# BREAKOUT

The Newsletter of the Hastings and Napier Amateur Radio Clubs

Hastings Branch 13 NZART - Napier Branch 25 NZART

Volume 18, Issue 8, August 2018



Hastings Br 13 Club Calls ZL2AS ZL2QS

Napier Br 25 Club Calls ZL2GT ZL2G

> IRLP Node 6793 147,250



Not your average hams' back yard. Guess where....ZL2DW has the answer

# Branch's 13/25 Net 9.00 AM Sunday Morning 670 Repeater

Editor John Newson ZL2VAF http://www.zl2gt.nz/

http://groups.yahoo.com/group/zl2as/

**Emergency Call-in Frequencies: 3615khz and 670 repeater** 



## Inside This Issue

Hastings Branch 13 Report	Page 2
Andrew White Memorial SOTA	Page 4
October 2018 Table Sale	Page 5
<b>Dummies Guide to HF Contesting</b>	Page 6
<b>Branch 13 Guest Speaker</b>	Page 10
To Take Away	Page 10

#### **HASTINGS BRANCH 13**

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Club Call: ZL2AS and ZL2QS

Club Nights: Fourth Wednesday each month at 7.30 pm Pakowhai Hall, Pakowhai Road, Pakowhai

## A STAND IN SPEAKS

Due to Blue ZL3TT being QRT for a short while I thought I would volunteer a brief spiel.

Those of you who were at the last Branch 13 meeting were treated to every hams delight......a "Junk Auction", I have no doubt that many of you ended up with some bargains. I can also tell you that our Branch ended up with well over \$200 for it's effort (this includes the scrap metal that was given in and sent to the scrap man the next day). This means that a good portion of our standing costs are taken care of for our current financial year.

Talking of things (partly) financial I can tell you that our Treasurer, Peter ZL2PW, mentioned recently that we have got sub's in to a point where we have the same number of paid up people as we did last year. The strange thing is that some of the sub's can be quite slow in arriving (but "a" sub is better than "no" sub) so we're grateful for them all. It should be remembered that the Club has things it needs to pay for throughout the year, eg, Hall rent, MBIE/RSM Licence fees for our respective repeaters and of course there is always the need for maintenance of repeaters and Branch equipment......and we shouldn't lose sight of the fact that we like to have a social aspect to our Club as well....who doesn't enjoy a cuppa and biscuit (and sometimes other goodies) on meeting nights.....just to name a few items.

Talking of sub's timing it's appropriate to remind you that our financial year ends on 30 September, our AGM is held in November and it's at this meeting that we decide what the sub. will be for the year. Many pay on the night of the AGM.....some even pay in advance of the AGM (on the presumption that the fee will remain as it has been for some years......this is a fair presumption based on history). Several reminders are issued early in the new year "that sub's are due" and with online banking these days it's pretty damn quick to deal with it, however we are not averse to receiving any kind of remittance be it cheque or cash.

## Continued on Page 4



Branch 13/HBARC, Hastings, office bearers, Peter Keong ZL2PW (Treasurer), Blue Smith ZL3TT (President), David Walker ZL2DW (Secretary).

#### **NAPIER BRANCH 25**

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Committee Meetings: 7:30 pm, 3rd Tuesday of January, March, May, July, September,

November

Club Calls: ZL2GT, ZL2G

Club Web Site: http://www.zl2gt.nz/

Club Nights: First Wednesday each month (except January) 7.30pm at the Club Rooms:

123 Latham Street Napier

## A STAND IN SPEAKS Continued

Over the years we can say that some pretty good management of our Club funds has been made (thanks Bill Lowes ZL2UBG and Peter Keong ZL2PW) placing us in a good spot these days. As an aside I can tell you that many years ago the Club decided to carry it's own Contents Insurance (with premiums at the time being prohibitive) and this fund stands in good shape today.

So keep those sub's rolling in in good time to support a club that you can feel proud of. And I can also say that there are many of you that volunteer much to the Club in so many ways, thank you.

At our last meeting we were addressed by NZART Councilor Peter Mulhare ZL2IK who talked about the NZART Public Liability insurance policy that has been under consideration. Peter told me later that he was impressed with the questions and feed back that he had during his presentation. Thanks for your time and effort Peter, from Branch 13.

Having had a wee bit of "it's to cold in the shack" itus I haven't been doing much on air, however last Saturday night (11 August) I decided I needed to pull my finger out.

8pm came and no I didn't win Lotto so into 80m I went. In short order I worked many VK stations in their Remembrance Day event....with a few more being worked on 40m., I think I worked 12 in all so I think I got over the "Winter Blues" OK. Working VK is no big deal of course but at least it's a bit of what Ham Radio is all about. Talking of "working VK" I was amused the previous Saturday night when I replied to a VK calling "CQ" on 40m. While he was polite and logged our contact he wanted to get away promptly to work a W5 hi hi. I must say that I was keen to do so also but the W5 had been up especially early for his morning so "wanted a cup of coffee and would be back very soon". I waited 15 minutes and decided that this was long enough and vacated the shack. For some working W5 on 40m would be no big deal but it doesn't happen for me every night.

Looking forward to seeing many of you at the next Branch 13/HBARC meeting at the Pakowhai Hall, 7-30pm Wednesday 22 August, all welcome.

73, David (ZL2DW Secretary for Branch 13/HBARC, Hastings)

# **Andrew White Memorial SOTA Activity Day 15th September**

Hi all. Sadly we lost Andrew ZL3CC unexpectedly earlier this year. To remember him, and his contributions to SOTA, AREC and amateur radio in general, the Saturday following his birthday is to be the Andrew White memorial SOTA Activity day. The aim is to encourage portable operation from a summit, and to encourage new and experienced hams to give SOTA a go.

For those that are not aware of the fun that SOTA can hold, the rules are simple. Select a summit from one of the 5000 or so available in New Zealand. Ensure you have the necessary permission (if private land) to access the summit. Set up a portable station from the summit (or within 25 vertical metres from the summit spot height). To be a true portable station it cannot be connected in any way to a vehicle.



How he Boy

Power must be from a battery or solar source. Fossil fuel sources or the grid are not allowed.

To select a summit go to www.sotamaps.org select your desired association (country) and region, and have a look around the map for one you would like to activate. If you are unsure send me an email and I can give you some suggestions depending on where you are warren@zl2aj.com. Once you have chosen your summit post an alert up on www.sotawatch.org under alerts. You will need to login to do this. Most of the activity will happen between 0000 and 0200 UTC but if this timeframe doesn't suit select the timeframe that best suits you. Feel free to join us on the zl-sota facebook group to let others know what you are planning or if

you need any advice about a summit or operating technique.

In Hawkes Bay there are a couple of easy access summits. Te Mata Peak is a drive up and requires no permission to access. Table Mountain behind Lake Tutira is a short walk and also requires no permission for access. One of our own hams ZL2GR has a summit on his farm. For the more advanced, Kaweka J is a summit and can be accessed without permission. There are many many others. A total of 156 summits exist in the Hawkes Bay region, with many others close by. Please remember to ask for access before walking onto private land.

# On the day

40 and 20 metres are good places to gather contacts. As is 5.353 if you have permission to operate there (contact Debbie to arrange this). On 40 we usually operate 7.090 but for largfer events like this we will spread out a bit each way. On 20 the usual frequency is 14.310 =/- spread. Any valid contact (not through a terrestrial repeater) on any band and any mode qualifies. Exchange signal report and callsign. If you are working summit to summit it is good practice to also exchange summit identifiers. 4 contacts with different hams gathers you the points for the summit. To boost your chances post a spot on www.sotawatch.org or use sotaspotter app (for android) or sotagoat (Apple) to do this for you.

Please let others know your plans for the day, take all the usual safety precautions, and don't underestimate the summit or the weather on the day. Have fun, take time to enjoy the views, and be safe. Once you are back home please let me know how your day went by sending me a short report to warren@zl2aj.com and I will include it in the next Break In column.

#### **Thanks**

Warren ZL2AJ (SOTA Association manager for ZL)



# **October 2018 Table Sale**

# Hi Everyone,

Its that time of year that you have all been waiting for. The ZL2KO Table Sale. Time to clean out the shack and make some cash.

### Date:

Saturday 6th October 2018

## Times:

Exhibitors: Doors Open at 8am General Public: Doors Open at 9am

# **Pricing:**

Full Table: \$25 until 30th Sept 2018 \$30 After Half Table: \$15 until 30th Sept 2018 \$20 After

## Location:

Longburn Hall, State Hwy 56, Longburn

To Register your Full or Half Table, Click HERE

# **Dummies Guide to HF Contesting**

# **Contesting**

Ham radio contesting is where in general an amateur tries to work as many other amateur stations he can in the contest period. Usually 12, 24 or 48 hours. Sometimes less in what is often called a "sprint".

Contesting is also called "radio sport" which may seem a stretch of the imagination but to be successful a reasonable amount of fitness and dedication is required along with training and preparation. Just like any sport.

The rules for each contest define the operating period, frequencies, modes and what information must be exchanged to form a "QSO" to claim points. The rules also set out how the contest will be scored with different points for different modes, countries etc. The contest sponsors publish the results in various magazines and on the internet.

Contesting grew out of other amateur radio activities like message handling in an emergency situation as a way for operators to improve their message handling skills and stations efficiency in the 1920' and 30's. Today, many amateur radio operators pursue contesting as their main interest in amateur radio. Being able to directly compare their skills and station with other contesting peers, has the effect of their skills and station being continually improved.

There are no international rules/regulations governing contests other than the relevant country of the licence, restrictions of power, etc. Each contest is sponsored by individuals or organisations and has its own set of rules. Because contests take place with amateur radio operators on the amateur frequencies, no remuneration can take place. It must be purely amateur in form. There are no 'professional' contesters or contest teams. Although most contests are sponsored by magazines, clubs etc., such as the CQ magazine, the ARRL and RSGB, with many smaller sprints sponsored by local clubs or individuals. Our own Oceania DX Contest being sponsored by the WIA and NZART with individual plagues and certificates sponsored by individual amateurs. This is an international contest growing each year.

# **Basic Contesting**

So what really is contesting? The essence is that during a contest, each station attempts to contact other stations and exchange certain information. The information exchanged is specific to the particular contest and may include the usual call signs, an RS(T) report as well as maybe the stations CQ or ITU Zone number, incrementing serial number or other specific contest information. The accuracy of this exchanged information logged is the crucial part of contesting. The time and frequency must also be logged. If any part is incorrect the contact is deemed null and void. I.E. worth no points. The usual mistake is incorrect or "busted" call signs.

A contest score is computed based on a formula defined for that particular contest. The formula usually assigns some number of points for each contact, and a "multiplier" based on some aspect of the exchanged information. Such as country, mode etc., usually based on the "entities" listed on the DXCC country list by the ARRL. Other contests based in Europe may use other countries/entities lists. This multiplier may be applied only once in the contest or may be applied to each band the country is worked on.

At the completion of the contest, each log is sent to the sponsored specified log checker and cross referenced with all other logs entered in that contest. Accuracy is most important and scores can be changed down for any inaccuracies found between logs in the exchanged information.

#### Choice of contest and contest section

Most contests have multiple sections such as QRP, low power, high power, multioperator or multi-radio. There is often a single band section, SSB only or CW only. All these sections usually have their own awards, so think about which section would suit you and give you the best chance of ending up in the 'top five'. While it's nice to compete it's better to win!

If you're not a seasoned contester (or if you are, but looking for an easy going contest) chose a smaller contest such as our own NZART Memorial contest or for a bit bigger contest the Oceania contest. Both of these contests have single band and mode sections. For Oceania, consider the Oceania 40m band and SSB or CW only section. There is a plaque for the winner of these sections too.

# Station equipment

Basic antennas are seldom good enough for the bigger international contests. A minimum for 20m and above would be a 3 element mono-band antenna. For 40m and below, it will probably need to be a wire antenna of some sort. Try to put up the best resonant antenna you can within your budget and land space. Steer clear of compromise antennas like G5RV's and trapped dipoles. Height is important as well as a clear take off.

A good 'competitive' rig is essential especially for the international contests. 'Competitive' means a sensitive and selective receiver, excellent close-in IMD performance, and a clean transmitter. Plus ergonomic. I.E. easy to use under pressure.

An output of 100W is fine for the 100W section but probably not for the open section. Most other countries will be allowed to run 1kw or more. (The UK is still limited to 400w but they are now in the minority). Some will be stretching that legal limit to the full. Running legally they will have calculated their coax losses and made sure they have the legal limit at the antenna. Above 100w you must run a linear.

The peripherals, such as the keyer, antenna switching, mic/paddle, voice player, computer etc., all need to work comfortably for the duration, even the chair and desk need to be right. Reliability is very important with all equipment.

# **Operation**

There are two main methods of operation. They can be used constantly or more usually together/alternating.

The first method is "search and pounce". This entails sweeping the band(s) for stations to work and is useful for looking for "multipliers". If your rig has a spectrum display use this to look for activity.

The second method is 'running'. You find a free frequency and start calling 'CQ Contest'. Then work whoever comes to you. They will be doing search and pounce. You are running. You do not move frequency. You keep calling and working. If you move, that frequency will be occupied when you come back. The 'run' frequency is the frequency you have found clear to call 'CQ Contest' on and in a crowded band you do not want to leave too much of a gap otherwise someone will jump in.

If your rig has a separate receiver, then scan the band using this facility. If your rig has a spectrum display use this to look for activity. The Yaesu top of the range FT series have separate receivers, as do some other top of the range rigs and a new station or multiplier can be found while still calling CQ on your 'run' frequency. Quickly swapping VFO's, working the station and going back to the run frequency and no one will ever know you left. Similarly, when using the display.

# **Calling**

Let's look at how you call on SSB first.

Listen to the big contest stations on SSB and they will be boringly mono-tone and repetitive.

It must be good as they win contests that way.

Call 'CQ contest ZL2W contest' once about every 10 seconds until someone replies.

Let's look at typical exchange;

ZL2W; 'cq contest zed ell two whisky contest'

A reply; 'gee four ar vee doubleU' ZL2W; 'q4rvw 59 012'

They reply; '59 020'

ZL2W; 'thank you. Zed ell two whisky'

Hopefully another station will reply. If not, go back to the 'CQ contest' calling.

Note the use of "59". Five nine is always used, really as a precursor to the actual numbers exchange. Please don't use "my numbers to you are..." Five nine is all that's required to alert the brain that a three digit number is following. Once used there is no reason to use it again.

There are many reasons for this and one is the contest stations know they will be receiving a series of numbers (depending on the contest requirements) and just requires your report. Another reason is that most computer contest logging programmes have 59 already filled in and it is time wasting to have to change it and mistakes can occur. There is little reason to give anything else but a 59 report. The contest station doesn't need or want to know his actual signal strength. If he does he will ask. He may well be beaming in another direction anyway.

Note that G4RVW just replied with his exchange. Nothing else. No need to reply with his call again unless ZL2W got it wrong when he replied. Also note that G4RVW did NOT begin with 'ZL2W this is G4RVW' or use the ZL2W call at all. They both know who they are talking to. Plus while the ZL2W station is replying he is typing in the G4 call sign into the computer. If the G4 started his call with ZL2W, before the brain realises, ZL2W has entered his own call into the log space and now has to go back and remove it and then remember your call to enter. That is why sometimes a call will be asked for again. In a major international contest, not only is time of the essence but the calls are coming in fast and furious and often on top of each other. The brain is operating on extremely short term memory and the body is running automatically. Akin to driving a car. You don't have to think about the steering or brakes. The body does that automatically.

Do not send your report until he has given your correct call and sent his report to you.

If a repeat is asked for just send the report several times and not the '59' eq

ZL2W Again please G4RVW 020 020 qsl?

In all repeats just send what is asked for. If he asks for your prefix just send that several times and not your whole call. He has some of it but is just missing part of it.

One last comment, I have been told to dispense with the 'thank you' at one contest site, but I believe that not only is it curtesy but while I'm saying that I'm pressing the "log it' button and looking at the cluster spots etc.

Smaller contests allow a more relaxed approach and even time to pass greetings to each other when not busy. A good reason to start the adventure into contesting with a smaller 'local' contest, like the NZART Memorial contest or the Trans-Tasman Low Bands Challenge.

For a CW contest the sequence is similar. Listen to the big stations and they will be slick and not too fast. 33wpm is fast and they will miss many callers who are not up to competency at that speed. They will be operating around 25wpm most of the time. They will be using computer generated CW for accuracy and ease of reading but listening with their ears. Much of the replies will be generated by the computer.

A typical exchange will be similar to the SSB exchange above.

ZL2W; "CQ ZL2W test"

A reply; 'g4rvw'

ZL2W; 'q4rvw 5nn 012'

They reply; '5nn 020' ZL2W; 'TU. ZL2W'

Note that 5nn will probably be used instead of 599. It is easier to send and easily read. Again it is a precursor to the actual contest exchange and is not intended to be an accurate RST.

Zero is often sent as O (oh) but as a CW operator you will probably be aware of these and other variations.

Note that in an SSB or CW contest, unless on 40m, simplex is always used. On 40m often a large split is used to allow some other countries and novices etc., to enter. Above 7.125 and 7.175MHz on SSB. Check the USA band plans. Listen to the operator for instructions and information. They may be listening on both frequencies. RTTY contest are always simplex.

By international agreement no contesting takes place on 30m, 17m or 12m bands or the new 60m band.

RTTY sequences are similar to SSB and CW except for specific RTTY conventions.

When calling CQ always have CQ at each end similar to as follows;

CQ ZL2W ZL2W CQ

Don't bother with full stops etc. Your macro should always start with a Carriage Return (enter) and end with only a space. This puts the information on a separate new line and is easier to pick out.

When you reply to a CQ send your call and 599 once only but the exchange several (2-3) times. Don't bother with 'cut' numbers either. To send 5nn requires a letters shift to be sent, wasting time. Also, if a repeat is asked for just send the exchange numbers several times and not the 599. As with SSB and CW 599 is taken as granted/standard so there is no need to repeat that. Use spaces between numbers. Do not use periods, hyphens etc. Always send a three digit number, even if the first two are zero.

If you are 'running' when replying to a caller use "hiscall' exchange 'hiscall' To confirm, use "TU 'hiscall' de 'mycall' CQ"

If you are in Search and Pounce mode never send your exchange to the CQ'ing station until he has acknowledged your call and sent his exchange first! This can upset the sequence and waste time plus causing confusion and repeats.

Don't send his call but only Mycall, eg: DE ZL2W ZL2W, then reply with only your exchange, eg: TU 599 002 002.

RTTY is a special mode and has special conventions that need to be observed. A RTTY operator will know which conventions are required to be utilised.

This has been a basic guide to contesting which I hope will encourage you to give it a go.

A good read on RTTY contesting is from the BARTG group by Roger J. Cooke, G3LDI.

A good read on contesting in general is HF Contesting by ZL3DW

You can also contact a contest group near you or myself for a chat and help. The dominant ZL contest groups are ZL4T, ZL3X and ZL1A. Google them for contact information.



# GUEST SPEAKER at the 22 August Branch 13/HBARC meeting

At the next meeting on Wed. 22 August Randall Goldfinch, ZL1NW, will speak about metalwork and services that he is familiar with, with his work at ABB.

This will suit the DIY home handyman.



### TO TAKE AWAY

One slightly damaged Triband HF Beam and 20ft tilt over pipe mast. All for free, all you have to do is recover them from the Hastings site.

Contact David (ZL2DW hm 8760518) for details and more info