



# Ragchew

“The Voice of Branch 68”

May 2017

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



[www.ncarcinc.weebly.com](http://www.ncarcinc.weebly.com)



QTH

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

## CLUB CALENDAR

Meetings start at 1930hrs, unless otherwise stated.

### *Host for May - ZL3COL*

May 11 General Meeting - “Tactical Wi-Fi Implementation” by Dave Hadler ZL3TRX

### **Branch 01 Ashburton**

May 8 General Meeting

### **Branch 05 Christchurch**

May 3 General Meeting - “Remits followed by (DVD) TX Factor 14 or 15”

18 Day Meeting @ 1300hrs

### **Branch 56 Christchurch West**

May 23 General Meeting

### **CARDS**

May 17 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](mailto:colingr@xtra.co.nz)  
Editor: Tony Buckland ZL3HAM Phone 03 312 5352 Email: [zl3ham@scorch.co.nz](mailto:zl3ham@scorch.co.nz)*

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## President's Report

April has been month full of holidays for the working person, and I have enjoyed many activities on my days off, not all related to amateur radio.

The shack upgrade has not happened yet, but some more thought has gone into layout etc.

I have been experimented with remote SDR receivers (software defined radio). On a website named: <http://kiwisdr.com/> there is a feast of remote receivers around the world (including 4 in New Zealand) that are available for use. These are really good if like me you are plagued with urban hash and noise. They can be used for antenna testing and for recording your signal to see what your radio sound like at the other end. Remember though they can't be used for contests or DXCC credit.

Please make an effort to come to next monthe general meeting where we will discuss the remits for this years conference. We will also have Dave Hadler ZL3TRX giving us a talk on WiFi developments for equestrian and other events that involve AREC safety comms and training, a subject that I have been involved with as well, not to be missed.

**73 Don ZL3DMC**

## AREC Report

### Civil defence

Saturday 29<sup>th</sup> April

Geoff ZL3QR and myself will be assessing CD teams involved in competency training around the letui area.

There will be approx. 6 teams of 8 persons, who each will have to assemble a portable repeater unit, make a QSO then disassemble. Exercise will finish at 1400hrs.

**Don ZL3DMC/ZK9EG**

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

Sat. 1/4/17. One Forestry unit called to a vineyard on fire within fire boundary of Omihi Forest.

First arrival appliance (Waipara) noted a small rubbish fire (with owner in attendance) and stood down remaining responding units.

**Geoff ZL3QR  
Dep. S/L.**

## Repeater Reports



### Mt. Noble 6975

Seem working ok but can't say I have used it very much. Our trip up in April has been postponed as one of the software programmers has not been available due to having to be in another Provence.

**Mike ZL3AKZ**

### Mt. Grey 675

The repeater is working well with no known issues.

**Geoff ZL3QR**



# The "Best" Random Wire Antenna Lengths

Random wire lengths you should and should not use!

Jack, VE3EED - SK

The random wire antenna is probably one of the least expensive, easiest and cheapest HF antennas to use if you have a tuner and you want to get the "most" out of a length of "random" wire without having to pull out that calculator, doing the math, getting the center insulator built or bought, running the feedline, and all the rest that goes with putting up a more elaborate antenna.

All you need for a random wire antenna is some wire, your tuner, one or more supports up as high as you can get them to string the wire from the supports to the tuner, at least one or two insulators and a little time. One single wire, no solder connections, very simple.... all the way from the tuner to the end support. That's it in a nutshell.....**or is it?**

Many hams have tried till they are blue in the face to install the random wire antenna that works on most; if not all of the HF bands with terrible results.

SWR usually is all over the place and the tuner will just not do it's job. You can get good loading and low swr on sometimes 2 or 3 bands, but one or more of the bands that you want, just will not cooperate with an swr that can be adjusted with the "tuner".

So after much frustration..down it comes and you go on to a totally different type of antenna....all that time just wasted in your opinion.....until now!

We recently found some good information about random wire lengths that you **should** and **should not** use.

Jack, VE3EED, hopefully has solved a major headache we all have when we attempt to go thru the trial and error and frustration with getting the random wire to work where WE want it to work.

He knew that in order for the tuner to "see" a fairly low swr to work within it's range, that the antenna had to be **NOT A HALF WAVE ON ANY FREQUENCY** that we wanted to us, because a half wave will give us a very high impedance and the resulting swr into a 50 ohm transmitter!

So Jack took most of one day, did the math with the aid of his trusty calculator, several cups of coffee and came up with.....

The table below represents half wave lengths and multiples that you **DO NOT WANT TO USE!**

You have to stay away from a half wavelength on any frequency. Therefore, we came up with the following numbers to avoid (**IN FEET**):

These lengths in the table below are the **culprits** that cause all of the trouble when using random lengths.

Frequency MHz	1/2 Wave	2nd Multiple	3rd Multiple	4th Multiple
1.9	246	492	738	984
3.8	123	246	369	492
7.2	65	130	195	260
10.1	46	92	138	184
14.2	33	66	99	132
18.1	26	52	78	104
21.3	22	44	66	88
24.9	19	38	57	76
28.5	16	32	48	64

So those are the numbers above that we have to stay as far away from as possible when building a long-wire antenna.

cont'd

Here they are in order:

**REVISED: 16 19 22 26 32 33 38 44 46 48 52 64 65 66 76 78 80 88 92 95 96 99 104 110 112 114 123 128 130 132 133 138 144 152 154 156 160 165 171 176 182 184 190 192 195 198 208 209 220 224 228 230 231 234 240 242 246 247 256 260 264 266 272 276 285 286 288 297 304 308 312 320 322 323 325 330 336 338 342 352 361 363 364 366 368 369 374 380 384 390 396 399 400 414 416 418 429 432 437 440 442 448 455 456 460 462 464 468 475 480 484 494 495 496.**

Some of these numbers are too close to squeeze in between them.

Here are the final numbers (in my opinion) in **green** below that would be good for a long-wire antenna: (You may want to make a note of them)

**REVISED: 29 35.5 41 58 71 84 107 119 148 203 347 407 423**

**REVISION NOTE:** We had a note from James, KB5YN, pointing out that one of my so-called GOOD numbers was 220 feet. That is the 10th multiple of a half wave on 15 meters. Well, I didn't think it would make any difference at that many multiples. However, the radio didn't tune up very well on 15 meters.

So, having nothing better to do one day, I re-did the calculations going out to 500 feet. That meant calculating all the way to 32 multiples of a half wave on 10 meters. I won't bore you with all that so the first portion of this still only shows up to the 4th multiple. There are so many new frequencies to stay away from, that it gets pretty tricky for the longer wires. However, the list has been revised and is good for wires as long as 500 feet.

**73.... JACK, VE3EED**

<p><i>Man Up &amp; Get Checked!</i></p>		<p>PHONE 0800 477 678 EMAIL <a href="mailto:info@prostate.org.nz">info@prostate.org.nz</a> WEB <a href="http://www.prostate.org.nz">www.prostate.org.nz</a></p>
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## April Meeting

Last month Don ZL3DMC gave us an illustrated talk on various Digital Modes, hopefully this has inspired a few more to give it a go.

This month we have Dave ZL3TRX giving us a talk on WiFi developments for equestrian and other events that involve AREC safety comms and training not to be missed.



**\*\*May Happy Birthday's\*\***

None that we know about ...

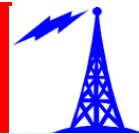






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### CALENDAR for 2017

#### General Meeting - Second Thursday at 1930 (7.30pm)

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
-				11	8	13	10	14	12	9	7

#### Committee Meeting - Fourth Thursday at 1930 (7.30pm)

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

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