Sony Resurrection

Microphone Stand

IDC Connector Woes

And More

WIA Affiliated Club

Cover photo, Assorted displays, Warning to royalists, this Photo has been digitally edited. (If you have any good photos, please send them in)

Contents.

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Event Queue

March:

1st	7:30	Prac night
2 & 3$^{rd.}$		ARRL DX Phone Contest - WIA
15$^{th.}$	8:00	General Meeting
16 - 17$^{th.}$		John Moyle Contest – courtesy WIA
17$^{th.}$		St. Patricks day, GB3SPD will be on air from the Emerald Isle – via WIA

April:

5th	7:30	Prac night
19th	8:00	General Meeting

Club run events are only possible with the involvement of ALL members.

Without volunteers to coordinate and participate in club events the club will fail to prosper

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President's Report March 2024

Welcome to the March edition of Gateway.   Normally in the march Edition the president spends some time writing about how next month will be the Club's AGM and how members should be thinking about running for a committee position. Well, this month is no exception. So if you do want your Club to involve your fellow members in new and exciting projects, certainly contemplate jointing the committee for the 2024-2025 term.

As members of a long standing club, it easy to be complacent. We have been around the hobby for a long time and there is a certain amount of 'been there, done that' which influences our participation.   The problem is that it also reduces our participation and we retreat to a comfortable position where we can see what's going on, but don't want to get too close. Anyone who finds themselves doing that needs to consciously step out of the comfort zone and get involved. It doesn't matter if you have been on the Ferris wheel several times before; it's still a pretty good ride.

I'd like to see some technical challenges in the Club that requires collaboration with 2-3 others to produce something a little new. Perhaps something they would not attempt on their own. I'd like to see a couple of such teams working on the same challenge over 3-4 months. Then we get to compare what the teams have to offer. Once the first step is taken, it becomes fun and everybody learns from the experience.

Since I have been a GGREC member I have seen the works of individuals that have been amazing. I have also observed that the most fun has come from the times when many of us worked together at a task. This is how we built the Club shack that we could not otherwise have afforded. Let's kick the concept around and see what we can come up with. I have a few ideas, but first, I'd like to hear from those who are reading this.

Yes this Friday night there will be a meeting at the Guide Hall.   We thought we'd do a little work on how DMR hotspots come together. I know mine needs work.   Something else I'd like to explore a little is infrared and how the ubiquitous TV remote works. It is a bit of magic that we all take for granted, without knowing what makes it tick. So ingrained is the use of an infrared remote to control on TV's and PVR's, that around half of drivers in car parks still think they have to point their key ring remote at the car in order to lock the doors.

See you there.

From The Editor

This month I've been having fun with the innards from an old Sony terminal/computer, (Sony called them a 'Videotex Workstation') this all kind of brings back a few memories, to the point that I dug up an old home movie of my trip to Brisbane to attend the World Expo, back in1988, (that I have dutifully uploaded to YouTube for anyone interested in this event.) This event being the whole reason that these Sony items ever existed in Australia, brought in especially for the world expo back then. To use the Sony's in AU you needed a 240 to 120V step down transformer. Like most CRT based systems, especially the colour ones, they are kind of power hungry, so I (maybe foolishly) ditched them several years back. Anyway, watching the old video was a good distraction from the garbage they call TV these days. I used to think all the shows featuring gun play was the bottom, but now the bottom (to me) is all these so called reality shows where they spend all their time trying to stick a knife into someone's back. Thankfully I can just turn it off and pick up an Amateur radio, of get onto my PC and start working on the next magazine article etc. Pity my wife does not share those interests…

Actually I'm kind of surprised I can do any of this, with that heat wave that has run through Victoria, I mean, cancelling the Moomba procession, apparently never in 75 years, speaks a bit to how many perceived it. My surprise being that we didn't lose power, the government and opposition have let out quite a bit of FUD about the transition to green power and that the power network is getting very fragile/unstable because of all the rooftop solar "It's not base load", being their cry (whatever base load is), so surprise surprise, the lights stayed on when I assume everyone was diving for their air conditioner controls.

In a way it was a bit disappointing as nothing seems to have happened. Especially with the push to ditch gas and have everything electric. I have battery backup and the odd UPS to keep me going, however no UPS will keep an electric cooker going! Luckily we are still on gas for hot water and cooking, although there is always the BBQ out back as a backup. You can go smelly etc. but you've got to eat and sandwiches only go so far.

We do have solar, however it's dependant on a connection to the grid, like most systems we cannot run stand alone. Batteries seem to be the next big thing, although we don't need that current recall of LG and a few other battery banks, as they love to self-combust with no warnings. Have a look on the internet, especially in China where car fires seem to be way too prevalent. Have a look at that pic at the top, a neighbour's car only a meter of two from our gas meter and fuse box. Now imagine that bolted to the side of your house, or in your garage.

No this was not actually an EV fire (it's the closest we've been to one, very scary even so), no the 'twit' next door cracked it and torched it at 3am! (an about to be repo'd job ??)

Paul VK3TGX

NEWs FROM THE TREASURY

from Klaus VK3IU

Treasurer News

Membership fees coming due

Its March again the last month before our AGM. This should serve as a reminder to all members that your membership fees are due by the AGM.

Preferred way of payment should be by electronic funds transfer (EFT), please state clearly your call sign or for SWLs you full name. If you are paying for more than one member ensure to state both callsigns or names clearly. **An email info to the treasurer is not needed and causes only additional work.**

The Treasurer will confirm your membership payments withing 7 days of receipt. If you have not received the payment confirmation after 7 days only then contact the treasurer.

	Annual
Pensioner	$40.00
Full	$50.00
Family	$20.00
Junior	$25.00

Current membership fees

Membership payments in cash are only accepted during a General Meeting. Please have the exact amount on hand when paying in cash. The preferred payment method remains by EFT

Make your payments to:

Gippsland Gate Radio & Electronics Club
BSB 633000   Account 146016746

If you decide not to renew your membership then please have the courtesy and let the treasurer know about it.

Thanks to the effort of few selected and committed members in helping with our fund raising efforts at the Bunnings sausage sizzle, we are able to keep the membership fees unchanged again.

Please consider to volunteer in the future to support your club.

New Treasurer is required:

This should serve as a reminder to the membership that by the next AGM I have served three years as Treasurer of the club and are no longer entitled to continue in this function.

**Consider volunteering for this role, don't leave the role open.**
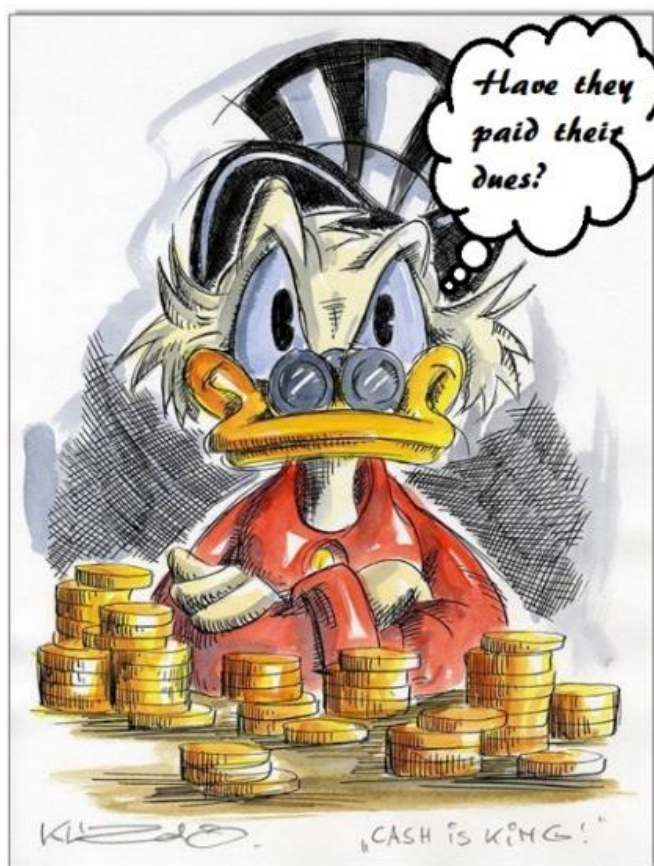
Sony Resurrection

Several years ago I had two of these Sony KTX1350 terminals, I had acquired them from Telstra where I worked, They had a lovely Trinitron CRT and showed excellent results from a PAL composite video source, with the terminal/computer bits mostly ignored. However with the advent of digital TV and the demise of my camcorders, these just sat idle and were eventually disposed of.

Step forward a few years and I start getting bit by the retro computing bug and that decision proved to be a VERY poor one.

Recently I was going through my stashes of bits and pieces and I came across my box of spare parts for these, a processor board and a few others. So I started wondering if I could get it to work and connect it to a modern LCD panel.
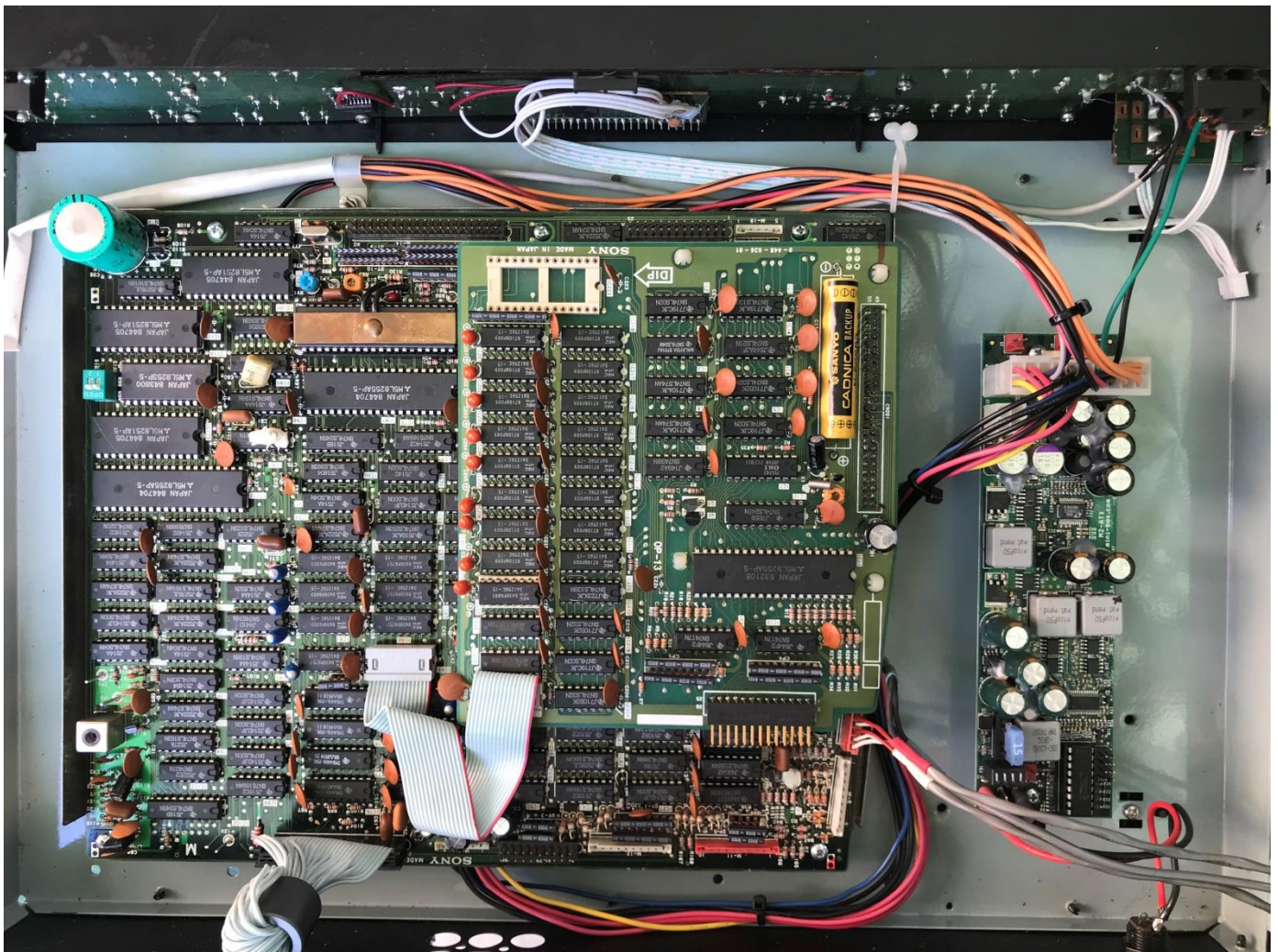
I had several old chassis that were about to go to the tip, so I selected one and dropped the processor board into it and hooked up a small power converter. Surprise surprise, one of the

board's connectors started issuing what looks like RGB video. Probably my next step is to try and find something that can display it. Unfortunately many screens will balk at it as it's in the old composite video format of 15K.6Hz horizontal scan, and 50/60 Hz vertical. So maybe I can use an IBM PC CGA style monitor. The other route is to convert from RGB to full composite video. I had several Commodore Amiga RGB to composite converters, hopefully I can find one.

However this is the least of my challenges, the main one is a keyboard... Of course it was a custom Sony job that appears to work on a similar scheme to an old PC keyboard, however the connector and pinouts are different – so it looks like I have quite a task ahead of me.

If nothing else, I have spent nothing on it, I can just step back and let it go to the recyclers.

A PC keyboard is quite an odd device, when you hit a key it does not send that character to the computer – that would have been way to obvious, no it sends 'scan codes', with no reference as to what's on that key, that's why when setting up a PC/Windows/Linux computer you have to tell the OS what keyboard you are using, it, and the keyboard has no idea. If you plug in a Dvorak, or French keyboard, you get the wrong characters. Then IBM brought out the PC AT, and redid the keyboard protocol…. So did Sony kind of copy one of these – I hope so.

The board on the right side is a 12V Car PC power supply, it enables the whole show to run from a 12V power supply, actually they are good up to 24.00V (as in not above, so no truck use) so a 19V laptop supply can be used, the other option was a mini PC supply with a loud fan, so you can probably guess why I went the 12V route.

You can probably just make out the daughter board on top of the main board, this gives it extra ram, a real time clock, and most importantly a floppy disk interface meaning you can boot it into MSDOS and use it as a computer, although it is not IBM PC compatible. Back in the day I had a DOS only version of Borland's Turbo Pascal running on one of these, unfortunately I had no video drivers, so I'd have to write my own to do anything more than display straight text. Back then I and another work mate was thinking 'video title generator', in those days all video editing was done via video tape recorders, adding text on top of live video was mostly a quite expensive option, a few seconds of video shots of a 'story board' was the best most had access to, basically the same as film camera's. Have a look at old black and white movies, nothing electronic of computer in any of the opening titles or credits at the end.

To me one of the biggest problems was these terminals only output RGB, not composite video that a video recorder could handle. I acquired a few encoders, but never went any further as I was sure there would be quite a bit of degradation going from composite to RGB then back again. The decoder in the KTX-1350, like all Sony gear was excellent, however the little Commodore 'dongles' did not instil any confidence in me. If you wanted great video from your Amiga computer you used RGB, the converters were for the peasants who only had a TV, so hence my assumption that they'd be just designed/built to that much lesser tear of quality.

When researching for the article I came across pictures of a different variant of these that did have composite out. To pinch a line from 'Get Smart', "Darn, missed it by that much."

 So what do I hope to achieve, well these, without the disk option, were either a Teletext or 80 column video terminal, so just something different to play with. I don't have a 'real' terminal.

Recently I discovered a group of people who are having fun with the old Prestel (Teletext) system that used to exist in the UK, or Telstar via https://glasstty.com/ as it now has come to

be known as, maybe because the 'Prestel' name has been grabbed by a few companies, and googling it will just get you to a book publisher etc. Anyway time for some 'terminal' fun...

This does seem like a blast from the past. I'll have to look further

Maybe I can get the old Sony boards talking to this.....

It would be nice to play with the software https://github.com/johnnewcombe/telstar-2/wiki and to generate my own home site, but I'd need to learn about Docker images etc., all a bit foreign to me. They also have way friendlier terminal software you can run on a regular PC.

World Expo 88   https://youtu.be/tVhCoKBcBW0 (My home vid).

The history of these terminals (in Australia) dates back to 'World Expo 88' a special event run in Brisbane back in 1988, it ran for many months and had exhibitors from all over the world.

Telstra, or rather 'Telecom Australia' as it was known back then, took on the task of setting up a pile of information terminals/kiosks for visitors to find their way around the site. Above is one such site, there were several others scattered around expo-88. These cabinets housed the Sony KTX-1350N computers, a Sony LDP-1500P Laser disk player, a Rodime 20MB SCSI hard drive, a touch screen adapter, and a Sony HiFi amplifier with of course a set of speakers. The Sony KTX-1350N was never intended for Australia, or for that matter Europe as it was 120V only, so US only?, well that does not explain why it was PAL/NTSC compatible. Back then you'd be really hard pressed to get anything in the US that would accept a PAL signal. Apart from that, the rest of the kit was ok on 240V.

These computers were Sony's take on the Microsoft concept of a 'Multimedia Computer'. Back in the 80's computers could not store or display video, they had nowhere the processing or storage resources for it. That 20MB, as in 20 Megabytes as opposed to 20 Gigabytes often seen in USB memory sticks these days could only store a few minutes of video, not that the I/O on these could pass the data fast enough, as in when was the last time you saw a drive that could dump its entire contents in a minute?

The original concept of multimedia was for the computer to be the controller, with the video and audio coming from something like a laser disk player, with maybe midi also used to generate music via an external synthesizer etc.

Somewhere in my collections, I have a board for an IBM AT PC that could do the same on a PC, unfortunately at about $1500, back then; it's not exactly a consumer friendly item.

The KTX1350 has a composite video input connecter and can mix its own graphics with that and display in on the screen. As in overlay etc, it could not actually 'process' that video

Unfortunately I don't have pics of the mixed video & graphics modes.

After the world expo these terminals just waited for other uses, I know at least one was used in a museum exhibit, as Museums Victoria has one in its vaults, the others ended up in Melbourne been used in tourist 'Visitor Information Terminals', sorry no pictures.

There were a few in the Bourke street mall, and another at Spencer Street, now Southern Cross railway station. Unfortunately some vandals took a liking to them and eventually found that a long heavy wooden pole, used as a battering ram could breach the Lexan face plate and Trinitron CRT to create a right old mess – hence me having a few leftovers as spare parts.

If your curious what's on those disks, have a look at https://youtu.be/aLVemjUNev8 for the Expo disc and https://youtu.be/5xv9YZ_W4vE for the Vic tourism disc. These must have cost a pretty penny to make, as there were never any writable laser discs, so stamping masters, stampers etc. had to be created, just like any other commercial release.

Paul VK3TGX

Microphone Stand

This is how I "Mount" my microphones. I superglue or screw on neodymium magnets to the back of the mic and the front of my PC tower is steel, the mics hold on well. There are 5 FM rigs in the shack and one mic is for my DMR handheld that sits in its charger

The two temperature meters in the middle do different things, the larger one has a long life on a set of batteries and is backlit while the smaller top one is wifi and turns my aircon on and off but needs 3 AAA rechargeable batteries changed every 3-4 weeks

The screen at the top is a LINUX program running on a Raspberry Pi that displays maps, solar data, and other info it is called "HamClock) here is the link

https://www.clearskyinstitute.com/ham/HamClock/

Mark "Pockets" Clohesy, VK3PKT

This is the VK3TGX take on hanging mics.

Above my desk I have a shallow rack, perfect for many mobile sets, normally these come with metal side panels, I have fitted a wooden one, I use particle board, however plywood may be better.
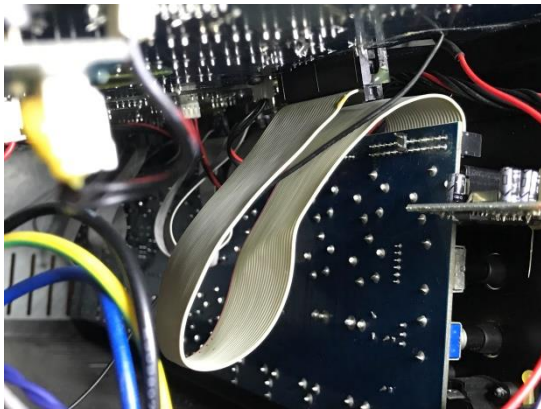
Perfect for attaching all the mic brackets that come with most radio's.

I grew up with cassette tapes and floppy disks, so unlike Mark I avoid magnets wherever I can. I've seen way too many destroyed tapes etc.

Also my shack is a workshop and metal filings always find a magnet.

Paul VK3TGX

IDC Connector Woes

I've been having intermittent audio in my Behringer DX2000 mixer for a while now, unfortunately I've been unable to obtain a circuit diagram for it, not for a lack of trying, bring on the "Right to Repair" movement. Anyway I stumbled onto a YouTube video that said he tracked his woes down to a bad IDC ribbon interconnect between the back panel and the main PCB, maybe his was a touch less intermittent than mine, that never missed a beat on the repair desk.
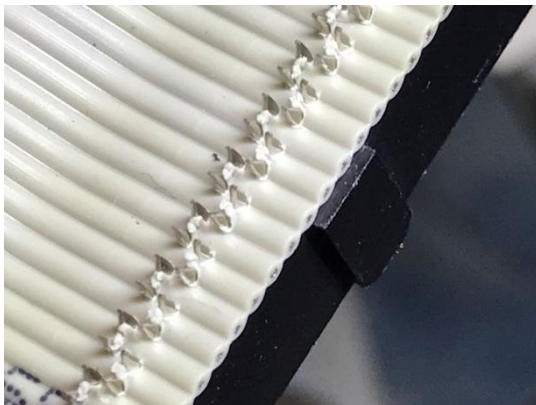

So I pulled the connector apart, it didn't seem the cable was that well seated, as in the conductors safely between the IDC prongs. Whilst the back 'retaining clip' was all the way home, so maybe I'm suffering from cheap connectors where the manufacturing tolerances are not great. I have heaps of these connectors in my computer gear, with no issues. Anyway I carefully nudged the wires deeper into the contacts with a jeweller's screwdriver. Now for some long term testing.
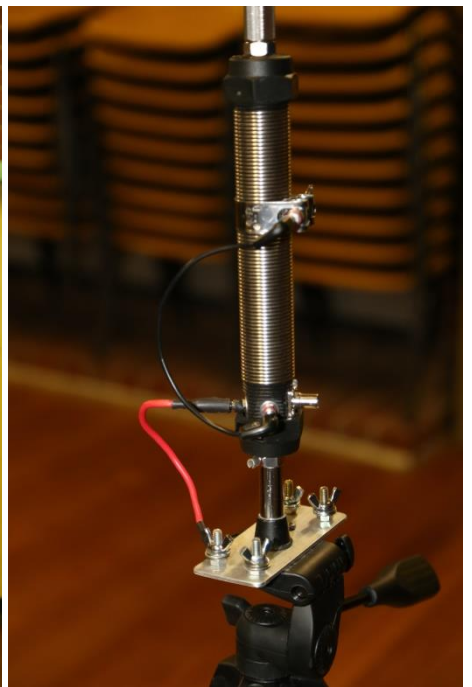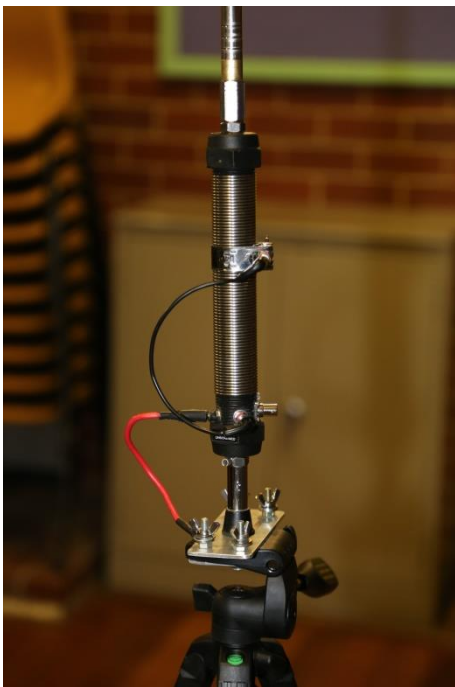
Paul VK3TGX

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Prac Night 1/03/2024

Replacing the loaner power amp with the repaired repeaters original power amp
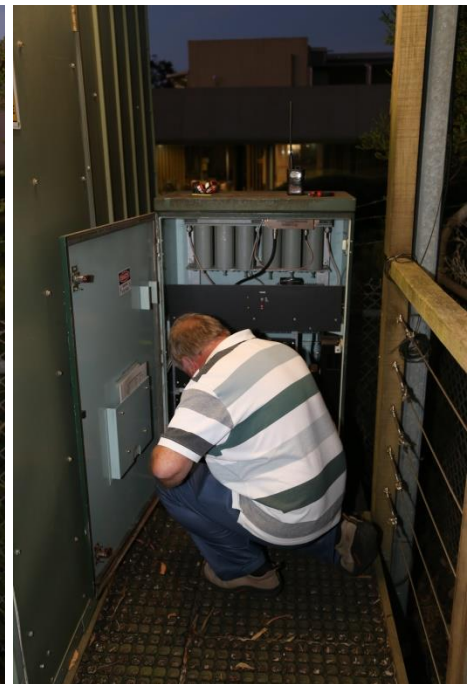
Whilst the rest of us talked and watched an expert at the CW key

Meeting 16/02/2024

Interesting YouTube Videos

We make a full size inertia car toy – how far will it roll?
https://youtu.be/m8FKh_FQNzw

Russia's Newest Military Signal Is COUNTING DOWN! - But Why?
https://youtu.be/VVtbslqzWIA

The GGREC is an affiliated club of the WIA
https://www.wia.org.au/

WIA Affiliated Club

We also give Thanks to

https://www.jaycar.com.au/

https://www.altronics.com.au/

For their generous support over the years

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Club Information

Meetings 20:00hrs on third Friday of the month at the
Cranbourne Guide hall, Grant Street Cranbourne
Prac/Natter nights first Friday in the Peter Pavey Clubrooms Cranbourne 19:30hrs
Visitors are always welcome.

Office bearers

President	Ian Jackson	VK3BUF	General 3	Gerard Watts	VK3ZXC
Admin Sec	vacant		Web Master	Mark Clohesy	VK3PKT
Treasurer	Klaus Illhardt	VK3IU	Magazine Editor	Paul Stubbs	VK3TGX
General 1	Fred Reid	VK3FWR	Property Officer	'committee'	
General 2	Bruce Williams	VK3BRW	Assoc. Secretary	Bruno Tonizzo	VK3BFT

Call in Frequencies, Beacons and Repeaters

The Club Station VK3BJA operates from the Cranbourne Clubrooms.
6m Repeater Cranbourne VK3RDD, In 52.575 Out 53.575 CTCSS none
70cm Repeater Cranbourne VK3RGW, In 431.425MHz Out 438.425MHz CTCSS 91.5Hz
VK3RGW Repeater supports Remote Internet access (IRLP), Node 6794 **offline**.
70cm Repeater Seaview VK3RWD, In 431.575MHz Out 438.575MHz CTCSS 91.5Hz
Simplex VHF - 145.450MHz FM, Simplex UHF - **TBA**
VK3RLP Beacons 1296.532MHz & 2403.532MHz **(currently offline)**

Membership Fee Schedule

Pensioner member rate $40.00, Extra family member $20.00
Standard member rate $50.00, Junior member rate $25.00
Fees can be paid by EFT to BSB 633000 - Account 146016746
• Always identify your EFT payments
• Membership fees are due by each April Annual General Meeting (AGM)

Magazine Articles to editor@ggrec.org.au Cut off, 10th of the month
All other Club correspondence to: secretary@ggrec.org.au
or via post : GGREC, 408 Old Sale Rd, Drouin West 3818
GGREC Web Site & Archive may be viewed at: www.ggrec.org.au
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