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# S.A. GROUP NEWSLETTER



**AR8 Aircraft Receiver Modified** 

# Historical Radio Society of Australia Inc. – S.A. Group

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# **Planned Forthcoming Meetings (some are tentative)**

To be announced

Sunday 26<sup>th</sup> July Unlikely to be the AGM and auction.

#### **Retiree's Luncheons**

Luncheons are held for retirees and those that can escape work, at the Buckingham Arms Hotel (for the time being) on the corner of Walkerville Terrace and Northcote Street, Gilberton. Meeting time is 1200 for a 1230 luncheon. All members, including those from interstate, are welcome. Forthcoming luncheons are:

Wednesday 8<sup>th</sup> July 2020 Wednesday 9<sup>th</sup> September 2020 Wednesday 11<sup>th</sup> November 2020

**Note:** Due to the virus, an RSVP to the Editor is required by email, telephone, letter, or the HRSA 2 metre call back on Wednesday nights please. Deadline for the RSVP is the end of Sunday 5<sup>th</sup> of July.

# **Committee Meetings**

None scheduled

#### **Front Cover**

A World War II aircraft receiver modified by ACE Radio so that it could be used as a 'stand-alone' communications receiver? Apparently there were still plenty of the World War II receivers still available in the late 1950s. ACE Radio modified the AR8 and mounted it, along with a power supply, audio amplifier and loudspeaker in a leatherette covered timber cabinet to be sold as a communications receiver.

This advertisement is from the December 1958 edition of R,TV&H. If you think £34/17/6 (\$69-75) was quite reasonable, using the Reserve Bank inflation calculator, this equates to \$1,111-41 in 2019 money and about 72 weeks of pocket money for someone in their early teens in 1958.

I had never seen an actual example until, Kyffin generously gave me the complete ACE Radio installation some time ago, so that I could salvage the receiver. Fortunately I thought about it before doing so and decided that this was an excellent example of how World War II equipment was used after the War.

Made by AWA, the AR8 was teamed with the AT5 transmitter, an Antenna Coupling Unit and Genemotor for fitting in medium and heavy aircraft. The Mosquito, Beaufort or Avro Anson were perhaps the smallest aircraft to have this fit. Brief specifications are Frequency Coverage of the MF tuning unit, 140 to 740 kHz and 765 kHz to 2 MHz and for the HF tuning unit, 2 to 20 MHz. The IF frequency is 755 kHz. Modes are cw/mcw/rt/direction finding for MF and cw/mcw/rt for HF. Power is supplied from one of two genemotosr common to the AT5 or a mains power supply. Inputs are 12, 24 or 240 volts.



"ACE" of ACE Radio stands for amplifiers, communications and electronics. ACE was located at Marrickville, NSW. **Ed.** 

#### **Editorial**

Unfortunately, meetings at St Cyprians appears to be some time off. The total hall area is 121 square metres and with 1 person every 4 square metres implies a maximum of 30 people. With hall dimensions of 14.75 x 8.26 metres, maintaining the 1.5 metre separation implies 9 x 5 or 45 people. However there are a number of obstructions in the hall, such as the ramp, stairs, mat storage etc. So these figures must be reduced. In addition, Government regulations are that every table and chair must be wiped before and after the meeting. I believe that there are a number of other hoops that one must jump through when hiring a hall. So it appears that meetings in the hall will not resume until there is a relaxation in proximity requirements. If it was summer, we could have a meeting in a park or somebody's back yard. Unfortunately the weather is not very suitable at this time of the year.

We would normally be promoting the Annual General Meeting at the end of July in this edition of the Newsletter. However, as far as I know, since the Group operates under the incorporation of our 'Parent' body in Melbourne, we do not need to seek permission from ICAC to defer the AGM. I have made mention of the Retirees Luncheon on page 2. Please note that I require an RSVP by the end of Sunday 5<sup>th</sup> of July so that the Buck can prepare suitable layout to comply with legal requirements. In addition to those methods of notification detailed on page 2, you may also text only 0478 296 566 if you wish. It is a great opportunity to have interaction with other members

The Wednesday evening 2 metre call back has been quite small but most enjoyable. The core has been Andy (VK5AAQ), Les (VK5JL) [until the cold weather set in], Mark (VK5AVQ) and myself (VK5UA). Other members participating have been Greg (VK5LG), Neville (VK5ZNP) and Glen (VK5GLM). Two non-members, Daryl (VK5JDS) and Trevor (VK5TW) have an interest in historic radio and so also participate. The average has been about 5 people per week. As we do not have control of the repeater, we have to be very careful of 'time-outs'. So in brief;

2000 to 2030 local time on Wednesdays, Houghton Repeater, 146.85 MHz Receive, 146.25 Transmit, for about an hour.

Keep Safe. Ed.

# **Presidents Report**

My fellow member, hopefully by about September we may have returned to some form of normality. We all miss our club's get-togethers, it was something to look forward to each month. I too, miss this.

I hope that you are all well. Look on the bright side, you have more time to develop the one active device project. [or restore more radios. Ed.]

Keep well

Christopher

# Secretary's Report

As you can imagine, there is very little to report since our face-to-face meetings were suspended at the end of February. However, there have been a couple of outstanding bits of business that needed attention:

#### **Bushfire Response: Review into South Australian Bushfires 2020:**

Following the February meeting at St. Cyprian Church Hall, I was asked by the group to write a submission to the State Government as this review had just been announced. The review was led by Mr Mick Keelty, former Australian Federal Police Commissioner, and supported by the South Australian Fire and Emergency Services Commission (SAFECOM) and experts from across the State's Emergency Services Sector.

From our February discussion, our main concern was the access to up to date emergency warnings and fire-ground conditions for residents. We wrote in support of ABC Local Radio broadcasting on the AM band from outside the danger areas to residents inside, and asked questions about access to battery operated radios for all, and even suggested how this access might be improved. The submission was reviewed by our committee prior to it being submitted. In May, we received acknowledgement of our submission from Mr Keelty which stated that we may be asked for further information at a later date. However, the Federal Government Royal Commission, currently in progress, seems to have overtaken the State review. We have noted in recent days that some of the issues around radio communications and access (for both residents and CFS crews) have become major areas of interest for the Commissioner

#### **RSL Aged-Care Facilities: Radiogram Project:**

As was reported in the April Newsletter, the first of 3 radiograms was installed at the RSL War Veteran's Home at Myrtle Bank in mid- March. Despite the interruption of the Covid19 pandemic to our activities, we.

are still looking for 2 more units. If you have one in good working order that you'd like to donate to such a good cause, then please give me a ring and we'll come and assess it for its suitability.

It's great to see that from June 1<sup>st</sup> that the State Government has begun to ease restrictions on gatherings. The light is visible at the end of the tunnel so hopefully, we will be able to meet again within a month or two. In the meantime, keep up with those projects!

*Ian Smyth* (Secretary)

# Valve Bank Update

The merry trio of Duncan, John and Norm are back on their Thursday morning sorting of valves. They spend a lot of time and do a great job, I sometimes think their effort is under-estimated by the Group. A sincere thank you to the late member, Ian Pepper's wife Debra, for the donation of Ian's valves to the Group.

#### Varying my isolation!

Refurbishing a 1955 Berco Rotary "Regavolt" Model 72A (Variable Transformer) - by Ian Smyth.

During the 4 months of COVID19 isolation,I decided to work on a couple of projects, especially things collected at our auctions that are taking up valuable space in my shed! I've always wanted an isolation transformer with a variac, having borrowed John Crawford's combined unit on several occasions and finding it more than useful. My workmate (and fellow HRSA-SA member Alan Martin) suggested that an isolation transformer permanently under my bench would be very useful, and that the variac could be added later when needed. Alan said that he had a 240 to 240 volt transformer lying about at home and he would dig

it out for me. He was as good as his word and soon after, it was installed under my bench.

Back in October last year, HRSA-SA member Miles Essery held a Sale Day of his own at the Hungarian



Above: The "modified" brush holder

**Right:** No casing and spashed with old





Above: Baseboard and "Cube Lock" fr ame

Right: Completed frame and sides added

Below: New brass top plate and copper sleeve to hold

the brush

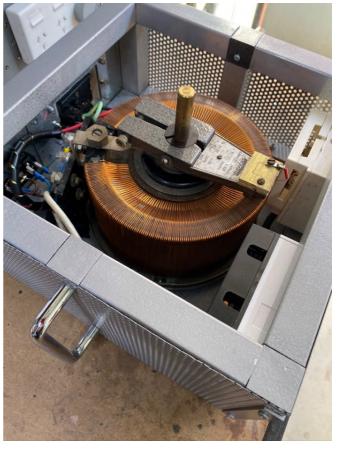
plastic knuckles and joint pieces that fit together. The frame was then screwed to the baseboard. I noticed that John Crawford's Variac that I had borrowed had mesh steel plate sides to let air flow through as these units can draw up to 10 amps of current! I chose a solid steel front and back with mesh sides and a solid

plate steel lid. It took me ages to carefully cut and assemble the casing, but I'm really pleased with the



Club in Norwood, with several HRSA-SA members in attendance. On a table of goods for sale by Keith Ellison I found the old Variac I had been looking for! It was splashed with paint, the outer casing was missing, the brush was very worn and had been "modified" so it was no longer adjustable...... but it was only \$20.00!!

I made a base board from 5-ply wood and constructed a frame to house it using "Cube Lock" which is 1 inch square aluminium tubing with rigid



results! Again, from John's example, I decided to add a large-face analogue Voltmeter and matching Ammeter on the front and mounted the input and output sockets on the back.

Prior to final assembly, the whole casing was painted with 2 coats of hammer-tone grey paint to give it that "industrial" feel. The trickiest part of the restoration was fabricating a new sleeve for the brush. The old one had been drilled and screwed in place without any up and down movement for the brush. I fabricated a new sleeve from very thin brass sheeting and cut two brass covers to hold the carbon brush in place with a light spring. It now responds to





variations in the copper coil as it passes over and retains light pressure downwards as it slowly wears away.

Finally, I mounted the two meters on the front panel then added the input and output sockets on the back. Alan Martin came over and helped me with the final wiring. He simplified my design and tidied it up considerably!! We blew a few 4-amp standard and slow-blow fuses but settled on a 10-amp fuse. It draws quite a large current on start-up! Final cost was about \$100.00 including the original \$20.00 for the variac. We are both pleased with the final result and will both be using it from now onwards.



**Above Left::** The new large-display Voltmeter in place

**Above:** The finished product – Front view

**Left:** The finished product - Rear view

Thanks Ian for a most interesting tale of your project. Ed.

#### Wanted

As the result of the virus, I have had an opportunity to go through some of my periodicals. In particular, all of my *Silicon Chip* magazines are in one place. Following replacing some missing and damaged editions from the publisher, I am now seeking Mar 1988, Feb 1989, May 1989, Dec 2001 and Dec 2012. Ed.

Classifieds are available to all members. Ed.

# **Photo Gallery**



Above: Thanks to John Wagener for providing the most interesting photograph. Note the tombstone radios scattered amongst the consoles.

Left: The conficet mention that I

Left: The earliest mention that I could find of Retirees Lunches was in the March 2009 Newsletter. However my photographic archives indicate that the first Luncheon, shown here, was in January 2009.

**Stop Press** Our Treasurer is kindly accepting HRSA membership subscriptions to forward to Melbourne. Should you wish to avail your selves of this facility please telephone or email John to arrange payment.