

	<h2 style="margin: 0;">FISTS DOWN UNDER</h2> <h3 style="margin: 0;">Newsletter – December 2011</h3> <p style="margin: 0;">Editor &amp; QSL Manager for ZL: Nigel Hardy, ZL2TX, P.O. Box 15078, Otaki 5542, New Zealand. - Tel: 06-364-6339</p> <p style="margin: 0;">Newsletter Distribution &amp; QSL Manager for VK: Chris Thompson, VK2CTN, P O Box 65, Dickson, ACT 2602, Australia</p> <p style="margin: 0;">Membership/Awards Liaison: Ralph Sutton, ZL2AOH, 12c Herbert Gardens, 186 The Terrace, Wellington 6011, New Zealand Tel: 0-4-473-0847. Fax: 0-4-473-0848</p> <p style="margin: 0;">QSL Manager for ZL6FF: Nigel Hardy, ZL2TX at address above. QSL Manager for VK2FDU: Chris Thompson VK2CTN at address above</p> <p style="margin: 0;">Address e-mails for all persons above to: &lt;<a href="mailto:fists-down-under@ihug.co.nz">fists-down-under@ihug.co.nz</a>&gt; Web site --: <a href="http://www.fistsdownunder.org">www.fistsdownunder.org</a></p>	 
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**SUGGESTED FISTS CLUB CALLING FREQUENCIES**

1.808 MHz (160m) – 3.528 MHz (80m) – 7.028 MHz (40m) – 10.118 MHz (30m) –  
14.058 MHz (20m) – 18.085 MHz (17m) – 21.058 MHz (15m) – 24.918 MHz (12m) – 28.058 MHz (10m)

Members are reminded that the above frequencies are suggested calling frequencies. If they are busy, it is suggested that once you establish contact with a station, it may be prudent to change frequency down the band, avoiding other calling frequencies of known clubs.

**DOWN UNDER MEMBERS' NEWS**

We appreciate the donations made by (not available at time of going to press – Ed)

**FORTHCOMING EVENTS**

These are some of the CW contest/event offerings in December 2011 and January 2011 most of which will be of more interest to our northern hemisphere readers

Thanks to WA7BNM Contest Calendar - <http://www.hornucopia.com/contestcal/contestcal.html>

QRP ARCI Top band Sprint	0000Z-0600Z Dec 1
ARRL 160-Meter Contest	2200Z Dec 2 to 1600Z Dec 4
Wake-Up! QRP Sprint	0600-0629Z Dec 3 and 0630Z-0659Z Dec 3 and 0700Z-0729Z Dec 3 and 0730Z-0800Z Dec 3
TOPS Activity Contest	1600Z Dec 3 to 1559Z Dec 4
AWA Bruce Kelley Memorial CW Contest	2300Z Dec 3 to 2300Z Dec 4 and 2300Z Dec 10 to 2300Z Dec 11
ARS Spartan Sprint	0200Z-0400Z Dec 6
NCCC Sprint Ladder	0230Z-0300Z Dec 9
ARRL 10-Meter Contest	0000Z Dec 10 to 2359Z Dec 11
CW ops Mini-CWT Test	1300Z-1400Z Dec 10 and 1900Z-2000Z Dec 10 and 0300Z-0400Z Dec 11
SKCC Weekend Sprint	0000Z-2400Z Dec 11

NAQCC Straight Key/Bug Sprint	0130Z-0330Z Dec 14
CW ops Mini-CWT Test	1300Z-1400Z Dec 14 and 1900Z-2000Z Dec 14 and 0300Z-0400Z Dec 15
NCCC Sprint Ladder	0230Z-0300Z Dec 16
AGB-Party Contest	2100Z-2400Z Dec 16
RAC Winter Contest	0000Z-2359Z Dec 17
Croatian CW Contest	1400Z Dec 17 to 1400Z Dec 18
Stew Perry Top band Challenge	1500Z Dec 17 to 1500Z Dec 18
ARRL Rookie Roundup CW	1800Z-2359Z Dec 18
QRP ARCI Holiday Spirits Homebrew Sprint	2000Z-2400Z Dec 18
Run for the Bacon QRP Contest	0200Z-0400Z Dec 19
DARC Christmas Contest	0830Z-1059Z Dec 26
SKCC Sprint	0000Z-0200Z Dec 28
CW ops Mini-CWT Test	1300Z-1400Z Dec 28 and 1900Z-2000Z Dec 28 and 0300Z-0400Z Dec 29
NAQCC Straight Key/Bug Sprint	0130Z-0330Z Dec 29
AGCW Happy New Year Contest	0900Z-1200Z Jan 1
ARS Spartan Sprint	0200Z-0400Z Jan 3
NCCC Sprint Ladder	0230Z-0300Z Jan 6
EUCW 160m Contest	2000Z Jan 7 to 0700Z Jan 8
DARC 10-Meter Contest	0900Z-1059Z Jan 8
Midwinter Contest	1000Z-1400Z Jan 8
NCCC Sprint Ladder	0230Z-0300Z Jan 13
North American QSO Party CW	1800Z Jan 14 to 0600Z Jan 15
NRAU-Baltic Contest CW	0630Z-0830Z Jan 15
NCCC Sprint Ladder	0230Z-0300Z Jan 20
LZ Open Contest	0000Z-0400Z Jan 21
Hungarian DX Contest	1200Z Jan 21 to 1200Z Jan 22
NCCC Sprint Ladder	0230Z-0300Z Jan 27
CQ 160-Meter Contest CW	2200Z Jan 27 to 2159Z Jan 29
REF Contest CW	0600Z Jan 28 to 1800Z Jan 29

**MORSE EXPRESS CHRISTMAS KEY - 2011**



Once again we feature the annual Christmas Key commissioned by Morse Express - its eleventh such key.

The 2011 Christmas Key is a miniature camelback key made by GHD Telegraph Key in Sendai City Japan, incorporating traditional Japanese craftsmanship with GHD's impeccable engineering and finish.

In keeping with GHD's larger keys, the Morse Express 2011 Christmas Key is fully adjustable, with precision pin bearings at the trunnion, miniature binding posts, comfortable knob, and perfect balance. The contacts are hard-silver and the finish is satin chrome plate.

The distinctive base is beautifully grained mahogany, and the knob is hand-turned. GHD's Toshihiko Ujiie uses both modern and traditional techniques to produce a miniature key that will be equally at home in the radio shack, in the field, or decorating a Christmas tree.

According to Marshall Emm N1FN "The Christmas keys have always been a labour of love for me and my first priority has always been usability. GHD has brought considerable expertise to the precision manufacture of the Christmas keys, and the 2011 is about as small as you can make a key and still have good functionality. The 2011 key measures 5.08 cm by 2.86 cm at the base and it weighs less than 57 gm. The 2011 Christmas Key is a LIMITED EDITION of 180 keys priced at \$89.95, plus shipping and handling. Each key has a label with **Christmas2011** and a unique serial number. Pictures and more information are available on the Morse Express web site at [www.MorseX.com](http://www.MorseX.com) where you will also find secure ordering facilities.

The 2011 Christmas key will add something special to straight key operations on straight key nights.

The Morse Express 2011 Christmas Key is \$ USD89.95 (plus s/h) and is only available from Morse Express.

#### **TRAWLING THE WEB**

Last month we reported that subscription to CQ Communications email magazine is no longer free. However they still publish "CQ Newsroom" that periodically reports items of general interest to hams. It is free at - <http://www.cqnewsroom.blogspot.com/>

Comprehensive article on "Ham Radio in the 21<sup>st</sup> Century"-  
[http://www.edn.com/article/519742-Ham radio in the 21st century.php#references](http://www.edn.com/article/519742-Ham%20radio%20in%20the%2021st%20century.php#references)

Just the Christmas gift for the ham who has everything -  
<http://www.notonthehighstreet.com/primitivestate/product/personalised-morse-code-t-shirt>

Chirpy - an Ultra Simple 2 Transistor 28MHz CW Transceiver -  
[https://sites.google.com/site/g3xbmqrp/Home/xbm10\\_2](https://sites.google.com/site/g3xbmqrp/Home/xbm10_2)

#### **OTHER MEMBERS' NEWS**

##### **FISTS – THE BEGINNINGS** **An essay by VK3DBD / G3SCD - David Dunn #3756**

Languages are all about communications and the human race over the thousands of years of its existence has developed many different varieties.

Some members of the animal kingdom too seem to have a means of communicating with each other, but as yet not understood by man.

Few folk can understand more than two or three languages and although attempts to make a truly universal one has been attempted- like the fairly successful Esperanto, it is debatable that use of such will ever become widespread.

The Morse code could be said to be a very simple and effective universal means of communication between different races, admittedly within certain parameters and can be learnt fairly easily by anyone without a working knowledge of each other's language.

Learning requires your brain memory to store 26 letters and 10 numbers, plus a few procedural sounds. Now that can't be too difficult can it?

You do not have a problem with accents, pronunciation, and except in very few cases even problems of poor hearing can be overcome too.

But it is a case of do it right, or at least as well as you can.....

"Accuracy transcends speed" is an important motto of Fists:

Very recent discussions on the Fists Club reflector has brought to the fore this matter of accurate sending of the Code:

With a Fists number of 3756 I don't consider myself a particularly early member, but time passes quickly and certainly in my fairly early days of taking up serious use of the code-and joining Fists, I remember a few QSOs with Geo G3ZQS himself. I had passed my 12 wpm Morse test at Humber radio, GKZ one of England's coastal Radio stations, not far from my home, many years before but using it was still an adventure. It was distinctly rusty and definitely a case of trying to prove the old ditty - "Practice makes perfect" Working Geo, Mr Fists Himself, and also being aware he was a member of FOC was indeed rather like an audience with God. I guess my CW suffered accordingly but Geo never turned a hair, polite gentleman he was. And he certainly was not lacking a great sense of humour.

Most of the old Fists newsletters are preserved for posterity on the UK Fists website and indeed I did actually contribute one or two old newsletters to the club. Being a hoarder of paperwork and anything that "might be useful", I have kept a few printed copies of those early ones and was able to supply Graham G3ZOD with scans for the archives.

The very first newsletter ever produced by Geo, is available to see on the club website.

His concept of the new organisation he had started, simply because of his enthusiasm and dedication to the art and craft of CW that enthusiasm shines through in all his writings to the very end.

He struggled to initially type out the early newsletters possibly on typewriter, or some sort of word processor. A stencil was made and copies were then duplicated on a "Roneo" or similar duplicating machine, and posted to members. Perhaps a photocopier, another expensive office aid, came later: If you were involved in such processes, you will recall that home printers for computers came quite a lot later and were not cheap either. Times have changed!

Bearing in mind the methods prevailing then it must have been a mammoth task for a person who was no Spring Chicken and also was doing his best to help and look after his dear wife Ivy who about that time had a hip replacement and no doubt both were feeling the effects of aging. Later Geo got hold of a basic printing press and set that up, it would enable printing pictures from printers "blocks" which of course he had to get made to order. Anyone who has had dealing with "half worn out" printing presses will be aware of the problems that usually come with them. The days of .JPG files and digital DIY images were yet to come - at least for normal mortals

The first Newsletter bears no year date but it seems that was produced in late 1987, but some later newsletters do have the wrong date on them just to confuse folk like me.

It was around period that I took up serious regular Morse QSOs - some 24 years after getting my licence and passing the test.

Geo's writings initially comment on the current members, giving where he can a humorous background history of their interests and activities. He also goes on to quote a few commonly used Q code and comment on procedures. One of the comments which really inspired me to write this was a short paragraph written by him which I quote:

"Beginners:

Please be watchful of your spacing, generally the spaces in between characters are more important than the construction of a character. .....Listen around. You would be surprised at the number of amateurs who own horses with double barreled names. "My NAG is TOMTOM" is not quite as uncommon as it should be."

It is equally or even more true now, than then, perhaps because these days CW ops in most countries do not have to pass a test to use the mode, are self taught. Now that is an admirable achievement of course, BUT personally I now find it is one of the most frequent causes of difficulty in reading a transmission. We all develop habits and usually only the bad ones are noticed. As Shakespeare wrote: (Mark Antony's speech in Julius Caesar) "The evil that men do lives after them; the good is oft interred with their bones"

George's few words imply so much, they really are an understatement. On air I come across many ops who send excellent Morse, the modern paddle and electronic keyer does help and to some extent controls the way characters are sent. Those keyers do tend to hide the recognisable "Fist" of individuals. But senders using a bug or a

sideswiper provide much individual style, unfortunately, not all of this makes for easy listening. The timing of every letter is critical so that the word is sent smoothly and the space between that and the next word must be recognizable as a space. Familiar words we send like a place name can so often be un-decipherable to the listener, simple because there is a missing space. There are scientific timings for characters, words etc which is fine if you are measuring with instruments, but it is the human brain, that most clever computer, which should be trained to adjust the timing, as in music to a very accurate tempo.

And Tempo is what it is- try listening to a piece of music played using all the right notes but with the wrong timing - it will be completely or nearly un-recognisable. It is rather a debatable statement I'm sure, but it can be considered as a link to the importance of correct sending, Geo's very first Newsletter bears the heading:-

The sounds of Bach are a cacaphony compared to the sweet melodies of Morse

As with music the odd wrong note will not make that much difference. A deliberate correction would spoil the tune because it has then spoiled the timing, or rhythm. So do not correct all of your mistakes, most will be quite obvious to the receiving station. In a book we can all read the printed word if some of the letters are wrong, but run them together and it gets very difficult.

It is acceptable and in fact recommended to repeat any number just twice. BUT don't forget the space between them or a 3 digit number becomes a six digit one

We who took the original Morse test usually had a helpful comment from the examiner, at least those who were kind enough to try and help the examinee whether a pass or fail. Mine; (Second time lucky) was "Your dots are a bit short" This was not a fail, simply a hint and I have never forgotten. From time to time I tape my own transmissions and play back a week or three later. Just to check quality. I must admit it varies!

Regretfully I never met Geo personally, but our QSO's gave great satisfaction especially as he seemed to know my name immediately, - computer retrieval was not so common then.

Over the next few years Fists membership grew and grew and Geo frequently wrote of his struggles of producing the newsletter, with his own deteriorating health and also that of his dog, often mentioned in the newsletters and his beloved Ivy too. Both the latter eventually departed this earth and Geo obviously found carrying on with the Fists work- by this time into unprecedented membership numbers, very difficult.

Help from others was gratefully accepted but I feel he was bit of a loner and was not one for delegating responsibilities.

The rest is history and there will for sure be many folk around who knew him in person and could add far more and tell some related stories of those early Fists days.

Geo must have felt very satisfied in his last days that his brainchild really had succeeded in creating the "Morse Code Preservation Society"

So even if you are struggling to achieve an acceptable speed, have go, get on the air and send CQ at the speed you would like to listen to. Good ops will reply at that speed, but you can always send QRS and anyone who does not respond to that is hardly worth having a QSO with.

So please do not forget ..... "**Accuracy transcends Speed**" Q.E.D

#### NEW AWARD

To commemorate the 25<sup>th</sup> Anniversary of the founding of the FISTS Club by the Late Geo Longden G3ZQS, a new award has been established. The full details are recorded in the attached document headed ""Prefix Awards". The same document will also be available, together with information on other FISTS Club awards, on our website <http://www.fistsdownunder.org/awards.htm>

*The ionosphere has awakened with vastly improved propagation on the higher bands. This new award is an opportunity for our members to come out of hibernation and populate the bands.*

#### Chris VK2CTN #9057

After almost two years of living in an inner city apartment where it was impossible to get on-air, save for a few portable expeditions, I'm very pleased to advise that I'm QRV once again! I recently moved to the country town of Yass in NSW, where I have bought a house. Yass is 50km NNW of Canberra and has a growing population, most of whom are probably ex-ACT residents who were also priced out of the property market in the capital.

At the moment I'm limited to QRP with the Elecraft K1, as my main rig has developed some problems which require further investigation. I have put up a dipole for 40mx and hope to improve on this situation over the holidays.

I have relinquished my VK1CT callsign. I'm still working in Canberra though, so my postal details as they appear in the newsletter masthead, remain unchanged.

### **HENDRICKS QRP KITS PFR-3A** **By VK4ZW-Ray Buck #9681**

I am a keen QRP operator and have built a number of kits to support this passion. Earlier this year Grant, VK4JAZ, another keen QRPer, said that he was keen on building a multiband QRP radio, mainly for CW operation. He was looking at the Elecraft K1 and the Hendricks PFR-3A (<http://www.qrpkits.com/pfr3.html>) – the PFR stands for Portable Field Radio. After some discussion Grant opted for the Hendricks kit. He made some enquiries with Doug Hendricks and found that the cost of postage for two kits was the same as for one and he asked me if I was interested. I hadn't been thinking of any new QRP radios as I thought I had enough radios (can you ever have enough?) however the ongoing discussion with Grant had wetted my appetite and so I eagerly said yes. The kit was designed for Doug Hendricks by Steve Weber, KD1JV, who has an awesome reputation for the design of quality kits.

The specifications for the PFR3-A are as follows::

- Bands : 40 meters, 30 meters and 20 meters
- Tuning range: Full band coverage
- Mode: CW only
- Power supply: internal AA batteries or external supply. The PFR-3A rig is designed to be powered by no more than about 12 volts and no less than 8 volts.
- Receiver MSD: 0.2 uV typical
- Selectivity : 300 Hz
- Receive current, no signal typical:
  - Active, 47 ma
  - Idle, 34 ma
- Transmitter:
  - 5 watts at 12 volts, all bands
  - Spurs: - 50 dBc maximum, all bands
  - 5 to 35 wpm internal iambic keyer
  - Two (2) 63 character keyer memories.
- Coax or balanced line output
- Built in BLT (balanced line tuner)

An accessory previously offered for the kit was a screw-on paddle assembly which has been discontinued. This was not an issue for either Grant or me as we prefer to have a paddle or key that is not attached to the housing. You can see the benefits for portable use of the screw-on paddle as the paddle looked quite small and easy to connect to the PFR-3A case.

The kits arrived in due course and Grant and I started on the build. The PFR-3A page on the Doug Hendricks QRP Kits website includes a downloadable Production Manual and a Decal Installation Instruction guide. The Production Manual is quite detailed and includes a step-by step build for the PFR3-A including a complete parts list that can be used to check all components when received.

As with all kits the first step is to check that all components and parts have been supplied. Grant and I found some parts missing. A quick email to Doug and the parts were on their way. The kit includes all components: a printed circuit board with the surface mounted devices for the RF Oscillator and Direct Digital Synthesiser pre-soldered on the board, all hardware, decals, and enamel coated enclosure with pre-drilled holes and slots.

Grant and I also ordered the Battery Status Indicator (<http://www.qrpkits.com/bsi.html>) as this seemed the most effective way to monitor the internal battery status in the field. This kit comes with mounting instructions for the PFR-3A but there are no pre-drilled holes in the enclosure.

There are five stages of construction in the following order:

- Microprocessor and display
- Receiver
- Transmitter
- Low pass filter
- SWR Bridge and Balanced Line Tuner Each stage is quite easy to construct and the testing required is comparatively easy; a frequency counter and cathode ray oscilloscope are suggested test equipment in addition to the ubiquitous multimeter however the construction can be accomplished without these but the accuracy of the receiver will be compromised. There are two errors on the printed circuit board design that require a jumper and capacitor to be soldered to the non-component side of the board. Power output is governed by the voltage supply (max 12 volts) and how the transmitter low pass filter coils are spaced around the cores.

As with all kit construction care must be taken when soldering components and the old saying of 'measure twice, cut once' still holds (that is, double check all components for correctness before installation).

Installation of the decals on the housing is quite tricky and Doug Hendricks includes two sets of decals and believe me you will need them as the decals are quite fragile. Once installed and with a couple of coats of clear varnish the housing looks very professional.

Operation:

Band selection is made using two slider switches. This was obviously a compromise made during the design of the kit. The two sliders are required to be in the appropriate positions for correct operation. The frequency is varied by two push button switches: one for increasing the frequency and one for decreasing the frequency. There is an RIT function controlled by a push button switch next to the frequency switches.

Straight key or paddle can be used and If a monaural plug is inserted in the key socket on power-up the rig is set for straight key mode.

There is a menu push button switch to accesses various keyer functions such as: send message, change keyer speed, TUNE mode, and enter messages and select iambic A or B mode of operation.

The inbuilt Balanced Line Tuner (BLT) is the same as offered in kit form by Doug Hendricks (BLT Plus [http://www.qrpkits.com/blt\\_plus.html](http://www.qrpkits.com/blt_plus.html)). The tuner will tune balanced and unbalanced antennas. The BLT can be switched out if using a tuned antenna or external antenna tuner.

Grant and I finished our kits within a couple of days of each other. Grant and I have had great success with the PFR3-A. Grant quickly made a QSO into North America and one with RA1AIF/MM, a Russian container ship captain in the South China Sea on 20m; both QRP. I made some local, VK2 and VK3 contacts as well as one from Brisbane to Invercargill on the first night of operation with Robin ZL4IG. I recently spent some time in London where I used a ¼ wave on 40 with counterpoise hanging out of a first story window and made numerous contacts into Europe on 4 watts or less (as the batteries ran down) on all bands.

All-in-all I am very pleased with the kit, as is Grant, and believe it represents great value for money and is a great portable rig.







**SEASONS' GREETINGS**

This is the last FISTS Down Under for 2011. We will be having a publishing holiday so the next edition will be in your mail boxes late in January 2012 as we move into our fourteenth year down under. We wish all our members, their families and friends the very best for a merry Christmas and a happy New Year of good health, peace and great propagation. Vy 73 de Nigel ZL2TX, Chris VK2CTN and Ralph ZL2AOH

