

# Ragchew

"The Voice of Branch 68"



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.



OTH

#### **CLUB CALENDAR**

Meetings start at 1930hrs, unless otherwise stated.

#### Host for September- ZL3AL

September 8 General Meeting - "SOTA" by Andrew ZL3CC

Branch 01 Ashburton

September 12 General Meeting

**Branch 05** Christchurch

September 7 General Meeting - "Photo Quiz" by Kelvin ZL3KB

15 Day meeting (1300hrs)

**Branch 56 Christchurch West** 

September 14 Free & Easy (1330hrs)

27 General Meeting

**CARDS** 

September 21 General Meeting

# "WestFest 2016" - 10/11 September in Murchison

#### **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

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Tel: 03 311-8020

# **President's Report**

Well Christmas is certainly getting closer and with it, hopefully some warmer weather.

I again had the privilege of tutoring some of the topics at the second Ham Cram held by Branch 05, and again a very successful outcome with 10 of the 11 candidates passing. Congratulations to one of our own new members Richard Sedcole who passed with only 1 error, well done Richard.

As summer approaches I am thinking of ways to get involved in the SOTA program, which is starting to become popular. I don't think I'll be climbing Mt Cook anytime soon but something more modest may be on the cards. The other project that I would like to complete in the near future is to look at my HF antennas and maybe make some improvements.

Please let the committee know if you have any ideas or topics for our monthly meetings, as we are always keen on new ideas.

Remember also that WestFest is coming up soon in Murchison on the 10th and 11th of September, and for our newer members this is an excellent weekend jam packed with a variety of amateur radio topics.

That's all for this month see you at the meetings.

73 Don ZL3DMC

### Branch 68 foundation member John Irving ZL4DR SK.

At our Club's formation in 1969, John (then ZL3FA) was a teacher at the Springbank School and that year we operated for the very first time in National Field Days from the school grounds using John's callsign as the Club was yet to receive it's own callsign ZL3RR. RIP John.

Geoff ZL3QR.

#### WestFest - 2016

Saturday 10 September 1030 – 1730 & Sunday 11 September 0900 - 1230

Venue: Murchison Bowling Clubrooms, Waller St, Murchison

For information contact Bob McQuarrie ZL3TY zl3ty@nzart.org.nz Phone (03) 768 7388 or 027 420 8043

# **AREC Report**

Nothing to report this month.

Don ZL3DMC, S/L.

# **Repeater Reports**

#### **Mt. Noble 6975**



Running great most of the time. Geoff commented about a low signal recently probably due to ice build up during the recent snowy conditions. Roll on Spring!

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 centre 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 its 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 its 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......

In Jack's own words....

"Here's the word on random-wire antennae."

Presented for your consideration by Jack, VE3EED.

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.

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** 



# FACE YOUR FEAR - Blue September 2016

Businesses, community groups, families and individuals all over New Zealand join in the Blue September campaign each year to get the message out to New Zealand men to "get checked" for prostate cancer. And they also raise a lot of money that supports the work of the Prostate Cancer Foundation.

https://blueseptember.org.nz/ www.prostate.org.nz

# **August Meeting**

Last month we viewed the British ham radio program TX Factor 12. Interesting content including reviews on two new SDR rigs.

This month Andrew ZL3CC will be explaining the intricacies and fun of SOTA (Summits on the Air). Raising ham radio to new heights!





# \*\*September Happy Birthday's\*\*

Roy ZL3ARJ
Mark ZL3AIC
Carleen ZL3ADO
Jim ZL3ND
(Apologies for errors last month)





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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
-								8	13	11	8

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

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

# **Branch 68 Marketplace**

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