

# FISTS DOWN UNDER



Newsletter of the Australian / New Zealand chapter of the International Morse Preservation Society

September 2014 Email: [fists-down-under@ihug.co.nz](mailto:fists-down-under@ihug.co.nz) | Website: [www.fistsdownunder.org](http://www.fistsdownunder.org)

## Editor / QSL Manager for VK

Chris Thompson VK2CTN  
PO Box 65  
Dickson ACT 2602, Australia

## Membership / Awards Liaison

Ralph Sutton ZL2AOH  
12c / 186 The Terrace  
Wellington 6011, New Zealand  
Tel: 04 473 0847

## QSL Manager for ZL

Nigel Hardy ZL2TX  
PO Box 15078  
Otaki 5542, New Zealand  
Tel: 06 364 6339

## Web Administration

Garry Cottle VK2GAZ  
96 Luttrell Street  
Richmond NSW 2753, Australia  
Tel: 02 4588 5429

Recommended FISTS calling frequencies (MHz): 1.808 3.528 7.028 10.118 14.058 18.085 21.058 24.908 28.058

## This month:

- FISTS Down Under CW net
- Ragchewing versus collecting countries
- ILLW / RD contest report
- Morse code, flying boats and underground bunkers
- WZ8C Memorial sprint
- New member profile: Sam VK2AFA
- Open-wire spreaders
- The VK CW beginners net

## Quotation

'I do not think that the wireless waves I have discovered will have any practical application.'

- Heinrich Rudolph Hertz



1857 - 1894

Source: <http://en.wikipedia.org>

## FISTS Down Under CW net

Chris VK2CTN #9057

From reading through the comments received in the July survey, there is clearly some concern that it's often difficult to find FISTS members on the bands. Therefore, to encourage activity and provide a weekly meeting point for members, I'm pleased to announce the trial of a FISTS CW net which will be taking place on Tuesday evenings, commencing on 2 September.

Here are the details:

Time: 1000 UTC (8pm AEST) and closing at 1100 UTC (9pm AEST).

Frequency: 3.528 MHz

Net controller: VK2FDU (operated by Chris VK2CTN)

To check into the net, you just need to send your callsign during a pause and the net controller will take care of the rest. Everyone is welcome to participate. I look forward to hearing you on the net!



## Ragchewing versus collecting countries

Ian ZL2AIM #9683

I normally get on to 20m in the late afternoon (04:00Z to 05:00Z) and start calling CQ. I stick around for an hour or so and normally work between 10 and 15 stations in that time. A lot of the stations I have worked before, but it is nice to be able to say hello again. I realised that it was not helping me improve my CW. It becomes second nature to read the RST reports etc. and the most difficult thing would be reading the caller's callsign. Even I can do that quite easily! But ragchewing is, for me, much more fun.

I started calling in the evenings (08:00Z onwards) on 40m or 80m at my usual speed of 26 wpm, but was disappointed that I was not getting many replies. So after a bit of head scratching, I slowed my speed down to 17 wpm and hey presto – I started to get answers from VK's and ZL's. In order to get a ragchew going, I would give a bit of info on my rig, antenna, power and the weather. If the other station gave me similar information back, then I would try some other topic and see if he was a ragchewing type or not.

Some people enjoy chewing the rag and others don't. I have been very fortunate in being able to ragchew with a few stations most evenings. All of these stations send at a similar speed to my ragchewing speed and it really is a pleasure to spend an hour or so discussing what you have been up to during that day. Some of the ragchewers have a great sense of humour and there are times that I suddenly burst out laughing with their humour.

It doesn't take long (provided that both parties transmit good, well spaced out, code), before you become so accustomed to the code that there is no stress in following each other's conversations. My country count has only had one extra country recently, (Jersey), but the enjoyment that I have got out of lovely ragchews is tremendous. If you are not a ragchewer, and just want to exchange RST and FISTS numbers with me, then that is fine.



## Key Note collection on CD

New to FISTS club sales is the FISTS Europe Key Note Collection on CD, which contains all available European Key Notes between October 1987 and July 2014.

The files are in PDF format. Key Notes prior to February 2000 are in the form of facsimiles.

The prices, including delivery, are £2.50 UK, £3.00 Europe, and £3.50 DX.

For ordering, please see the club sales website:

<http://fists.co.uk/kncd>

## Oceania DX Contest sponsor

FISTS Down Under is now the proud sponsor of the *CW Single Operator All Band Low Power* category of this popular contest. The previous sponsor was the Pacific DXers Group.

The winner of this category receives a plaque and the FISTS logo will feature on it.

The Oceania DX contest has been around since the mid 1930s and was known previously as the VK / ZL Contest.

This year the CW section of the contest will be held on 11 - 12 October.

More details:

[www.oceaniadxcontest.com](http://www.oceaniadxcontest.com)

I am still working towards various FISTS awards and would love to exchange numbers with you. I am presently at 244 points so would value some extra ones. As for the FISTS Nightmare Award, I don't think I will ever finish it, but enjoy filling in the 'crossword' of FISTS stations worked.

Regarding the Millionaire award, I have got over 1,400,000 and working towards the next level. Whilst not a FISTS award, I have been trying to get my WAS in CW and I am looking to work Nebraska in order to gain the award. I missed out when W1AW/x worked from Nebraska earlier in the year.

## ILLW / RD contest report

**Doc VK5BUG #14136**

There were two big events over the weekend of 16 - 17 August: The International Lighthouse/ Lightship Weekend and the Remembrance Day Contest.

Station: VK5BAR (Adelaide Hills Amateur Radio Society club callsign) - operator VK5BUG Doc - Ten Tec Argonaut II running 2W output, homebrew Cootie key, 26ft alloy vertical and 16 radials.



Venue: The Marino Rocks lighthouse ID AU0118 was situated in a locked, fenced compound, so the station was set up about 30m outside the fence. This location was within the boundaries of the Marino Conservation Park which counted toward the popular AHARS Conservation Parks Award.

Saturday: 20m - The entire band was obliterated by S9 QRM from multiple SMPS hash and pulses from the lighthouse building due to its 'real life' as a multi-mode / frequency base station host.

15m - I logged many diverse long haul stations, some of which let me know that they could just hear a station calling them, but were not able to copy well enough for an authentic QSO even after several repetitions of callsign etc. Stations included OK, VE, VK4, S22, HL, OH, ON, OZ, YU, RK, LY, SM and LA.

Sunday: 40m - VK2, 3, 5 and 7 worked as part of the RD contest. Many other stations were called but without contact success.

11 x ILLW and 11 x AHARS Parks award contacts made.

Most were very hard work for the other stations involved, as my signals were obviously often barely perceptible, e.g. RST reports of 219, 229 etc. and much resending of numerical details was required.

20m - International contest underway with many powerful European stations active and my QRP signals were obviously not breaking the noise floor. I responded to calls over a 90-minute period before going QRT.

Comments: A very worthwhile shakedown exercise for my pedestrian RF trolley. It came up trumps as a one-stop shop station on pneumatic tyred wheels and containing a large umbrella and wet weather poncho, 2 x HF transceivers, UTC clock, balanced / unbalanced aerial coupler, 4 x collapsible alloy tubing aerials, 4 x sets of 4 radials each (30, 20, 15 and 10m), 4 x different bal / unbal feedline options, binoculars, digital camera, 2 x SLA batteries (7.2 and 17Ah), slide out operating desk, and grounding busbar all on board.

A number of VK2, 3 and 5 40m CW RD contesters appeared not to be concerned about transmitting almost on top of each other's signal, sometimes for over an hour (!!!).



Marino Rocks Lighthouse

Many CW stations that did not appear to be QRP operations were occupying 7038 / 7040 MHz which are the accepted VK and international QRP CW frequencies respectively. That significantly disadvantaged serious QRP category operation in the RD contest.

A number of what could have been 'part time' or inexperienced CW contesters gave out 5 x 9 reports immediately followed by up to 6 requests for repetitions of signal report/ ILLW details - whatever happened to authentic QSA / QRK and Tone report numbers? QRP operators require accurate RST reports for them to be meaningful and informative.

# Morse code, flying boats and underground bunkers

Thomas VK3EO #14161



Over the last few months I have been involved in a project with a small group of amateurs here in the Swan Hill area of North West Victoria to re-establish radio transmission from an old World War II communications bunker at Lake Boga, about 15 minutes drive from Swan Hill. During the war this bunker was a top secret facility used to communicate with the strategically important flying boats and other stations in the South Pacific over HF radio. The underground bunker is located at the site of the historic WWII No.1 Flying Boat Repair Depot at Lake Boga which is now part of the Lake Boga Flying Boat Museum.

The bunker is around 40m long and 8m wide and is of a domed bomb proof design, set into the ground and covered with earth. It has been designed to be inconspicuous from the air and they did a really good job as the bunker is virtually invisible on Google Earth.

Inside, the bunker has been restored to look like it did during the time of operation with working radio equipment, telephone exchange and code/ cypher machines.



Lake Boga with Catalina flying boats.

*...this bunker was a top secret facility...*

Originally there was an underground telegraph line that connected the repair depot at Lake Boga to Melbourne and messages would be passed on to Melbourne over this line. Perhaps it's still there somewhere. It would make a good earth.

In early March 2014 a local amateur and I had a meeting with the Lake Boga Lions Club who run the Flying Boat Museum and we discussed the idea of establishing a working HF station in the communications bunker. Anzac Day was about a month away and everyone agreed it would be a great day to have something up and running. After some discussion about the best antenna system for the bunker, we settled on a 40m dipole, using it on its third harmonic for 15m band operation.

We used some high quality coax cable with the same electrical properties as LMR-400 but full copper to allow for flexing and a 1:1 balun at the feed point. Some 60mm diameter steel poles were donated by a local engineering company and we erected the antenna at about 7m above the bunker which is about 10m from ground level. It looks great and seems to perform exceptionally well, even with a 5:1 SWR on 15m! The Anzac Day event went very well, with around 25 contacts to VK and ZL on 40m and it was a good day for the general public to see radio in action.

Over the last few months we have had a number of successful operations from the bunker, with many visitors including two scout groups and a group of primary school students who have been in the bunker for an explanation of the history of the repair depot and why radio was important at the time, a demonstration of Morse code and a discussion about the technology of radio transmission. So far it has been a surprising success! The kids who have been in the bunker for a demonstration seem genuinely interested in what is going on with lots of wide eyed attention and questions. We don't really know what it will lead to for these students but I'm hoping it helps spark an interest in radio and technology. I think learning Morse code is a great activity in itself - I remember when I was at school and learning Morse at home, my level of maths ability was greater just after I had been practising.



Lake Boga is 325km NW of Melbourne and 17km SE of Swan Hill.



The bunker as it is now.

### Did you know...

Prior to WWII, the highest level of security classification in the UK (and possibly the Commonwealth) was 'Most Secret'.

It was renamed 'Top Secret' to be consistent with the USA.

Source: <http://en.wikipedia.org>

### For sale or swap

A fully operational, compact desktop **Italian IRME T60/7 Series II 500KHz band CW/MCW ex-ships transmitter**, with 4 x 25DQ6B PA and another as the modulator.

Comes with Lucent 24V 32A smps, 8 x NOS 25DQ6Bs, plus a bunch of FT241 630m band crystals for someone to get active on 472KHz CW.

Its only issue is a cracked meter glass, which does not affect operation of course.

My other major hobbies are fishing and garden railway operation. I would be quite happy to swap the transmitter for Mamod or MSS 32mm gauge live steam locomotives, rolling stock etc.



Doc VK5BUG #14136

Email: [d.wd@bigpond.com](mailto:d.wd@bigpond.com)

We have also had some great interest from visitors to the museum, most of whom are travelling through the area on holidays. This has been one of the most rewarding aspects of the project for me so far. It is great to be able to demonstrate the art of radio communications to people who have never seen it before and give them an experience of living history with the sound of Morse code reverberating off the walls of the bunker again.

So far we have had a local newspaper article and two television news segments on the project. This has been excellent because it involves the community in the project and gives people some background information on the project, so it is much easier to explain what we are doing. The first television segment was with local WIN TV from Bendigo which covers North West Victoria, and the second was Channel 7 out of Melbourne who made a special trip to do the story. The video of this story is available at the following link: <http://www.youtube.com/watch?v=8N-9clhHUSY>

That day in particular was really special because we had Jean Willox, a telegraphist who worked in the bunker during WWII, a group of school students from the local primary school, Lions Club members and the news team all there on the day. Amazingly, Jean was able to pick out and recognise letters of Morse code at 15WPM after nearly 70 years since touching a key and it was a real privilege to have her there on the day.

There is much more to be done with the project in the next few years, including a better antenna system with some donated towers, more 'operations/ activations' from the bunker, finding the original transmitter that was there during the war and following up on a number of leads regarding war time radio. We even found an old radio teletype machine that was on a display along with a restored radial aircraft engine at the museum. The owner of the engine had left it there not knowing what it was and asked us to identify it. It's a little bit like being in an Indiana Jones movie, with all these bits of information and old underground radio bunkers. It has been great fun so far and I'm looking forward to being involved in the next developments.

As of writing I have just heard back from our regulator to say we have a callsign for the operation at the bunker, VK3FBM, which is an acronym for Flying Boat Museum.

There is a page for VK3FBM on QRZ.com with QSL information if you make contact with the station. I hope to hear you on the air.



Thomas VK3EO

*What a great story! I highly recommend watching the video clip. Well done, Thomas! - Ed.*

## WZ8C Memorial sprint

The North American QRP CW Club (NAQCC) and FISTS are jointly sponsoring a special sprint on 3 September at 0001 - 0300 UTC (the evening of 2 September in North America) in memory of CW advocate Nancy Kott WZ8C SK. The sprint is part of a month-long operating challenge that is also being held in memory of Nancy.

Nancy was the President of the FISTS CW Club in North America as well as being past editor of WorldRadio and WorldRadio Online magazines, and is a 2014 inductee into the CQ Amateur Radio Hall of Fame in recognition of her work in promoting Morse code.

Details about the exchange, log submission, etc. can be found at: <http://naqcc.info/nancy.html>



Nancy WZ8C #379

## New member

This month we warmly welcome **Sam Burg VK2AFA #14180**.

Sam writes: I'm 27 years old and I'm a diesel fitter. I received my standard licence around 1.5 years ago. A month later I passed the advanced test, receiving the callsign VK2AFA. My QTH is Morpeth in the Hunter Valley.

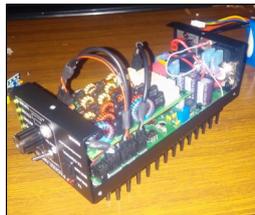
I started learning CW from scratch at the start of this year and have practised nearly everyday since. My interest started in CW with the introduction of SOTA last year in VK2. I have built a few QRP rigs like the PFR3 and a CRK10A planning to be used for SOTA. Looking forward to many years of CW fun.



Sam pictured in front of a Liebherr 9800 backhoe.



Sam VK2AFA on Mt Richardson (SOTA summit VK2 / HU-074) near Dungog. He has achieved 181 SOTA activation points in less than a year!



HF Packer v4 amplifier.



QRP antenna tuner.



Hendricks PFR-3 QRP rig.

## Open-wire spreaders

**David VK3DBD #3756**



Although the trade offers every convenience of ready made devices for the amateur, home construction and experimenting seems to be common.

I recently advertised some surplus (commercial) spreaders for open wire line and was surprised at the response. For FISTS members who are thinking of similar constructional projects, I offer this simple, cheap and highly effective solution which will hardly hurt your pocket.

Get some length of the plastic binder channel sold for clipping A3 and A4 documents together and often in longer lengths for hanging posters and maps on the wall. It is usually black, but I have seen it in different colours, should you fancy a decorative feeder!

Cut it to the right length to suit your required spacing, drill two holes through each end, making sure they are at 90 degrees to each other, this effectively traps the wire and stops the spacer moving once adjusted. Three inch spacing is usually the preferred measure and the wire used should be a light multi-strand, preferably insulated such as used in low current auto applications. Almost any wire will do.

There are various means of measuring the velocity factor and the low priced antenna analyser is now becoming a commonplace possession. Beg, buy or borrow one...

The test books will tell you that a half wave of feeder will provide the same impedance at the start and finish and obviously that can be adjusted by trimming the length to end up with a suitable match to coax should you need to do so. It is an almost loss-less feed line and does not have the weight of coax. The only proviso is that it is best kept away from solid objects such as walls and trees and can be of considerable length offering distinct advantages for those who have to erect their antenna far from the shack.

The photos show the details. 10mm plastic irrigation pipe is another material that can be used for this purpose, but is probably a little heavier. Holes should be drilled, offset in the same way to trap the wire.



Front view



Side view

### Recommended FISTS club calling frequencies

If they are busy, it is suggested that you QSY to a clear spot (within your licence limitations and the band plans).

Band	MHz
160	1.808
80	3.528
40	7.028
30	10.118
20	14.058
17	18.085
15	21.058
12	24.908
10	28.058

## Key dates

### FISTS Down Under CW Net

Tuesdays on 3.528 MHz

1000 - 1100 UTC

(8 - 9pm AEST)

Net controller: VK2FDU

### WZ8C Memorial Sprint

3 September

0001 - 0300 UTC

In memory of Nancy Kott WZ8C.

More details:

<http://naqcc.info/nancy.html>

## Elecraft K1 QRP rig

Unfortunately the 4 band version of this popular HF kit is no longer available.

Here is an extract of a post by Wayne N6KR from Elecraft:

*The 4-band module requires extremely low-temperature-coefficient trimmer capacitors because of its narrow-band pre-mix and RF band-pass filters. The last source for these exotic trimmers dried up recently. A redesign using higher -TC trimmers might be possible, but the filters would end up being triple-tuned, which would force the use of SMD components throughout, and tuning the filters would then be very difficult without a spectrum analyzer...*

More details [here](#).

## Donations

Many thanks to the following members who included a donation when renewing their membership:

David ZL2AUJ #9668

Arthur VK2ASB #9082

## The VK CW beginners net

David VK4MDX #14171

The idea for the VK CW beginners net didn't come to me suddenly, but the seed was probably planted back when I was VK4FOLO. I had already had an interest in Morse code but as soon as I became licensed, I became interested in learning. I found the practice tools available these days to be great for learning, but I just couldn't keep myself motivated. I am one of those blokes who need a clear use for things I learn. I decided that CW was the ideal tool for DX, especially for foundation licence calls, which are limited to just a few watts.

With that idea in mind, I knew I would have to master enough code to be able to have a short QSO, typical of a DX contact. I began practising and soon I was confident enough to reply to DX stations. My first DX contact was a Willis Island DXpedition and from then on I was hooked. Despite my limited ability at Morse, I now had enough confidence to reply to certain stations and have a short QSO.

It occurred to me that since Morse was no longer a licence requirement, perhaps I could get more people interested if I made it seem less like a chore and more like a fun thing to do on air. Instead of just working away alone at trying to master code, perhaps a group of like minded people could get on air and practise amongst themselves. I knew that this meant people would be sending, when they had not yet mastered receiving, but I had my own theory about the old advice which says 'don't touch a key until you can receive well'. While this may have been great advice, particularly for those using straight keys, I think that today, with electronic keyers built into radios, the advice is no longer relevant.

A beginner learning on a straight key sends pretty awful code and of course hears it via the sidetone, and this is not good for learning to receive. However, a learner sending code using a keyer can send pretty reasonable code with very little practice and as such hears pretty reasonable code when he sends; this can only aid his/ her learning. What is more, the learner can have some fun in a supportive environment, instead of struggling with using learning tools alone.

From this thought, the CW Beginners Net was born, and has grown to have as many as six participants. It has waxed and waned along the way, and my work schedule makes it difficult for me to be there all the time, but instructions are available that would allow anyone, even a learner, to run



David VK4MDX is also a keen glider pilot and former instructor. Pictured here inside a Glasflugal Hornet (VHGEX) single seater glider.

the net. Matt VK2RQ #14154 in Sydney has often assisted with net control and has been very supportive of the net.

The net runs Wednesday and Saturday at 1030 UTC and presently operates on 3.552MHz in winter and 7.552MHz in summer.

Further information about the net is available at: <http://www.vkcwbeginners.net> and on Facebook.

*Please support this net if you can. Having more operators trained in the use of CW is a great result for all of us.*

*Well done, David! - Ed.*

## Membership renewals

Ralph ZL2AOH #1073

Here is the list of those due to the end of September 2014, some are well overdue.

Please check carefully and tell us if you are listed in error, if you have mislaid your renewal form and require a replacement or otherwise have a query. Please send in your subscription (\$15 ZL members) (\$16 VK members).

9012 - 9053 - 9061 - 9566 - 9613 - 9674 - 9675 - 9677 - 9699 - 14111 - 14130 - 14132 - 14133 - 14138 - 14142 - 14145 - 14149 - 14150 - 14160 - 14169



*Until next month, 73*