Components as well.

<u>Editor's note</u>: I followed this guide and rebuilt a 1929 Philips "Sevenette" speaker with a 10 inch x 8 ohm modern speaker and the M1112. It now works perfectly with an old 1929 Philips TRF radio.

Answers to the Quick Capacitance Quiz: (Questions were on Page 6)

QUESTION 1: Capacitance acts to store electrical energy as?

ANSWER: D. An electric field

Explanation:

Capacitance acts to store electrical energy as an electric field. When a voltage is applied across a capacitor, it creates an electric field between its plates. This electric field stores the electrical energy in the form of potential energy. The amount of energy stored is directly proportional to the capacitance value of the capacitor. Therefore, the correct answer is an electric field.

QUESTION 2: As the spacing between plates in a capacitor is made smaller, all other things being equal:

ANSWER: A. The capacitance increases

Explanation:

The capacitance of a capacitor is directly proportional to the area of the plates and inversely proportional to the distance between them. As the spacing between plates in a capacitor is made smaller, the distance between the plates decreases, resulting in an increase in capacitance. This is because the closer the plates are, the stronger the electric field between them, allowing for more charge to be stored on the plates. Therefore, the capacitance increases.

How did you go on those two questions? - Here's another one to get you going!

Two capacitors, C1 and C2, are connected in series, with capacitances of 4 microfarads and 6 microfarads, respectively. What is the equivalent capacitance of the combination?

A. 10 microfarads

B. 2.4 microfarads

C. 5 microfarads

D. 3.75 microfarads

Correct Answer: B. 2.4 microfarads

Wishing all our members and their families a very Merry Christmas and a wonderful New Year







HRSA-SA Group - Amateur Radio Call-Back Network

In 2020, when our HRSA-SA Group was unable to hold meetings due to Covid-19, a small group of licensed radio amateurs decided to hold a local call-back net.

The first broadcast was on the 26th of April 2020. Although the ban on meetings was soon lifted, the broadcasts have continued and as we approach the completion of our fourth year, we are still going strong.

While the aim is primarily for HRSA members, non-members are also welcome, the more the merrier. The group has a small band of listeners who either do not have the required licence or do not have transmitting facilities. Topics generally centre around historic radio, or activities coming at HRSA events, plus a range of widely varying content, can be heard.

For those licenced amateurs and those that would like to listen to the broadcast and have the correct facilities the details are:

Wednesday Nights (each week) – Starting at 2000 hrs.

On VK5RAD repeater (Crafers) on 147.0 MHz. (Note: We will remain with the Crafers repeater until the Houghton repeater is fully upgraded and operational.)

There are generally two full rounds and a quick "wrap-up" round.

New participants are most welcome.

So why not tune in and listen, or join in the conversation?

For further information, contact Tony Bell at home on (08) 8269 4095