



Next Meeting Friday 7th June 7.30pm

--No Meeting at Clubrooms--

Next club meeting will be a tour of the TAA Museum
7 York Street, Airport West, commencing at 7.30pm.

This will be at no cost to current financial members of the club.

Friends and family may attend by donation of \$5 to WANSARC, that will be passed on to the TAA Museum.

Prior bookings must have been made, via email sent by club Secretary

**WANSARC came THIRD
in the recent 2013 John Moyle Field Day
in the category of
All mode /Six hour / Multiple operator, with 197 points**

*Not bad... for only four operators, on only two radios, for four hours
Working just on 40 meters HF,
with a non rotatable wire inverted "V" antenna,
and on VHF/UHF - 2 meters / 70cm and 23cm with tri-band Verticals,
all erected just seven meters above ground level...*

WINTER FIELD DAY

The Winter Field Day will be held over the weekend of 22/23 June.

Check the rules at <http://www.wia.org.au/members/contests/vhfuhf/>

Last Club Meeting	2
Around the Shack	4
BBQ Academy Class	5
How Is Chilli Pepper Heat Measured?	8
Radio Enthusiasts Pay Tribute to Veterans	9
For Sale	9
So what exactly are VU Meters used for...?	10
WANSARC Club Profile	10

Last Club Meeting

Last meeting at the suggestion of Ken VK3YXC, had members bring in some old equipment and give a short talk on its history. Items shown were quite varied and some interesting comments to go with them. Don VK3HDX supplied a door prize, supplied by Belkin, being a 240v surge protector, which was won by Graeme VK3NE, out of 16 tickets, the odds are better than Tattsлото. Don said members could expect more door prizes in future, which are only going to improve, so make an effort to attend meetings!!! Don has also been working 10 meters DX of late, making contacts with countries on low power while experimenting with antennas. After discussions it was voted that the new starting time of 8pm for the weekly Tuesday night Net remain and those present agreed.

15kV Vacuum Relay,
Rob VK3VO ↓

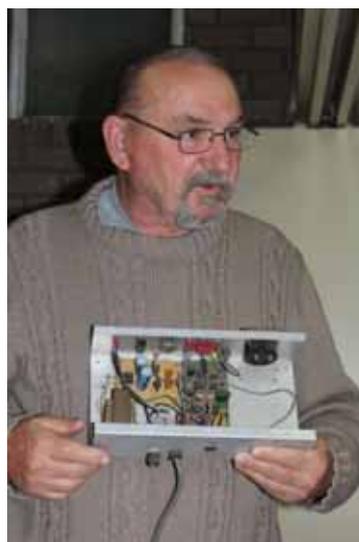
4 amp CB Power Supply,
Johnno VK3FMPB ↓

FT 290R Mk1, bought 13/6/1984,
for \$399 Don VK3HDX ↓ Graeme with his prize ↓



↑ Graeme's portable broadcast transistor radio, bought 1959 for £36 ↑

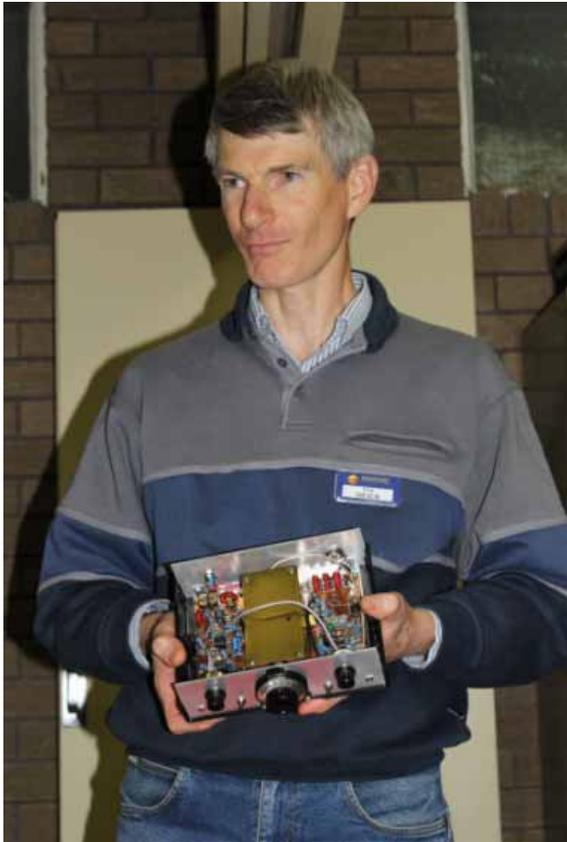
↑ Another radio of Graeme, issued by the ship to Antarctica ↑



↑ Raspberry Pi Microcontroller, both Bob 3VO & Guy VK3GUY

RTTY decoder and Grid Dip Oscillator, Mick VK3AY

The Raspberry Pi has really taken off worldwide and can do an amazing array of things, take a look at www.raspberrypi.org. The Raspberry Pi is a credit-card-sized single-board computer developed in the UK by the Raspberry Pi Foundation with the intention of promoting the teaching of basic computer science in schools. The Raspberry Pi has a Broadcom BCM2835 system on a chip (SoC), which includes an ARM1176JZF-S 700 MHz processor. The Foundation provides Debian and Arch Linux ARM distributions for download. Also planned are tools for supporting Python as the main programming language, with support for BBC BASIC, (via the RISC OS image or the "Brandy Basic" clone for Linux) and Perl. Costs about \$40, see the May edition of Silicon Chip Magazine.



↑ Greg speaks of his fun with CW QRP

Also giving a talk on the good old days was Mark VK3PI, who told of Foxhunting days.

Mark had a yellow Ford Escort that had a hole in the centre of the roof that allowed a three element beam to be rotated about while searching for the 'fox'. The 'fox' took many guises over the years, such as hidden inside a pipe making it quite directional, inside Santa Clause's sack walking down Lygon Street and even inside a handbag of a woman dressed as a "working girl" walking down the street...

One ham after getting RF signals near her, finally plucked up the courage to walk up to her and ask "...are you the fox?" To which she said "yes."

One time Mark and few hams were stopped in a quiet court at night all running about with DF antennae, looking for the nearby fox.

A lady peered through her blinds at all the activity in the darkness and phoned 000, thinking someone was planting bombs, or something nasty.

Within minutes Mark said you could hear the approaching sirens and after a chat with the emergency personnel they were invited back to the station to explain the setup to interested police. Mark even had the front passenger seat removed and racks installed to house all the radio gear to track the fox.

A write up can be found in WANSARC News edition October 2002 on page 3.

Mick VK3CH bought along an old 1952 Army Test Meter that has been in the family for years, also a copy of the 1979 P&T Amateur Radio Operators Handbook, which was a very compact concise guide for its day. Another item from 1992 when Mick was in China was a Megger, bought for about \$5, the guy in the shop did not even know what it did! Not speaking Chinese I could not ask him any questions of it either... but upon getting back to VK it was found to work well, a real bargain.

Meter face close ups ↓



Mick still has the original Heathkit "Cantenna" 1k Watt 50 Ω dummy load that my father made in 1969. Mick replaced the cooking oil with high grade High Tension Circuit Breaker oil, this oil has cancer causing risk PCB's, so that 'show and tell' stayed at home.

At nights end it was agreed that another night of bringing some "amateur radio nostalgic possessions" be done.

Many said they used to have some gear that they had sold, or given away years ago, thinking they would never miss it, but the night brought back memories to many, as the years pass its only then sometimes you realize that the old stuff performed just as good, was actually repairable and usually less complicated to 'drive' on air than the modern stuff.

Thanks to those that took the time to drag some gear in and give an impromptu chat.

The new club tea / coffee urn works well also.

~Mick VK3CH

Around the Shack

WEEKLY VK3AWS CLUB NET NEW 8 PM TIMESLOT

The club Net each Tuesday night has been operating with a new trial start time of 8pm. Recently Don VK3HDX has been rebroadcasting the Net (*as a trial, subject to changes*) on HF, 80 meters on 3.647 LSB and 28.470 USB received 9+ all over town. The new starting time of 8pm has now been formally adopted.

WANSARC NET TUESDAY NIGHT

Note the New Club Net Starting Time of

8.00 PM

**146.450 MHz FM
NET CONTROL STATION
VK3AWS**

Join the Net, Keep up to date with news from club and members

THE DEAF ITALIAN BOOKKEEPER

A Mafia Godfather finds out that his bookkeeper, Guido, has cheated him out of \$10,000,000.00.

His bookkeeper is deaf. That was the reason he got the job in the first place. It was assumed that Guido would hear nothing and would therefore never have to testify in court.

When the Godfather goes to confront Guido about the missing \$10 million, he takes along his lawyer, who knows sign language. The Godfather tells the lawyer, "Ask him where the money is."

The lawyer, using sign language, asks Guido, "Where's the money?" Guido signs back, "I don't know what you are talking about." The lawyer tells the Godfather, "He says he doesn't know what you are talking about."

The Godfather pulls out a pistol, puts it to Guido's head and says, "Ask him again or I'll kill him!"

The lawyer signs to Guido, "He'll kill you if you don't tell him." Guido trembles and signs back, "OK! You win! The money is in a brown briefcase, buried behind the shed at my cousin Bruno's house.."

The Godfather asks the lawyer, "What did he say?"

The lawyer replies, "He says screw you, you don't have the guts to pull the trigger."

VK3RTV NEWS

I have been experimenting with small Yagi designs to replace the existing transmit arrays which are a bit on the unhealthy side. The current design uses gamma matching together with a mast head antenna tuner to match 8 yagis to 50 ohms.

This did result in a very good match, but not as broadband as I would like. I have changed to a folded dipole and also significantly increased the element diameter to achieve a more broadband characteristic. The driven element is an aluminium strip of 12mm by 3mm thick.

The antenna is four elements based on the well known long yagi design program. I intend to build an array of four antenna, two pointing towards the CBD and the other two facing at an angle of 45 degrees each way. There are no stations along the line of the ranges so this arrangement should work out well. We will then reactivate the higher power transmitter.

We have one active DVB-S station in the Yarra Valley plus some receive only stations. A 6 dB coupler with a spot beam can service these amateurs.

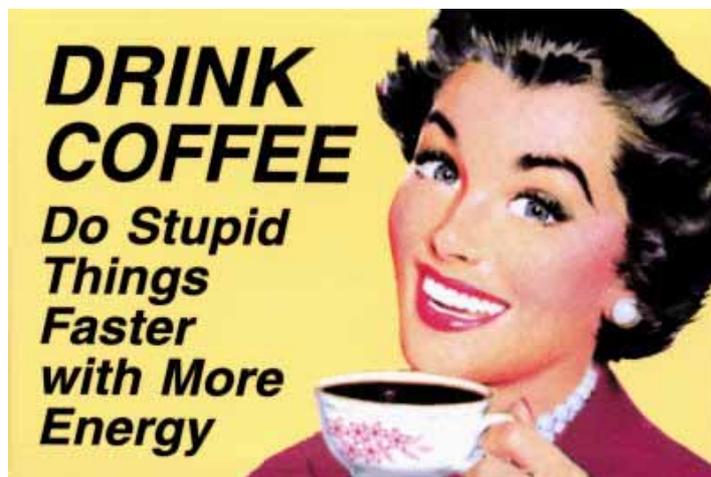
I have also new antennas for VK3RTV1 and a 3 dB coupler and antenna to increase the access to VK3RTV2.

~ Regards Peter VK3BFG

6 METER ACTIVITY IN VK7

Due to the analogue TV switch off in Tasmania they removed the CTCSS tone from the 6m repeater and there has been a resurgence of 6m activity in Southern VK7. *~WIA*

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As soon as you sit down to a cup of hot coffee, your boss will ask you to do something which will last until the coffee is cold.

~Author Unknown

Sleep is a symptom of caffeine deprivation.

~Author Unknown

Decaffeinated coffee is kind of like kissing your sister.

~Bob Irwin

Chocolate, men, coffee - some things are better rich.

~Author Unknown

Coffee, the finest organic suspension ever devised.

~Star Trek: Voyager

Petroleum and coffee had no value a few centuries ago.

~Author Unknown

He was my cream, and I was his coffee - And when you poured us together, it was something.

~Josephine Baker

Coffee smells like freshly ground heaven.

~Jessi Lane Adams

Deja Brew: The feeling that you've had this coffee before.

~Author Unknown

I would rather suffer with coffee than be senseless.

~Napoleon Bonaparte

If it wasn't for coffee, I'd have no discernible personality at all.

~David Letterman

Nescafe no es cafe. (Instant coffee is not coffee.)

~Mexican saying

"Coffee: creative lighter fluid."

~Floyd Maxwell

Only Irish coffee provides in a single glass all four essential food groups: alcohol, caffeine, sugar, and fat

~Alex Levine

Did you know...

There are LESS calories in a pot of beer than in a pot of full cream milk...



BBQ Academy Class

Mick decided to improve his skills at smoking, slow smoke cooking all sorts of meats that is. Thanks to Don VK3HDX, I was put on to Bob Hart, who is the "Grillmaster" of the BBQ. Having a Weber Smoker BBQ, it was time to see what it can really do.



A copy of the book used in the course was handed to me via Don, so some experimenting prior to the course was done. WANSARC members have sampled both the lamb and pork spare ribs. On a sunny afternoon in suburban Melbourne, Mick and six others took a BBQ class.

Most of all you need to know is in the supplied book "Heat & Smoke", very well written. → The day consisted of doing several recipes from the book, so when you go home you know what to do, as Bob says, there are no strict rules or amounts or procedures, its more what you like.

The only strict rule was timing when cooking delicate items like fish or steak.

If you take the book as a guide you could learn nearly as much as the course, but seeing it happening and being able to ask lots of questions is the key.

Our guide Bob Hart is very well known, has his own radio show and does many talks on BBQ.

While I have owned the book, I was yet to get around to making up all the rubs and sauces.

Now that I have tasted these, I will be doing some "hunt and gather" of ingredients, they are so robust and tasty and so easy to make.

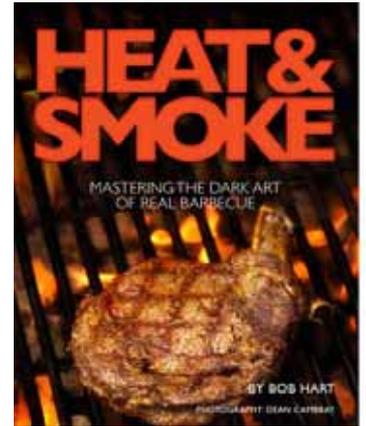
If you want to learn how to BBQ properly at a gourmet level, this course is for you.

To quote the website "...this is not a place at which you will find fiddly recipes, sooky recipes, or 101 ways of grilling silly things on sticks. In the world of real barbecue, there are only a few recipes you will ever need for each main ingredient to make your mark as a master of the grill. And, in time, we will explore all of these. Each technique we outline will have, as you will quickly discover, multiple applications. We will, in time, cover the essential types of barbecue devices, necessary pieces of equipment, rubs, marinades, sauces and anything else that will make our lives easier and more delicious. And we will discuss cuts of meat, which ones work best, and for what. We will cover everything you need to know to make serious barbecue magic."

The day started with a melted cheese with garlic, thyme and red wine added and bread to dip in it.

The taste is wonderful and addictive, like everything we ate that day.

My favourite is the buffalo chicken wings, especially the sauces that go with them, forget TGI Fridays, these rock! Much cheaper too.



Buffalo Chicken Wings cooking ↑

Adding the spicy sauce ↑

Above the cheese cooking for 15 minutes, eating same, scallops with yummy sauce.

← Beer Butt Chicken in the "Big Green Egg BBQ" and after cooking ↓



Salmon cooked on Cedar Wood ↑



A mix of BBQ's were used to showcase their abilities. These were the Weber 'Q', Weber Kettle, The Big Green Egg, The Saffire (a kiln type BBQ), Weber Smokey Mountain, which I have used for a few months now and the Weber Genesis, which I now intend to buy after seeing how good it is.

A Saffire (which is a charcoal fired, ceramic grill and smoker) would be a nice addition to the back yard as well... I'm really tempted...



BBQ Corn Cobs ↑



Corn rolled in Chipotle Mayonnaise and Parmesan



Slow smoked Lamb Ribs, melts in your mouth...

Brushing BBQ sauce on the lamb ribs ↓



Lamb cutlets cooking, after some melted cultured butter with mint pesto ↓



You can BBQ nearly anything and Bob says your whole dinner including dessert should all be done using the BBQ. But the King Dish of the night would have to be the steak, a rib-eye on the bone, weighing around 600g, and ideal for two. A generous rub of spices (1tbs dry mustard, 1tbs sweet paprika, 1tbs dark brown sugar, 1.5tbs garlic powder, 1.5tbs onion powder, 1.5tbs celery salt, 1tbs cayenne pepper, half tsp ground allspice) but you may need more quantity of it once you taste it!!! Bob cooks the steaks with a timer set to three minutes turning right angles to get cross grill marks and then turning them and doing the same to the other side, twelve minutes in all for 'blue' steak. And then at least six minutes time resting the steak prior to carving.



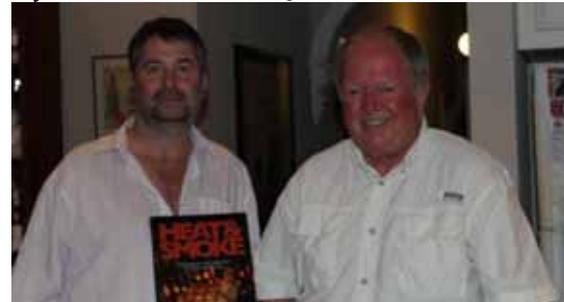
Smothered in spice rub, then cooked on high heat to get the grill marks on, later perfect so soft and tasty steak, soft as butter...

Lamb Ribs, divided up with BBQ sauce ↓



Apples stuffed with Mars Bar, brown sugar, Sultanas, Liqueur Muscat and Cream ↓

If your serious about BBQ food and carnivorous like me, do the course, check out <http://www.australianbarbecueacademy.com>



Mick in the kitchen with Grillmaster Bob Hart ↑

If you don't have time for the course at least consider getting the book, and no you cant borrow mine! Thanks to Don VK3HDX for telling me about the Master class sessions of the Australian Barbecue Academy.

A close up of the Lamb Ribs... feeling hungry yet...?





One danger of doing courses like these is of course it puts ideas in your head, but these are probably some of the better ideas to have... Two years ago only had one BBQ, but now choice of gas 'oven type', kettle gas, coal direct, coal 'smoker' or the new Saffire grill. The new tastes that can be created are as close as the back yard, so looks like I'm going to need more exercise....(hi) But due to the weight of the Saffire, it wont be taken to Bundoora Park, you will all have to come here one day... not enough room in the car for that and all the radio gear as well... !!

~Mick VK3CH

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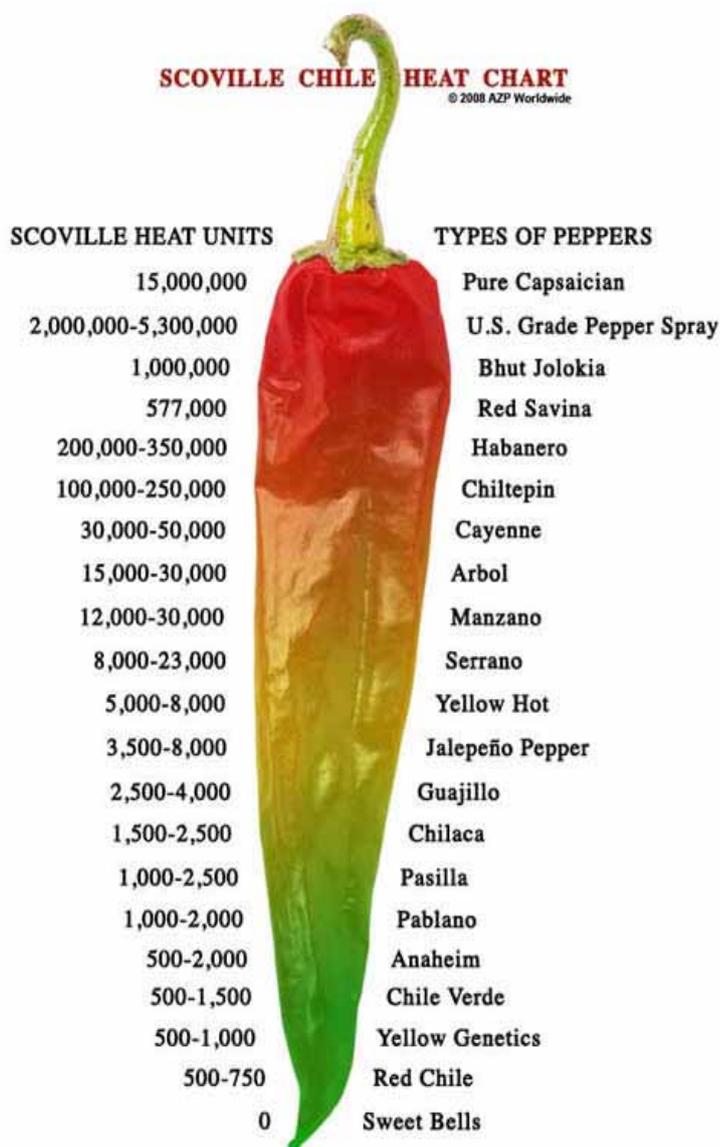
Sidewalk Bubblegum ©1999 Clay Butler

How Is Chilli Pepper Heat Measured?

How do you measure chilli heat? How hot is your pepper? The Scoville Heat Unit Scale (see chart to the right), also referred to as the Scoville Scale, or Scoville Chart, is a long-standing measure of the hotness of chilli peppers. Capsaicin is a chemical compound that stimulates chemical receptor nerve endings in the skin. The number of Scoville heat units (SHU) indicates the amount of capsaicin present in a particular pepper. The scale was developed in 1912 by American chemist Wilbur Scoville, specifically to rate the pungency or heat of peppers. Officially, his method was known as the Scoville Organoleptic Test. Try repeating that 3 times!

Here's the key: With the original Scoville scale method, a solution of a pepper extract is diluted in sugar syrup until the heat is no longer detectable to a group of tasters. The amount of dilution (pepper & sugar syrup) provides a measure on the Scoville Scale. Therefore, a bell pepper or other sweet pepper - which contains no capsaicin - has a Scoville rating of zero, or no detectable heat, even when it's undiluted. On the other end of the spectrum, the hottest chilli, such as habanero and chiltepin peppers, have a rating of 200,000 or higher which indicates their extract has to be diluted 200,000 times before the capsaicin heat is undetectable. The shortfall of the Scoville scale test for peppers is that it relies on human perception, which is certainly subjective.

Today, pepper and spice heat is now measured by a more scientific method known as High Performance Liquid Chromatography or HPLC. A mathematical formula is then applied to weigh peppers by their ability to create a sensation of heat.



This method does not use Scoville Heat Units (SHU) but measures something called ASTA Pungency Units. In this process, one part of capsaicin per million translates to 15 Scoville units. And, this system says that ASTA Pungency Units can be multiplied by 15 to be reported as Scoville units. Yet, this conversion is approximate. Leading spice and pepper experts say there is consensus that the ASTA units results in 20–40% lower heat than the Scoville method provides. Still confused?

Solution: Skip the science and math and perform your own tests, by enjoying what chilli have to offer - titillating taste and that heat!

Speaking of Chilli, Mick has a collection of "Death Sauces" that are used as a spice in cooking now and then...

These go very well with marinated chicken wings or pork spare ribs. There are many variations to be found on the internet, many of them poor copies... but its all in your own expectations...

You know your onto a good thing when they make you agree to a waiver before they will supply the product to you...!

An actual disclaimer is here, others exist with similar wording...

Product Disclaimer for 10+ Hot Sauces

In exchange for the purchase of 10+ Hot Sauces, certain conditions and promises are required. They are as follows: Due to the extremely hot nature of these products (300,000-1,000,000 Scoville units), you agree that the hot sauce shall only be used as a food additive. 10+ hot sauce is to be used at your own risk. You disclaim, release, and relinquish any and all claims, actions, and/or lawsuits that you, or any of your dependents, heirs, or family members may have relating to any damage and/or injury that results, or is alleged to have resulted, from use, consumption, ingestion and/or contact of any bodily part or organ of or from the 10+ hot sauce. You will be required to agree to this at checkout time, should you decide to purchase a 10+ hot sauce.



Mick has long posted his copy off (they required it in hand writing) to my supplier in Perth of the best hot sauces I have ever tasted. Also to supply proof your at least 18 years age before they sell the "hardcore hot stuff" to you. Check out <http://chilliandspice.com.au>



RADIO REMEMBRANCE – Tablelands Radio Group members, from left, Dave Edmunds, Bill Lochridge, Mike Patterson, Dennis Bauer, Ray Hudson and Glenys Hudson took part in the link-up.

Radio enthusiasts pay tribute to veterans

DEFENCE Force members were remembered in an extra way on Anzac Day with the Australian Amateur Radio operators holding their third radio salute.

Using high frequency radio transceivers on old radio modes such as Amplitude Modulation and Interrupted Continuous Wave (Morse code), members of groups across the nation appreciated the difficulties experienced by those who used it during times of war.

This year the group decided to use an igloo that

was used for an entertainment venue for Australian Service personnel recovering at the Australian General Hospital at Rocky Creek.

The equipment was set up on the afternoon of Anzac Day and it wasn't long before the group was in contact with other amateur radio stations who were taking part in the nationwide event.

Operators from Cooktown to Rockhampton and west to Charters Towers and Mt Surprise were in contact.

The Townsville Amateur

Radio Club acted as net co-ordinator because of its central location and operation from a WWII command bunker at West End.

Ex *HMAS Diamantina* was also on air and used Morse code and contact was made with Col Whelan, the operator at the Queensland Maritime Museum.

In Victoria, Terry Murphy was operating from ex *HMAS Cassiemaine* and John Karr operated from Balcombe Army camp memorial gates.

Amateur radio operators in Turkey set up similar stations near Gallipoli.

A bit of free advertising of our VK, AM and CW on Anzac Day event, in "The Senior" Newspaper.

The second last paragraph mentions Johnno VK3FMPB operating at Balcombe Army Camp.

Hope it gives it and amateur radio more publicity as this newspaper goes all around Australia. ~Mike vk4mik

FOR SALE

ROTATOR LIGHT DUTY – FOR SALE

Unsure of condition. Was purchased from Bob VK3EL deceased estate at club auction.

Includes Controller, Rotator and Cable.

\$40.00



ROTATOR HEAVY DUTY – FOR SALE

Unsure of condition. Was purchased from Bob VK3EL deceased estate at club auction.

Includes Controller, Rotator and Cable.

\$60.00



PURCHASE BOTH AND PAY ONLY \$90.00

Contact Frank Bonotto VK3ZO

vk3zo@aanet.com.au

0418888038

94785679

Reservoir

So what exactly are VU Meters used for...?

A Volume Unit (VU) meter is a device displaying a representation of the signal level in audio equipment. Consumer audio equipment often features VU meters, both for utilitarian purposes (e.g. in recording equipment) and for aesthetics (in playback devices).

The original VU meter is a passive electromechanical device, namely a 200µA DC movement ammeter fed from a full wave copper-oxide rectifier mounted within the meter case. The mass of the needle causes a relatively slow response, which in effect integrates the signal, with a rise time of 300ms. 0VU is equal to +4 dBu, or 1.228 volts RMS across a 600 ohm load.

0VU is often referred to as "0dB". The meter was designed not to measure the signal, but to let users aim the signal level to a target level of 0 VU (sometimes labelled 100%), so it is not important that the device is non-linear and imprecise for low levels.

In effect, the scale ranges from -20 VU to +3 VU, with -3 VU right in the middle. Purely electronic devices may emulate the response of the needle; they are VU-meters inasmuch as they respect the standard.

The VU-meter (intentionally) "slows" measurement, averaging out peaks and troughs of short duration, and reflects more the perceived loudness of the material than the more modern and initially more expensive PPM meters.

For this reason many audio practitioners prefer it to its alternatives, though the meter indication does not reflect some of the key features of the signal, most notably its peak level, which in many cases, must not pass a defined limit.

In the broadcast industry, loudness monitoring was standardized only recently.

VK3CH DIGITAL ATV - VU METER ADDITION

Some of the new ATV digital units being built around town, notably by EMDRC members sport fancy and functional VU sound level meters. Feeling 'left out', Mick put a meter to the portable ATV unit. Micks two other ATV units may get VU meters, time will tell...



Thanks to Jack VK3WWW & Damien VK3KQ for advice and internet link to TA7318P VU mini level driver board. ~Mick VK3CH

WANSARC VK3AWS

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WANSARC CLUB PROFILE

History

The Western and Northern Suburbs Amateur Radio Club (**WANSARC**) was first formed in 1969 and since then has served the needs and interests of amateur radio operators, short wave listeners and those interested in hobby radio and electronics. The club is not gender specific, having both female and male members. Members come from all walks of life with a mix of experience, young and mature, novice and technical. The most important aspect of the club is the willingness of all members to share their knowledge for the benefit of others. Members mainly reside in the west and north of Melbourne; however membership is encouraged from all interested. **WANSARC** is an affiliated club of **The Wireless Institute of Australia**.

Meetings

Meetings held at the **Ern Rose Memorial Pavilion, SEAVER GROVE, RESERVOIR** (Melway Map 18 D5) on the **1st Friday of each month** (excluding January) commencing at **7.30pm local time**. Talk in on **146.450MHz FM**—call club station **VK3AWS**.

Benefits

Free technology and related presentations, sponsored construction activities, discounted (and sometimes free) equipment, network of likeminded radio and electronics enthusiasts, excellent club facilities and environment plus an informative monthly newsletter for members to post articles, news, classifieds for all radio, test equipment, etc, featuring Amateur Radio news from WANSARC, ARV, WIA, ACMA, Melbourne Clubs, VK and Worldwide.

Club Nets

146.450MHz FM each Tuesday evening commencing 7.30pm local time. Net Control Station - **VK3AWS**

Website: www.wansarc.org.au

Postal: **WANSARC PO Box 336 RESERVOIR 3073**

A proud tradition of supporting hobby radio and electronics enthusiasts since 1969

All editors' comments and other opinions in submitted articles may not always represent the opinions of the committee or the members of **WANSARC**, but are published in the spirit in which they were submitted; in any case anything stated is to promote interest and active discussion on club activities and the promotion of Amateur Radio in general. Contributions to **WANSARC** are always welcome from any part of the world. Email attachments of Word™, Plain Text, Excel™, PDF™ and JPG are all acceptable. You can either post material to the Post Office Box address at the top of this page, or email your submission to the editor direct at vk3ch@wia.org.au

Email attachments not to exceed 5 Mb in file size. Attachments of (or thought to be) executable code or virulently affected emails will not be opened.

Other persons or radio clubs may edit or copy out such as they like from the magazine but a reference to **WANSARC** is appreciated, except copyrighted (©) material or as otherwise indicated. Other articles that are credited to outside sources should be asked for their permission if they are used.

While we strive to be accurate, no responsibility taken for errors, omissions, or other perceived deficiencies, in respect of information contained in technical or other articles.

Any dates, times and locations given for upcoming events should always be checked with a reliable source closer to the event – coming up on the **WANSARC Tuesday evening NET** on **146.450 MHz** starting at **07:30 pm Local** is recommended to discuss and confirm information and any dates.

The club website has current information on planned events and scheduled meeting dates. **WANSARC News** written with Word™ 2007, published with Adobe Acrobat™ 10.

You can get the WIA News sent to your inbox each week by simply clicking a link and entering your email address found at www.wia.org.au The links for either text email or MP3 voice files are there as well as Podcasts and Twitter. This service is FREE.