



GATEWAY

**The Official Magazine of the Gippsland
Gate Radio & Electronics Club Inc.**

September 2017



**Wire Antenna's & 90° bends
Retro Computing
The V.I.E.
And More**

**President's report
- page 3**

Contents.

- 3 – Presidents Report, WIA, JOTA, VK3RDD, & A Tesla Car
 - 6 – From The Editor – Radio woes, or death to a FT101
 - 7 – Jack Vance and the unique internet event of the V.I.E.
 - 10 – Retro Computing
 - 15 – Wire Antenna's & 90° bends
 - 17 – GGREC Open Mic Session – 18 August 2017
 - 19 – Anybody Home?
 - 20 – General Meeting Minutes
 - 22 – Club Information
-

Event Queue

September:

- | | |
|------------------------------------|--|
| 1 st | Prac Night – Club rooms |
| 8 th - 12 th | IARU High Speed Telegraphy world championships |
| 15 th | General Meeting |

October:

- | | |
|------------------------------------|---|
| 7 th | Prac Night – Club rooms |
| 21 st | General Meeting |
| 29 th -30 th | CQ WW DX / SSB CONTEST (always Octobers, Last full weekend) |

November:

- | | |
|-------------------------------------|---|
| 26 th - 27 th | CQ WW DX / CW CONTEST (always Novembers, Last full weekend) |
|-------------------------------------|---|

WIA

It has already been about 3 months since the new WIA board has taken control. There has been a lot written in the recent AR magazine describing broad plans and some detail about the new committees that have been formed. This all looks quite positive and I really hope it goes somewhere soon. There are a few concerns rising to the surface that are affecting the vitality of this organisation. The WIA still has no Treasurer and there is much anecdotal evidence that large sums of WIA funds continue to be lost on a weekly basis. I really look forward to seeing some fresh reporting about the present financial situation. WIA members went to the last election with conflicting information at hand. The previous board denied that there were significant financial and compliance issues, which greatly conflicted with reports from ex Directors & Treasurers that had quit in disgust when due diligence was not occurring as it should.

What we now need as members is to see what the true situation is without sugar coating and soft damage-control language. How much is really being lost and what is being done to stop it?

The new board is calling for volunteers for certain roles, which is a reasonable request. However, when I visit the WIA Website I see a long list of sub-committee members made up of the very same guys that has brought the organisation to its knees over the past years.

Here are just a few examples:

Communications And Marketing

- Robert Broomhead VK3DN - Committee leader
- Roger Harrison VK2ZRH - Deputy leader
- Jim Linton VK3PC
- Phil Wait VK2ASD

New Initiatives Committee

- Phil Wait VK2ASD - Board member
- Robert Broomhead VK3DN
- Roger Harrison VK2ZRH
- Jim Linton VK3PC - WIA Company Secretary

Administrative And Financial Committee

- WIA Treasurer - vacant
- Jim Linton VK3PC - WIA Company Secretary
- Phil Wait VK2ASD - WIA Board member
- Fred Swainston VK3DAC

Affiliated Clubs Committee

- Fred Swainston VK3DAC - Clubs Liaison officer
- Phil Wait VK2ASD - WIA Board member



Really? It raises the important question. How can the organisation repair and improve itself with the same old crew implementing policy? Why would you put a team that had been burning the sausages for years in charge of a new barbecue? It was proven at the last WIA election that there was no member confidence in their past efforts, which is fundamentally why the members had collectively evicted them from their Director positions.

A quote attributed to Einstein has relevance here. *"Insanity is repeating the same mistakes and expecting different results."* Confidence and a willingness to work with this crew is very low.

I have not found any amateurs willing to step forth into these new volunteer roles within the WIA while the old board is still dominating its committees. I'm just repeatedly hearing that members don't want to have anything to do with them.

As much as I want the new board to succeed with their plans, I can't see how the WIA can successfully resolve old issues and move forward with the same people running the show.

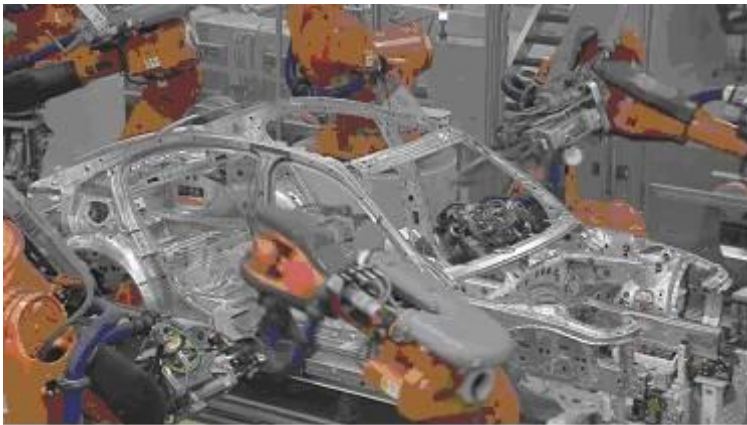
WYNTK

In other news, we had a big night last Friday night at the Club Shack where we explored another radio in the 'What You Need To Know' series. This time it was the Club's TS520S HF transceiver. The brief on how to drive this rig has been uploaded to the Club website for general viewing. <http://ggrec.org.au/Downloads/WYNTK-04%20TS-520S.pdf> The next time you are within the Club Shack, don't be afraid to plug this rig into an antenna and try for a few contacts. That's what it's there for.

JOTA

Jambooree on the Air is coming up in October and we had been asked if we could help out again this year, but it is possible this may not happen. JOTA involvement now requires operators to hold a *Working With Children* certification. At present there are only a couple of our members with this and we don't have sufficient numbers on the day to proceed. The cutoff is our September meeting on the 15th and the event is scheduled to take place on October 21. If we don't have at least three operators come forth over the next week, I shall let the Guides know that we cannot help out this year.

This coming Friday night meeting we thought it would be good to contrast the video clip of a few months ago where we showed monochrome footage of an early car manufacturing plant.



See the automated electric car plant clip at the next meeting

This time we will show a short clip of a modern BMW robotic car assembly plant in Munich. A couple of months ago Michael our Secretary visited this factory in person.

It is intriguing to see how far automation has progressed in the creation of the modern car.

Change the General Meeting format?

At the upcoming meeting we want to discuss the General Meeting format to see if there are better ways of conducting these events. Much of what we do is repetitive formality.

One suggestion put forth is that we post the monthly financial information at an internet location accessible to members, where they can examine them at leisure and raise questions at a meeting if they wish, but otherwise it does not need to be discussed unless the Treasurer has a specific issue for member's attention. Likewise previous minutes can be posted for inspection. Correspondence would not be presented unless it is relevant to the membership at large.

This would leave our General meetings to a quick discussion about ongoing events and a New Business segment where members can still ask questions and raise topics.

After that short meeting we can then have an informal roundup of what interesting things have taken place with members over the past month. So on Friday we can kick the idea around and if there is consensus we can try it for a few months to see how well it works.

RDD Future

The Club has a perfectly good six-metre repeater in storage, after the previous site owners (The water tower in Cockatoo) tried to charge a very large annual fee for their site. If it was a strategy to get rid of us, it worked. At present we are paying a repeater license for a repeater taking up garage space.

The way I see it we have four options available to us.

1. We can cancel the repeater license (these are hard to get) and sell the repeater hardware for whatever we can get. This won't be much.
2. We can put a request out to other VK3 Clubs to see if there is another club out there which would like to take over the license and possibly the equipment for another location.
3. We can select another temporary site and plug the repeater in with limited range. This would allow us to maintain the license while we decide what to do next.
4. We try to find a fresh site for the repeater of some substance. (One suggestion was to see if we could install it at our old beacon location at the Langwarrin Water Tank site, as we still have an equipment rack and feedlines dormant at that site.)

It comes down to the question as to whether the Club still wants to maintain a 6 metre band repeater and whether or not our members will ever use it. It is a topic for discussion this Friday night.

October Tesla car talk and demo

Remember to put a pin in the October General Meeting date, where Shane Clayton will bring a Tesla car to the meeting and will give a presentation about the technology. This has just been confirmed.

That's it guy's. See you at the General Meeting at 8:00pm this Friday night...



From The Editor

Radio woes at the TGX shack.



Many years ago I bought this radio at the Ballarat hamfest, what attracted me to it was the fact it still had its protective plastic film on the front panel. Unfortunately the valves proved to be less than pristine as on the upper bands I could get nowhere near full power out of it.

However, due to the bad QRM at my QTH, I've never really gotten serious with HF. I do have some other portable rigs, but they usually only see the light of day at campsites, or field days etc. During my recent antenna woes I stoked up the good old 101 to run some tests, 40M was all ok, I could get just over 100W, pity the antenna was up the creek and 70% of the power was reflected back to the shack. With a 10W test signal, my Kenwood antenna tuner said 7 was coming back. So I switched to 20M and went to tune up into my dummy load. I got about 4 watts, then nothing. I switched back to 40, same, nothing. Darn. So I informed all at Ian's Kenwood radio tuning session that I needed a new radio. I've fried my '101

The next day I tried again, and the old girl responded, it looks like the band switch was the culprit – time for a good clean (another day?)

After fixing? my off-centre dipole, I turned on the 101 again, good copy was received, so I set about having a good listen around on 40 whilst the final tube filaments had a good warm up session, then 'nothing' the lights went out, the fan stopped, it had stopped dead in its tracks.

I leaned over the radio and observed a burning smell.

I never got to flick on the tune switch, the only 'heavy' load was the heaters, but the smell kind of reminded me of a fried power transformer. Hopefully not. Maybe I should get a Kenwood to go with my Kenwood antenna tuner & station monitor.

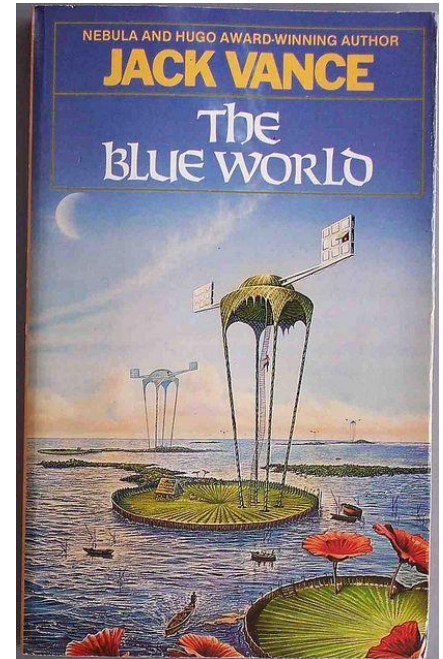
Paul VK3TGX

JACK VANCE AND THE UNIQUE INTERNET EVENT OF THE V.I.E.

Ian Jackson VK3BUF

Here is an article that has little to do with Amateur Radio, but it does relate to a unique use of the internet that has not since been repeated.

For me this story began in the 70's when I read a lot of Science Fiction novels during daily train travel to Melbourne. It came to pass that one of my favourite authors was an American bloke by the name of Jack Vance. He'd written a lot of quality books since the sixties. They were imaginative stories and used a narrative style that was extremely concise and thoughtful. No sentence carried an unnecessary word, yet his descriptions of places and people were so vivid that readers were conveyed to his distant lands with more art than CGI graphics could ever reveal. There were no short-cuts to his extraordinary use of language, which often had me scrambling for a dictionary to learn the meaning of words still new to me.



Ok, so I was a fan. I read his paperback books when I could find them, but they became increasingly hard to find. An unread Vance novel from a second hand bookstore was a prize far greater in value than the scant dollar figure scrawled inside the front cover.



Jack Vance, the author

But I was not the only fan. Even George R.R.Martin of *Game Of Thrones* fame admitted that his world of feudal warlords was loosely based upon Jack Vance's colourful *Lyoness* series. Martin often describes Vance as the greatest sci-fi writer of all time. I concur.

By the late 90' nearly all of Vance's books were long out of print. A Jack Vance fan website sprung up where people would post comments about his works, discuss the meaning of story lines and lament that his books

were hard to find. Many of his early works had been changed by editors in some editions, which inevitably made them worse. These editor modified versions were as much a travesty to literature as would be an attempt to improve upon the *Mona Lisa* with crayons.

All that I've described here set the scene for what came next. Fans on the web site lamented how wonderful it would be if all of his out-of-print books could be reprinted as one master set of stories. Many fans from all around the globe agreed and the concept of the **Vance Integral Edition** was born.

The mission was to scan every page of every book he wrote, three times, using volunteers at home all over the world, then convert the images to Word documents using Optical Character Recognition (OCR) software. These documents would then be run through special comparative filter software somewhere in the USA, written specifically for this project by other fans with software development skills, until a complete text was created of his entire life works to date. Other processes were applied to confirm the quality of text. In some cases volunteers had to gain access to original handwritten manuscripts to ensure the work being reprinted was 100% Jack Vance.

This text was then sent to Italy where a master publisher reprinted these works into forty seven leather bound volumes on special acid free paper that will not yellow over time. It was a not-for-profit project and the cost of the book set was exactly one-thousandth the cost of printing of the

one thousand sets published. Volunteers flew to Italy from dozens of countries to help pack and dispatch the books to other fans who had already paid in full.

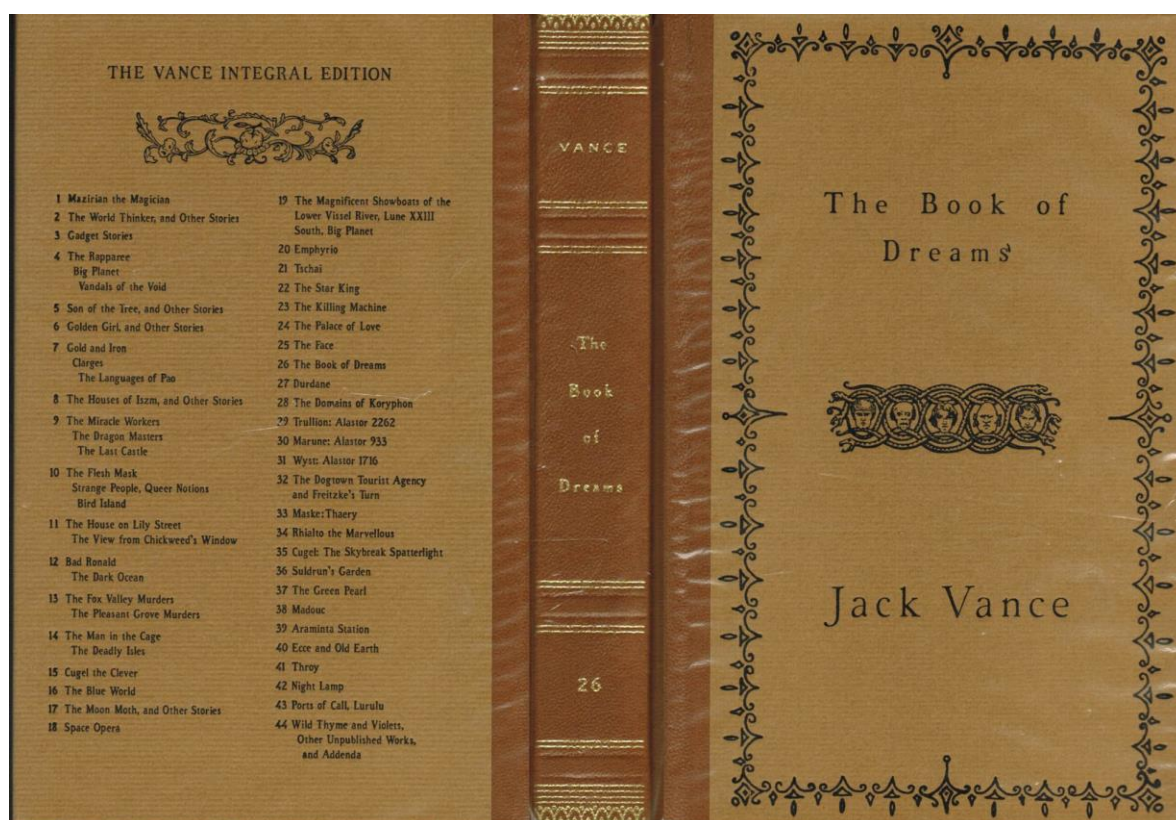
Vance, while in his eighties at that time, was totally blind, but still churning out the occasional novel on his talking PC. He was sceptical, but agreed to let the project take place. Later his wife and family did become involved with the project when they saw what a legacy it would become.

The project could never had existed without the internet. It involved hundreds of volunteers, working together, most of whom never got to meet each other in person.

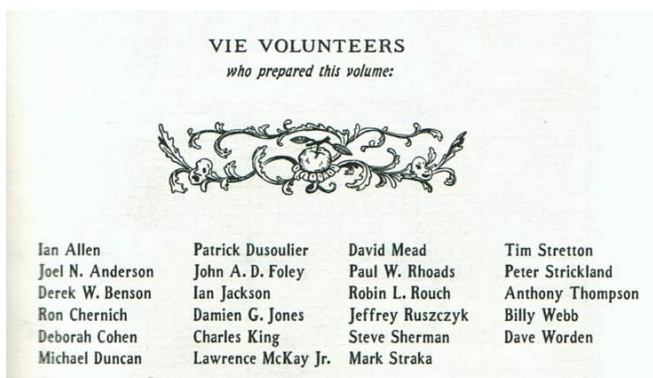
The books themselves became a work of art. A special font was created for the text and named after a town in one of Vance's stories. Hundreds of illustrations were created and dispersed thruought the books. The rear of each leather bound volume listed all other book titles in the set.



A typical illustration prepared for the V.I.E.



One of the 47 volumes that makes up the VIE set



The inside cover of each volume contains a list of the volunteers that were involved with the preparation of that particular book.

The Vance Integral Edition took about three years to produce from concept to conclusion. Never before or since, had so many fans, living in isolated corners of the world come together to honour and preserve the works of a single writer in this way.

For me, the work within this project came at a difficult time. I was in the middle of designing and drafting the largest construction project I had ever attempted. The house where I now live. Still, I made some space and managed to scan and OCR a couple of the novels from the preferred paperback text that I had on the shelf, then emailed the results to a project coordinator. As time-poor as I was back then, it was great to be involved at some level. It wasn't a cheap venture. The Aussie dollar was doing badly at the time relative to the USD. I had to send about \$2000 AUD abroad in the hope that all would come to fruition in the following year or two. It was worth the wait and in due course my book set arrived at Drouin West in good condition.



My VIE set, along with my favourite stapler (a rare red Swingline) and a choking chicken

I made up some clear protective covers for each volume and proceeded to read the stories from Volume 1 onwards. In some cases I was reading the stories for the first time, as quite a few had never made it to Australia before.

In May 2013 Jack Vance passed away, age 96 and tributes poured in from around the world. He still has a fan base, but not much of his work can be found in bookshops and libraries. This *Vance Integral Edition* is hard to come by, as like myself, those that have a set are loathe to let them go. I recently saw a set for sale in the Netherlands for 5000 Euro's, but it didn't last long.

So now these fabulous stories take up a prime spot in my bookcase, next to my other prized possession, my red *Swingline* stapler, which is an entirely different story...

(Visit <https://news.tinypulse.com/rb-the-surprising-history-of-the-red-swingline-stapler-20429/> for the background about that one...)

On the first page of this article you can see a paperback cover where it says he is a *Hugo Award Winner*. This prestigious sci-fi award is named after Hugo Gernsback. This guy had a BIG influence upon amateur Radio. That story rates a whole separate article for a different day.

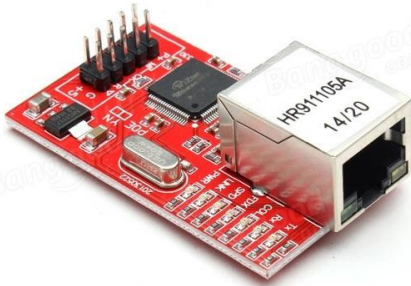
Retro Computing

Updated



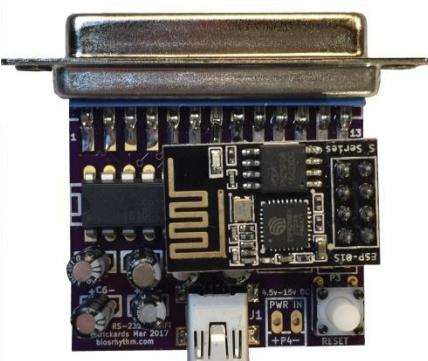
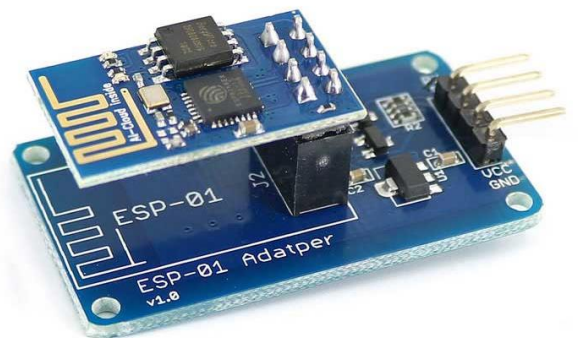
One of the first things I bought when I got my first job was a computer (Second was a HiFi system), a Tandy TRS-80. I can still clearly remember setting it up for its first run on my parent's kitchen bench. Over the years it was expanded, and re-built twice. The first rebuild placed it into a 19inch rack case, the second into a TRS-80 model 4 case (obtained as a spare part), which is how it still stands (pity I threw out the original case). One of my main interests was connecting it to "things", like radio's, paper tape readers, relays etc. I eventually scored an ancient GEC 200 baud modem that was modified/updated for 300 bps.

This modem was built in a 19 inch card cage, using several boards, all discreet components, with no IC's. In those days, the main use was calling bulletin boards, some as far away as Sydney – I'm sure my parents were a tad confused when they received the resultant huge phone bills. These days the old Tandy computer is only switched on on the odd occasion, maybe I'll load a game, but that's about it. For quite a while I've wondered about how to connect it to my home network. I've done many a Google search on connecting 8 bit micro's to the 'net.



Lately I had a look at the Arduino Ethernet add-on's available from Banggood, about \$5 from China. Yes you can locally buy an Arduino with Ethernet, but at the best part of \$100, it was far outside what I was prepared to pay to investigate a curiosity. I ended up settling on a \$10 board, as it had a row of status LED's. Recently I also spotted a module on banggood.com called a "Geekcreit® ESP8266 ESP-01 Serial Port WIFI

Transceiver Wireless Module" However, as usual on these sites, technical information is all but absent, the only line on the add that offered any clue was "The AT command is perfect, efficient, concise". The AT command set is what one uses to control the last of the dial up modems. For instance if I wanted to command a 'modern' modem to connect to a remote site I'd send it a command like "ATDT97705061", which means 'ATtention, Dial, T



9770... At only \$6.47, free postage, I didn't have much to lose. My nephew Brendan had previously informed me of the "WiFi232" – 'An Internet Hayes Modem for your Retro Computer', for \$33 US, http://biosrhythm.com/?page_id=1453 however it's always been "Out of stock" every time I've looked. On investigation, it's just an EPS-01 module on a board, just like the Banggood unit, the only extra is a RS232 driver IC (Sipex SP3232E). I have heaps of MAX232 IC's, so no problem here.

The Geekcreit adapter module talks TTL 5V, for Arduino use, (& the Max232) unlike the ESP-01, which is natively 3.3V only.

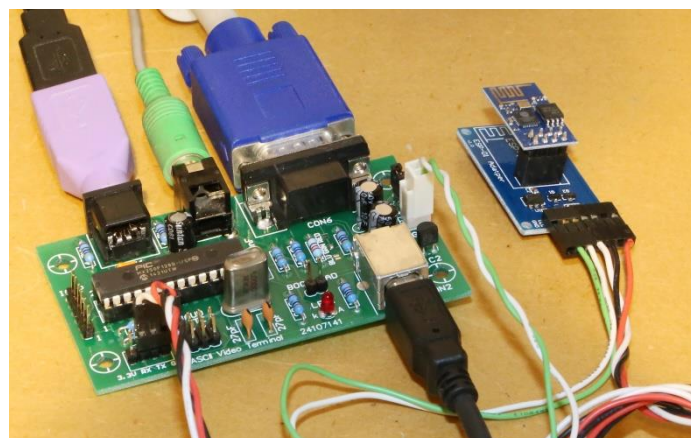
A while ago I ordered two ASCII serial terminal boards from Silicon chip magazine <http://www.siliconchip.com.au/Issue/2014/July/Micromite%2C+Pt.3%3A+Build+An+ASCII+Video+Display+Terminal> To build a terminal, these talk 3.3V TTL, perfect for the Banggood Geekcreit module. Time to finish them off. So in the end I successfully connected the dumb terminal to my WiFi router. It's was a good call to use the terminal before the TRS-80, as the default comms speed on the ESP-01 was



115,200 baud, way above what the old TRS-80 can handle, I'll just reset the ESP-01 to 1200 etc., for the Tandy. Otherwise I would have been scratching my head somewhat.

So what can I connect to? My first idea was to link up to my Netgear NAS and transfer my catalogue of software over, so I can load them up on an Android TRS-80 emulator. Yes, that could be done via a serial link to a windows PC, but I like the idea of doing it via FTP.

Otherwise, there are quite a lot of 'old school' BBS's on the internet that are accessed, not by a web browser, but by Telnet – just what this module provides.



```
ATI
OK
AT+GMR
AT version:1.3.0.0(Jul 14 2018 18:54:01)
SDK version:2.0.0(5a875ba)
Farylink Technology Co., Ltd. v1.0.2
May 11 2017 22:23:58
OK
AT+CWJAP
+CWJAP:(3,"BelongX7CKGCQK",-83,"f8:ab:05:92:0e:5d",1,-11,0)
+CWJAP:(4,"BigPond0448",-75,"00:23:51:05:ad:e8",8,-47,0)
+CWJAP:(3,"TelstraD2DADF",-90,"30:91:8f:d2:da:df",6,-64,0)
+CWJAP:(0,"Fon WiFi",-90,"32:91:8f:d2:da:e2",6,-62,0)
+CWJAP:(4,"ORiely 2.4G",-81,"d8:fe:e3:e4:80:d4",11,-37,0)

OK
AT+CWJAP="BigPond0000","0000000000"
WIFI CONNECTED
WIFI GOT IP
OK
-
```

A 80's Apple II BBS



Telnet: a80sappleiibbs.ddns.net
Software: GBBS Pro
Connection: Telnet

Real BBS – Real Apple II – Real 5.25 Disks A 80's Apple II BBS is running on a real Apple IIe with real 5.25 Duodisk. The Software is GBBS Pro V1.2 DOS3.3 – developed at the beginning 1980's. This is a real Apple II BBS, a real BBS with the hardware setup from the [...]

A 90's Manila BBS



Telnet: a90smanilabbs.ddns.net
Software: Mystic
Connection: Telnet

The System Operator's primary motivation in running this BBS is to have fun in retro computing. He exerted effort to make this BBS give you a mid-1990's BBSing experience. Fidonet and FsxNet echo mail areas are available here. Popular door games such as (but not limited to) LORD, LORD2, Global War, etc., can be played [...]

After connecting the module up to your WiFi router then 'dial' (type) "ATD 'bulletin-board-name'" and your online just like the good old dial-up days of old.

This sample of BBS's came from the website <http://telnetbbsguide.com/>

They list 413 BBS's in total. with 13 added in the last 30 days.

Although I don't know when it was last updated.

A Missing Chromosome



Dedicated to retro gaming and computing, gravis ultrasound, vintage mopeds and small displacement motorcycles, and DIY ethics. Filez, Appz, Gamez, Romz, Textfiles, Rare Service Manuals and Brochures for vintage mopeds and cycles, 1:1 images of 5.25" and 3.5" floppy diskettes, and it's growing every day! Now with one of the largest collections of Gravis UltraSound files [...]

Telnet:	marabbs.no-ip.org
Modem:	717-664-3735
Software:	Mystic
Connection:	Dial-Up, Telnet

Abaddon's Palace BBS



Alpha testing for Guardian BBS

Telnet:	bbs.vchapman.info:1023
Software:	Guardian
Connection:	Telnet

Adept BBS



The Adept BBS is a Worldgroup BBS based in Louisville, KY. We first went online in 1992 and were one of the original MajorMUD beta sites. While many of our original games are no longer available, we still feature MajorMUD, Tradewars, Swords of Chaos, Tournament LORD, Worldlink Teleconference, and many others. All Users receive free [...]

Telnet:	adeptbbs.com
Software:	Worldgroup
Connection:	Telnet

Age of Reason BBS



Telnet:	bbs.retroarchive.org:2300
Software:	GBBS Pro
Connection:	Telnet

Agency BBS



Telnet:	agency.bbs.geek.nz
Software:	Mystic
Connection:	Telnet

Alcatraz



Telnet:	64.121.86.229:9000
Software:	BBS Express Pro
Connection:	Telnet

Alcatraz opened circa 1985 closed mid-late 1989. Currently runs on an emulator on a pc. We were a member of UFP. For best results, log in with an Atari 8-bit or ATASCII e emulator like AT_Telnet2 or Syncterm for the PC.

I can see a problem for me right now, my computer of interest, the TRS-80 is not here, however if you have an Apple or Commodore 64, then you may fair better, the rest seem to be using IBM PC graphics.

I haven't as yet attempted to visit any of these, so the impact of any graphics shown on the website is unknown – maybe these sample screen shots are not the opening screens, but just chosen to look better on their website.

I had a look on good old Google and there are other lists out there, so keep looking.

An option for the more adventurous, build your own BBS. I noticed at least one of them was running on a raspberry pi. And for the eco warrior's among you, I also saw a solar powered BBS.

The Raspberry pi – <https://www.raspberrypi.org/> uses about 5W of power, and can be picked up for under \$50.



Alternatively, there are many knock offs and clones to choose from – so have a go. To start with, Google the BBS software listed here to see what hardware is required.

If I can't get FTP to go, I'll try setting up my own BBS.

So what is in that little board, one rather flash bit of silicon. (plus a rom chip & a crystal)

The functional diagram of ESP8266EX is shown in Figure 3-1.

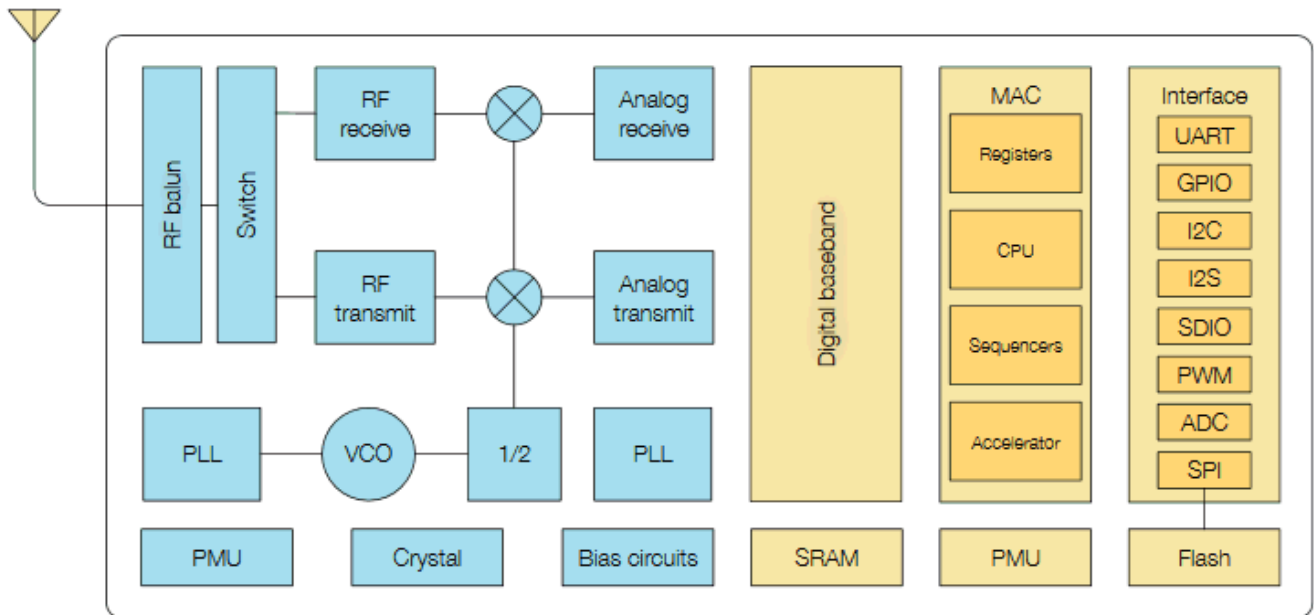


Figure 3-1. Functional Block Diagram

My Tandy TRS-80 has a Z80 8 bit micro clocked at 1.77 MHz with 12k ROM and expanded RAM of 48K (It originally had 4K ROM, 4K RAM when I bought it), whereas the 5mm square IC on the ESP-01 module has a 32bit processor, normally clocked at 80MHz, but if needed the clock can be stepped up to 160MHz!



The only thing missing is program flash rom, that's in the other 8 pin IC on the board.

All the RF bits are on that one chip, with the processor. Normally one would put shielding between your RF front end and any digital parts, not in this case, even the antenna is on the module board, and it has no problem seeing the WiFi hotspots of my neighbours - amazing!

According to the Esp8266 datasheet, which is available on the web from :-

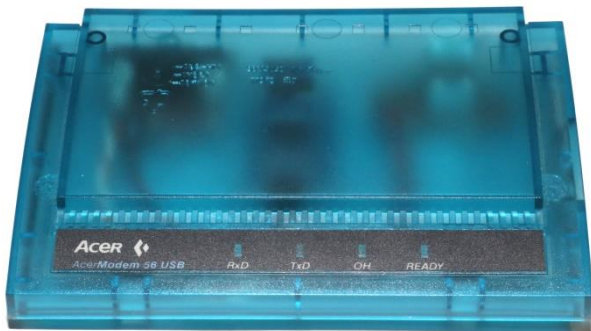
http://www.electrodragon.com/w/images/c/ce/Esp8266_datasheet_5.2.pdf, the WiFi protocol stack only uses about 20% of the processors ability, if you look around there are projects to also load user software onto the module – No external micro needed, the ESP-01 can do it all, it even has a 10bit A/D converter, PWM and all the regular goodies – That's if 6 I/O pins are enough for your project. The only problem is this unit is only 3.3V – 5V will kill it – SO BEWARE!



The ESP-01 (with 5V adapter) and the RS232 converter installed in an old \$2 modem case

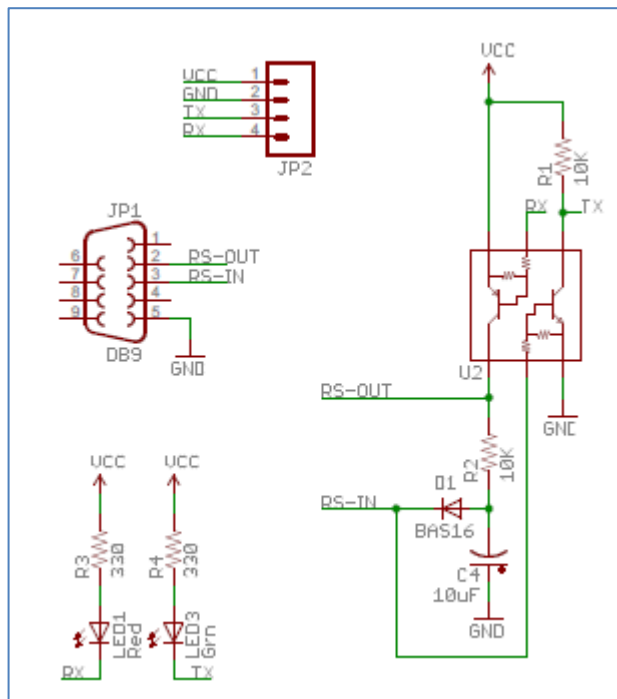


The original modem board – much busier



The final 'modem' – For now, it's built into an old modem case bought from the Dandenong trash & treasure market for \$2.

As the ESP-01 only supports 3.3V, it's being installed in a 5V adapter; this is then connected to an RS232 level converter, for connection to the comm port of the 'ancient' computer of choice, in my case, a TRS-80 modem 1



The Sparkfun RS232 converter was not my first choice (junk box), as it does not generate a negative 12V rail for the line driver, like say a MAX232, but rather pinches that supply from the incoming serial line from the connected computer. Yes, you can usually get away with this, but if in the future I try using it with a device that is receive only (no TX data to the modem) then there will be no -ve for the transmitter.

The other potential problem is the handshaking lines, RTS, CTS, DTR, DSR, and Carrier detect are not connected to anything. A PC can usually be told to ignore these handshake lines, but that option is not guaranteed. So I usually either loop them back on themselves, or tie the 'output' lines to, say +12V. As I only have 5V, I went for the loopback option.

I should get back onto the web and order a few 'decent' MAX232 based RS232 converters, they, and the required fly leads are only \$2.22 each from Banggood.

The last board, is just a mount for a USB socket, used purely for a 5V power supply. Normally a miniature USB socket is used for this purpose; however the solder pins are incredibly small, being pretty much microscope territory. So I've opted for a full size USB 'B' socket, the pins of which can be coaxed into standard .1 inch vero-board (as used here). Most of the modules were then mounted with hot melt glue.

So as you can see, this has to be one of the simplest projects to build, However the programming of the processor could well prove to be a major stumbling block, boy is there a lot to learn about web IP traffic etc., for a quick fix, hopefully the WiFi232's become available again, (wimp out, use his code) without a killer post & pack, as has been the killer in the past.

So all up \$8.65 + case, not bad, so far.



Paul VK3TGX



Wire Antenna's & 90° bends



For quite a while (16 years?), I've been running an off-centre dipole antenna at my QTH.

If you can make sense of the pictures I have, the short end of the antenna starting from a small tower "A", then to the balun on the Nally tower "B", Now for the tricky bit, my yard is not large enough to extend the long side of the of-centre dipole, so it does a 'dogleg' around an insulator on pole "C" at my carport and ends up at another pole "D", at the other side of my house

All well, it kind of tunes in, however due to the local suburban QRM that extends to S9 at times, trying for any improvements has not being considered worth the effort. Distant stations say I'm coming in fine; it's my lack of being able to hear them that is the real problem – till now. (as in, it gets worse, not better)

Having the wire do a right angle bend trough an insulator has proven to be mechanically ill-advised, with sufficient wind flexing things around, that bend has proven to be the usual breaking point. One quiet day at work I was looking at a pile of CD's that were destined for the bin, both full sized and mini CD's. Then I had a thought, two mini CD's with a full size one either side looked like a pulley wheel – would this work with antenna wire? I've left the odd CD outside, and while the metalized data layer soon falls away, the plastic seems very UV stable. So I glued a few CD's together, two full sized, three mini, then two more full sized.



I was going to prop it up somewhere, with some wire rope around it, tensioned up with a few house bricks etc. for a test.

That was till my brother saw it and laughed out loud. A few days later he came back with his version, dimensionally identical, but made out of a solid slab of stainless steel. (He works in an engineering shop/factory).



It was awfully heavy, So I got stuck into it with a drill press and lost a lot of excess metal. Boy is stainless a funny material to work with.

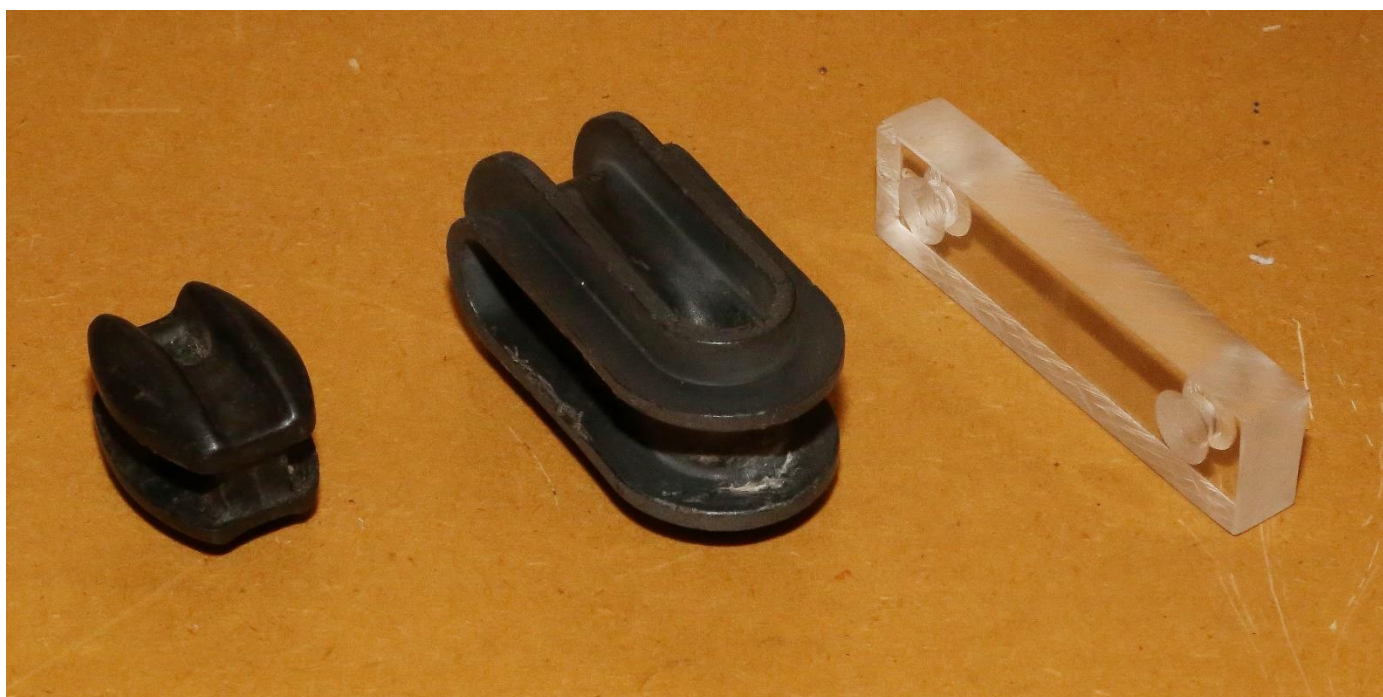
The side arms are made of 40mm wide aluminium, with a Lexan block in the back as an insulator to the wire rope used to hoist it up. I put thin plastic dividers between the wheel and aluminium to hopefully ward off any electrolysis between the dissimilar metals, although that was probably a waste of time as there is plenty of other places for that problem to occur, like at the steel bolts etc.



Getting it up in the air proved to be an almost all day event, as the new stainless steel wire rope I was using for the actual antenna (Yes, stainless is far from the ideal antenna material) fouled on almost everything on the way up, starting with my caravan, a tree, house eaves, tree again, then back under the house eaves.

Then the roll of wire I bought from Bunnings was of course too short – darn, time for a mid-air splice.

The insulators, that have now been in the air for 16 years are made from 10mm thick Perspex, I was amazed to find the one I removed from pole 'C' to look like I'd just made it, no degradation, or wear of any sort was readily visible. Have a look here below.



Here is the old insulator alongside two commercial eggs. If someone handed that insulator to me, I'd say it's never been used! UV light seems to kill a lot of things; however this material seems to be a winner.

Anyway I hauled it all back up – I ran 10W up and got 7 back, Yikes, what's the problem now. My first thought was the balun was full of water. (White PVC tube, on top of the Nally tower, seen below) Finally the weather cleared the other day and I dropped the tower for a looksee.



Can you spot the problem? DUH!

The wire rope antenna wire had been attached and the tower raised ages ago, awaiting the pulley's installation. The crossover must have occurred sometime in-between, not exactly visible 15M below.

Later tests were perfect on 40M (1:1), However 20M needed an ATU (3:1)

Paul VK3TGX

GGREC Open Mic Session – 18 August 2017

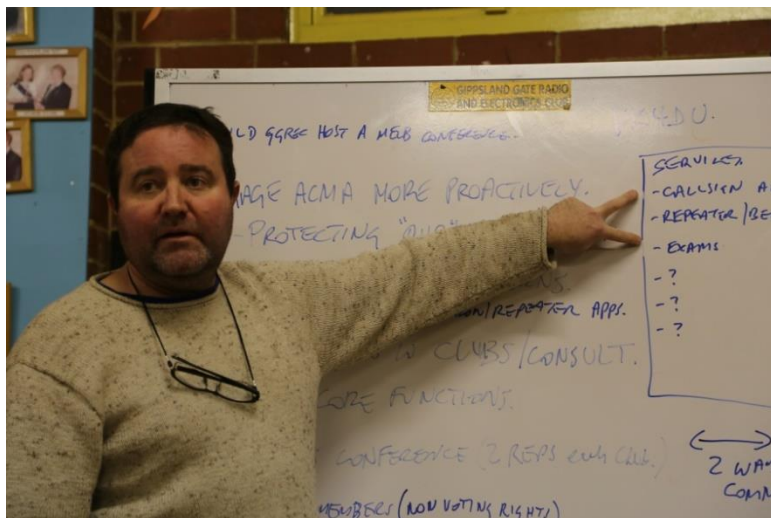
Topic: “What do you think the WIA should be doing?”

At the August General Meeting we had an open forum discussion to get impressions from members about where they thought the WIA was now and what they believe ought to happen to improve the organisation. These comments were documented herein. The plan is to forward this information to the WIA board in the near future.

It was noted that a number of club members re-joined the WIA in the past year in order to cast a vote for change. Many were concerned that change has not been forthcoming.

1. Engage ACMA more proactively
 - Protect and consolidate existing bands rather than chase new bands
 - Discuss shared concerns. Stop pretending everything is ok.
2. Address core services – eg.
 - Why are there such long delays in repeater application – we can’t simply blame ACMA. Much of the problems lies within.
3. Vastly improve engagement and communication with Clubs
 - Consider “local” representation
 - Consider an annual WIA/Clubs conference (2 representatives from each club)
4. Focus on core functions
 - ACMA Liaison & representation
 - Growing the hobby
 - Supporting clubs & education
 - ACMA outsourcing Services – Exams & Callsign – although it is noted that this is not in the WIA Constitution – is it distracting the organisation from its core business?
5. Investigate the concept of affiliate members (non-voting rights) to increase the official representation base
6. Update the Amateur Radio brand – 21st century
7. Address the recent issues of mismanagement
 - Update WIA website
 - Shut down non-effective committees immediately
 - Provide members with an open and honest assessment of the situation
 - Hold previous Directors accountable for the situation they have created

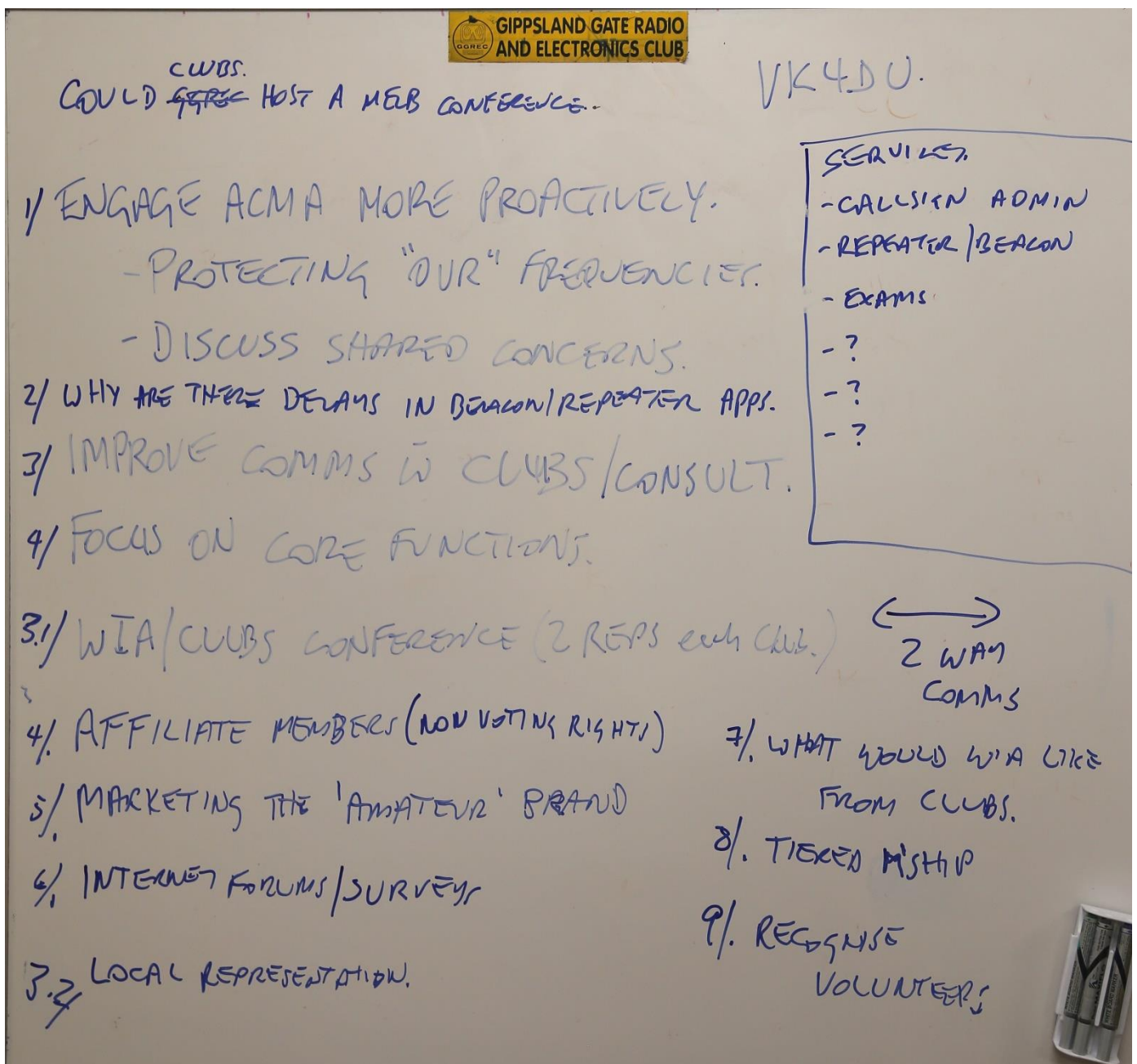
WIA Thoughts



At our last meeting we had a discussion, or was it a wish list creation session of what the members thought the WIA needed to do to best serve its members.

Only time will tell, (If they improve)

Although I think expectations are high, now that the WIA has a new line-up.

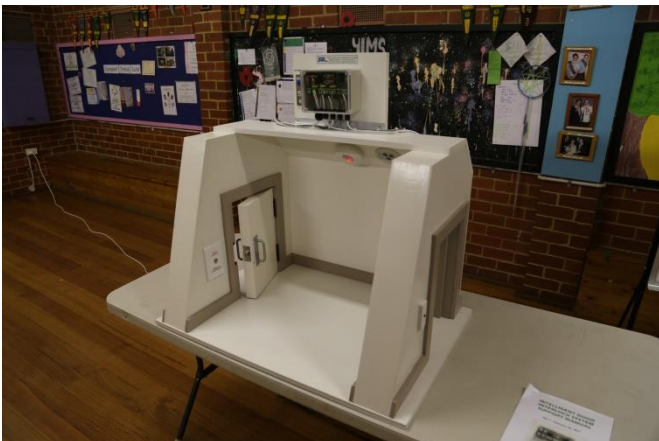


Chris is calling it an "Open Mic", kind of strange talk for a radio club, as it was not 'on air'

Anybody Home?



You'd probably be thinking of "Jack and the beanstalk" right now, but no, it was Ian VK3BUF's demo of his residential shared room door interlock system, shown to us at our last meeting. Thanks Ian for the demo.



General Meeting Minutes

Date : 18/8/2017

Start time : 8:30pm

Chairperson : Ian VK3BUF

Minute Taker : as above

Visitors:

Guest Speaker tonight: None

Tonight there is no guest speaker. We will have a short discussion forum on the WIA

Treasurer's report: Prepared by Chris VK3QB

- Summary of Hamfest sale financial results

Moved: Bruce **Seconded:** Yarn NOV **Approved:** Yes

Previous Minutes: As previously distributed in July magazine

Moved Chris QB **Seconded** Ron FRDL **Approved:** Yes

Business arising from the previous minutes:

Comment on the hamfest sale

- 200 snags sold
- Thank Brian & Nils for their showbag prep
- Thank Pat and kitchen staff team
- Better marketing of our club next year?
- Suggestion made that we have some Cola drinks available as well

VK3RWD Repeater

- Battery upgrade imminent – donated from Parmaker

Club License information

- upgraded to reflect operations by Standard & F call licensees
- Anomaly fixed in license conditions

Possible changes to General Meeting structure:

Discussion ensued about the possibility of rearranging the format of General Meetings to reduce formality and involve more members in interesting topics of discussion.

At the Aug GM we will invite members to introduce their own ideas for meeting formats.

A short discussion forum will occur at the Sept meeting and the committee will form conclusions from that forum and make changes accordingly.

Last Prac Night

Was on the FT950 Next prac night on the TS520 HF rig

NEW BUSINESS

JOTA

Guides have requested GGREC to help with JOTA this year

BXG unavailable to organise. Looking for volunteers for Oct. Working with children I.D.

Required. If min 3 volunteers are not available then JOTA may not proceed this year via GGREC. Cutoff date: September GM.

INTRO CARDS

GGREC Intro cards have been produced by Mark 3PKT for general distribution and club promotion. Concept was well accepted.

MAGAZINE ARTICLES

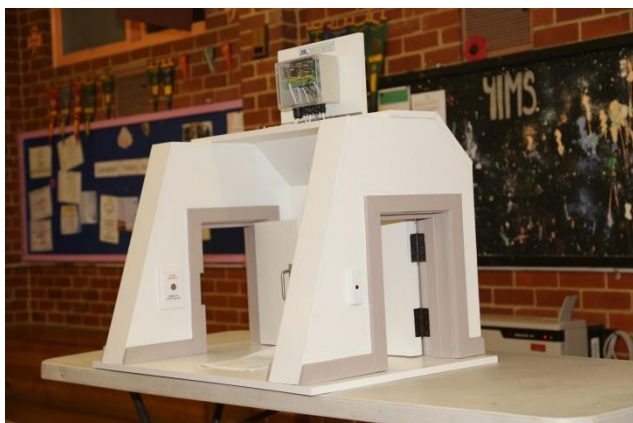
More articles are needed for Gateway. Many Club members are capable of preparing something from time-to-time.

Upcoming General Meeting

- ♦ Open Mic on WIA direction and ideas. QB to make introduction at beginning,
- ♦ Then find out from members and non-members what their ideal WIA would be doing.
- ♦ No July activity planned for Sept yet (maybe follow up video of modern car manufacture plant, say BMW, to contrast with old documentary previously shown.
- ♦ October meeting to be Tesla car and talk by Shane Clayton

Meeting closed : 9:10pm

Next Prac Night : 01/9/2017 Intro into how to use an FT-950 (Need to Know series)





Club Information



Meetings 2000hrs on third Friday of the month at the
Cranbourne Guide Grant Street Cranbourne
Prac nights first Friday in the Peter Pavey Clubrooms Cranbourne 1930hrs
Visitors are always welcome to attend

Office bearers

President	Ian Jackson	VK3BUF	Web Master	Mark Clohesy	VK3PKT
Admin Sec	Michael Van DenAcker	VK3GHM	Magazine Editor	Paul Stubbs	VK3TGX
Treasurer	Chris Chapman	VK3QB	Property Officer	Bruno Tonizzo	VK3BFT
General 1	Mark Clohesy	VK3PKT	Secretary	Ian Jackson	VK3BUF
General 2	Ron Lacey	VK3FRDL			

Call in Frequencies, Beacons and Repeaters

The Club Station VK3BJA operates from the Cranbourne Clubrooms.
6m Repeater VK3RDD – Currently de-commissioned until further notice - *sorry*
70cm Repeater Cranbourne VK3RLP In 434.475MHz Out 439.475MHz CTCSS 91.5Hz
VK3RLP Repeater supports Remote Internet access (IRLP), Node 6794.
70cm Repeater Drouin VK3RWD In 433.575MHz Out 438.575MHz CTCSS 91.5Hz
Simplex VHF - 145.450MHz FM • Simplex UHF - 438.850MHz FM
VK3RLP Beacons 1296.532MHz & 2403.532MHz

Membership Fee Schedule

- Pension Member rate \$25.00 Extra Family Member \$20.00
Standard Member rate \$40.00 Junior Member rate \$25.00
Fees can be paid by EFT to BSB 633000 - Account 146016746.
• Always identify your EFT payments.
• Membership Fee's Are Due at each April Annual General Meeting.

Magazine Articles to editor@ggrec.org.au or yk3tgx@gmail.com Cut off, 10th
All other Club correspondence to: secretary@ggrec.org.au
or via Snail Mail : GGREC, C/O Ian Jackson, 408 Old Sale Rd, Drouin West 3818
GGREC Web Site & Archive may be viewed at: www.ggrec.org.au
Website errors, contact web master via email webmaster@ggrec.org.au
Facebook Page www.facebook.com/GippslandGate