FISTS DOWN UNDER

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

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This month:

I was...a geek before there were computers!

- ZL1AHJ

New member

We extend a warm welcome to **Tony Burns ZL1AHJ #14179**.

Hi all, I'm a fourth generation Kiwi who grew up as a Hawkes Bay farm boy. I'm married, with two sons offshore and three grandchildren.

That farm boyhood was blessed with a large garden and a father who helped me make a long-wire radio aerial and a weather-proof hole in the wall of the farmhouse. One day, Dad came home from town with two books discarded from the local library, he'd bought them for a few pennies each. *The Boy Electrician* and *Elements of Wireless* transformed my mind and my bedroom. I was a wartime baby and a geek before there were computers! The Boys' Rally at our local church had a Radio Club. I built a 'Hiker's Two' shortwave receiver with two battery valves, and learned Morse at the dizzying speed of 5 wpm.

I joined the aerial topdressing industry in the 1960's as an aircraft mechanic, and qualified as a licensed engineer and commercial pilot. I was able to get involved with MF radio installations in our Fletcher FU24 fleet. To reach out into country areas we operated somewhere about 3 MHz. Later on, and living in Dunedin by that time, I got an operator's certificate as ZL4TBK but other concerns and a brand new family overtook that hobby for many years.

I got deeply into electronics when I joined Rank Xerox as a technician, moved up to Auckland, and was employed in the national workshop's electronics lab. I designed and built a 16-bit microcomputer from the chips up, and used it to test and diagnose electronic controllers that came in from copying machines for repair. With that tool we could do our month's allocation of controllers in four days. I could read object code straight off 9-track paper tape, and was regarded as a mutant by my colleagues.

From copiers and early computers, I drifted into broadcast television as a studio engineer, and then into corporate computers and networks. I spent years as a consultant 'soldier-of-fortune' feasting and starving by turns. Now that I'm retired, I'm an amateur astronomer and planning to get active again on air, with an interest in QRP and CW. Haven't got any kit of my own just yet, but I have a borrowed Yaesu HF transceiver (FT757GX), and I'm beginning to home brew some test gear as a start.

Members' news

David VK3DBD / G3SCD #3756 reports from Lincolnshire, England. Summer is being issued out in small doses here, certainly some nice days and the lush growth and wild flowers along the roadsides etc. are particularly striking this year, but could do with a little more heat. Still got plenty to do and have, as yet, had little opportunity to play with the (relatively) long list of new toys: IC706, IC7000 and the Elecraft KX3.

Have had a session trying to improve the antenna farm and seem to have succeeded quite well. An 80m dipole albeit with a 90 degree bend, is higher than before and works well. The 5MHz dipole with trap for 40 is superb on both those bands and the other 30 and 20m dipoles although not had much use, are as before and QRM permitting, work OK.

Am currently working on preparations for a week in Scotland from 12 - 19 July. Mainly fishing and boating, but will be /p as GM3SCD when possible.

How radio active are you?

That is, how often do you fire up your rig and close the contacts on your Morse key?

Please let us know via this short survey. It should take less than a minute to complete.

https://docs.google.com/forms/d/1U4Q3bV8-G1mhpIXCCGDqguHlQbSBhis9Sf82z_-EJ8c

The aim of the survey is to gain some understanding of when members are likely to be on the air and on which bands. Results will be published in the August newsletter.

A $180 light bulb

Ralph ZL2AOH #1073

There is a plethora of light bulb jokes. So much so that there is a website devoted to them: www.lightbulbjokes.com

Here's a light bulb story that the victim didn't think was a joke!

My ICOM IC-736 has a genuine meter, not one of those LCD abominations that flashes and distracts you while you are trying to concentrate on your QSO. The needle in the meter is very thin and a challenge to geriatric eyes. Therefore when the bulb illuminating the meter failed, it was extremely difficult to read the meter reading.

I consulted the user and service manuals but neither admitted to a part number for, or even the existence of, the bulb. So I contacted ICOM New Zealand seeking their help. After a few days they responded that they had located the correct bulb, the part was $3.00 and the freight would be $5.80. All I had to do was to pay the amount of $8.80 to their bank account by internet banking and the bulb would be on its way.

The meter shone just like new, BUT the rig was silent

The only problem was that they failed to tell me their bank account number. I emailed them about that and after a week with no reply I emailed them again. Another week passed and I was getting really peeved. I decided to write to them enclosing a cheque. This did result in an email on a Friday evening thanking me for the cheque and saying that the item would be sent by Monday's courier.

However by the next Friday nothing had arrived so I spoke to the managing director who rang back shortly afterwards saying that the dispatch clerk didn't know my address. I pointed out that it was always appended to every email I write! Eventually the envelope arrived on the following Tuesday. Hallelujah!

I proceeded to open up the rig to access the old bulb. This involved removing twenty five screws securing the case, plus another five to allow the front panel to hinge down exposing the meter. It took only a few moments to cut the leads to the old bulb an solder the leads to the new one. Five plus twenty five screws later, all was secured and I attached the power leads and other cables to the rig and when I switched on the meter shone just like new, BUT the rig was silent; it would neither receive nor transmit.

I ensured that all the external connections and front and back panel settings were OK, so reluctantly realised that I had done something to cause the failure. So I undid all the thirty screws. An inspection showed that by hinging the front panel down too far, a connecting ribbon cable between the front panel and main circuit board had been stretched so that it disconnected. I tried to insert the cable into its mounting a number of times but had no success and decided that it was something needing replacement and specialist attention.

I reassembled the rig and packed it for shipping to my preferred serviceman in Auckland. Having to use a crutch at present, I was not able to take the 12kg package to the post shop myself. I arranged payment for the $44.10 courier fee through the excellent NZ Post on-line facility. I rang Courier Post at about noon to arrange a pick up. I was assured that it would be collected during the afternoon. Actually it was not until about 10AM the following morning that the package eventually left. Fortunately that was the last mishap that occurred in this long tale of woe.

A few days later the package was returned; everything working well and I think the receiver was improved by the serviceman when checking everything was 100% before returning the rig to me. His bill, including return freight was $127.42, so the total cost of this experience was $180.32!

Tony Hancock - the English comedian, would have been 90 years old on 12 May 2014.

An episode of *Hancock* called 'The Radio Ham', was first broadcast in 1961. You can watch this on YouTube at: https://www.youtube.com/watch?v=2PzeB1nj79w

To celebrate his birthday, the Coventry Amateur Radio Society operated GB8TH outside the home of his birthplace in Birmingham.

A BBC news broadcast of the event can be seen at: https://www.youtube.com/watch?v=7cWBwTGze2w

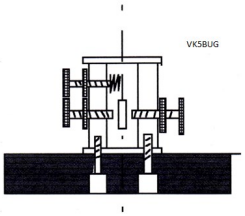
Bug building

Doc VK5BUG #14136

The accompanying bug key drawings are intended to be more about a design concept and overall plan, particularly in relation to scales and ratios of the various elements, rather than an engineering prescription.

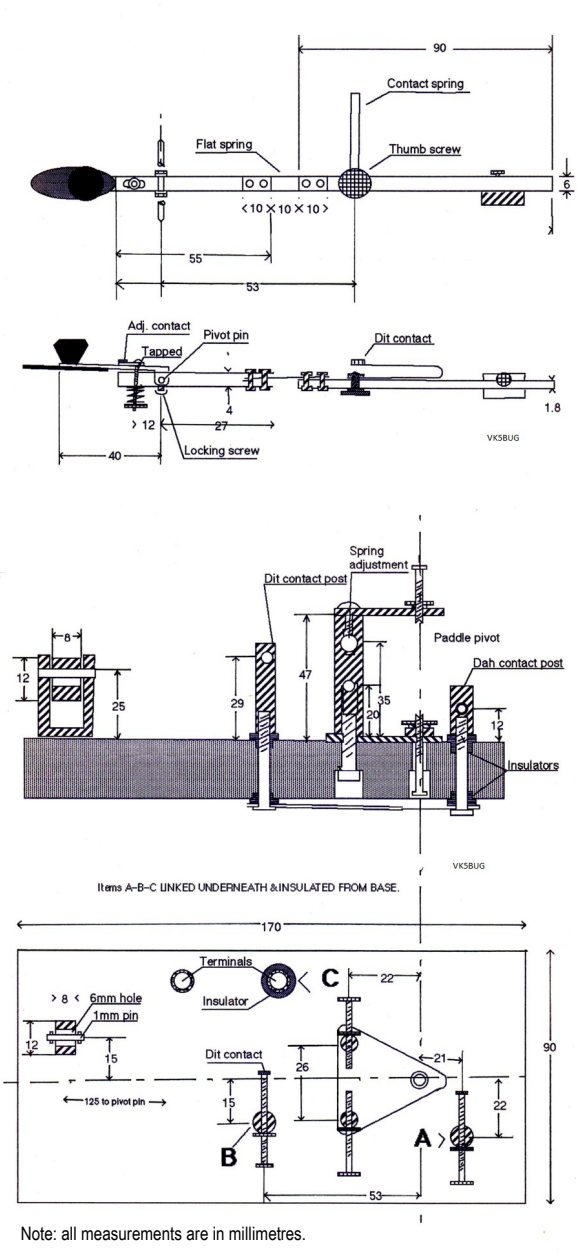
The whole thing is 'up for grabs' by personal customising, while the choice of fabrication materials is moot, depending upon the contents of one's junkbox, bank balance, personal preference, skill level, workshop equipment availability and dolphin friendliness factor! I do not have a lathe, so the hand files and Dremel outfit got good workouts!

I used mild steel plate for most of my key, and in fact added a second base plate with the upper being separated by one centimetre from the lower: like a sandwich with no filling. This was just an attempt at creativity in adding mass to eliminate 'desktop creep' as well as uniqueness. Once cut, drilled and linished, the entire base was hard chromed, accompanied by the major superstructure items.



Insulators were hand made from Teflon and polyethylene offcuts; hardware was selected from a range of 6BA to 0BA bolts, nuts and washers, with knurled round nuts lurking in my junkbox. Flat and coil springs were extracted from expired children's toys plucked from the 50-cent tables at local Flea Markets. The armature finger rest is a robust guitar pick epoxied to a plastic knob.

A Vibroplex 'Champion' key was used as an initial template, though my own key was customised as I saw fit during the construction journey, and it has been physically stretched so that it borders on 'imposing', while also being much heavier than the commercial key.



Note: all measurements are in millimetres.

Friends have used the plans to make distant relative keys from marble, jade, aluminium billet, hard and soft woods as well as dense plastics, with appropriate conducting material installed where necessary. Such hybrids are usually works of art. I work with only one completely functional elbow, so my skillset has been adapted accordingly.

Making the key was never a 'must do' project, and it took a couple of part time years before the pieces were sent to a chrome plater. Assembly and tune-up took a couple of hours once the pieces were back in my possession.

Although it is not a preferred SOTA or AHARS Parks Award key for portable work, I like using it as a change from sideswipery every now and then.

Should you choose to make your own version, I hope the journey and end product both bring you lots of joy. It is a hobby...

The finished product.

Designed and made by Doc VK5BUG.

Key dates

FISTS Activity Day

Every Tuesday

0001 - 2359 UTC

Simply get on the air, make some contacts and hopefully meet other FISTS members along the way!

Trans –Tasman Contest

Saturday 19 July

0800 - 1400 UTC

80m and 160m

This 6 hour contest is not intended to be either a sprint or marathon, but to provide a good evening of contesting.

The format is intended to suit both the novice and serious contester, with a friendly and relaxing atmosphere.

More details: www.wia.org.au

Hall of Fame

Nancy Kott WZ8C SK was recently inducted into the CQ Amateur Radio Hall of Fame.

Nancy was a great supporter of Morse code and was involved with the administration of the North American chapter of the FISTS CW Club since its inception.

Nancy became a silent key on 2 March 2014.

Donations

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

George VK2DLF #9052
Paul ZL1PC #9073
Bill ZL2BIL #9003

HF antenna design

Michael VK3CMV #14175

Apart from CW, another of my interests is HF antenna design. In 2013, I was the primary writer of two articles on low band antennas, and both of these were published in *Amateur Radio* magazine.

The first was titled 'Building Big on 160 metres for the VK / ZL Trans-Tasman Contest' (April 2013) and the second was 'Play time' on 80 metres: A high performance antenna system for the VK / ZL Trans-Tasman contest (December 2013).

My main antenna is for 40m and it's a one and a half wavelength horizontal quad loop, broken at the half way point of the loop with an egg insulator. It is strung up about 70ft (21m) above ground, on four of the big trees in my yard.

This antenna is fed with a resonant half-wavelength of 450 ohm ladder line, via a 4:1 balun, mounted on the eves and then several metres of RG8 coax through the wall into the shack. I have found that the ladder line, with its velocity factor of .91, is much easier to achieve multi-band resonance with.

The big quad loop is multi resonant on 40m, 20m, 15m and 10m. It works exceedingly well on four bands, with no external ATU necessary. The internal tuner of the ICOM 7140 easily achieves negligible SWR with this system.

One of the antenna supports: a Mountain Grey Gum, 33m tall.

My 80m antenna is a vertically polarised, phased array, using the design by KE4UYP, again, hanging off more of the 90ft+ gum trees in my back yard. I have no 160m antenna at present (must think about that).

On 18MHz I run an upside down delta loop, with the apex at the bottom, pointing northwest/ southeast towards Europe. The loop is suspended on a single rope between two of my trees, at a height of approximately 60ft (19m). Feeding the loop is achieved via a one kilowatt 1:1 balun at the base, into RG8 coax and then to the shack. I plan to build and parallel feed another delta loop for 10MHz, with the same feed point and antenna supports in the very near future.

The 4:1 balun.

For local club chit chat on VHF/ UHF, it's an MC 50 collinear base antenna. This antenna is strung around 80 feet (24m) up on one of the trees and gives excellent local repeater access with 5W output from the VHF rig.

I'm a very active member of the Sherbrooke Community Radio Club, with our club website at http://www.vk3kid.org.au Another of my interests is photography and some of my pictures and videos are on the club's website.

Membership renewals

Ralph ZL2AOH #1073

This list includes memberships that expire up until 31 July 2014. It includes several that are well overdue and who risk having their membership terminated.

9012 - 9023 - 9053 - 9066 - 9082 - 9566 - 9608 - 9609 - 9611 - 9674 - 9675 - 9677 - 9679 - 9691 - 14119 - 14129 - 14130 - 14134 - 14135 - 14138 - 14142 - 14145 - 14146 - 14147 14157 -14158 - 14161 - 14167

Please check if you are included. Let us know at fists-down-under@ihug.co.nz if you are included in error, or if you need a replacement renewal form (which includes payment options), or if you have any membership queries. Otherwise, please send your subscription.

Until next month, ***73***