



Ragchew

“The Voice of Branch 68”

March 2016

The North Canterbury Amateur Radio Club Inc.
PO Box 14, Woodend 7641



www.ncarcinc.weebly.com

Meetings are held at the Woodend Youth Centre, unless otherwise advised.



QTH

CLUB CALENDAR

Meetings start at 1930hrs, unless otherwise stated.

Host for March – ZL3OV

March 10 General Meeting - “Software Defined Radio” by Simon ZL4PLM

Branch 01 Ashburton

March 7 General Meeting - John ZL2AYQ is host

Branch 05 Christchurch

March 2 General Meeting - “Breaking RTTY Signals during WW2” by Prof. Jack Copeland
17 Day meeting (1300hrs)

Branch 56 Christchurch West

March 9 Free & Easy (1330hrs)
22 General Meeting

CARDS

March 16 General Meeting

Nets and Frequencies

Canterbury 2M SSB Net 144.200MHz every Tuesday from 2000hrs (vertical polarisation)

Canterbury 6M Net 3850 6M Repeater Thursdays from 2000hrs (vertical polarisation)

Canterbury Area Net 5625 Repeater, 2000hrs on Sundays

National Broadcast last Sunday of the month at 2000hrs on 3.900MHz, National System, 6975 and 705 Repeaters

*Secretary: Colin Rowe ZL3COL Phone 03 313 2303 Email: colingr@xtra.co.nz
Editor: Tony Buckland ZL3HAM Phone 03 312 5352 Email: zl3ham@scorch.co.nz*

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President's Report

I was humbled at the last club meeting to be given the John Powell Amateur of the Year Award. A totally unexpected honour, thank you.

This weekend I have finally solved two problems in the shack, that have been plaguing me for almost a year. Firstly my IC-718 seemed to be lacking in power (approx 40-50W output) and secondly my doublet antenna wouldn't tune up as it used to.

I had checked all connections, completed a factory reset of the radio and was about to send it to the doctor for radical surgery!

But an initial test with Richard ZL4FZ at his QTH revealed that the radio was in perfect working condition with good power output on all frequencies. Then a test of my power distribution system encompassing a West Mountain PowerGate and separate fused distribution box also by West Mountain, again found everything in good order.

What was this mysterious affliction? A short 200mm power lead with 2 inline fuses in it supplying the radio with power. When initially tested the voltage was a healthy 13.79v but under load it dropped to 11.0v, problem found, swapped out the lead and all was good again.

Almost exactly the same culprit with the antenna, a faulty coax jumper going into the tuner. So there we are, check your connections and make sure your engineering is good!

By the time you get Ragchew we would have participated in the Jock White Field Day, so look forward to that report.

73 Don ZL3DMC

AREC Report

Forest Rural Fire: (AREC supplied Comms / Logistics to Forestry Fire Teams).

Sun. 21/2/16. Smoke sighted on Waimak riverbank near Eyrewell Forest by pilot of light aircraft. First responders unable to locate any fire. Two Forestry units stood down while en route.

CDEM:

Sat. 20/2/16. Request from CDEMO to assist with comms at the Pines Beach Fire. On arrival, determined that what little Fireground radio activity was happening was in fact totally "in field", i.e. between fire crews, and not via the ICP. After a suitable time observing this, and in consultation with the PRFO, CDEMO and ICP staff, determined that AREC would not be needed especially as fire fighting activity was being wound down.

Geoff ZL3QR Dep. S/L

****John Powell Radio Amateur of the Year Award****

**Congratulations to Don MacDonald ZL3DMC
Who received this award.**

Repeater Reports

Mt. Noble 6975

Appears to be functioning as usual. I have not listened too much lately as I had to re move the dual-band rig from the truck. It's 21 degrees up there this evening as I type this report (22 Feb). Would have been a good day for a walk up the hill.

Mike ZL3AKZ

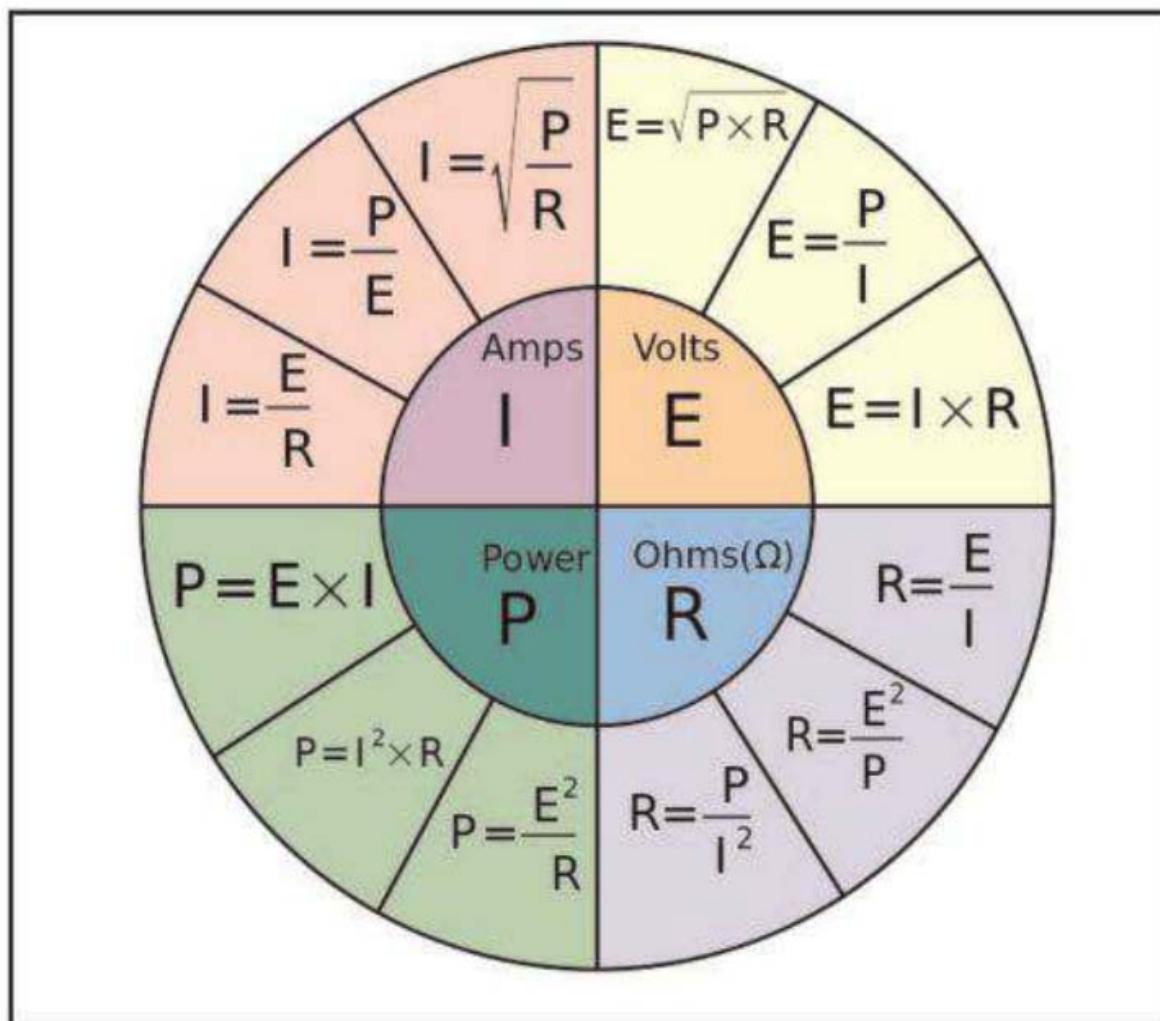
Mt. Grey 675

The repeater is working well with no known issues.

Geoff ZL3QR



This commonly used pie chart covers the basic elements of Ohm's Law, and more



****For Sale****

Tilt-over Tower 13M. Complete with beam, rotator & control, etc.

For further details contact Geoff ZL3QR
(03) 313 7317 or zl3qr@kinect.co.nz

March Meeting

The last meeting was the AGM and followed by a DVD "K1N Navassa Island DXpedition" the # 1 most wanted DXCC entity.

This month Simon ZL4PLM will be giving us a presentation and demo on "Software Defined Radio".



****March Happy Birthday's****

Liz ZL3LIZ
Emily ZL3WEM



GRITTY 1.3

RTTY decoder for Windows XP/7/8/10, 32/64-bit

FREEWARE

<http://www.dxatlas.com/Gritty/>

GRITTY is an RTTY decoding program based on the technology developed for the RTTY Skimmer Server project. This is not a skimmer, it decodes a single signal in the 3-kHz audio coming from the transceiver via a soundcard, just like any other RTTY program.

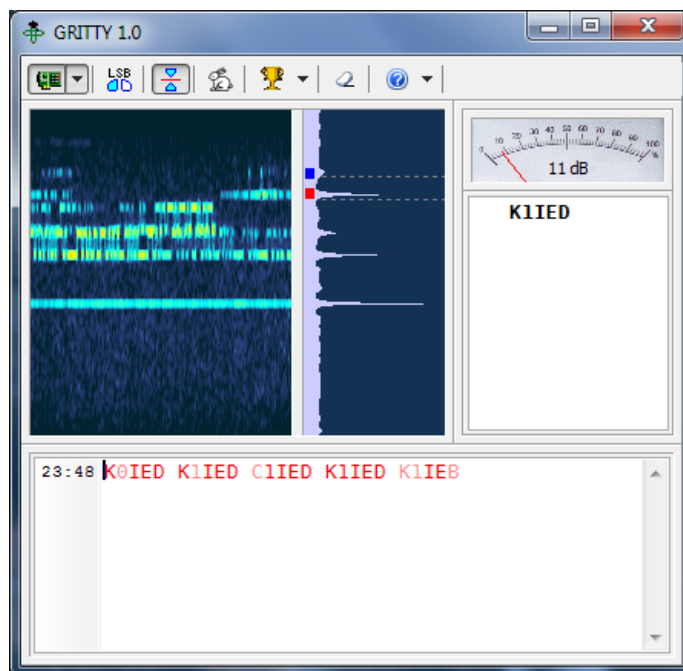


Fig.1. GRITTY is decoding weak signals. Unreliable characters in the text are printed using light colours, many of them are errors, but the program still determines the correct callsign and shows it on the callsign stack.

How It Works

The decoding algorithm in GRITTY is based on the methods of Bayesian statistics. This results in a better decoding accuracy than other algorithms, created by the trial and error method, typically achieve. In the Bayesian framework, all information is represented in the form of probabilities. In particular, the Bayesian decoder computes not only the 5-bit Baudot codes, but also the probability of error in each of the bits.

One obvious use of these extra data is to compute the error probability for each character in the text, and color-highlight the unreliable characters. Another use is smart squelching. In GRITTY, the squelch function is based not on the signal amplitude but on the error probability. This works better than the traditional squelch since it allows decoding of very weak signals but suppresses strong signals when interference makes accurate decoding impossible. The net result is very little garbage in the output.

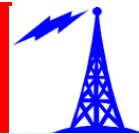
The bit error probabilities are also used in other, more interesting ways. GRITTY not simply prints what was decoded, but performs some intelligent analysis of the decoded text. When similar callsigns appear in the message, an experienced operator can often tell which call is correct and which one is corrupted. GRITTY can do the same, but more accurately than a human, because it can compare the calls bit by bit and merge the probabilities using the Bayes formula. Quite often the program is able to determine the correct callsign and put it on the call stack even if all received copies of the call are corrupt.

A similar approach is used to find and correct the errors in other parts of the text, such as exchange numbers and CQ/DE keywords, to fix incorrect shift state, etc.



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CALENDAR for 2016**General Meeting - Second Thursday at 1930 (7.30pm)**

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
-		10	14	12	9	14	11	8	13	11	8

Committee Meeting - Fourth Thursday at 1930 (7.30pm)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
		24	28	26	23	28	25	22	27	25	-

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Enquiries to Denise ZL3HI, phone (03) 313 4907

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