

The Vintage Wireless and Gramophone Club of Western Australia Inc.

RADIO-GRAM

Issue 137

June 2021



News from the Vintage Wireless and Gramophone Club, Perth. WA.
This issue comprises the January 2021 to June 2021 Meetings.



This AWA Transmission Measuring set, c 1972 was auctioned at our January 2021 meeting. Pages 6—8.



At the March meeting Rod Edward gave an interesting presentation on WW2 and other military transceivers with an impressive display of equipment. Pages 11—12.



Our club ran a public information display stand at the Shannons Classic Car Show on 18 April 2021, attracting many visitors. Page 36.



Norbert Torney showed his home-made AM MW modulators and FM tuners at the 24 May 2021 meeting. Pages 13—14.

VINTAGE WIRELESS AND GRAMAPHONE CLUB OF WESTERN AUSTRALIA Inc.

EXECUTIVE 2020-2021

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Committee: Rob Nunn, Barry Kinsella, Andrew Wakeman, Vince Taylor, Reg Gauci, Tony Bayliss, Tony Barbitano

Assistant Committee : Sydney Pateman (Auctions).
Dean Ashworth (Librarian).

Editor: Rob Nunn; Publicity/Website: Reg Gauci

Meetings are currently held on the fourth Monday of each month (with the exception of December) at 8pm in the Blue Gum Community Centre—Function Room. Visitors are always welcome!

Although the main interests of members are wireless receivers and gramophones (or phonographs) , many members are also interested in amplifiers, telephones, musical boxes, tape recorders, television receivers and other associated equipment and memorabilia.

Radio-Gram is currently published twice per year, in about February and September.

Send articles and advertisements to the editor :

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Please make sure your 'copy' is submitted by the meeting night prior to the issue month.

Advertisements are placed FREE of charge, but should be of a non-exploitive nature.

**Subscriptions: \$35 (payable in June)
(Concession rate: \$30)**

Editorial

Welcome to Edition No 137 of our Club magazine, "Radio-Gram"! This issue covers our club activities during the period from January to June 2021.

The magazine complements our Club Website, <http://vwgc.org.au> managed by our Vice-President Reg Gauci.



Rob Nunn

Our January members auction went well, and some collectable radios and other items were sold.

An invited speaker, Gus Slater gave an interesting presentation on "Loudness in Broadcasting" at our February meeting. Many thanks to Gus for his research and work putting this history together.

At the March meeting Rod Edwards gave some history on his collection of WW2, Vietnam and Korean war transceiver radios. Rod had a good display of examples from his collection. Thanks Rod for most interesting presentation.

The Shannon's Classic Car Show went ahead as usual on 18 April. We put on our usual display of radios and gramophones etc but the organisers had allocated a less conspicuous location for our display than we had enjoyed in past years. So we had fewer visitors but still quite a few.

Our 26 April 2021 meeting had to be cancelled due to closure of Blue Gum Community Centre due to newly-imposed Covid19 restrictions.

On 3 May 2021 a Committee meeting was held at my home and a program was decided for the remaining meetings of 2021. The Committee also discussed many other items, including finances. It was decided to increase member subs by \$5 per year for all members. This means standard membership increases from \$35 to \$40, and Concessional membership from \$30 to \$35 per year.

We were pleased that our 24 May 2021 meeting was able to go ahead after relaxed Covid-19 restrictions. Many thanks to Kevin Chant for entertaining us with a history of car radios, with some fine examples.

Our AGM and Member's Auction was held on 28 June 2021. Thanks very much for the support of the Committee during the past year. The serving Committee indicated their willingness to stand again. Nominations were called from the members present for any position on the Committee. Paul Hansen retired from the Librarian position and Dean Ashworth volunteered to take his place. There were no other nominations and the Committee for 2021—2022 were congratulated. A big thank you to Paul Hansen for his work in the difficult position as librarian.

Members are asked to return any club books to the library.

Best wishes.....Rob Nunn

Table of Contents

Contacts and Editorial.....	President and Editor, Rob Nunn.....	Page 2
Contributors to this Edition.....		Page 4
Executive members.....		Page 4
Recent and Coming Events.....		Page 5
Minutes and photos of the 25 January 2021 Meeting.....	Vince Taylor.....	Pages 6—8
Minutes and photos of the 22 February 2021 Meeting.....	Vince Taylor.....	Pages 9—10
Minutes and photos of the 22 March 2021 Meeting.....	Vince Taylor.....	Pages 11-12
Minutes and photos of the 24 May 2021 Meeting.....	Vince Taylor.....	Pages 13-14
Minutes and photos of the 28 June 2021 Meeting.....	Vince Taylor.....	Pages 15-17
A 2 Tube/Valve Wide Band TRF with Superheterodyne Performance...	Norbert Torney....	Page 18-19
Bremer Bay Museum.....	Rob Nunn.....	Page 20
Broadcasting History—Locally Produced Gramophone Disks.....	Gus Slater.....	Page 21
A Super-Heterodox Song...(P.R Watts).....	Gary Cowans.....	Pages 22-23
How On Earth.....	James Wemm.....	Pages 24-26
Radio The Old Way.....	Stan Gratte.....	Pages 27
Restoration/Salvaging French Art Deco Radio.....	Phil Oxwell.....	Page 28
AWA Radio Stations.....	Dennis Grimwood.....	Pages 29-30
Tony Smith and Martin Clarke.....	Richard Rennie.....	Pages 31
Restoration of a Cossor Melody Maker.....	Gary Cowans.....	Page 32
Restoration of a 1938 Airzone Radio Star 6 Volt Radio.....	Richard Jeffrey.....	Page 33
MCTV Mandurah Community Television Station.....	Norbert Torney.....	Pages 34
Collapsible Phonograph Horn and Platenclean.....	Richard Rennie.....	Page 35
Shannon's Classic Car Show 28 April 2021.....	Rob Nunn.....	Page 36
Construction of a Home-Made AM Modulator.....	Norbert Torney.....	Pages 37-38
Tressie's Museum.....	Rob Nunn.....	Page 39
Back Page Notices.....		Page 40

CONTRIBUTORS TO ARTICLES IN THIS EDITION



Dennis Grimwood



Vince Taylor



Norbert Torney



Richard Rennie



Gary Cowans



Phil Oxwell.



Rob Nunn
-Editor



Gus Slater



Stan Gratte



Richard Jeffrey

COMMITTEE MEMBERS 2021—2022



President and Editor
Rob Nunn



Webmaster and Vice-President
Reg Gauci



Secretary
Andrew Wakeman



Treasurer
Barry Kinsella



Minutes Secretary
Vince Taylor



Tony Barbatano
-Auctioneer



Committee
Tony Bayliss

ASSISTANT COMMITTEE 2021—2022



Assistant Auctioneer
Syd Pateman



Librarian
Dean Ashworth

Recent Events

January 25, 2021 : Members Auction.

February 22, 2021 : Loudness in Broadcasting (Gus Slater)

March 22, 2021 : Military Radios (Rod Edward)

April 26, 2021 : Cancelled due Covid-19 restrictions

May 24, 2021 : Car Radios (Kevin Chant)

Coming Events

June 28, 2021 : AGM and Members Auction

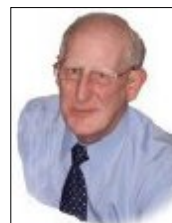
July 26, 2021 : The Development of Radar (Don Ripper)

August 23, 2021 : Mini-Gramophones (Richard Rennie/Steve Austin/Rodney House)

September 27, 2021 : Mini-Talks x3 (Barry Kinsella/Geoffrey Lilburne/Gary Cowans)

October 25, 2021 : The Story of Nicola Tesla (DVD 50min) and First Trans-Atlantic radio Telegraphy by Guglielmo Marconi (DVD 10min)

November 22, 2021 : End of Year Dinner—Catered, with member contribution of \$10 per attendee.



Gus Slater



Rod Edward



Kevin Chant



Don Ripper



Richard Rennie



Rodney House



Barry Kinsella



Steve Austin



Geoffrey Lilburne



Gary Cowans

Minutes of Vintage Wireless and Gramophone Collectors Club meeting held at clubrooms Monday 25th January 2021.

47 members present.

8.10pm. Meeting commenced.

The meeting was opened by President Rob Nunn. All members are reminded that they must fill in the attendance book to allow for Covid19 contact tracing. We have apologies tonight from Trevor Richards and Udaya Halim.

A PDF of Club Magazine #136 was sent out to members on Jan 20th. If anyone would like a hard copy then take one tonight and cross your name off the list. We are doing this in order to save on postage.

The club exhibited at the Man Cave event on Nov 10th at the Bluegum Community Centre; thanks to Andrew Wakeman, Tony Bayliss and Rodney House for setting up.

The club was also represented at Have a Go Day at Burswood on November 11th; thanks to Tony Bayliss, Reg Gauci, Rodney House and Barry Kinsella for their efforts.

The last meeting in November was a good turnout for our end of year dinner. The club recently applied for a non monetary grant to Melville Council for \$500. This has been approved and will cover our club room hire fees for 6 months.

Members are reminded to keep in touch with activities via the website. All members are reminded to wear their badges so we can get to know who you are. Books are still missing from the library...None have come back. Please look and return if you have any. Tonight after supper will be an auction of member's items.

Secretary's Report.

Thanks to Rob Nunn for his efforts to secure the grant for the room hire costs and negotiate our hours of use. This has done much to reduce our running costs.

The next event the club will exhibit at is the Shannon's Classic Car Show on the 1st April at Ascot Racecourse.

The committee has decided on a change to the members auctions to help them run smoothly; 1) a non refundable charge of \$2 per lot to be paid gto the club and 2) a reserve price listed on items to start the bidding at.

Two magazines were received *The Phonograph Record Vol 55* and *HRSA Radiowaves #155*. There was no outgoing correspondence.

The secretary's report was moved as correct by John Pascolich and seconded by Don Ripper. Passed unanimously.

Treasurer's Report.

Tabled as a separate document. Moved as correct by Tony Bayliss and seconded by Laurie Bujega. Passed unanimously.

General Business.

Norbert Tourney- 1) Many in the club have hearing that is getting bad. Would be happy to donate a small PA system to the club to help out, ...it just needs a microphone. 2) Has a box of lesser items set aside on the side table...they are free to a good home.

Items of Interest.

Tony Bayliss- TRF Radio. 1928 Stromberg Carlson 5 gang Australian made receiver with 1929 Stewart Warner speaker.

Peter May- Remains of NCR WW2 clandestine communications receiver. Restoration project.

Meeting closed 8.45pm.

An auction of members items was held after the break..



Philips mantle valve, plastic AM radio c.1960;s offered at the January auction.



Valves are often available at club auctions.



AWA Radiola portable transistor radio 1960's

25 January 2021 meeting



The January meeting is always popular with members mainly due to the Members Auction, which often has some excellent bargains



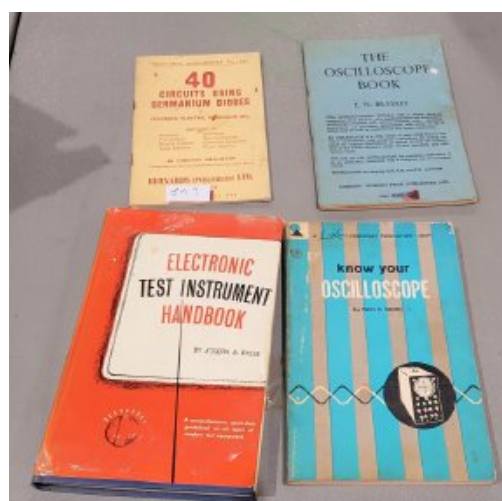
This AWA FM/AM Signal generator from Marconi Instruments Ltd, c1960's was auctioned for \$40 at the January meeting.



Reg Gauci at work on record-keeping at the January auction.



HMV Little Nipper 61-51 valve, mantle radio
c.1950's was auctioned for \$45.



Books, manuals and circuit diagrams are often available to members and can be picked up at bargain prices at our auctions.

25 January 2021 meeting



Tony Bayliss shows his recent acquisition TRF radio. 1928 Stromberg Carlson 5 gang Australian made receiver with 1929 Stewart Warner speaker.



Members examine items brought in for the Member's auction



Peter May brought in for Show n Tell his WW2 vintage biscuit-tin radio, a Philco MCR-1, valve-based miniature Communications receiver.



A Breville portable battery-AC leather-wrapped timber case radio, model 857, 1949, broadcast band, 5 valve, Superhet with RF stage, made in Australia.



Auctioned Philips model Radioplayer 135, MW-SW bakelite, 4-valve mantle AC radio with the knobs! Made in Australia 1952, priced 25 Australian pounds.



Auctioned a Lafayette Guardian 6600 AM/FM, battery portable, plastic, 22-transistor radio, made in the USA early 1970's

Minutes of Vintage Wireless and Gramophone Collectors Club meeting held at clubrooms Monday 22nd February 2021.

32 members present.

8.00pm. Meeting commenced.

The meeting was opened by President Rob Nunn. Although we are no longer required to send our list of attendees to the Shire all members must still fill in the attendance book to allow for State Government Covid19 contact tracing.

The talk tonight will be on the topic of Loudness in Broadcasting and be presented by Gus Slater. Thanks to Richard Rennie for organising.

Tonight after supper will be an auction of donated items. Be generous with your bidding as this is money for the club. We request that members wear their badges and be quiet during the auction so that the auctioneer can hear and speed things along.

It is also requested that any outstanding library books be returned to the club. Keep up to date with club activities via the webpage. At our next meeting Rod Edwards will be presenting a talk on Military radios.

Secretary's Report.

Shannons Classic Car Show is on Sunday 18th April. The Club will be exhibiting gramophones and radios, Richard Rennie will exhibit some radios and TVs and John Paskolich will be there with the telephone collectors group.

There was no incoming or outgoing correspondence. The secretary's report was moved as correct by Merv Thompson and seconded by Tony Bayliss. Passed unanimously.

Treasurer's Report.

Tabled as a separate document. Moved as correct by Rodney House and seconded by Tony Bayliss. Passed unanimously.

General Business.

Barry Ford- Peel Amateur Radio Group will be holding a swap meet on Saturday 6th March, 89 Allnutt street Mandurah. Doors open; 8am sellers, 8.30am buyers. Entry fee \$5.00.

Items of Interest.

Tony Bayliss- early 1950s Ultima, white hard plastic radio. 5 valve using English and Australian components. Dial is set for Australian and New Zealand stations.

Norbert Tourney- Vacuum tube display made from wood and Perspex. Good way to display rare valuable tubes such as the tipped 1916 tube shown.

Meeting closed 8.17pm.

Tonight's talk by Gus Slater on Loudness in Broadcasting.



Donated for auction at the 22 February 2021 meeting was this National Deluxe 1960's television set.



Members examine items up for auction

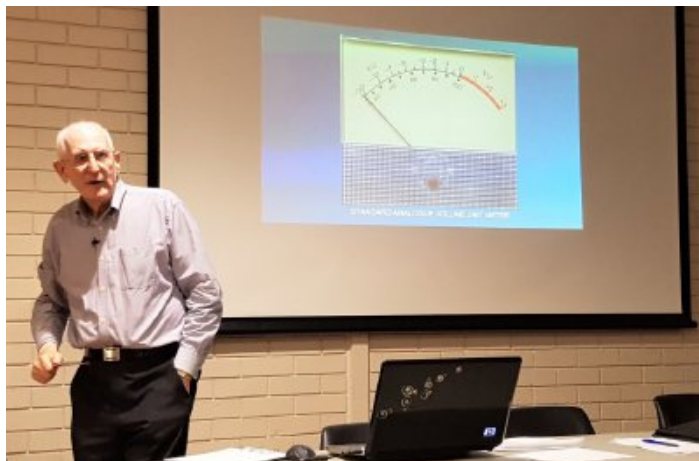


A mantle metal cabinet, home-made valve radio 1950's? was donated for auction.



A good many items were donated for the auction

22 February 2021 meeting



Gus Slater was our guest presenter for the February meeting. His subject was "Loudness in Broadcasting"



An Ultimate white plastic mantle radio was donated for the auction



Tony Barbatano and Syd Pateman prepare for the donated items auction.



Some home-made radios appeared in the February donated items auction and were usually quickly picked up by buyers..



Above and below : Norbert Torney brought in a display of valves for the Shown Tell.



Plenty of reading here for a bargain price!



Minutes of Vintage Wireless and Gramophone Collectors Club meeting held at clubrooms Monday 22nd March 2021.

29 members present.

8.00pm. Meeting commenced.

The meeting was opened by President Rob Nunn. Welcome extended to visitor Steve Mudge, ex licensed amateur radio operator.

All members are reminded that they must fill in the attendance book to allow for Covid19 contact tracing. We have apologies tonight from Tony Smith.

Club Magazine #137 is in preparation and contributions are always welcome. Members are asked to keep in touch with upcoming events via the website. Members are asked to check if they have any Club library books at home and return them as soon as possible.

Tonight's presentation will be by Rod Edwards on Military radios. There will be an auction of donated goods after supper.

Secretary's Report.

Shannons Classic Car Show is on Sunday 18th April. The Club will be exhibiting gramophones, radios and some TVs. The safe app QR code is at the door and all members are encouraged to use it.

Last month's presenter Gus Slater has kindly given us a copy of his talk on Loudness in Broadcasting for our archives. There was no incoming correspondence.

Outgoing correspondence consisted of a letter of thanks to Gus Slater. The secretary's report was moved as correct by Laurie Bugeja and seconded by Tony Bayliss . Passed unanimously.

Treasurer's Report.

Tabled as a separate document. Moved as correct by Merv Thomposon and seconded by Sid Pateman. Passed unanimously.

General Business.

James Wemm- Discovered on a recent trip that the Bremer Bay Museum has a large collection of radios and gramophones.

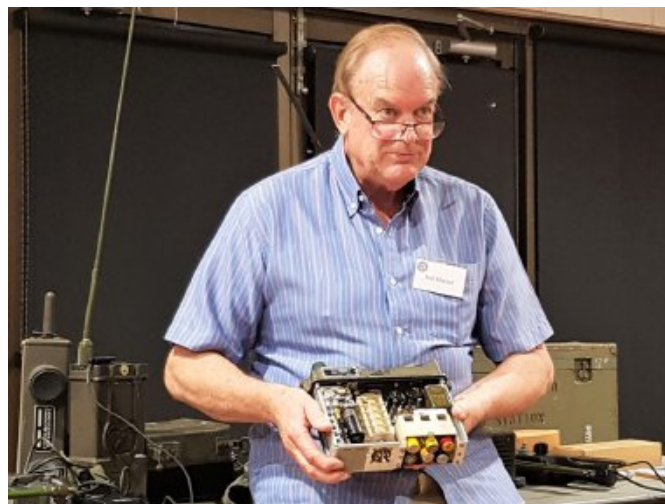
Vince Taylor- Lou Ottens, the Dutch engineer who invented the compact cassette died on the 6th March aged 94.

Items of Interest.

Tony Bayliss- 1952 Phillips 155, hard plastic, mantle clock-radio.

Meeting closed 8.45pm.

Tonight's talk by Rod Edwards on Military radios.



Rod Edwards gave a presentation on WW2 transceiver radios with some excellent examples from his collection.



From left to right: Transceivers—PRC-6 (Korea); At rear- BC-611 (WW2); URC-4 emergency vhf/uhf and battery pack; At back- PRC-10 (Vietnam); At front- Canadian CPRC-26 (Korea); PRC-77 solid state transceiver (Vietnam)



Inside the PRC-10 (Vietnam) -minaturised components (see pencil valves) and chassis !960's for rugged portable applications in a wartime situation.

22 March 2021 meeting



There was a good attendance of 29 members for the 22 March 2021 meeting.



At front is the PRC-77 transceiver (Vietnam) with speaker box; direction-finding antenna; At rear the Australian A510 set in its carrier box (used in Malaya)



The PRC-77 transceiver shown by Rod Edward



Philips Chronoradio 155, clock radio, 5-valve, AM, AC, made in Australia 1957, in nice condition, was shown by Tony Bayliss..



Rixonola gramophone c. 1920's to mid 1930's in nice condition. Made in Australia by Jackson and McDonald



Philips Superb Combination 147 wood-case mantle broadcast band/SW, 7-valve, 3 speaker radio made in Australia 1957-61 was auctioned at the meeting. Original price 72 Aust. Pounds.

Minutes of Vintage Wireless and Gramophone Collectors Club meeting held at clubrooms Monday 24th May 2021. 41 members present. 3 guests.

8.05pm. Meeting commenced.

The meeting was opened by President Rob Nunn and a welcome extended to the visitors attending. A committee meeting was held on the 3rd of May and a programme finalised for the rest of the year. Club banners, badges, auctions and exhibitions were also discussed.

The club is currently running at a shortfall of about \$2,000 and this is expected to increase a little next year. As such the committee have decided to increase subs by \$5 for all members. Regular membership will now be \$45 and concession \$35.

All members are reminded that they must fill in the attendance book to allow for Covid19 contact tracing. Club Magazine #137 is in preparation and contributions are always welcome. Members are asked to keep in touch with upcoming events via the website.

Members are asked to check if they have any Club library books at home and return them as soon as possible.

Tonight's presentation will be by Kevin Chant on car radios. There will be an auction of donated goods after supper. The committee will be charging a \$2 fee for each item at the member's auction which will be held next month.

The auctions of donated goods are a good money spinner for the club so members are reminded that they can donate goods to the club for auction and help the club along financially.

Secretary's Report.

Shannons Classic Car Show was on Sunday 18th April though it was thought the show was not as good as usual. The Club exhibited gramophones, radios and some TVs, and Pong was a great draw card. It is thought that a better spot is needed for next year.

The AGM and members auction will be held next month. The letter R will be used to indicate on lots that a reserve price has been set for the item. It has also been decided that all items will have to be paid for first before sellers come to get their cash.

The safe app QR code is at the door and all members are encouraged to use it. There was no incoming or outgoing correspondence. The secretary's report was moved as correct by Tony Barbatano and seconded by Don Ripper. Passed unanimously.

Treasurer's Report.

Tabled as a separate document. Moved as correct by Laurie Bugeja and seconded by Tony Bayliss. Passed unanimously.

General Business.

Dennis Grimwood- Enquired as to what the clubs main expenses were. Barry answered Website fees, End of Year Dinner (approx \$2200), Insurance (\$500), Room rental, Magazine (\$7 per copy and \$3 postage). Suggestions for revenue came from Tony Barbatano (raffle), Wolfgang Ferber (gold coin donation).

Barry Kinsella- His daughter is looking to purchase a radiogram.

Items of Interest.

Gary Cowans- 2 replica radios made by Australian Digital Radios (owned by Ron Sherry). They are good units and have Bluetooth and USB connections.

Norbert Torney- A solution for when all the AM radio stations close...a Modulator. Norbert exhibited 3 modulators that can send out a frequency to be picked up by any AM radio so they can still be used for demonstration. They ranged from a basic home-made model for approx \$13 to store bought at more expense.

Mathew Cass- Field Detector. Mystery unit made in Australia possibly for the RAAF. Any info welcomed.

Meeting closed 8.45pm.

Tonight's presentation will be by Kevin Chant on car radios.

Kevin Chant gave us an interesting talk on the history of car radios, with some fine displays from his collection.



Matthew Cass brought in a mystery unit Field Detector, made in Australia, possibly for the RAAF. Any information from members welcomed.



24 May 2021 meeting



Gary Cowans brought along his "Australian Digital Radio" model "Lil Lottie" based on the STC Bantam series for the 1940's. Made by Ron Sherry, a Geelong antique radio enthusiast. Contact <https://australiandigitalradio.com.au>



Some of the members present at the 24 May meeting.



Norbert Torney shows his construction project of AM Modulators. These can be used to transmit a variety of source signals to an AM radio, which will be the only way to utilise AM radios when AM transmissions cease.



Close-up of Gary's "Lil Lottie" radio.



Norbert showed 3 AM Modulators and sources.



Minutes of the Vintage Wireless and Gramophone Club of WA meeting held at clubrooms on 28 June 2021. (35 members present)

The **President** opened the meeting at 8.02 p.m. He made the following announcements. Under current Covid-19 restrictions, members are required to sign in with the SafeWA app or manually at the entrance door. Rob stated the Covid rules.

The next magazine would be available in July. Some stories are wanted for the next edition. David Hawkes had passed away. He was a presenter to the club on two occasions. Other presenters are still wanted.

The **Secretary** confirmed the Covid Phase 1 lockdown. All members must sign in and wear masks and obey the four square metre rule. Correspondence in. Have a Go Day will be on 10 November 2021. Secretary's report was accepted. Moved Tony Bayliss. Seconded Laurie Bugeja

The **Treasurer's report** was presented. It was indicated that a public liability information form was available. Indicated that 50% of the magazines were hard copies as wanted by members. Concession membership was defined. The Treasurer's report was accepted. Moved by Don Ripper. Seconded by Bill Oxwell.

General Business. No items.

Items of interest

Norbert Torney showed a magic eye made from LEDs. Tony Bayless showed a radio restoration project. Barry Kinsella showed a German pre-war radio.

ANNUAL GENERAL MEETING

Whole committee stepped down. The President gave a speech. After some discussion all the current office bearers were re-elected.

President: Rob Nunn
Vice President: Reg Gauchi
Secretary: Andrew Wakeman
Treasurer: Barry Kinsella
Committee: Vince Taylor, Tony Bayliss, Tony Barbitano, Sydney Pateman.

A new librarian was appointed. (Dean Ashworth)

Meeting was closed and a monster option was held.



Back to Stage-1 Covid restrictions and masks!



An Alba console radio (British) attracted keen bidding in the auction.



A Ferris M94 portable car radio 240v/6v was auctioned. Where were you Kevin?

28 June 2021 Meeting



Members attending the June meeting were required to wear masks under current Covid-19 restrictions



Symphonic tape recorder with Truvox tape deck (imported from UK) and amplifier made by Alberts Hi Fi in Perth. C.1960's



Philips model L2X71T/62 MW/LW portable battery, 7-transistor, plastic/leather/canvas radio made in Belgium in 1957/58 was auctioned.



Philips Radioplayer All Transistor 199, portable 7-transistor, 9v battery made in Australia 1959/1960, original price 44 Aust. Pounds (seems expensive!)



Astor MW mantle radio, valve, plastic, c.1950's radio was auctioned.



Pioneer Stereo Tuner TX-60B c.1980's was auctioned.

28 June 2021 Meeting



Mullard bakelite cabinet (painted red) mantle valve radio c. 1950's



Philips Operatic 37MA bakelite, 4-valve, MW, AC mantle radio made in Australia 1947



HMV model 886 MW/SW, 5-valve wood cabinet, table model radio made in Australia in 1946 was auctioned.



Pye PRC Invasion receiver c.1942-5
During WW2, 5000 PCR1 units and 12,000 PCR2 and PCR3 units were produced by Pye Radio Works in Cambridge at a rate of 800 per month. Philips Lamps are estimated to have produced 15000 to 179000 units at their Mitcham works in South London. Auction reserve \$60



Some 78 and 33 rpm records were auctioned



HMV model 1120 radio, MW/LW/SW, wooden case, 5-valve, AC mantle radio made in UK in 1949, was auctioned.

A Two Tube/Valve, Wide Band TRF with Superheterodyne Performance.

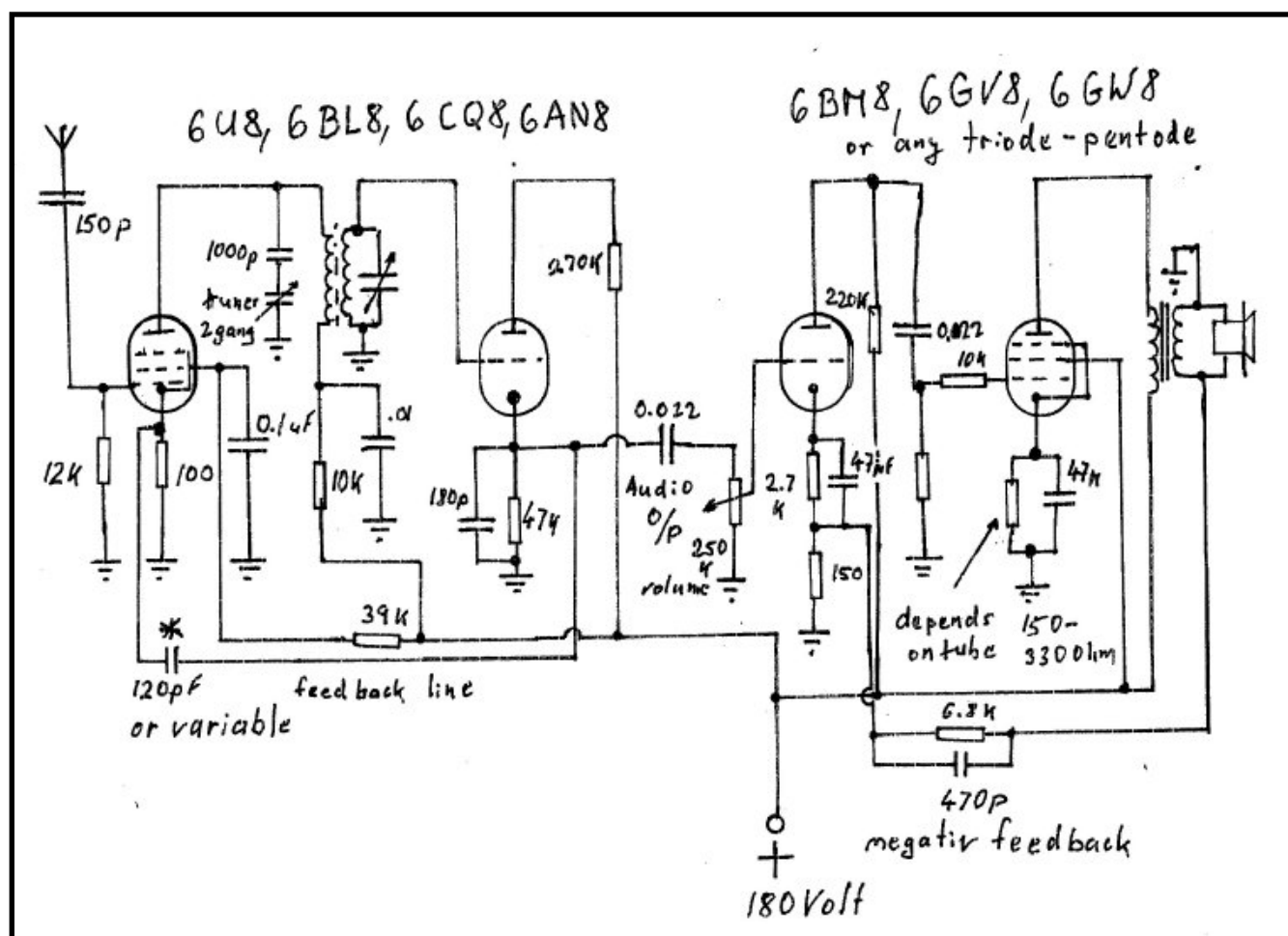
This is an interesting concept for people who still like to turn items from the junk box into a useable radio.



Norbert Torney



Front view completed project



TRF Circuit Diagram

I have been using only left over bits and pieces; the basic concept relies on TV wide band tubes for which there is very little use. These tubes have been rarely used for AM radios because of their ultra high gain which makes it impossible to control unwanted spurious oscillation.

However I came across a 1947 German magazine where a circuit designer used a previously unknown circuit specifically designed for wideband, high gain, ex military tubes. It is possible to use the full gain for superb super like performance.

I tried the circuit with the original RV12P2000 tubes. Both as an untuned RF preamp with a second detector stage and as a band-filter style design with plate tuning.

The band-filter idea provides excellent station separation with very high RF gain. I envisaged to use a detector I've never tried before, THE INFINITE IMPEDANCE DETECTOR. There are four types of common detectors, the ancient grid leak detector, the more advanced plate detector and the most

common of all, the diode detector. But there was also the rarely used cathode detector (infinite impedance detector).

This detector generates the lowest possible distortion of all of them. Because there is no loading of the detector tuned circuit it actually produces slightly higher output than a diode detector. Luckily I found a circuit with a detailed description; all I



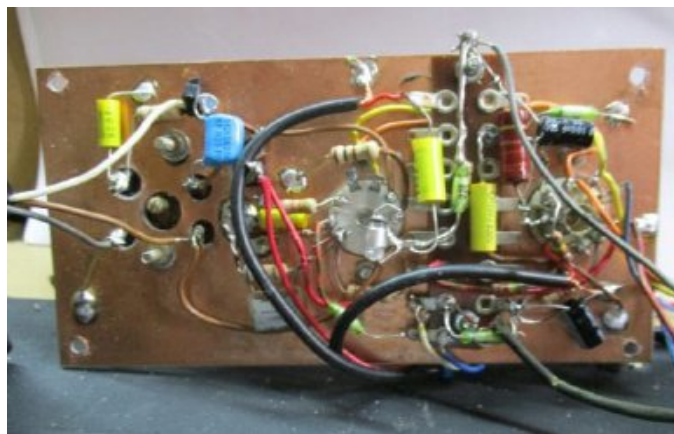
Front view close-up coil and control

needed to do is adapt component values for my circuit. The whole idea was, using only junk box components, used TV tubes, used tube sockets, etc.

Capacitors needed to be new, but they are cheap enough. Being a poor coil maker I've used a modified IF band-filter. The coils are designed for 455 KHz and only need to be wound down to get to the standard AM (medium wave) band. A coil assembly from an early 50s radio seemed to be ideal. I do have an accurate inductivity meter that goes down to a few micro Henries. After the parallel caps were removed I checked the coils, both were just over 0.9 mH.

Close to half needed to be wound off to get to the required 0.22 mH. I left an extra few turns on the plate coil, to get sufficient inductance. Both coils had large ferrite cores and made it easy to get them right and even tracking. Common IF coil assemblies don't have feedback coils; the only RF available for feedback is at the cathode of the detector coil, because there is no phase shift the RF can only be fed back into the cathode of the

RF amplifier tube.. This idea worked perfect. I've used fixed feedback and managed to get even amplification over the whole band.



Component wiring connections

The radio finally finished has got a RF sensitivity similar to a small three or four *valve* super, superb sound with lots of treble and very little static, definitely less than a small super. The only disadvantage is the lack of auto gain control, meaning every station comes in with a different volume level. The circuit values are for 6U8/6CQ8 & for 6BM8, for different output tubes use different cathode resistors everything else remains the same.

.....Norbert

If you used one of these:



Stay at home! You are in the high risk group.



Bremer Bay Museum



Rob Nunn

In July 2020 my wife and I travelled with our caravan to the south coast of WA to visit a number of places, including Bremer Bay.

Bremer Bay township is about 515 kilometers SE of Perth and is situated on the Wellstead Estuary. The township is very small, but there is a resort serving lovely meals, and a golf club and many beautiful nearby bays and beaches. The caravan park is very large and situated along the estuary which has leafy walk trails and is popular with bird watchers.

There is a property at Peppermint Grove, built by the Wellstead family in the early 1800's. The property has an excellent museum with a large collection of many things including radios and gramophones and telephones. We have a few photos taken on our visit..
....Rob



Part of the Wellstead museum collection



An impressive collection of radios and gramophones



HMV and REXONOLA table-top gramophones.



Philips Table Radiogram 532A 5-valve SW/MW/LW , manual turntable, wood cabinet, Made in UK 1954?



Sonora console gramophone



Edison table drum phonograph 1908

BROADCASTING HISTORY— LOCALLY-PRODUCED GRAMOPHONE DISCS

While magnetic tape recording was evolving from the early nineteen fifties, standard groove 78 RPM recordings continued to be used well into the nineteen sixties.



Gus Slater



Radio station production of 78 RPM *acetate* recordings was alive and well for commercial advertising spots for local sponsors.

Most radio stations had a disc-cutting *lathe* that featured a synchronous motor directly driving a heavy platter at precise speed.

The recording media were aluminium discs coated with cellulose-nitrate (incorrectly but conventionally called "acetate").

A cutting head with a heated stylus modulated by an audio signal of about 30 Watts was able to cut an impression of the sound into this black, plastic coating.

The *acetate discs* were not nearly as durable as the vinyl-pressings that were usually distributed for national sponsors' spots but they would survive enough plays to satisfy the average advertising campaign for local clients. They were relatively light and easy to exchange between stations by mail. Most importantly, they didn't take up much shelf space when stored on-edge, and, of course, they could be presented directly to air from a gramophone-unit.

The original productions were recorded on tape and the tape recording played off a dedicated machine in the cutting room, via an extremely linear (*Class-A*) amplifier, powerful enough to drive the cutting head on the disc-lathe to produce an eminently-broadcastable recording.

We usually cut a number of identical tracks, typically, thirty-second advertisements onto each side of the 10 inch or 12 inch diameter disc. Operators were instructed to play the inside tracks first because they tended to wear out more quickly due to the mechanical intricacies of the pickup-arms. At Radio 6PM the panel operators used a yellow *Chinagraph* pencil to strike-out any tracks that wore out before the commercial's campaign-run had finished.

There was as much art as science involved in operating the 6PM disc-cutting lathe effectively. It was very sophisticated and made by Neumann in Germany. All that precision didn't amount to much, however, because none of us could read the equipment handbook.



Fortunately, someone had worked out long before that we would always get better recordings at 78 RPM than we would at 45 or 33¹/₃ RPM simply because at higher speeds we were cutting more material than at lower speeds so at 78 RPM, we could create a better *image* of the sound, on the disc.

The temperature of the stylus was critical but our *pre-flight* check assumed that the rheostat under the lathe had not been interfered with and if the stylus was too hot to touch, it was assumed to be ready to cut. Similarly, the very linear amplifier that modulated the cutting head (two 2A3 valves in *Class-A*) was checked regularly for distortion, and frequency response but, we assumed that if the meter on the front of the rack was indicating *the right level* (signified by a green Chinagraph pencil line on the face of the output meter), then the deflection of the stylus would not be large enough to break through the walls of adjacent grooves but the *depth of modulation* would be sufficient to play-back from a turntable and pickup at the correct level.

In any case, the standard quality check for those recordings involved holding them up in the air and tilting them towards the lamp that hung over the lathe. If there was a nice *rainbow* from the light reflected and dispersed by the well-modulated grooves, it passed.

The *swarf*, the thin threads of cellulose-nitrate material etched out of the grooves by the cutting-stylus peeled off the disc as the platter rotated. It was standard practice to use a soft paint brush to encourage the swarf in the direction of a plastic tube that was connected to a domestic vacuum cleaner on the other side of the wall.

That material, especially in that *gun-cotton* form was extremely flammable and after each session it was collected from the vacuum-cleaner bag and transferred into old army ammunition boxes that usually resided in the control room with their lids firmly closed until their contents could be disposed of safely. At Radio 6PM, part of the awesome responsibility of the disc-recording technician involved the juggling of bookings around the concert sessions, conducted in the adjoining studio, to avoid vacuum cleaner noises.

.....Gus Slater

With thanks to Gary Cowans for sending this in.

A SUPER-HETERODOX SONG

By P. R. WATTS

(with Apologies
to W. S. Gilbert)

I.

When I first put this super-het. on,
My rapture was hard to restrain.
The giddy elation
Of getting a station
Was almost too much for my brain.
The background might splutter and squeal,
It was only a whip to my zeal
Till the moment dramatic
When (signal ex-static !)
The DX upon me would steal.
A hope that I counted upon,

When I first put this super-het. on !

Chorus of Hams

By a simple coincidence, he
Could hardly have counted upon,
This fervor descended on me,
When I first put my super-het. on !



2.

When I first put this super-het. on,
I developed a lyrical vein.
I used to concoct odes
To switch coils and octodes
In semi-delirious strain.
I'd dedicate dithyrambs to
The shrine of the mystical WOO,
And songs out of season
To Boundbrook and Zeesen,
And eclogues to OER2.
Such themes I descanted upon,
When I first put this super-het on!

Chorus of Hams

By a simple coincidence, he
Could hardly have counted upon,
The afflatus was potent in me,
When I first put my super-het. on !





3.

I said, when I first put it on,
 "Let us see what the night will bring forth!
 I'll cast my antenna
 For Rome or Vienna,
 Or Skamleboæk, Denmark, up North.
 I'll circle the dial right through:
 (Who knows what this outfit can do?)
 Though the veriest tyro,
 I MIGHT capture Cairo,
 Or OAX40, Peru."
 A hope I scarce counted upon,
 When I first put this super-het. on!

Chorus of Hams

By a simple coincidence, he
 Could hardly have counted upon,
 Such hopes were but slender with me,
 When I first put my super-het. on!

4.

When I first put this super-het. on,
 I was bursting with tit-bits to tell:
 All the latest palaver
 From Bandoeng, Java,
 And oddments from Aix-la-Chapelle.
 I would save for the chaps in the train
 Statistical snacks from Ukraine,
 And the choicest collations
 From Radio Nations,
 Or Boston, or EAQ, Spain.
 A menu I counted upon,
 When I first put this super-het. on!

Chorus of Hams

By a simple coincidence, he
 Could hardly have counted upon,
 Such morsels were manna to me,
 When I first put my super-het. on!



5.

When I first put this super-het. on,
 I deemed it no transient joy.
 In the glamorous present
 Were dreams iridescent
 Of pleasures that naught could alloy.
 But the future held trouble and teen,
 A shadow came over the scene,
 When a ladies-hairdresser
 (The Devil possess her!)
 Installed an electric machine.
 An event I did NOT count upon,
 When I first put this super-het. on!

Chorus of Hams

By a simple coincidence, he
 Could hardly have counted upon,
 A blooper lay waiting for me,
 When I first put my super-het. on!



How On Earth!

By James Wemm



James Wemm

Everyone has a story to tell and I hope that this might be the catalyst to kick things off.

How on earth did I get myself involved in this scientific discipline loosely termed 'Radio'?

Well, I blame my father really as he had this thing called radio as a hobby, it certainly wasn't his field of employment although he was a radio operator/navigator during the second world war based in Borneo in the early stages of the war. And post war he worked for the DCA (Department of Civil Aviation) as an air traffic controller at the Mildura Airport in northern Victoria.

What has this got to do with me? Well if we go back to the early fifties there was no Television so we would listen to serials on the radio, Dad and Dave, Tarzan, D24 etc as well as the test cricket between England and Australia which was sort of rebroadcast by Alan McGilvray on the ABC.

Now when the tests were played in England, the broadcasts were very late at night and into the wee small hours of the morning. Too late for my brother and I to stay up so Dad decided to build us both a crystal set so we could go to sleep listening to the cricket. Being an eight year old with a reasonably inquisitive mind I wanted to know more about this exciting technology, well to me it was anyway.

Now I had already learnt how to solder and I used to connect batteries together that I had found at the tip to get enough juice to light a torch lamp and then take it to school for show and tell.

Dad would religiously get a copy of Radio and Hobbies each month and would build some of the projects they used to feature at regular intervals. Dad showed me the article he used to build the crystal set so from then on, I used to flip through the pages looking at the pictures really as I didn't really understand much about it.

However, in one of the magazines they featured an article on a crystal set made in a matchbox. How good is this I thought and to tune the stations you simply moved the inside of the box in and out of the outer part of the box. Both sections had a Coil wound around it. Didn't work as good as the original set which had a coil wound on a large diameter former, higher Q and all that.

So I was hooked although I really didn't do much with this radio stuff until after we moved to Melbourne in 1957. Then I started making one valve reflex receivers etc all of which were featured in the Radio and Hobbies maga-

zines. It was about this time that I started to buy secondhand console radios from the second shop which at the time were dirt cheap as people were virtually throwing them out as black and white television had taken their place of pride in most homes. I used to just strip them down for the parts and throw the cabinets out! Sacrilege.

It appears my career path had been set out for me and even though I achieved a scholarship at the local Tech School, I left part way through as all my friends had left and had apprenticeships and were earning a weekly wage, so I decided to do the same. The term Idiot comes to mind.

Couldn't get a job or an apprenticeship in radio so I worked for Woolworths variety stores in Moonee Ponds for near on 12 months before I obtained an apprenticeship at the Ammunition factory in Footscray and although the first year was about fitting and turning they could not guarantee me that I was a definite for radio studies in the second year. So I left before the end on my probation period and got a fill in job while looking for a start in radio somewhere.

Eventually snagged a job at a small retail radio parts outlet called Electronic Developments in Melbourne CBD. This was a great position as I was tasked with building up any kits they sold where the buyer wanted the kit constructed by us. Electronic Developments Provided all the kits of the projects that were featured in Radio, Television and Hobbies. Also helped out at the sales counter when required. This was a dream job for me although the wages weren't anything to write home about, I was always on the lookout for another opportunity with hopefully higher wages.

Got a job at Warburton & Franki in their radio section however found myself working in the store. Left after about three months and obtained a position at Australian Sound & Television in Sth Melbourne. Wasn't a bad job however found myself in the workshop building PA amplifiers and radio tuners for the sound systems that were put in Schools etc. Did a bit of servicing on the road as well as setting up outdoor PA systems for school carnivals etc.

Stayed for almost two years then went and worked for Eagle signals who were involved in the manufacture and service of traffic light systems however found myself working on the bench building up the modules for the various traffic light systems. Thought I was going to be in the testing section!

There has to be something better, I wanted to get into the servicing side of things but without formal qualifications it was going to prove difficult. Probably a bit late for an apprenticeship so I decided to enrol in a Radio serviceman's course at RMIT in Melbourne CBD which was a part time course delivered two nights a week for a period of four years.

And guess what, the first year we did fitting and turning, can you believe it!! We also did technical drawing and Maths if my memory serves me correctly.

While working at Eagle Signals I saw a position advertised for a trainee technician at STC, Standard Telephones and Cables in their PA and sound reinforcement department. This had my name written all over it if I could only snag it. Duly went for an interview and was asked when could I start? This turned out to be a great and at times a challenging career move.

After spending about twelve months installing PA systems and the like I eventually found myself out on the road servicing all manner of systems that STC had installed at lots of various locations. These included Evacuation systems at GMH, Sound systems at Flemington and Moonee Valley Race courses and Pocket paging systems working on 40.68 Mhz.

I eventually became the service manager for this department as the incumbent resigned his position and went to an opposition company. My department eventually took over the Industrial electronics department and as such we were servicing industrial rectifiers used in the PABX telephone systems and other vital installations such as the Shell refinery and even on the oil rigs in the Bass strait.

STC lost a big contract to provide Telstra (Actually Telecom at the time) with new exchanges to replace the old step by step exchanges that were installed all around the country. The writing was on the wall and the company was going through a phase of downsizing and my position was becoming a bit tenuous, as it seemed to me anyway. So what was I going to do next?

Well while at the races at Flemington one Saturday while operating and maintaining the sound and telephone systems I came across an add seeking suitable people to teach electronics at various tech/TAFE schools around the metro area of Melbourne. This again had my name all over it after all what could be so hard about teaching a discipline that I had made my career.

This was in September 1977 so I put together an application form and delivered it to the Victorian education department office. I didn't really think that I might snag a position as a teacher although I had completed seven years part time study at RMIT and had obtained my Electronic Technicians certificate. Shows a bit of dedication doesn't it?

Eventually heard back from the Department and was invited to an interview at the Hawthorn Teacher's College Which I thought went well until the panel informed me that I was ineligible as I did not do an apprenticeship. I replied, probably a bit agro 'that what was the point in spending the last seven years studying Electronics at RMIT'. The panel thanked me for my time and the interview was over.

However, as I was walking out of the building one of the panel members bailed me up and indicated that all was not lost and that I should apply for a tradesman's rights certificate and send the department a copy with a letter of explanation which I duly did.

Didn't hear anymore so I thought that was that and I will have to look at other options. Then out of the blue I received a letter from the department to attend a medical check-up in November sometime which I duly did and passed with flying colours. Still didn't know what was going on until early in January 1978 I received a letter of appointment and I was to front up to Box Hill Boys technical school at 9.00am on the 2nd of February to meet the principle and fellow members of my team. Talk about communication of more to the point, the lack of it.

Never been so nervous as when I took my first-class teaching apprentices Electrical trade maths. We spent two years at teacher's college two days a week with the other three days delivering twelve hours of teaching. Not a bad job when all is said and done.

Stayed in the teaching profession for over thirty years where we went from teaching apprentice level courses, full time and part time technician studies to eventually advanced diploma level courses. During this time the school went from being Box Hill College to Box Hill TAFE college and eventually Box Hill Institute when we started delivering certificate level and under-graduate level courses.

Retired from teaching when I was 62 and moved to Perth, Mandurah actually and obtained a position at a Mining supply company RCT (Remote Control Technologies) as a training manager. Here I was involved in generating training packages for the various pieces of equipment that they designed and manufactured there.

Also looked after and mentored a number of people who delivered the training to mine site staff. Stayed there for around ten and a half years until I eventually retired for good this time as I was fast approaching my 73rd birthday. Could have stayed longer but had to break the ties of regular work so I could enjoy my third stage of life and hopefully get out on the road.

Now, at the same time as I was teaching, I also had my own business known as Bader Electronics and communications and was involved in Supplying and installing sound reinforcement systems to a number of Catholic Churches around the Melbourne metro area.

Also installed sound systems at a number of schools around Melbourne metro area however, my most ambitious project was designing, building and installing the evacuation system at the Note Printing branch at Craigieburn north of Melbourne. This system had to keep working if the power was cut or if someone shorted out one of the speaker lines.

Over the years I have repaired lots of radio and television equipment as many of the VWGC members have done however, there are always those jobs that give you a lot of satisfaction. I have at least three of them that really stand out as other 'technicians' and even engineers were not able to identify the source of the problem and as it turns out, they were relatively simple.

I will perhaps detail these in a later edition of our Radio-Gram magazine when space permits in the meantime, here are three of my favourite items of equipment which I have fully restored.



The first is an Airzone console radio c. 1932 which we french-polished to restore it to its natural beauty.



The second is a HMV gramophone c.1928, which I believe was french polished.



The final one is a standard edition phonograph, although I have not done a lot to the case. I am assuming this was manufactured at 1890's or early 1900's.



.....James Wemm

Jeff Trimmer sent in this advertisement from yesteryear.

FERRIS
Portable
CAR RADIOS

240 VOLT
6 & 12 VOLT

CARS HOMES BOATS
THE FAMILY MAN'S CAR RADIO—
YOU CAN PLAY THEM EVERYWHERE

MODEL 94

MODEL 90

MODEL 84

MODEL 94: 6-valve broadcast model which gives excellent performance both as a car radio or as an electrically operated home mental model.

MODEL 90: 5-valve broadcast model which is also a first class car/home set manufactured to sell at a lower price.

MODEL 84: A superior 7-valve, dual wave, portable car radio which gives wonderful reception in outback areas where ordinary car radio reception is often impossible.

For further details, ask for special Ferris Portable Car Radio folder

DISTRIBUTED BY

Radio the old way.

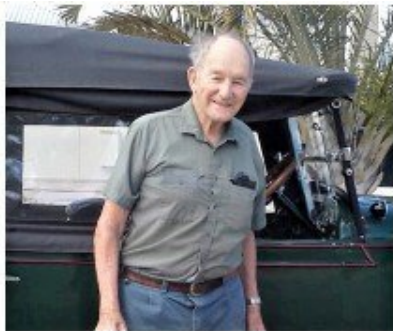
by Stan Gratte

Stan Gratte, OAM. is a long time Wonthella Progress Association, and Geraldton Historical Society member and well known local historian who has a wealth of information and who regularly shares his knowledge.



Stan Gratte

I was born in 1930 and always had an interest in how things worked. This lead me into some curious doings and I hope you find these interesting. It was of course Wartime when I grew up and no doubt this had some influence on me. Things like Aircraft and Radio were still be "in thing" and I'll tell you of my experiments with the radio.



Dad had a console radio which was built by my uncle, Les Thorley of Northern about 1932. We brought it to Geraldton in 1935 and Dad built a very big aerial, as Geraldton did not have a radio station until 1937 when 6GE opened.

We listened to Perth stations. Dad and Dave on 6IX, 6WB and 6MD (how's my memory) was our favourite serial and their adventures were discussed by the kids at school, if their parents had a radio. This also eventuated in countless yarns, told out of school, featuring Dad and Dave. I remember some but they are not fit to print here.

Dad's aerial consisted of two 10 metre high posts about 20 metres apart and reception was usually good. That big aerial will figure in my exploits. Keep tuned.

My first entry into the world of electricity was an electric map. I drew a map of Australia on a board, then marked about 20 main towns and cities on it.



These were marked by brass paperclips for contactors. These were connected to their names in a circle like the spokes of the wheel.

You put a pointer, say on Canberra and put a contactor on a length of wire on Canberra and a light globe lit up if you were right. I took these electric maps to a flower show which my parents were involved in, charging a penny a shot and you got your penny back if Right. I made nearly a pound (20 shillings-240 pence) for the Red Cross. It taught me about CIRCUITS.

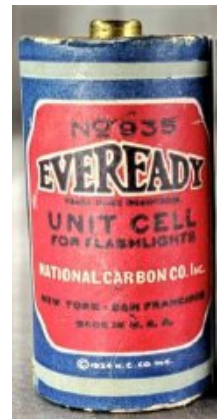
It was Wartime, and boys were encouraged to identify aircraft and to learn Morse code. I bought a buzzer type

Morse code set for seven shillings and sixpence, and soon picked up a bit of Morse code. It soon got boring. However I found that if you got near Dad's radio then the buzzer could be heard on it. I went one better and I connected my buzzer to Dad's aerial and you had no trouble hearing it on my mate's family radio about 200 m away. I had enough sense to know that I was causing interference of the radio waves and soon cut that out.

I came up with another invention. I had found that if I connected two sets of earphones together then you could talk over them like a telephone. My mates and I knew where the army had a telephone line which we believed was abandoned.

Anyhow we commandeered it (that's the Army terminology) and connected my mate's bedroom to mine about 200 m away. It worked and we had our own a telephone. Even our mums used it to have a natter.

Of course, I made a crystal set and listened to that in bed. You could buy those little glass affairs with a bit of galena and a cat's whisker. The coil, I made myself on a former made from a badminton shuttle tube container, and if my memories are correct I used 40 turns. It worked well, off Dad's aerial.



It was wartime and there was scarcity of just about anything, even torch batteries which I needed. I found out a trick to give them another life. You took the cardboard cover off and punched a few holes in the zinc outer casing.

You then soaked the battery in a strong solution of sal-ammoniac (ammonium chloride) which was then used for soldering, or even strong salt solution. Plug the holes up, put the cardboard covered back and you've got a new battery.

.....Stan Gratte



Restoration /Salvaging French Art Deco Radio

by Phil Owell



Phil Owell

I had the opportunity late last year 2020 with Corona-virus lockdowns to purchase another nice French Valve Radio. I had been looking out for this model radio for a fair while due to its rarity and general unavailability anywhere else but France/Europe and not usually anywhere in Australia.

It was listed for bidding /sale on eBay Australia and I fought off a couple of bidders to purchase it and very glad I did even though it attracted a very high premium price.

Took several weeks to arrive in WA from Victoria due to delays in transport due again to Covid -19 delays and by then I had started a bit of a dialogue with the seller. She advised she had been based in France for a while and purchased it as she said it looked nice.

It's a 1953 (5 valve) model as I have been advised and is a model JS Radio Paris.

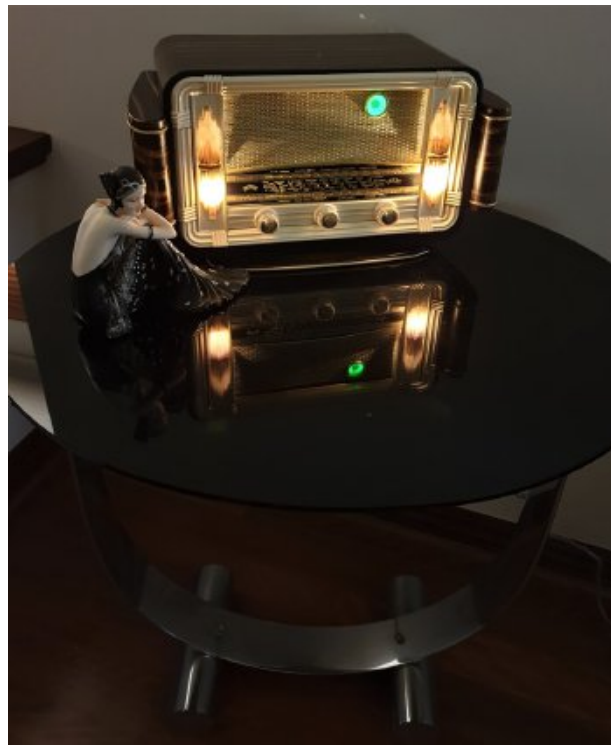
It was in reasonable condition and all original with the nice patterned tiger type striped wooden case however the metal facia was in a not too good condition. After stripping it down I spent a great deal of time to replicate what the original facia colours etc would have been.

The two-side Plastic/Perspex embellishments light up when turned on and replicate a juke box theme. The green magic eye also compliments the look. The internal electrics have been fully restored and the radio now plays with great clarity and volume.

I belong to a Art Deco internet/international website and posting the photos of it I received well over 1000 likes and many comments regarding it as it looks immaculate especially lit up at night. The classic Art Deco look of some 1940s and 1950s French radios are very beautiful.

There are some beautiful items still out in the world in Art Deco and its surprising when delving into just how many people love the classic look of Art Deco. I am always on the lookout for French/European radios of this era (as well as being patriotic for Australian models also)

.....Phil



JS Radio Paris c.1953, 5-valve radio.



Close-up of the JS Radio Paris c.1953, 5-valve radio restored by Phil.



Rear details of the JS Radio Paris c.1953, 5-valve radio restored by Phil.

AWA Radio Stations

By Dennis Grimwood

GOOD EVENING, MERRYGOEN!



Dennis Grimwood

Ladies and gentlemen, this is the A.W.A. wireless station 2XT, broadcasting from The Great White Train at Merrygoen!



The Great White Train with 2XT's transmission mast raised and ready to broadcast.

Those may not have been his exact words, but no doubt that's what the announcer (male, of course, in those days) would have told his delighted handful of listeners on Saturday, January 9, 1926

A wealthy squatter's family might have listened spell-bound to the broadcast on a Radiola Super Six, a six-

3LO



Maurice Dudley at 3LO, The Cambridge Building, 139 Collins Street, Melbourne, 1927



3LO Melbourne Control Room, 1925

valve super-heterodyne receiver which had cost 90 pounds (\$180). One of his shearers could have heard the program through headphones attached to a tiny 'cat's whiskers' crystal set, which A.W.A. (Amalgamated Wireless [Australasia] Ltd.) marketed for three pounds (\$6).

2FC



The official opening of 2FC, (Farmer and Company), Sydney, Australia, 1924



Inside Station 2FC's main studio at 98 Market Street, Sydney, 1928

The unique travelling station 2XT had its studio and transmitter in a carriage attached to The Great White Train, designed to promote Australian-made goods, which was touring 106 New South Wales country towns.

As soon as they arrived, 2XT's versatile staff, who probably numbered only two or three, had hurriedly erected the transmission mast, which towered 40ft. (13 metres) above the carriage roof, pasted posters on walls and telegraph poles, solicited advertisements from shopkeepers, and then begun broadcasting music from gramophone (phonograph) records.

Leading storekeepers and residents enjoyed dinner on the train, "in the car used for this purpose by the Prince of Wales during his visit."

All in all, it must have been a red-letter day in Merrygoen, whose present population has dwindled to 120.

AWA Radio Stations (continued)

Merrygoen is near Dubbo. The Bushducks' website describes the present town: "We continued north along the rail-line to the semi ghost town of Merrygoen. If it wasn't for the old rail junction and the small BHP mine, the tumbledown Railway Hotel and the small general store would cease to survive."

And where then would you buy such a huge range of home-made jams and chutneys as to be found here? Off the beaten track with the sheep hiding in the shade under the hand operated signal box, Merrygoen seemed stuck in a time warp."

The Great White Train, 1019ft. (309m) in length, comprised a locomotive travelling tank (which contained water for the passengers, not for the loco), two pullman cars, dining car, sleeping car. 15 bogie covered vans, and one bogie goods brake-van (lavatory type), all painted white. It was said to have been one of the longest trains ever seen in Australia.

The Governor of New South Wales, Sir Dudley de Chair, had farewelled the train from Sydney two months before it reached Merrygoen. The send-off ceremony had been arranged for Wednesday, November 4, 1925, at 9.30pm, when the train was to have departed from Central Station "with all lights and searchlights turned fully on."

Even in those far-off days, the NSW Government Railways were plagued with unexpected delays. "The schedule was altered to a departure from Alexandria on Wednesday 11 November at 12.30pm after the official send off at 10.00am but owing to further difficulties experienced by the Railways, the official send off time was changed to 2.15pm with the place of departure being changed to Darling Island."

Station 2XT, one of Australia's earliest broadcasters, made two country tours with The Great White Train, and was then dismantled, never to be heard again. No other radio station in the world can claim to have broadcast from so many different towns.

2XT received reports that its broadcasts had been received all over Australia and more than 1200 miles away in New Zealand and Misima (Papua). "Particular reference was made to the clarity and volume, which was sufficient to be received on a loud speaker," said the *A. WA. Radio Guide*.

"The transmitting power of the station was 500 watts, while it operated on a wave length of 255 metres... The

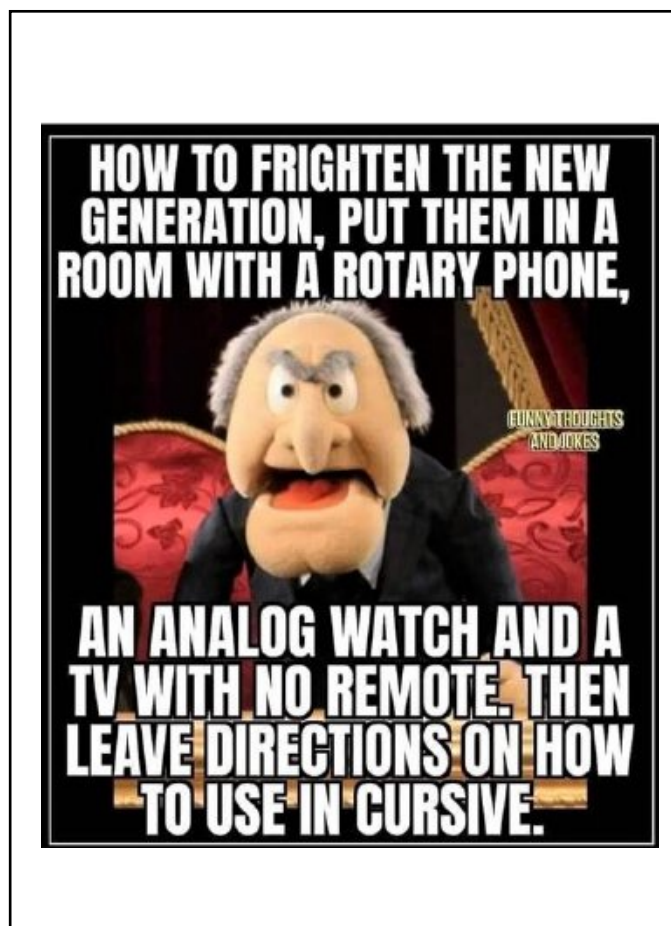
aerial consisted of a single wire 60 feet long suspended between steel masts 40 feet above the roof of the carriage, while earth connection was made to the steel rails." [Another source said "Transmission was on a wavelength of 850 metres, with a power of 1.2kW."]

In Victoria, in 1931, 3YB, based in Ballarat, began broadcasting from a motor truck, and presented programs from several towns visited on a regular schedule.

The following year, it installed its studio and transmitter in a railway carriage, and continued to broadcast from several country centres in turn. It finally became a fixture in Warrnambool in 1936, and still broadcasts from that town.

Another mobile station, 9MI, operated from the passenger liner M.V. Kanimbla (11,000 tons) broadcasting programs to onshore listeners as it cruised along Australia's coastline in the 1930s.

.....Dennis



Tony Smith and Martin Clarke

Based on an interview with Tony Smith

Tony Smith was involved in helping Martin Clarke get interested in sound recording.



Richard Rennie

Martin Clarke was born in 1940. In the 1950s he was living with his mother in Bayview Terrace in Mosman Park on the corner of Glyde Street, just up from Saint Hilda's school. Tony Smith lived only one house away from Martin Clarke's house.

Martin Clarke's father had been killed in an air crash. Thus Martin Clarke's mother was a widow and he was an only child.

His mother was happy to buy things for him; anything that had to do with sound recording, and for him to be acting as a disc jockey. His mother virtually gave him whatever he wanted. So he had the best of everything. He was quite young at that stage.



Martin Clarke

Tony Smith was never involved in the professional recordings made later by Martin Clarke. He was only involved in helping Clarke get interested in sound recording.

At his house, Martin Clarke's mother turned an enclosed sleep-out verandah area into a sound recording control room.

There was a door going into a bedroom that opened out onto this verandah, and that bedroom became a little studio. She installed in a double glazed glass door to this room.

Martin Clarke in effect had a control room with a control panel on the enclosed verandah. He could look through the glass door into a sort of studio. The door cut off extraneous noise during recording.



Above: Seven inch acetate recording made by Martin Clarke prior to Clarion being established.

For Martin Clarke it was just as a hobby. This was probably about 1954 when he was just 14 years old.

Tony Smith made equipment so that Martin could not only act as a disc jockey, but could start to do professional recording. The final setup involved a large desk

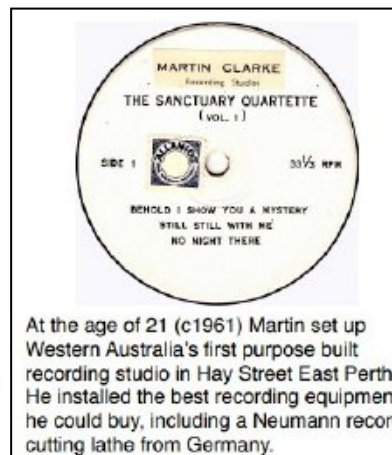
holding a control panel for two 16 inch BRS turntables with AWA professional pickups and their pre-amplifiers, two microphone channels from the studio, and a talkback facility for Martin to speak to the studio.



As well in 1956 a rack was constructed to hold the main power supply, amplifier, and appropriate patching. Martin was then just 16 years old.

The recording equipment also included a Byer 66 professional tape recorder, a battery operated portable tape machine, and a Siemens 16mm film projector for screening and copying soundtracks.

At one time Martin Clarke ran a wire up the back fences to Tony Smith's house and he put a loud speaker in his workshop, so Tony could hear Martin Clarke playing records and carrying on – "he was a frustrated disc jockey."



At the age of 21 (c1961) Martin set up Western Australia's first purpose built recording studio in Hay Street East Perth. He installed the best recording equipment he could buy, including a Neumann record cutting lathe from Germany.

At first, Martin Clarke did not cut his own acetate records. But Tony Smith, now and then, cut the odd record for him. Martin Clarke also had one of the first portable tape recorders, with a wind-up (spring) motor and batteries for the amplifier. They were made so they were quite light to carry around and you could record without having to have external

Tony Smith was at university up until 1955. He started work after that and lost touch with Martin Clarke. At the age of 21 (c1961) Martin set up Western Australia's first purpose built recording studio in Hay Street East Perth.

He installed the best recording equipment he could buy, including a Neumann record cutting lathe from Germany.

In 1962 Martin Clarke established W.A.'s first national record label - Clarion. Its first release MCP-001 was a novelty song "Little White Star" – a tribute to astronaut John Glenn and Glenn's seeing of the "lights of Perth".

.....Richard Rennie



In 1962 Martin Clarke established W.A.'s first national record label - Clarion. Its first release MCP-001 was a novelty song "Little White Star" – a tribute to astronaut John Glenn and Glenn's seeing of the "lights of Perth".

Restoration of a Cossor Melody Maker

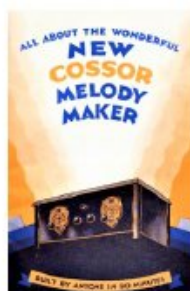
by Gary Cowans



The Cossor "Melody Maker" was introduced in the UK in March 1927. It was sold as a kit set to promote the introduction of Cossor Screen Grid valves.

The kitset required no soldering, came with incredibly detailed instructions, and could be assembled in a short time. It worked well and proved extremely popular. It was imported to Australia in 1928/30 and was sold by most radio dealers for £8/15/-.

I managed to win the VWGC Auction for one in good condition in January 2020. I completely disassembled the unit and cleaned and painted the cabinet and plywood chassis.



Finished plywood chassis



All bakelite parts were cleaned and mounted to the chassis.



Finished chassis

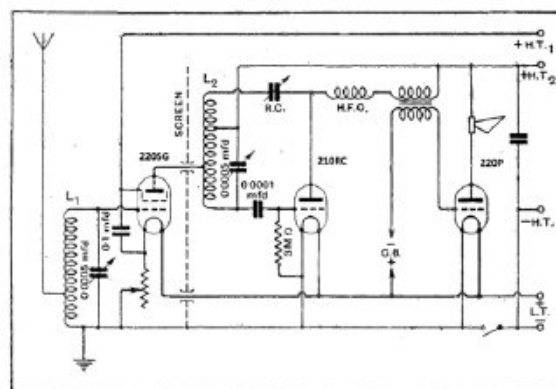
The paint on the outside of the cabinet was originally a brown wrinkle finish. I could not obtain a brown wrinkle paint, so I used black and finished by spraying dark brown over the black.

All components were tested electrically OK however all the valves had open circuit filaments so I could not test the radio!



It was all original but sadly had only one original Cossor valve

Cossor valves for this radio are not available from the HRSA or our local valve suppliers so if anyone has a set I would be interested.



Schematic



Label under the lid



Finished radio

More details on the radio are available on the Radio Museum.
https://www.radiomuseum.org/r/cossor_melody_maker.html

Restoration of a 1938 Airzone Radio Star 6 Volt radio.

By Richard Jeffrey



Richard Jeffrey

I purchased the brown and white radio in March 2021 having seen it on eBay.

I was very pleased when it arrived from Tamworth and found the set was in really good condition with only one minor crack where the roof meets the side of the cabinet.



Airzone Radio Star 1938

The set was made in 1938 and is a 6 volt farm radio drawing 0.8 amps. I have replaced the 6 volt supply cables along with all capacitors.

I changed the vibrator to an electronic one which has eliminated the internal static. While changing the power cable I replaced the fuse holder which was in the power cord.



Airzone under chassis component wiring

The crack in the cabinet I repaired with superglue which I glued from inside the cabinet.



The 6v supply cables and all capacitors were replaced

To repair the original station display window which had yellowed with age I made plaster moulds of the original shape and used them to create a new plastic station window. This turned out well.



My last task was to polish the cabinet with cutting compound.

..... Richard Jeffrey

MCTV - Mandurah Community Television Station

By Norbert Torney



Norbert Torney

Cleaning ancient messes that I've collected over thirty years or more, I came across a pamphlet advertising MCTV, Western Australia's first community TV station.

My former partner Tony Reynolds was a very active member of the radio amateur club WARC.

His specialty was amateur television; I always admired his home built UHF TV transmitter which worked very well. Another very active HAM operator Nick Aretos liked Tony's work also and indicated a great deal of interest in Community Television which had just become possible (twenty five years ago-1994).

Nick is a great organizer who can turn ideas into reality in a matter of hours. Within days he informed us that he already had applied for the licence.

He called up a meeting with interested people and MCTV was founded with about twenty active members, all volunteers who spend a great deal of their spare time to procure programs, equipment, ideas and all those many things you need to run a TV station.

Tony and I were the ones who did the technical work. An ancient UHF tube type transmitter was found and set up to channel 31 the channel allocated to us. With the licence in place, the tower (it is still the tallest in Mandurah) installed, MCTV was operational in less than three months.

Membership increased daily, and the very enthusiastic members managed to transmit every night for two hours community oriented television programs. A new up market transmitter was purchased and put in service; it covered most of Mandurah and outlying suburbs.

Combined Electronics Services, my company, offered every one free tuning of their TVs so they could receive Channel 31.

Donations flooded in and with Nick being the never tiring motor, Western Australia's first community television station flourished.

When everything was nicely in place my partner Tony Reynolds had had a family drama in England and had to go back to Torquay as soon as possible. This caused me to be too busy to look over the TV station. Other members took over brought in lots of not so practical ideas, and squabbling started.

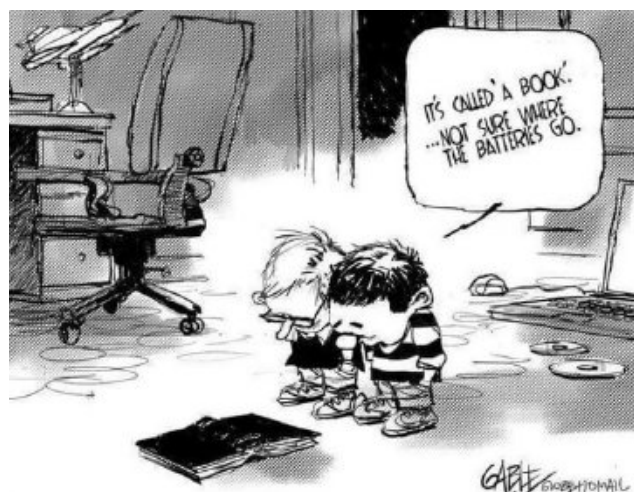
One day Nick Aretos announced he would move to Malloy Island near Augusta and surrendered his CEO job. Within months those members who contributed actively lost heart and slowly bit by bit the organisation fell apart.

After less than two years on the air the operation was closed down. Our operator's license was given to the Perth community TV station later called Channel 31. They also got our frequency and are now operating as Channel 44.

Tony Reynolds never came back to Mandurah and settled at a small town on the South Island of New Zealand where he founded a new community TV station; this one is still in use. Nick Aretos is still in Augusta; I lost contact with him.

I bought from Nick the former studio and converted same into a comfortable workshop. I leased the old TV tower to communications companies as a repeater link between Perth and Bunbury. After ten years I sold the unit and the tower. My own UHF radio repeater is still in everyday use, by the new owners, a well known cleaning company.

.....Norbert



Collapsible Phonograph Horn

By Richard Rennie



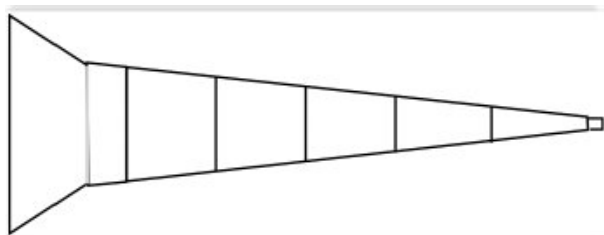
In the 1960s I was a school teacher in Katanning. I had just begun collecting phonographs.

Richard Rennie

A student, who had learned of my interest, told me that on his farm there was a horn from a phonograph.

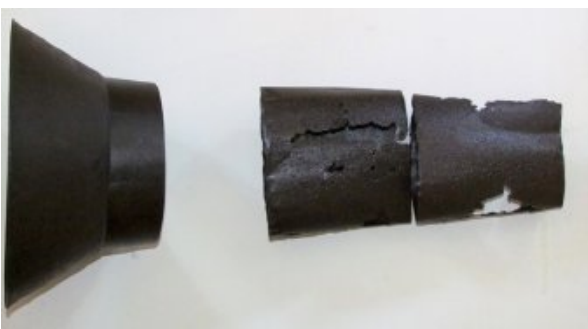
So one weekend I arrange to visit the farm. When I got there he told me that the horn was out on the rubbish tip. It have been there for years. He took me out and we found parts of the horn.

It was a very rare collapsible horn. It originally had a long cone with a flare on the end. The cone came in sections that fitted inside each other, so it could be compressed into a small space.



However it was very rusty and incomplete.

He told me that, as a young child, he would hold the end of the horn and swing it around so that it expanded into a long horn. And then push it down into its compacted form.



He let me take the remaining pieces. Although they were very rusty I had never seen anything like it before. I have since preserved the horn and used it in a display. After all these years I have never found another one of this type of horn. They are very unique.

Another Success of PlatenClean

Rubber cleaner and restorer

by Richard Rennie

Recently an elderly lady brought to me a cassette player that she wanted to use to hear some of her family's recording. It would not play. But a little dab of PlatenClean on the belts and rubber wheels made it work. It also worked on some old turntables.



Shannon's Classic Car Show 18 April 2021

Shannon's Classic Car Show was held at Ascot Racecourse on 18 April 2021.

This is a major car show event with over 1000 classic cars on show. Our club was again invited to put on a display of vintage radios and gramophones, including classic car radios which are much sought after by car enthusiasts.

We were only too pleased to continue with our display stand, owing to much public interest in previous years. This year was a little disappointing as our display stand location had been moved to a less conspicuous place. We hope to remedy this situation next year.

A big thank you to club members Andrew Wakeman, Tony Baylis and Richard Rennie who brought along their radios and manned the stand.

Rob Nunn



From left to right : Tony Baylis, Andrew Wakeman and Richard Rennie



Adjacent display of vintage telephones.



Some of Richard's novelty radio and TV sets.



One of our displayed radios, an Ultimate mantle



One of our displays—an Astor mantle bakelite radio



One of the fine classic cars at the show—a 1964 Ford Thunderbird

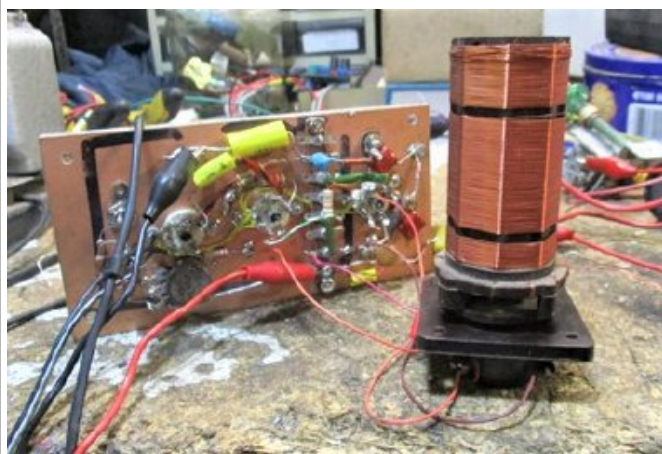
Tests confirmed, using grid one as audio-in with an old Sansui FM tuner, without extra amplification produced sufficient modulation with a volume level similar to a commercial radio station. Because of the wideband nature of the design the sound was better than the average Perth radio station can produce.

Additionally because of the transmitter close to the radio the ambient noise level was close to zero. Using my 1938 Volksempfänger and playing authentic music of the period, playing with my trusted TEAC CD player, I found "Lilli Marlene" never sounded so good. Having the modulator hooked up in my workshop for tests with a long wire antenna five meters could be easily covered.



AM Modulator in use with my home-made FM tuner

When the antenna pulled out a full one meter coverage was still possible; the thought occurred that I could use a ferrite antenna for both, as oscillator coil and transmit antenna. The idea worked like a charm. I found suitable antennas are still available off the shelf from Perth electronics stores.

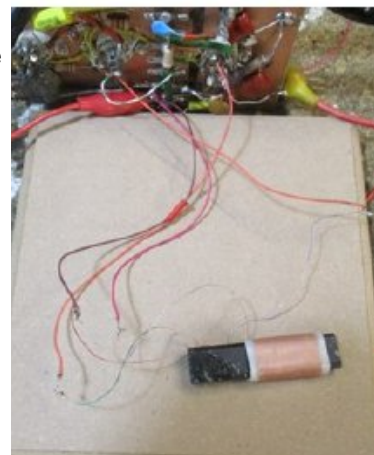


My home-made oscillator coil

Having the basic mini transmitter finished a suitable case needed to be found; it shouldn't be too ugly but functional, I settled for a wooden box found at the Bunnings store, in their hobby section. It turned out to be the most

expensive item @ \$9.95. My time was the only real cost factor for this particular exercise; since I am retired and live for my hobbies it isn't an issue. -

I also constructed a field strength meter to be able to carry out tests and constructed a five Watt crystal controlled unit which covers up to 500 meters. Because this one would be illegal to use I cannot publish construction details.



Ferrite rod doubled as an oscillator and antenna

The power supply, because it is a low power set with hardly any power requirements I decided on a novel idea to avoid a large mains transformer. Two small mini transformers are hooked up back to front to produce the needed high tension for the plate supply. The second transformer has got a 9 Volt secondary, as a result it produces 172 Volts AC, which in turn produces the needed 220 Volt DC for the tube plate.

As a final word a crystal controlled unit is by far better, however finding suitable crystals for the medium band is a major task. Experiments have shown that not all that's available will oscillate without knowing the magic word.

I have been able to get a number of 563 Khertz crystals that do work without too much experimenting, producing a quality signal on both the 563 khz and the first harmonic 1126 khz. This was the only lot I've managed to find.

.....Norbert



Appearing in the 22 February 2021 auction this military aerial tuning unit was in good condition.

Tressies Museum. Karlgarin, WA

In July 2020 I visited the Trestail property at 4313 Koninin-Hyden Rd, Karlgarin (phone 08 9889 5043) to have a look at their museum built up by Merv, Laurel and Craig Trestail. There is a public caravan park on site with modern amenities.

Their collection of historical artifacts includes radios, gramophones, records, tins, sewing machines, telephones. Razors, crockery, toy cars, painted plates, pottery, cameras, CD and tape players etc and other household items. Everything is housed in beautiful cabinets and labelled where possible.

This is well worth a visit and not too far from Perth.
.....Rob Nunn



Rob poses with an array of console-type gramophones at Tressies Museum.



Above : Some transistor portables in excellent condition



There were many console gramophones



Above : A well-documented display of 78 records, phonographs and gramophones



Phonographs and gramophones etc.

Note : Advertisements are placed free-of-charge, but should be of a non-exploitive nature. (Editor)

Check out our Club Website!
VWGC.ORG.AU

There are also Links to other pages relating to Membership, Meetings, Auctions, Contact Details, Club Magazine, Advertisements, Gramophone Needles etc. We are fortunate to have an excellent site managed by member Reg Gauci
So check it out and keep up to date!

Information Wanted

ARTISTRY RECORDING STUDIOS

I am doing research into the Artistry Recording Studios in Perth. I would appreciate getting a photo of any Artistry record labels that members may have
Richard Rennie
9330 1636
rennie@lightandsound.net.au



WANTED

TO PHOTOGRAPH ONLY.

A Belmont Radio c1930.

Portable or cabinet.

Richard Rennie
Ph 9330 1636

rennie@lightandsound.net.au

**ENCYCLOPAEDIA
OF
WESTERN AUSTRALIAN
WIRELESSES AND GRAMOPHONES**



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The stories and catalogues in this book were largely produced by documenting those Western Australian wirelesses and gramophones that exist in local museums and private collections, and by interviewing, over the past 20 years, many of the people who actually built and/or sold them.

207 pages

400 illustrations, most in colour.

The book may be purchased through:

STYLUS AVAILABLE FOR RECORD PLAYER

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