ISSN 084-6209

The Vintage Wireless and Gramophone Club of Western Australia

RADIO-GRAM

Issue 128

February 2016

News from the Vintage Wireless and Gramophone Club, Perth. WA. This issue comprises the September 2015 to January 2016 Meetings.

Norbert Torney presented Early Television at our September 2015 meeting, with an excellent set of examples to display.

Peter Harries struts his stuff during his amusing presentation talk and musical interlude at the October 2015 meeting.

John Newman (centre) and his wife Joan, and Steve Austin were among a good crowd enjoying the November Christmas party at the Clubhouse.

Auctioneer, Tony Barbatano and Assistant, Syd Pateman present an Eddystone USB/LSB/AM/CW receiver up for auction at the January meeting.

VINTAGE WIRELESS AND GRAMAPHONE CLUB OF WESTERN AUSTRALIA Inc.

EXECUTIVE 2015-2016

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Editor: Rob Nunn; Publicity/Website: Reg Gauci

Meetings are held on the fourth Tuesday of each month (with the exception of December) at 8pm in the Veteran Car Club rooms at 6 Hickey Street, Ardross. 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 August.

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: $25 (payable in June)
(Concession rate: $20)

President's Report

Rob Nunn

Welcome to Edition No 128 of our Club magazine, "Radio-Gram"! This issue covers the period from September 2015 to January 2016. The magazine complements our Club Website, managed by Reg Gauci with up to date information on the Club activities.

On 22 September 2015 the monthly meeting featured a mini-auction and a presentation on Early Television Receivers by member Norbert Torney. Norbert brought along a some fine examples of his collection including a Pye BT18 (1948) 2nd postwar model with oil-filled magnifier. "Fish bowl TV"! Many thanks to Norbert for an interesting talk and for showing us these very early television sets.

Our field trip to the Gravity Discovery Centre got underway on 4 October 2015, with 10 club members attending. (Refer page 13).The trip was sponsored by the Club and included bus transport, admission, Guided Tour and lunch. All agreed that the tour of the Centre was very interesting. And a good time was had by all! Members are encouraged to participate in these trips and get to know your fellow members better.

Peter Harries was our Guest Speaker at the 27 October 2015 meeting. Peter thoroughly entertained us all with his anecdotes, stories of the early days in radio/TV, and musical performances with his piano accordion. Peter also showed the smallest valve portable I have seen. Made by Toshiba. Thank you Peter for an entertaining evening!

Have-A-Go-Day was held at the Burswood on 11 November 2015, and some of our members set up a nice display stand of early radios and gramophones. Thank you to Andrew Wakeman, Reg Gauci, Barry Kinsella, Rodney House and Tony Bayliss for their hard work. Time and contribution. We intend to try to get a better location next year. We felt that many people would not have known we were there because our location was not obvious from the main walkways in the garden.

The end of year Christmas party was held on 24 November 2015. This year it was decided to obtain the services of caterers to supply all the food and eating gear. The party was held at the Clubhouse and the main room and verandahs were laid out with seating and tables. It was generally agreed that the food was delicious and in good quantity, and that it was very nice to sit down and let a caterer do all the hard work for a change!

On 26 January 2016 our monthly meeting featured a monster auction, And there was certainly plenty of radio and gramophone gear to spend a few dollars on! Bidding was brisk and virtually all items were sold. A big thank you to

All those who assisted with the auction, especially Auctioneer Tony Barbatano and assistant Syd Pateman, Rodney House on the computer program, Andrew Wakeman and Barry Kinsella on the purchase records.

Preparations for the Wireless Hill "Radiosonic" Exhibition (The First 50 Years of the Wireless and Gramophone in WA) are well underway by Richard Rennie, and selection of radios, with assistance from Andrew Wakeman is planned on 17 February 2016.

The State Department of Commerce has advised that new laws have been passed covering the operation of incorporated associations in WA. These come into effect on July 1, 2016. These changes mainly involve financial record keeping practices. We will be ensuring that our Club follows the new rules as they become public.

Your Committee will be meeting on 19 February 2016 to discuss the program for the latter half of the year.

Best Wishes to all .....Rob

The Secretary's Report

Andrew Wakeman

Thanks again to all those members and friends that have contributed by giving presentations and helped manage the Auctioning of goods at the monthly Club Meetings.

Also a big thank you to those members that attended the displays at the Railfest Open Day in October 2015 and the Have A Go Day in November 2015.

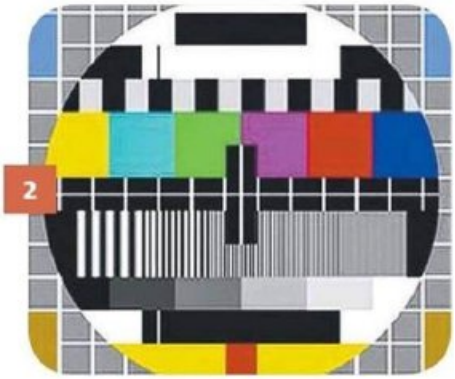
The 2015 Christmas party which was fully catered this time and was a great success; thanks again to the organisers.

A big auction of members items was held on 26 January 2016, there was an excellent turnout considering that our January meeting fell on Australia Day.

Displays are planned to be held this year at the Guilford Heritage Day in April 2016 and the Arthur Grady Day in May 2016.

Quality presentations have again been organised for the coming months and the regular mini auctions of donated goods will continue to be held.

Andrew



We don't see much of these days today! When TV transmissions were limited we saw them quite often, waiting for the TV programs to start!

I'll be back in a jiffy, just going to adjust the antenna!

CONTRIBUTORS TO THIS EDITION

Tony Smith

Vince Taylor

Reg Gauci

Rodney House

Richard Rennie

Syd Pateman

Rob Nunn
-Editor

Andrew Wakeman

Peter Browne

Tony Barbatano
-Auctioneer

Toby Croce

EXECUTIVE AND COMMITTEE MEMBERS

President
Rob Nunn

Webmaster and Vice-President
Reg Gauci

Secretary
Andrew Wakeman

Treasurer
Barry Kinsella

Minutes Secretary
Vince Taylor

Committee
Tony Smith

Recent Events

July 28, 2015 : Richard Rennie presents Darksuckers and the Science of the Dark.

August 25, 2015 : Vince Taylor presents HMV Memories of a Musical Dog.

September 22, 2015 : Norbert Torney presents Early TV's

October 27, 2015 : Peter Harries will present a talk on his early days as and entertainer in the television industry and live music.

November 24, 2015 : End of Year Party. Starts at 6.30pm. Food and soft drinks, tea and coffee provided.

January 26, 2016: Members Monster Auction.

Richard Rennie

Vince Taylor

Norbert Torney

Peter Harries

Coming Events

February 23, 2016: Batteries and Cells (Show and Tell) by Barry Kinsella.

March 22, 2016 : Compressed Air Gramophones, presented by Steve Austin and Richard Rennie.

April 26, 2016 : The Case of the Cassette, presented by Tony Smith and Richard Rennie.

May 24, 2016 : The Evolution of High Quality Valve Amplifiers, presented by Dennis Grimwood.

June 28, 2016 : AGM and Members Mega Auction.

Barry Kinsella

Richard Rennie

Steve Austin

Dennis Grimwood

Tony Smith

Minutes of Vintage Wireless and Gramophone Collectors Club meeting held at clubrooms Tuesday September 22nd 2015.

27 members present, 2 guests.

8.00pm. Meeting commenced.

The meeting was opened by President Rob Nunn and welcome extended to guests Jack Kelly and John Holtman. For those you paying subs tonight can you please fill out the information form so we have your relevant details.

Magazine #127 has been completed and mailed. Thanks to those who have contributed. More items are needed for both the magazine and website.

An email has been sent out for the outing to the Gravity Discovery Centre at Gin Gin. Meet here at clubrooms 9am Sunday 4th Oct. Lunch and guided tour provided. A signup sheet is here tonight.

The November meeting will be the end of year wind-up. This shall be held at the clubrooms and commence at 6.30pm.

Secretary's Report.

Preparations are continuing for the upcoming Rail fest and November's Have A Go Day. There was no incoming or outgoing correspondence. The secretary's report was moved as correct by Rod House and seconded by Paul Hansen. Passed unanimously.

Treasurer's Report.

Tabled as a separate document.
Moved as correct by Richard Rennie, seconded by Dennis Grimwood. Passed unanimously.

General Business

Richard Rennie- Proposes that VWGCC helps the Wireless Hill Museum with a 3 month display next April. This was seconded by Richard Jefferys. Please see Richard after the meeting to sign on to the working group.

Dennis Grimwood- enquired as to the connection between Capitol Radio and Wireless Hill Museum. There is no formal connection other than Capitol Radio leasing part of the premises as a studio.

Items of Interest.

Phil Oxwell- The contents of the private museum at Gin Gin have been dispersed following the death of the owner. Though some items had been removed, Phil has managed to purchase the whole collection. This has meant taking on a storage unit. Much of the collection may be on-sold. See Phil regarding options.

Paul Hansen was in England in July and went to Bletchley Park Historic site. Highly recommended for a visit if you are in the UK.

Tony Smith- The next meeting will have a presentation by entertainer Peter Harries.

Meeting closed 8.34pm.

Norbert and Colleen Tourney will be tonight's presenters on vintage and early TV.

Norbert shows some of extensive collection of early television sets.

Left to right- Pye BT16 first post-war British TV, GEC 405 (1959-60), Philips (Aust) 625 line CCIR standard (1956), Sanyo colour14in (1976-7).
Top—Home-built (Radio Craft magazine1938) 5in TV

Left to right. Norbert displayed fine examples of British Ekco first battery-powered TV (1955), Cossor 10in (1949) and Quelle-Universum battery powered 8in (1960-1) TV set.

Photos from 22 September 2015 Meeting and mini-auction

Some of the members present at the 22 September 2015 meeting

Pye BT18 (1948) 2nd postwar model with oil-filled magnifier. “Fish bowl TV”!

Left-to-right, Sony Trintron (1968-9) simple PAL (no delay line—phase correction knob for when the faces go green!) Sony also built a modified NTSC TV, Astor (Australian) early 1960’s and Murphy (1961) with multi-standard switch, can receive 405 and 625 line pictures.

Pye BT16 first post war British TV. Economical on floor space!

Norbert sets up a test pattern and recording on a Sanyo television set

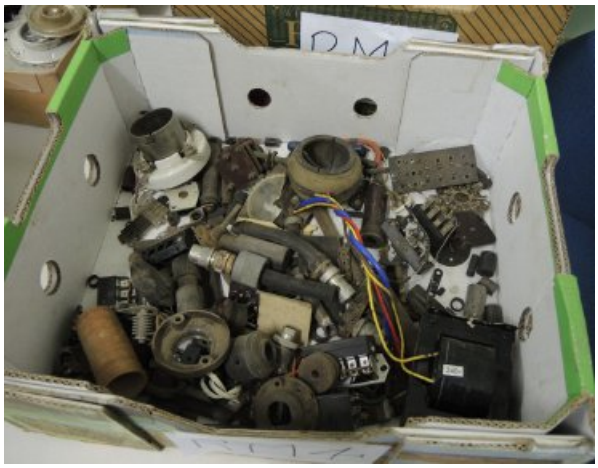
Photos from 22 September 2015 Meeting and mini-auction

Minature Sanyo AM/FM Quartz Clock Radio TV

Norbert shows some TV picture tubes from his extensive collection of early television sets.

Norberts presentation on early model tele-vision attracted considerable interest from members.

Murphy (1961) television set with multi-standard switch can receive 405 and 625 line pictures.



A box of spare parts up for auction at the September meeting.

Colombia portable gramophone up for auction.

Minutes of Vintage Wireless and Gramophone Collectors Club meeting held at clubrooms Tuesday October 27th 2015.
35 members present, 3 visitors.

8.00pm. Meeting commenced.
The meeting was opened by President Rob Nunn. Welcome to tonight's presenter Peter Harries. Members are asked to submit items (stories/ photos) for inclusion on the club website and magazine/ newsletter.

The club outing to the Gravity Discovery Centre was attended by 10 people and a great time was had by all who attended.

A subcommittee has been formed to prepare a museum display for Wireless Hill next year. Please see Richard Rennie if you are interested in participating.

Have A Go Day will be on 11th November and an interview will be done on Curtin Radio.

The end of year event will be held at the clubrooms on the 24th November commencing 6.30. A show of hands is required of attendees as a guide for catering purposes.

Secretary's Report.
Thanks to all who attended the Rail Fest day. There were over 1000 visitors and a great deal of interest shown in the club display.

An email has gone out regarding a radio sale next year at Cessnock NSW. A copy of the catalogue is available.

The October edition of the HRSA magazine has arrived.
There was no outgoing correspondence.
The Secretary's report was moved as correct by Paul Hansen and seconded by Merv Thompson. Passed.

Treasurer's Report.
The Treasurer's report was tabled as a separate document. Moved as correct by Richard Rennie and seconded by Norbert Tourney.

General Business.
Merv Thompson-Wishes to express thanks to those who organised the day trip to the Gravity Discovery Centre at Gin Gin. Was a top notch day.

Richard Rennie- Four club members went to Wireless Hill Museum and talked to the curator. A possible theme for the proposed display is 'The First Fifty years of Radio and TV in WA. There are more people needed for this event to assist with advice etc. Please get in touch with Richard Rennie if you can help.

Also...another box of radio knobs has been donated to the club. These will be sold for $1 each. There are also some donated items on the table in the hallway that are free to a good home.

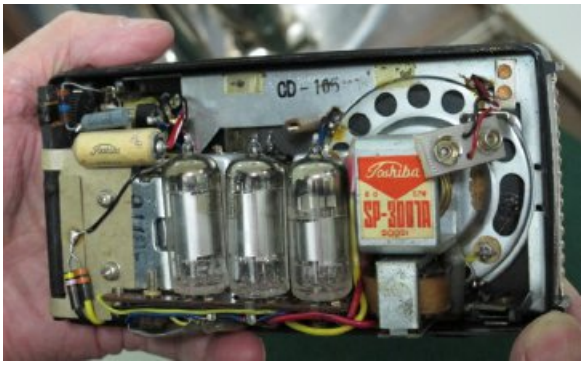
Tony Smith- The January 2016 meeting will feature an auction as usual. A preliminary list is being put together to advertise this event so please get in touch with Tony with your auction items.

Items of Interest
Norbert Tourney- Reproduction 2valve radio made with vintage parts to a 1940's design. This was made for a competition to design a 2 valve radio to drive a standard speaker. Also shown was a 1924-25 single valve radio.

Meeting closed 8.25pm.
Tonight's presenter will be entertainer Peter Harries with anecdotes on the early years of TV.

Peter Harries with his prized miniature Toshiba valve radio.

Above and below : Peter shows his Toshiba standard broadcast miniature valve radio.



Minutes of Vintage Wireless and Gramophone Collectors Club meeting held at clubrooms Tuesday January 26th 2016.

34 members present, 2 visitors.

8.05pm. Meeting commenced.

The meeting was opened by President Rob Nunn. Welcome to guests Russell Nash (ex Telstra) and Morgan Wild (78 rpm record collector). A reminder that tonight's event is a club auction and only financial members are permitted to bid. Subs can be paid in the break.

Many thanks to those club members that helped with the end of year wind up in November. Temptations Catering did a good job and lightened the load considerably for those working on the event.

Many thanks also to those members who set up and manned the Have A Go Day display. The club magazine Radiogram #128 is in preparation for distribution mid- late February. Contributions for magazine and website are welcomed.

Secretary's Report.

There has been no incoming or outgoing formal correspondence. A big sale of vintage radios will be held in Melbourne in March (see Andrew for details).

Contact has been made with the organisers of the Guildford Heritage Day to be held on the 3rd of April signalling our attendance. (If you wish to be involved see Andrew for details).

There have been a number of emails from members of the public regarding items offered for sale. These have been forwarded to members on the email list.

There have been many items donated to the club by a member from the south west. These will probably be put up for auction at the February meeting. The Secretary's report was moved as correct by Reg Gauci and seconded by Dennis Brown. Passed.

Treasurer's Report.

The Treasurer's report was tabled as a separate document. Not listed is the money that has been taken out of petty cash to pay Steve Saville for the 2 books recently purchased for the club (*Console Radios of the Empire 1925-40* and *Kreisler Radios*). Moved as correct by John Pascolich and seconded by Richard Rennie.

General Business.

Barry Kinsella- Have A Go Day was not successful due to Clowns, Sleep Apnoea and Dialysis not being a good mix for the VWGCC. If we cannot secure a better space then it would be best not to attend. John Pascolich replied that we perhaps concentrate on the Guildford and Fremantle Heritage days as they seem to be a better fit.

Steve Austin- There are only a few packets of gramophone needles left and the club needs to find a new supplier if they wish to continue this service. Anyone who can help with the location of a new supplier get in touch.

Dennis Brown- Wireless Hill Museum are de-accessioning some items so it might be wise to keep an eye out for those items coming on the market.

Richard Rennie- Wireless Hill are very happy with the club participation in the display at the museum later in the year. There are already 7 people involved. If anyone else wishes to come on board they are welcome to get in touch.

Items of Interest

Tony Bayliss-A) Portable gramophone, continental hatbox type. B) A number of acetate recordings. C) 7 inch mystery record with two individual tracks recorded on each side for use with a sapphire stylus.

Merv Thompson- Record recorder. PYE RECORD MAKER c.late 1950s. Regular record player with magnetic discs and pick-up for recording.

Meeting closed 8.35pm.

An auction was held.

Merv Thompson shows a Pye portable Recording Record Player (late 1950's) with magnetic disks and pick-up. *Right* : Barry Kinsella.

Tony Bayliss shows a portable continental hatbox gramophone and some acetate recordings in Items of Interest at the January meeting.

Photos from 26 January Meeting and Auction

The January Members Auction attracted plenty of interest from club members and virtually all items were sold with mostly brisk bidding.

A mantle Bakelite HMV valve radio, looking for a set of knobs was up for auction.

A variety of radios, gramophones and test equipment were up for auction at the January meeting.

A Juli Corder and Sony tape recorder at the auction.

Foreground : Lawrie Bugeja, Richard Jeffrey, Steve Austin and Vince Taylor.

Some more photos from our January 2016 Meeting

STC valve mantle wood cabinet radio.

A nicely restored Airzone valve wood cabinet, and an AWA Radiola radiogram were popular items in the auction

Some of the members discussing the auction with Auctioneer Tony Barbatano

A variety of test equipment were up for auction and attracted interest from some people.

Plenty of valves and spare parts were available. And an unusual Sharp “Both Sides Play Disc Stereo System”

From left : Tony Smith chats with Merv Thompson and Lawrie Bugeja, no doubt promoting some good things in the auction!

Trip to Gravity Discovery Centre, Neergabby Sunday 4 Oct 2015

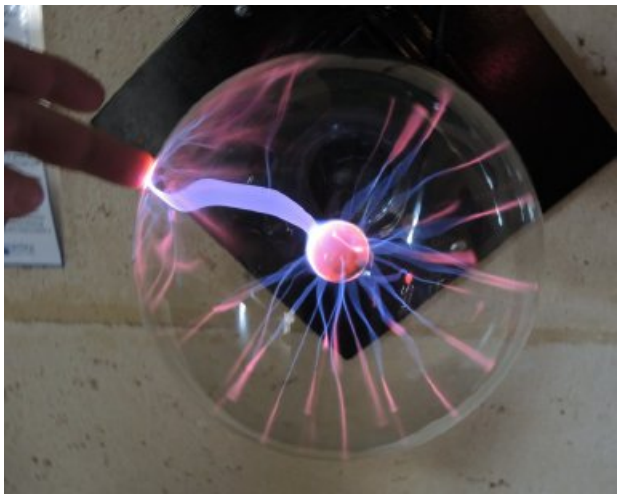
Members who signed up for the Club sponsored bus trip to the Gravity Discovery Centre, 1098 Military Rd, Neergabby.

On Sunday 4 October, 2015 10 members attended the Club-sponsored field trip to the Gravity Discovery Centre, Neergabby. The Club provided bus and driver transport to the centre, departing at 9am and returning to the Club-house about 5pm.

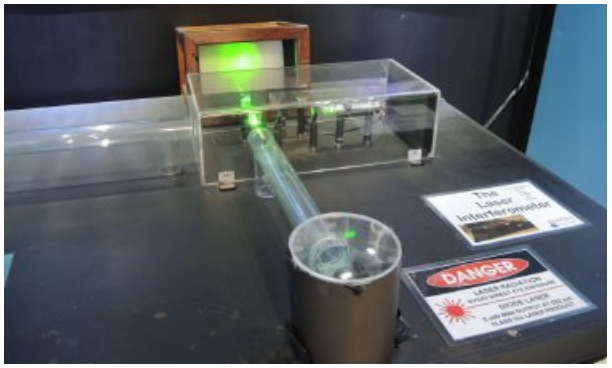
Our Guide gives a rundown on the displays.

Admission and lunch was also provided by the Club, and because we were a Group we enjoyed the services of a Guide, which was very professional and really enhanced the experience of our visit.

The Gravity Discovery Centre is a wonderful facility about an hours drive north of Perth. They have many interactive devices and vibrant displays that demonstrate and educate in physics, astronomy, the Universe, geology, botany, etc.



The plasma ball with sparks that will travel to a nearby hand was an excellent interactive device based on a miniature Tesla coil origin.



Laser Interferometer demonstration.

Photos from Gravity Discovery Centre Trip

Club members enjoyed a very tasty lunch at the facility

Niobe—First southern hemisphere gravitational wave detector.

Quasar - supermassive black hole fed with gas emitting enormously bright jets of light.

Rodney House, Tony Smith and Rob Nunn (Editor) listen to the Guide explanation.

Mundrabilla meteorite, Nullabour, WA. Weighing 300kg, fallen more than a million years ago. Pitting due to weathering.

Colourful displays in the Black Hole area.

SRCWA Have-a-Go-Day 11 November 2015

VWGC display set up by Tony, Andrew, Reg, Barry and Rod.

Tony, Andrew and Reg with some vintage radios.

Australian Historic Telephone Society had a display adjacent to ours, a few meters closer to the laughing show.

Reg, Barry and Rod with gramophones, record players and transistor portable radios,

HMV portable gramophone (1931), HMV with horn and Edison cylinder Amberola 30.

VWGC Christmas Party 24 Nov 2015.

A social affair this year with a few of the members wives attending.

Merv, Peter , Joan and Steve having a chat.

Foreground : Andrew, David, Barry and Paul.

Foreground : Richard, David and Bill

Barry, wife, John, Paul, Tony, Andrew Richard.

Foreground : Andrew, John and Paul.

Mitre lends a helping hand at the Carvery.

Some of the dessert fare on offer.

The Vintage Wireless and Gramophone Club presents

SOUNDS LIKE HISTORY

A series of free public presentations

in support of the new exhibition in the Wireless Hill Museum
RADIOSONIC

The First 50 Years of Wireless and The Gramophone in WA 1884-1934

May 15 (noon - 3 pm) — Old Valve Radio Information Day
Bring your old valve radio to the Wireless Hill Museum and the VWGC members will provide information about its history, its age and its care and conservation. (No valuations)

May 22 (2 pm) — The First Radio Experiments in WA.
In 1899, **Mr. G.P. Stevens** of the Telegraph Department in Perth carried out the first radio experiments in Western Australia. With demonstration of his original technology. (Or did someone else do it first?)

May 29 (2 pm) — Professor Archibald and the First Phonograph in WA.
Story of the first **Edison Phonograph** in Western Australia demonstrated by **Professor Douglas Archibald,** and hear a re-creation of a speech by **Sir John Forrest** recorded by Archibald in 1891, and played on an Edison Phonograph.

June 5 (2 pm) — 6WF and the Mulgaphone radio
Hear the story of the establishment of 6WF, the first radio station in WA; and the history of the **Mulgaphone,** the legendary Western Australian wireless receivers

June 12 (2 pm) — Edison and his Inventions
Edison's inventions, from the Electric Vote Recorder, improvements to telegraph and telephone, 35 mm movie film, Mimeograph, batteries, light globes, to the **Phonograph;** with actual demonstrations.

June 19 (2 pm) — Royalty on Record (The Real King's Speech)
Hear **original** recordings of the Kings and Queens of Australia; including Edward VII, George V, Edward VIII, George VI, Princesses Elizabeth and Margaret, Elizabeth II; and possibly Queen Victoria.

OTHER CLUB PRESENTATIONS

June –August

The Story of the Applecross Wireless Station (1912 — 1967)

Old Wind-up Gramophone Information Day

The Invention and Development of the Telephone (1876 on)

Analogue Television (1932 - 1981)
From 6WF to the ABC (1924 - 1932)

Dinosaurs of Sound (1925 - 1935)
Sound Like Heritage (1892 - 1965)
Coming of Sound in WA Cinemas Part 1 (1904 - 1914)
F.R.I.E.D. (1879 - 2016) First Real Exhibition International of Darksuckers
Two Ears Good (1881 — on) The history of stereophonic sound

Never Use a Surge Protector with a Step-Down Transformer.

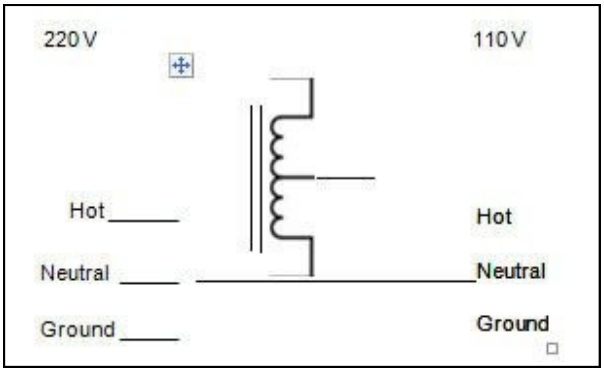
Andreas Gustafsson.

Background

Step-down transformers are commonly used to convert the 220 volt electricity found in most parts of the world to the 110 volts required by North American equipment. For example, they are popular with American expatriates who don't want to throw away their American appliances when moving to Europe.

Unfortunately, when used incorrectly, step-down transformers can be dangerous. This article is a cautionary tale of one incident that could have ended in disaster.

A step-down transformer.



Schematic of step-down transformer, one plug orientation

The problem with step-down transformers

Most step-down transformers (certainly all inexpensive ones) are actually autotransformers meaning they have only a single winding with a center tap rather than two separate electrically isolated windings.

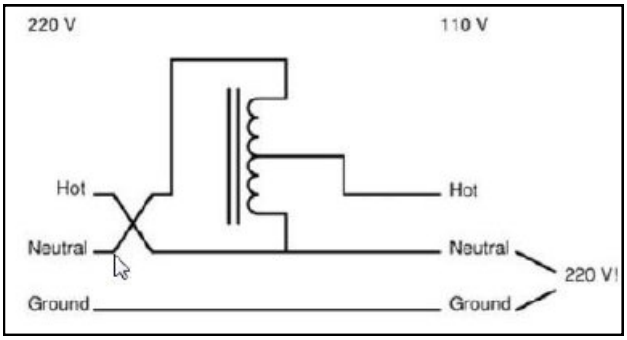
What this means is that the 110 volt output is not electri cally isolated from the 220 volt input. Mars worse, in many European countries the power plugs can be plugged into the outlet two different ways, which leads to another problem: *there is a 50 percent* chance *that the voltage between neutral and ground will be 220 volts.*

Non-polarised “schuko” power plug.

The problem with surge protectors

Usually, having 220 volts between neutral and ground in an appliance designed for 110 volts is not a problem — the insulation has a large safety margin. However, if you connect a surge protector (or a piece of equipment with built-in surge protection) on the 110 volt side, bad things can happen.

Surge protectors contain varistors, components which protect against surges by effectively shorting out any excess voltage. Some surge protectors contain only a single varistor connected between hot and neutral; those will work fine with a step-down transformer.



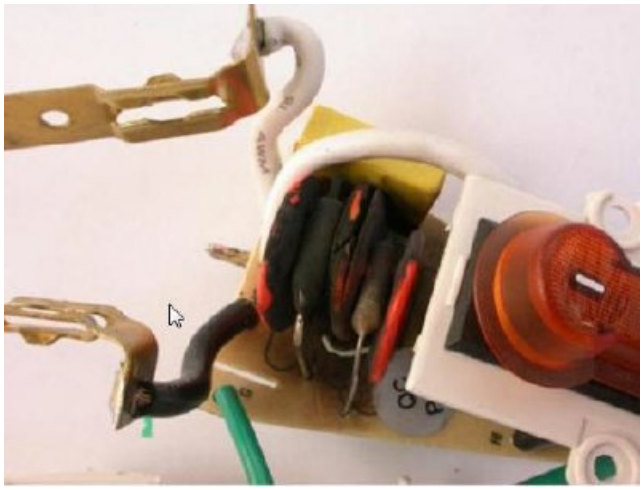
Schematic of step-down transformer , opposite plug orientation.

However, many surge protectors have additional varistors connected between hot and ground and between neutral and ground. When a surge protector of this kind is used with a step-down tranformer, one of these varistors can be subjected to the full 220 volts.

This is enough to trigger the varistor into its conducting mode, effectively treating the 220 volts as a surge. Varistors are designed to absorbed short-lived surges, but they can't handle a persistent overvoltage. A varistor subjected to twice its rated voltage will quickly be destroyed, usually causing a short circuit and a blown fuse.

What happened to me

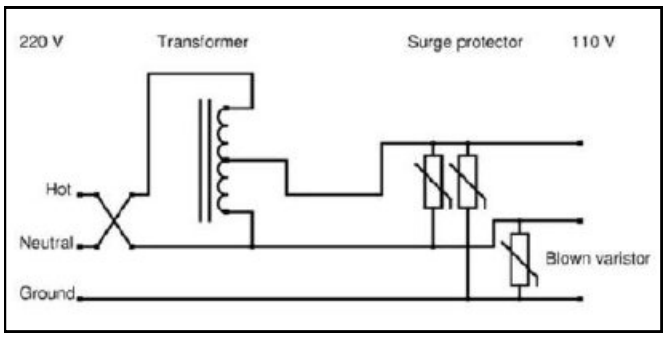
I had moved back to Europe from the U.S. and brought with me some electrical appliances and a step-down transformer. Because the transformer had only one outlet and I needed to connect multiple appliances I used a U.S. power strip connected to the 110 V output. Like most power strips sold in the U.S., it had built-in surge protection.



Innards of the surge protector, with charred varister.

This worked fine for several weeks. Then I *went* travelling and unuplugged everything just to be safe. When I returned and plugged the step-down transformer back in, there was a bang and the lights went out. A fuse had blown in my apartment's breaker panel. I replaced the fuse and tried plugging in the step-down transformer again; the fuse instantly blew for a second time.

I opened up the power strip and found that it contained three varistors, one of which was charred. Measuring the charred varistor with a multimeter showed that it was shorted out.



Schematic of connections at tie of incident.

Why it happened

This is what must have happened: When I returned from my trip, I plugged in the surge protector the opposite way from before the trip. Before the trip, there was no more than 110 volts over any of the hidden varistors in the power strips, but with the plug oriented differently, the voltage rose to 220 volts, causing the varistor to short out.

What could have happened

It could have been much worse. For one thing, if the varistors in the power strip had been sturdier, the one getting the excess voltage might not have shorted out instantly and blown the fuse, but instead slowly overheated and started a fire.

But what concerns me most is the following scenario: After the initial incident, the blown varistor was completely shorted out. This left the power strip with *a short between hot and ground,* a very dangerous condition.

If at that point I had plugged the step-down transformer into an ungrounded outlet, *the chassis* of any *grounded 110 volt equipment connected to the power strip would have been live with 220 volts,* and I would have stood a good chance of being electrocuted.

Conclusion

Never use a surge protector on the 110 volt side of a 220-to-110 volt step-down transformer if the power plug can be plugged in two different ways. It could kill you. If you must use a power strip, make very sure it doesn't have surge protection built in.

If you are in a country with polarized power plugs, such as the UK, this problem is less likely to affect you, but it's still possible if either the wall outlet or the power plug of the transformer has been wired with incorrect polarity. Exercise care.

Permission to publish this article was received from Andreas Gustafsson at www.gson.org/ The Editor would like to thank Andreas for his kind offer.

Toby Croce Collection

Toby Croce sorts through a box, surrounded by his extensive collection.

JVC Videosphere space helmet TV.

Toby makes adjustments to a Manhattan TV in cabinet, circa 1958-60.

1909 Edison phonograph.

More photos of Toby Croce Collection

Toby Croce TV collection.

Precedent radiogram TV (1958).

Some fine vintage radios.

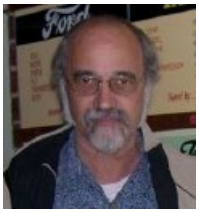
More radios from the collection.

Radio built into a Graetz TV (late 1950's)

Valve amplifier with glowing filaments.

With thanks to Toby for his kind permission to publish these photos of his collection. (Ed.)

Restoration of the Volksempfaenger VE301Wdyn.



Norbert Torney

On the 30th of the first month of 1933 the Nazis came to power in Germany, Joseph Goebbels their Propaganda Minister decided radios were too expensive but essential for his propaganda efforts, because Germany had only a twenty percent saturation of homes with radio receivers.

A maximum price ceiling of RM 72.00 was found to be suitable. At the time quality radios like my Telefunken Nauen sold for RM 249.00, too expensive for the average citizen. The Seibt Company in Berlin was ordered to design the RM (Reichsmark) 72.00 radio.

1938 VE301DYN Volksempfaenger wireless

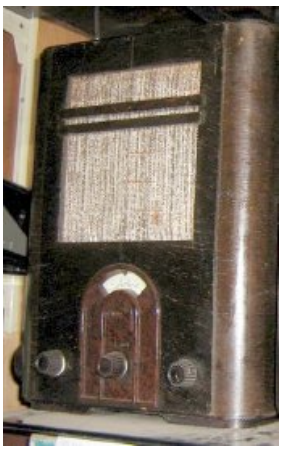
All modern advancements were disregarded, dynamic speakers could not be used because of the cost of the output transformer and of course the speaker itself. It could not be a superheterodyne, because of the mixer tube and the extra coils. The power transformer needed to be small to keep cost down, therefore a low power audio stage was used.

The final product was a small TRF radio which used three antiquated tubes. Every German manufacturer was ordered to produce an identical radio, with all parts interchangeable. The first model was introduced to the public at the 1933 Berlin Radio Exhibition. Irrespective of it's no frills design it worked well and sold well. Three models were manufactured the VE301w, a standard AC 110 – 240 volt model in a Bakelite case, the VE301G a 240 volt DC only model in a wooden case similar to the Bakelite case, and finally the VE301B a battery version of the set, also in a wooden case.

Between 1933 and 1937 only small changes occurred, the set stayed essentially the same. In 1937 a radical upgrade was introduced and named the VE301Wn (the n stands for new). This radio was much better than its predecessor. With a six feet long wire in the antenna socket mine plays rather well; the RF sensitivity was doubled by comparison with its predecessor.

In 1938 an all around upgrade with a dynamic speaker a much more appealing case and improved RF sensitivity was introduced. The new name was VE301Wdyn, this set was also available as an AC/DC version, suitable named VE301GWdyn (GW stands for DC/AC). These sets had a quality dynamic speaker and are consistent with many other small radios of the era.

I restored one of those about eight years ago, it looked good and worked well. One day somebody made me an offer I couldn't refuse, so I sold the set. Meanwhile I obtained another one which needed a ground up overhaul. When it arrived (eBay) the case was badly broken because the vendor didn't bother to use quality packaging.



Because the chassis was reasonably original and made by Braun one of the better German brands and fairly rare, I decided to glue the case together (until a better case could be found) and proceed with the technical restoration.

Checking the tubes the original RES164 o/p tube was replaced with a different one (RES964), the RGN1064 had a different tube mounted in its original base

1934 VE301 Battery wood case Volksempfaenger

(this was common practice with 1940s techs) and the last one the AF7 was simply dud. Not a very good beginning.

On the positive side I do have a new AF7, a good working RGN1064 and a RES164 with less than 50% emission which can be rejuvenated (details on Jogie's Roehrenbude). I changed the usual 3 or 4 paper condensers (a must with early radios). Now with the antenna connected "6mm", our local station and hum was heard loud and clear.

The dial light worked, rather unusual for an old radio, after I changed the 2 mains filter electrolytics the set played a lot louder and hum free – a one hour textbook restoration or not ? I decided to have a cuppa and check out eBay for a new case. By the time I returned, my workshop emitted a strong smell, also irregular puffs of smoke came of the radio.

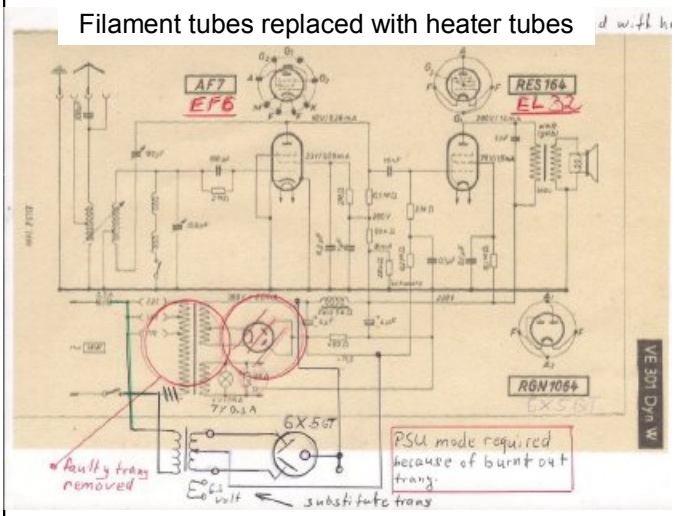
The dial light had gone dim and the volume down. Oh no! a new mains transformer had to be procured. I found one just the right size but the original transformer had two 4volt windings, one for the rectifier and one for the

other tubes. This transformer had one 6 volt winding only; a dropping resistor to bring it down to 4 volt isn't a drama but the rectifier winding had to be separate.

A solution would have been two silicon diodes and discarding the rectifier tube but that leaves an empty tube socket. The RES164 I had was anything but good. My counterpart tech in Germany would have used the Russian 4P1L as replacement or the not so good looking RL2P3 which is available on the internet as a replacement kit. The RES164 is in reality a copy of the late 1920s Philips B443, which is just as hard to find.

After careful consideration I decided on a set of "E" tubes – EL32, EF6, and 6X5GT (EZ35) in-lieu of the EZ3 which would have required a new socket. The set worked actually a lot better than ever, because the EL32 produces 2.5 watt rather than the 1.2 watt produced by the RES164. Even better the EF6 is a pin for pin replacement for the AF7 with 20% more gain. I was never a purist and radios that don't work do nothing for me.

Filament tubes replaced with heater tubes



Tube replacements in the VE301B2 wireless

The advantage would be a set with brand new tubes and for that matter common ones that can be easily replaced if the need arises. The interior looks now like a VE301G-Wdyn because the GW uses an o/p tube (VL1) which looks almost identical to the EL32, all I need to find now is a ST globe type 6X5/EZ35 and the set looks original again.

This set was copied in Britain and like its German counterpart, produced by every British manufacturer however the name was changed to Wartime Utility Receiver. I own one of these too, mine was made by Ferranti and like its German counterpart has no longer its original tubes. As in Germany the designer opted for oddball tubes which became obsolete within a very short time.

The Telefunken RES164 as well as its Philips equivalent replacement the L416d and the Russian 4P1L are filament type output tubes and therefore certain requirements are necessary when heated with AC.

I noticed on a restoration report in one of the club magazines that the workings of direct heated tubes in mains operated equipment is not fully understood. Let me explain why directly heated/filament tubes can be heated without any hum problems from a mains transformer.

Before 1929 only filament tubes existed but mains radios were manufactured from 1925 onward. Logic dictates if you feed 50/60 hertz hum into a tube cathode the tube will be operating as a cathode amplifier therefore an enormously loud hum will come out of the plate/anode due to the tube gain which would massively intensify the hum. This is not the case when you look at the filament heater voltage as a totally separate circuit independent from the cathode to anode circuit.

On mains radios (I've got quite a few) with filament tubes/output tubes; neither of the transformer filament wires can be grounded, as there must not be a voltage difference to ground. When there is no voltage potential hum amplification cannot occur.

To complete the cathode to anode current circuit it is necessary to fit a 50 - 300 ohm wire wound potentiometer between the two filament-terminals with the wiper connected to earth. This Entbrummer as the Germans call it serves to balance the filament and act as a cathode bias resistor as well.

Yet hum can still occur because the 50/60 Hz cycle is not a constant voltage because it changes 50/60 times a second crossing the zero line every time. Because of that change of current, changes of tube emission will occur, in effect hum modulating the cathode current, however only minor hum will be produced.

During the 1920s manufacturers produced low voltage high current filaments for their tubes. A much thicker filament (low voltage/high current) produces a lot less hum than a high voltage/low current filament. 2 volt was common but also 1.5 volt tubes were manufactured.

The type 26 tube (1.5 volt 1.05amp), the most common one in the "Baby Coffins" is one of those directly heated tubes specifically designed for mains operated radios. Its indirectly heated counterpart the 27 was used as a hum free audio driver because the first audio stage is the most hum prone stage.

Modern triode type HiFi amps are still using filament type output tubes; the modern variation of the Westinghouse 300B and the better known 2A3 which was commonly used in cinema power amps.

At this stage I like to point out not only hum is generated, because of uneven emission caused by ac heating, but also white noise/hiss. All quality tube amps are using dc

heating for the preamplifier stages to combat these effects. Unfortunately also indirectly heated tubes are affected but to a much lesser degree.

My 1927 Kolster Brandis, as well as my 1927 King are using type 26 and 71 filament tubes in mains operated radios. Hum is not really a problem in both sets. Filament output tubes such as the 47, AL1, AD1, 2A3 and a fair number of British and German o/p filament tubes were used right up to the mid 1930s.

I hope this helps to understand why ac heating of filament tubes is possible and in case of high power triodes necessary. The largest challenge for hum reduction designs or even total removal was the fact that electrolytic condensers were not available before 1932. 1933 models were the first radio designs that incorporated electrolytic condensers.

Paper condensers above a certain size contain so much inductivity that increase in capacitance/size offsets any gain that might have been produced thru increased capacitance. All sorts of interesting circuits have been used however nothing was as effective as high capacitance electrolytic condensers.

Two way or bridge rectifiers also contribute greatly to hum reduction because they double the mains frequency to 100/120 hertz. The higher the frequency the easier ripple filtering is. Modern day power supplies work with frequencies of 50 000 hertz and more. Even in the good old days vibrator power supplies for car radios and farm radios used commonly frequencies of 100 to 120 hertz. The higher frequency improved efficiency greatly and simplified ripple filtering.

Since the introduction of transistor invertors only frequencies over 2000 hertz have been used, these higher frequencies drastically improve efficiency and noise filtering, while reducing transformers to minute sizes.

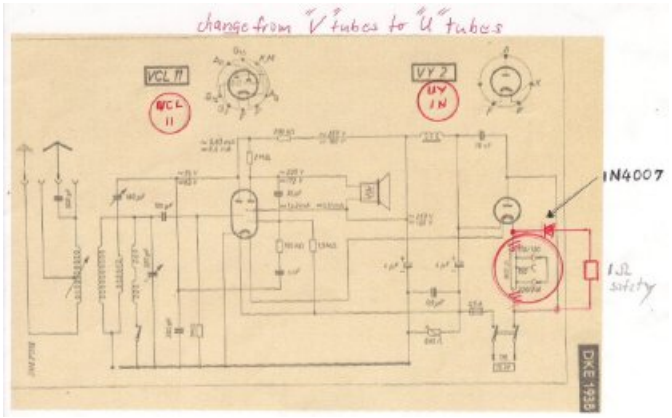
When I finally found a replacement case for my VE301Wdyn, postage turned out to be more than double the cost of the radio case. To help out the vendor offered a not so good DKE 110-240 from 1943/44 made in Poland, because the price was right I jumped to it. Non German manufactured DKEs are rare and quickly picked up by European collectors.

Inspecting the goods after arrival I found the DKE case had been denazified (all Nazi logos removed), this was common practice in 1945 after the war, otherwise than that the set was in very good restorable condition. The rectifier tube socket (5 pin “P” base) was missing, as were both tubes, however the original speaker was there and working and all other original components were in the right places.

As with all Volksempfaengers, tubes are either not obtainable or ridiculously expensive; I do have a 100% original DKE38 with the original tubes in good working order. I bought this one when I still had a flourishing business and could afford it.

The original tubes were the VCL11 and the VY2 both tubes were only used in DKEs and had a poor reputation with the 1940s techs. My original reaction was, good looking substitutes had to be found.

At the time (1938) only German manufacturers produced triode/pentode combination tubes, these tubes were continued right through to the mid 1950s and are available for a fair price.



The Volksempfaenger VE301B2 wireless

The logical choice are the ECL11 and the UCL11; I’ve got both in stock only the UCL11 is a practical choice because it is designed for AC/DC radios. Luckily the UCL11 has got identical pin connections to the original VCL11 and looks exactly the same but triple the power rating and a 100mA heater.

Because of the much higher plate current a suitable “U” type rectifier had to be found, “P” base and Telefunken base rectifiers are out of the question because of the shape and size of the sockets. I chose a UY1N, because it has an octal socket which fitted straight into the hole left by the 5 pin P base.

These sets were designed to work on any voltage between 110 volt and 240 volt ac/dc via an adjustable-dropping resistor. “V” tubes have a 50mA heater whereas “U” tubes use a 100mA heater; that meant the original resistor could not be used.

High wattage filament droppers were common in European black and white TVs but are now impossible to find. Making a quick calculation, the UY1N needed 50 volt and the UCL11 60 volt together 110 volt leaves 130 volt to be dropped.

A half wave rectifier without filter condensers lets only the positive or the negative half wave pass therefore effectively dropping the voltage by half. A little experiment proved that a common silicon diode 1N4007 dropped the 240 volt by 135 volt leaving me with 105 volt, just right for the job, a simple calculation proved that the power dissipated in the diode was only 0.7 watt meaning the diode runs only hand warm.

I added a safety resistor which will burn out immediately in case the diode fails. The performance of the DKE 110/240 is now totally identical to my original DKE 38. As

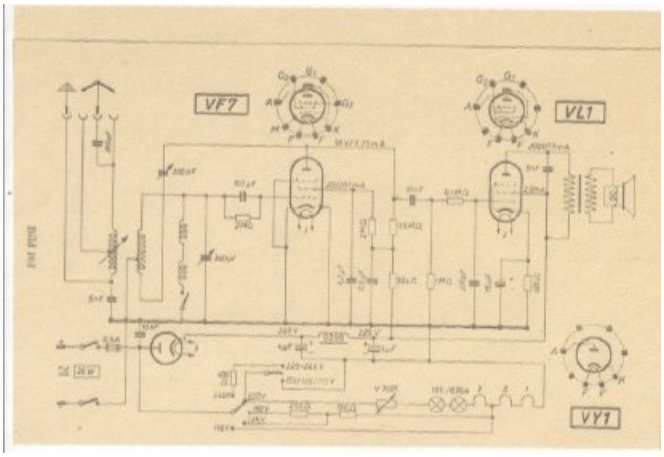
I am not a purist I am very happy with the result.

Now I need to find a 1980s replica, they were manufactured and sold by Quelle Universum in Germany. They come in different colours and turn up on eBay now and then.

A very original replica of the original VE301 was also manufactured in the former GDR (German Democratic Republic – ceased to exist in 1990) in the 1980s , both sets are original size, but are AM/FM transistor radios. Someday I'll find them.

Not everybody likes my ideas of substituting, however it should be considered that during the hard years from 1944 to about 1951 substitution was the only way to keep radio equipment going.

European technicians had no choice. In Germany the government offered surplus military tubes which were produced in large quantities and are still available.



Volksempfaenger VE301 Dyn GW circuit

The battery transmitter tube RL2P3 was standard fare for replacing the RES164 and its Philips equivalent. These tubes are still offered as standard replacement on the Internet.

I prefer the much better looking Russian 4P1L (looks exactly like a 6V6GT) the loctal socket fits straight into the original B5 hole, the tube is much better than any other substitute and is available for 3 Euro off the shelf.

The unobtainable VY2 rectifier was usually replaced with a metal rectifier mounted inside the "P5" base. I prefer to leave the faulty VY2 and mount a standard 1N4007 silicon diode together with a surge resistor underneath the tube socket.

Volksempfaengers with working stock original tubes are hard to find and very pricy; I personally can't see the value. Lastly the rebuilt of a 1933 VE301B; these sets have a wooden case and are very difficult to find. Some years ago I obtained one, originally manufactured by Blaupunkt. The case was A1 all knobs were there but the chassis had been stripped of all its parts.

Unfortunately the 301B uses also archaic tubes which are pretty impossible to obtain. Looking at the situation, the set had to be mains operated in any case.

I decided to rebuild the set as a 1946 model Blaupunkt Volksempfaenger. The design of this set used an extra tube but no rectifier tube, the result was that these sets performed a lot better than their pre war predecessor.

As I had the two REN904 RF-tubes and an original metal rectifier, only the output tube needed to be substituted. My choice was the Russian 4P1, I accepted the much higher volume and lower distortion.

In my opinion if Herr Blaupunkt had had the 4P1L he would have used it too. I do own now a VE301B, a VE301Wn, a VE301Wdyn, a DKE38, a DKE110 – 240 and an English War Time Utility Radio, all in working order and of course good looking. .....Norbert

Telefunken DKE 110-240 wireless.

Feranti English version WW2 wireless

Finding of a Mulgaphone Amplifier

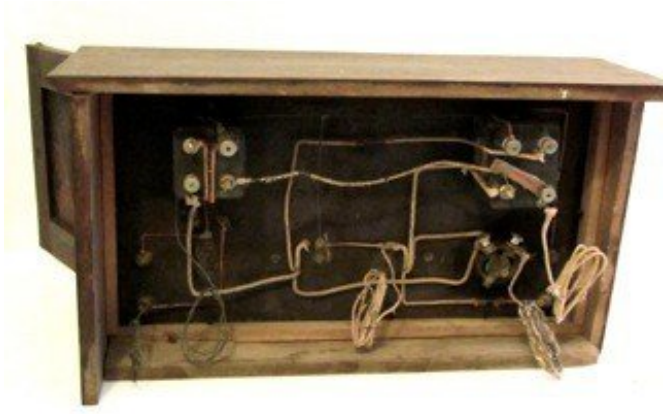
Richard Rennie

Although several Mulgaphone Amplifiers exist within the large cabinet Type "RDAA" or "RRDAA" models, until recently I had not sighted the stand-alone amplifier. The recent discovery has provided information for the first time about the style of the cabinet used.

Mulgaphones, such as Type "RD", could only be listened

Mulgaphone Amplifier

to using headphones. By the purchase of a two valve Amplifier Type "AA", a horn speaker could then be used. The amplifier came in very dirty and poor condition. It was covered with red dust from the farm on which it was originally used. The wooden cabinet was gently dusted



Rear of Mulgaphone Amplifier

and then lightly cleaned. Some of the original polish on the wood still remained, and was conserved. The rare WFL (Westralian Farmers Limited) logo was still visible on the front, but very fragile. It was photographed and then treated to ensure it did not flake off. The front face was then lightly cleaned and conserved.

Most of the wiring was still attached to the rear of the facade, but was deteriorating.

One door was partly missing and several sections of the sides of the cabinet were also missing. However enough remained to give a complete picture of the Mulgaphone Amplifier.

Mulgaphone label after conservation.

The Type "AA" amplifier was supplied in a cabinet designed to sit on top of the Type "RD" cabinet. When it was added to an "RD" cabinet receiver it would work a loud speaker up to 250 miles from Perth.

The amplifier, when sold in July 1926, cost £12-10-0. Accessories were 2 DE3 valves, two 36 volt H.T. batteries, two 11/2 volt L.T. cells. A Sparta loud speaker was an extra £7-10-0.

Mulgaphone Amplifier with horn after restoration.

……..Richard

Mark Twain once said—

“One Mans Trash is Another Girls Treasure”

Tony Smith

At a Club auction some year ago there was a box of Transistor Radios, the ones we used to call "Trannies". There was one that simply called out to me—”Buy me”! Havind no discipline that is exactly what I did!

The set was of English design and make - by ROBERTS. It featured Long-wave, Medium wave, and FM. The dial system and controls were very smart and functional, and the radio was very handsome for such a small set. In my opinion it would have competed very well against the flood of Japanese sets that came on the market.

I am unsure but believe that this set would never have been introduced to the Australian market, probably partly because we do not have long-wave stations, and as well the 9 volt battery size and shape meant that as far as I can remember this particular battery was never on our market.
Thus the set would have been brought in by a traveller from the UK, and not very long ago, as the battery still had plenty of "Go".
A new battery was made out of a series of "C" cells and the set performed very well. Out of a box of power adaptors, also bought at the Club, came exactly the right one with the right voltage and polarity to suit, so that the set could be used indoors and thus save the battery.

The thought came that this would make a great gift for one of my grandchildren. And it did!

Giving the set to my granddaughter Zeeka resulted in her falling immediately in love with it, and it became one of her pride and joy possessions back home in Tasmania. All her schoolgirl friends were very jealous, and all visitors to home were equally impressed.

And why not! The cabinet is of wood, covered in part by navy velour, some appropriate chromework, and it is fitted with a swivel base for use when AM stations are weak and the set needs to be turned to get weak signals.

Another aspect of the set is the inscription on the dial. My explanation to Zeeka was along the lines that the Royal Family had selected the Roberts Company to be the official supplier of radios to them.

I told Zeeka that this was thus a very unique set with probably no other in Australia, and in a sort of way having it in her possesion gave her a direct link to Kate Middleton! (I don't know if she believed me - but as young girls follow the Royal family in all the magazines I reckon I won a heart!).

The point of this little story is that the set has gone to a good home, rather than be trashed!

As an aside I now know why I have such little hair - It has all gone to Zeeka!

……..Tony Smith

HISTORIC EXHIBITION

"Centenary of the Cinema"

Richard Rennie

In 1995 the Vintage Wireless and Gramophone Club staged a major exhibition to celebrate the 'Centenary of the Cinema'. The club presented the exhibition in a major shopping centre. It ran for a full week and was manned each day by members of the club. Below are a few memorable photos of that exhibition.

The then President, Derwent Brown, (shown above with some of his projectors) was the coordinator of the display. He also constructed the white fence that surrounded the artifacts.

EKCO BAW 98 (1937)

Tony Smith

At a recent Club auction of old English radios one took my eye! It was fitted with what was simply the most unusual dial system I had seen.

The set had large "Thumb-wheel" type knobs for the tuning and volume, and a printed dial scale that incorporated "TV Sound" and "Aircraft" markings, as well as the usual medium wave, short wave and long wave. The wave-change switch had an additional dedicated setting for TV sound, whilst the Aircraft marking on the dial was in the Long wave band.

There was a certain bit of mystery as to why TV sound was incorporated in a radio receiver. One explanation

was that being able to hear the sound of TV could become an incentive for a family to buy a set.

Another explanation was that as TV was extremely expensive in those early days, there was still some entertainment to be had from the sound only. Later information came to hand that this sound was AM on around 47Mcs. (I thought the tuning coils for this looked pretty small!)

OK, but why "Aircraft"? Perhaps, as flying was in it's infancy, listening to early exchanges on flying could also be interesting. As it turned out nearly 80 years later the spot marked Aircraft on the Long wave spectrum on this set is exactly today the AM frequency from Pearce aerodrome giving weather and runway details 24 hours a day. If you have a longwave set, tune in to Pearce!

Firstly readers, here is a challenge! Try looking up these valves in your valve book and see which, if any, you can find.

21OHL
COSSOR
VP2B
MULLARD
TDD2A
MULLARD
QP230 MAZDA

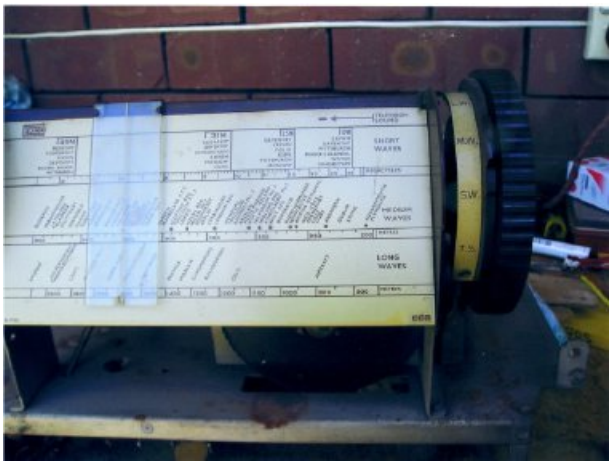
What - No luck!

Fortunately the International Radio Tube Encyclopaedia listed these and thus gave me a start to come to grips with the set. The valves were all 2volt filament battery valves, and the set was complete with an AC unit to provide 135volts HT, and 2 volts to charge a 2volt accumulator used for the filaments.

One could surmise that in 1937 in England there was a gradual change from battery receivers to AC ones, but still using the current 2volt filament valves. Thus for operation from AC the set would use the accumulator for the filaments, and the power-pack for the HT. In areas of no power the set is simply a battery set.
When the set is not in use the power pack would be switched to charge the accumulator. Checking inside the power-pack showed the transformer with the 2volt and Ht connections and the two solid state rectifiers. It later turned

out the the low voltage rectifier had failed but a simple modern diode did the trick!

At this stage there was no source of a circuit diagram, so a bit of guess-work came into play. The filaments of all valves were intact which in itself is a bit of a miracle, considering the age and condition of the set.



Although the tuning system incorporated a three section tuning capacitor, the set did not have the usual RF section. The first reaction to this was that as the IF frequency was set at 175 Kcs the front end would possibly use two of the capacitor sections in a double tuning section, (known as "Double-spot Image Suppression"),

to minimise the possibility of "Imaging"' along the dial, due to the low IF frequency.

So - The front end consisted of a triode oscillator (21OHL) feeding into a VP2B pentode, acting as a converter, which in turn fed the IF amplifier, another VP2B. The detector-audio stage was the TDD2A, it being a conventional duo-diode and audio triode.
Then came something interesting !

The output valve was the QP230, it being a pair of pentodes in the one envelope! It was fed by a pushpull input audio tranformer, and with a pushpull output transformer. I had never seen anything like this before and will refer to it later on. The loudspeaker fitted was a 10" elliptical one in perfect condition, with no moth-holes and a very large magnet.

Where to start?
In the past I have never been one to automatically replace capacitors unless they are faulty. However - a glance under the chassis changed my mind quick-smart!

There were several large capacitors oozing wax and tar and looking very sad. Careful scraping off the offending wax helped to reveal their values and so these were replaced at once. Those that looked OK were left as is.

Final restored radio

With no circuit to assist there was nothing else to do but to try out the set.

Using a 2 volt kit from the HRSA, and a workshop HT pack, the time came to turn on. Would you believe that at once there were signals on all bands. The volume and reproduction from the set were phenominal thanks to the push-pull output stage and the 10 inch elliptical speaker.

What do the Yanks say - If it ain't broke, don't fix it! There were thoughts of checking the alignment, but the performance on shortwave said to me - leave me alone! Having the set going it was now worthwhile to tackle the cabinet.

The end result is a spectacular example of radio just before WWII.

……...Tony

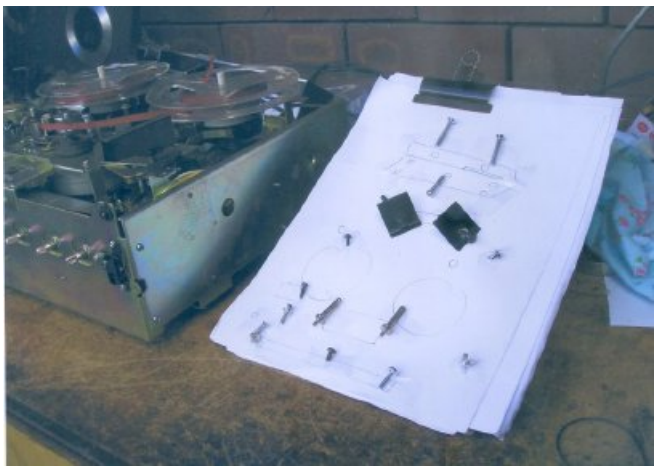
TECHNICAL TIPS

Tony Smith

Are you dismantling something new or complicated?
Here are some do's and don'ts.

DON'T trust to memory - note everything.

DON'T ever put nuts, bolts or screws on the bench, even if it is a simple operation. You may have to answer the phone or go to another job - One can easily forget where items go or, coming back one bump can mix things up.



Instead, always use small containers as you work (takeaway food containers are a good choice). Mark each container if the job is complicated.

DO a rough sketch of the section you are working on. A clip board is useful here. As each nut, screw or bolt comes off attach them onto the sketch in their right position with sticky tape.

If the dismantling has to be done in a sequence write down each step in the correct order with the appropriate parts attached.
All this is very important if for example one has to leave off half way, or come back to the job days later.

Do all this and then it is a "piece of cake" to re-assemble! ……..Tony.

WARNING

AS WITH ANY SECOND-HAND ELECTRICAL APPLIANCE **OLD VALVE RADIOS** SHOULD BE INSPECTED, CHECKED FOR DAMAGE AND ELECTRICALLY TESTED BY A COMPETENT, QUALIFIED PERSON BEFORE BEING PLACED INTO SERVICE.

SOME COMPONENTS IN OLD VALVE RADIOS DETERIORATE WITH AGE AND CAN BECOME DANGEROUS. THE POWER PLUG SHOULD BE CHECKED TO ENSURE IT IS WIRED CORRECTLY AND THE CABLE INSULATION INSPECTED FOR DAMAGE.

THE FACTORY FITTED 2 WIRE POWER CABLE FITTED TO MOST OLD RADIOS DOES NOT MEET MODERN SAFETY STANDARDS AND SHOULD BE REPLACED WITH MODERN THREE WIRE CABLE THAT CONTAINS A PROPERLY TERMINATED EARTH WIRE.

HIGH VOLTAGE ELECTROLYTIC CAPACITORS USED IN THE RADIO CAN BECOME ELECTRICALLY LEAKY WITH AGE, MAY OVERHEAT AND CAN EXPLODE VIOLENTLY. SUCH LEAKAGE CAN ALSO CAUSE THE POWER TRANSFORMER TO OVERHEAT AND SET FIRE TO THE RADIO.

PAPER CAPACITORS USED IN THE RADIO ALSO ARE PONE TO ELECTRICAL LEAKAGE, RESULTING IN OVERHEATING. HIGH VOLTAGES USED IN THE RADIO REPRESENT AN EXTREME SHOCK HAZARD AND CAN KILL.

DO NOT ATTEMPT TO DISMANTLE OR WORK ON THE OLD RADIO WHILE IT IS CONNECTED TO THE POWER MAINS. IT SHOULD BE NOTED THAT SOME RADIOS ARE INTENDED TO OPERATED ON LOW VOLTAGE, e.g. 32 VOLTS DC.

SOME OTHERS MAY BE AC/DC SETS WHICH ARE CONSIDERED DANGEROUS BECAUSE THEY DO NOT HAVE A POWER TRANSFORMER AND ONE WIRE OF THE MAINS CABLE IS DIRECTLY CONNECTED TO THE CHASSIS. IF THE CABLE IS INCORRECTLY WIRED THE EXPOSED CHASSIS WILL BECOME LIVE WHICH REPRESENTS AN EXTREME SHOCK HAZARD.

OLD VALVE RADIOS ARE A FIRE HAZARD AND SHOULD NOT BE LEFT TURNED ON WHEN SOMEONE IS NOT PRESENT.

NEVER LIFT AN OLD BAKELITE CASED RADIO BY THE TOP. COUNTLESS NUMBERS OF CABINETS HAVE BEEN DAMAGED BY DOING SO. ALWAYS LIFT USING TWO HANDS AROUND THE SIDES AND BASE.

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

WANTED

Acetate records

'Acetate records' are aluminium discs coated with a thin layer of

Cellulose acetate.

They were used for one-off recordings by radio stations and private individual.

Contact Richard

Ph 9330 1636

email rsrennie@lightandsound.net.au

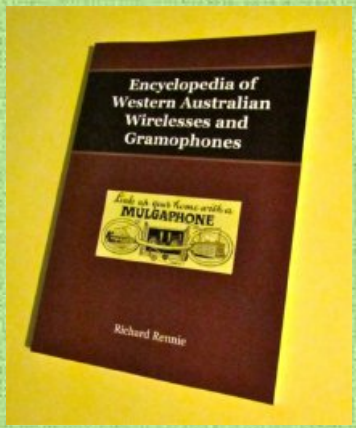
Check out our Club Website!

VWGC.ORG.AU

The Welcome Page shown below provides an introduction to the Club—its scope and purpose, objectives and meetings schedule.

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 ably managed by member Reg Gauci So check it out and keep up to date!

ENCYCLOPAEDIA OF WESTERN AUSTRALIAN WIRELESSES AND GRAMOPHONES



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:
Richard Rennie 9330 1636

WANTED TO BUY

BTH - BBC headphones, same as in photo. Working or not. Even a broken set would do.
Richard Rennie 933011636
(rennie@lightandsound.net.au)

WANTED

One 6 inch electrodynamic speaker.
Contact Fred Franklin, 12 Dulverton Ct,
Karama, Darwin, NT 0812.
Phone 0428 883 195.

WANTED FOR RESEARCH PROJECT

Does anyone have in their collection a 10 inch 78 rpm record with a Gaumont Studio label stuck over the original label, like that shown below.
The record may be by Zonophone or Victor (HMV) from circa 1910. I would be interested in seeing what is written on the over-pasted label. A scan would be appreciated.
Richard Rennie Ph 9330 1636 or email rsrennie@lightandsound.net.au