



# Western Suburbs Radio Club Inc.

## March 2020 Newsletter

ZL1AC, Branch 03 NZART 3000 Great North Road New Lynn,  
 PO Box 15-122 New Lynn WAITAKERE 0640  
 President: Ian Sangster ZL1RCA, Vice President – Grant Manning ZL1GSM.  
 Secretary: Andrew Mitchell, ZL1AF, Treasurer Merv Thomas ZL1SK,  
 Newsletter Editor – John Neill ZL1NE.  
 VHF Club Net Wednesday 08:30pm 146.525 MHz,  
 HF Club Net Fridays 08:00pm 3.650 MHz  
 Website <http://www.amateurradio.co.nz/>

## Club Calendar 2020

Wednesday	18 <sup>th</sup>	March	Informal Meeting at the Clubrooms 9:30am
Friday	20 <sup>th</sup>	March	March Equinox
Saturday	28 <sup>th</sup>	March	Committee Meeting 9:00 am
Saturday	28 <sup>th</sup>	March	Club Meeting Cancelled due to Covid 19
Saturday	28 <sup>th</sup>	March	Te Puke Radio Club Used Equipment Sale Cancelled due to Covid 19
Wednesday	1 <sup>st</sup>	April	Informal Meeting at the Clubrooms Cancelled due to Covid 19
Friday	10 <sup>th</sup>	April	Good Friday
Monday	13 <sup>th</sup>	April	Easter Monday
Wednesday	15 <sup>th</sup>	April	Informal Meeting at the Clubrooms Cancelled due to Covid 19
Saturday	18 <sup>th</sup>	April	Committee Meeting 9:00 am – One week early due to Anzac
Saturday	18 <sup>th</sup>	April	Club Meeting 10:00 am Program to be determined One week early due to Anzac
Saturday	25 <sup>th</sup>	April	ANZAC Day Cancelled due to Covid 19
Wednesday	29 <sup>th</sup>	April	Informal Meeting at the Clubrooms Cancelled Due to Covid 19
Wednesday	6 <sup>th</sup>	May	Informal Meeting at the Clubrooms Cancelled due to Covid 19
Sunday	10 <sup>th</sup>	May	Mother's Day
Wednesday	20 <sup>th</sup>	May	Informal Meeting at the Clubrooms Cancelled due to Covid 19
Saturday	23 <sup>rd</sup>	May	Committee Meeting Cancelled due to Covid 19
Saturday	23 <sup>rd</sup>	May	Club Meeting Cancelled due to Covid 19
Wednesday	27 <sup>th</sup>	May	Informal Meeting at the Clubrooms Cancelled due to Covid 19
Saturday	30 <sup>th</sup>	May	NZART Conference Cancelled due to Covid 19
Sunday	31 <sup>st</sup>	May	NZART Conference Cancelled due to Covid 19
Monday	1 <sup>st</sup>	June	Queen's Birthday
Wednesday	3 <sup>rd</sup>	June	Informal Meeting at the Clubrooms 9:30am
Wednesday	10 <sup>th</sup>	June	Midwinter Dinner – Date and Venue to be confirmed
Wednesday	17 <sup>th</sup>	June	Informal Meeting at the Clubrooms 9:30am to be confirmed
Sunday	21 <sup>st</sup>	June	June Solstice
Saturday	27 <sup>th</sup>	June	Committee Meeting 9:00 am to be confirmed
Saturday	27 <sup>th</sup>	June	Club Meeting 10:00 am Program to be determined to be confirmed
Wednesday	1 <sup>st</sup>	July	Informal Meeting at the Clubrooms 9:30am to be confirmed
Wednesday	15 <sup>th</sup>	July	Informal Meeting at the Clubrooms 9:30am to be confirmed
Saturday	25 <sup>th</sup>	July	Committee Meeting 9:00 am to be confirmed
Saturday	25 <sup>th</sup>	July	Club Meeting 10:00 am Program to be determined to be confirmed
Saturday	29 <sup>th</sup>	July	Informal Meeting at the Clubrooms 9:30am to be confirmed
Wednesday	5 <sup>th</sup>	August	Informal Meeting at the Clubrooms 9:30am to be confirmed
Wednesday	19 <sup>th</sup>	August	Informal Meeting at the Clubrooms 9:30am to be confirmed
Saturday	22 <sup>nd</sup>	August	Committee Meeting 9:00 am to be confirmed
Saturday	22 <sup>nd</sup>	August	Club Meeting 10:00 am Program to be determined to be confirmed
Wednesday	2 <sup>nd</sup>	September	Informal Meeting at the Clubrooms 9:30am to be confirmed
Sunday	6 <sup>th</sup>	September	Father's Day
Wednesday	16 <sup>th</sup>	September	Informal Meeting at the Clubrooms 9:30am to be confirmed

Wednesday	23 <sup>rd</sup>	September	September Equinox
Saturday	26 <sup>th</sup>	September	Committee Meeting 9:00 am to be confirmed
Saturday	26 <sup>th</sup>	September	Club Meeting 10:00 am Program to be determined to be confirmed
Wednesday	30 <sup>th</sup>	September	Informal Meeting at the Clubrooms 9:30am to be confirmed
Wednesday	7 <sup>th</sup>	October	Informal Meeting at the Clubrooms 9:30am to be confirmed
Saturday	17 <sup>th</sup>	October	Committee Meeting 9:00 am – One week early due to Labour Weekend
Saturday	17 <sup>th</sup>	October	Club Meeting 10:00 am Program to be determined One week early due to Labour Weekend
Wednesday	21 <sup>st</sup>	October	Informal Meeting at the Clubrooms 9:30am
Monday	26 <sup>th</sup>	October	Labour Day
Saturday	7 <sup>th</sup>	November	Used Equipment Sale – Rosebank School Hall – Date and Venue to be confirmed
Wednesday	4 <sup>th</sup>	November	Informal Meeting at the Clubrooms 9:30am
Wednesday	18 <sup>th</sup>	November	Informal Meeting at the Clubrooms 9:30am
Saturday	28 <sup>th</sup>	November	Committee Meeting 9:00 am
Saturday	28 <sup>th</sup>	November	Club Meeting 10:00 am Program to be determined
Wednesday	2 <sup>nd</sup>	December	Informal Meeting at the Clubrooms 9:30am
Wednesday	9 <sup>th</sup>	December	Christmas Dinner - Date and Venue to be confirmed
Wednesday	16 <sup>th</sup>	December	Informal Meeting at the Clubrooms 9:30am
Monday	21 <sup>st</sup>	December	December Solstice
Wednesday	30 <sup>th</sup>	December	Informal Meeting at the Clubrooms 9:30am
Monday	21 <sup>st</sup>	December	December Solstice
Thursday	24 <sup>th</sup>	December	Christmas Eve
Friday	25 <sup>th</sup>	December	Christmas Day
Saturday	26 <sup>th</sup>	December	Boxing Day

## Meeting Agendas

If you have a topic that you would like to present at a club meeting, could you please contact the President or Vice President prior to meetings so that the item can be programmed for a future date.

## March Meeting

This meeting and all future meetings, including Wednesday morning coffee meetings, have been cancelled due to the Covid 19 virus Pandemic. The committee will constantly review the situation and resume meetings as soon as possible. The decision was taken because many of our members are older and in the age group where contracting the virus is likely to have significant effect on them. We are aware that the Government Regulations will allow indoor meetings of up to 100 people and that we are most unlikely to come anywhere near that limitation however, we felt it prudent to take this action. The HF net on Fridays on 3.650MHz at 8pm and the VHF Net on 164.525MHz at 8:30pm will of course continue. It would be lovely to have a few more club members join in.

## February Meeting

At the February Meeting Tony, ZL1TLC, gave a talk on remote operation via the internet of Digital Modes such as WSPR and FT8. Thanks Tony for an informative talk.

## Annual General Meeting

The Annual General Meeting was to take place at the April meeting. As it is most unlikely that meetings will have resumed by April we will advise when the Annual General Meeting will take place.

## HF Field Day

Insufficient numbers of club members wished to take part so we did not have a station this year.

## Club Fees

Club fees are due in April. The preferred method of payment is by internet banking. The Club's Bank Account is **020184-0030318-00**. If paying online please add your "Call Sign" or "Name" and the words "Club Fees" as a reference. Please email the Treasurer at [mervthomasmusic@gmail.com](mailto:mervthomasmusic@gmail.com) stating that you have payed online, who will then reply with a receipt number via an email.

Alternatively, use the payment slip at the end of this newsletter if you prefer to pay by cheque. Please send your payment to the Treasurer at PO Box 15-122, New Lynn. If you require a receipt, please email the Treasurer at [mervthomasmusic@gmail.com](mailto:mervthomasmusic@gmail.com) and he will email the receipt number to you. Please note that the PO Box is only cleared once a month at the moment so there may be some delay in processing cheque payments. A payment slip is included at the end of the newsletter.

Given the Covid-19 Pandemic and the cancellation of club meetings in the foreseeable future, cash payment is discouraged this year.

The fees are as follows:

- Standard Membership           \$30.00
- Family Membership           \$35.00
- Rural Membership           \$10.00

**Please note** that the fees are reviewed each year at the Annual General Meeting. Paying before the AGM may save you a small amount if the fees should be adjusted upwards.

Many thanks to the Club Members who have already paid for 2020.

## Informal Wednesday Meetings

The Wednesday morning coffee meetings have been cancelled due to Covid 19 virus until further notice. The committee will review the situation and the meetings will start as soon as the threat of contracting the virus has passed.

## Club Nets

**HF Net 3.650 MHz at 8:00pm** every Friday.  
+/-10 KHz if QRM/QRN is a problem.

All are welcome to check in on the nets.

The HF Net roster is opposite.  
The full HF Net Roster can be found at:  
<http://www.amateurradio.co.nz/>

27-Mar-20	ZL1AF	Andrew
3-Apr-20	ZL1RCA	Ian
10-Apr-20	ZL1BYI	Ian
17-Apr-20	ZL1BAK	Graeme
24-Apr-20	ZL1NE	John
1-May-20	ZL1AF	Andrew
8-May-20	ZL1RCA	Ian
15-May-20	ZL1BYI	Ian
22-May-20	ZL1BAK	Graeme
29-May-20	ZL1NE	John

The Clubs STSP repeater will be set up for Club Members to keep in touch with each other during the Covid-19 Pandemic. The Frequency is 146.925 –ve split. The repeater will not be operating all the time, but put out a call you may find it on and a Club Member/s to have a chat with.

## Creating a New Clubhouse Antenna

By Andrew ZL1AF

Having learnt a lot from constructing my own W3DZZ trap dipoles, and as the clubhouse G5RV seemed to be under performing, I offered to build a new antenna for the clubhouse.

First the coax traps were built using PVC pipe with an external diameter of 37mm. I knew from building my antenna for portable use, that I needed approx.  $13\frac{1}{4}$  turns of coax for a resonance of 7.1MHz. I wound this and found the coil had a resonance of 7.05MHz so I was happy with that. I wound the second trap and found that it too was resonant at 7.05MHz. Boy, was I happy, and the NanoVNA makes the whole process of tuning so easy.

I then smothered the open end of the coax with silicon sealer, wrapped the whole former length with insulating tape, and then used shrink wrap tape to enclose the whole thing. I checked again that all my fiddling hadn't changed resonance in any way. You can see from the picture below which trap benefitted from my learning how to use shrink wrap tape.



Next came the dipole arms, one each side of the traps. John, ZL1NE, had donated some hard drawn, 14 gauge copper wire, which although tricky to work with, is excellent material for the job. With some scissor clamps and large paint cans to hold one end I was able to cut two 9.8m lengths for the 7MHz legs and 6.7m lengths for the other, 3.5MHz side. Some more juggling with clamps, weights and vices saw me solder the traps to the antenna legs. When attaching the traps to the legs, the exposed inner of the coax is always joined to the leg going to the centre feed point.

Next came the centre feed point. It is suggested that a 6 turn, 50mm inner diameter coax choke be used with this antenna to minimise common mode current. This is usually hung below the feed point, but I decided to incorporate it in the centre, so I built this from a \$2 shop breadboard.



The loop on right is to add strength to the coax that has come from the transceiver and the tail to the left will become the feed points for the antenna legs. So it was time to finish the construction by soldering the two sides to the centre plate. This was simple enough, and when done the split coax was also smothered in silicon sealer.



Taking it outside and putting up a temporary 3m mast I managed to get one leg straight, with a small kink at the end of the other. Setting up the FT817 and SWR bridge I was able to see that the antenna tuned nicely on the 40m band, and was resonate at 3.225MHz on 80m. I chopped 1m off each leg and tried again. Resonance was now at 3.625MHz. Checking further there was a SWR of less than 1:3 across the whole 80m band.

Next was hoisting into location at the clubrooms, as position and height always affects tuning. We dropped the old G5RV and discovered why it was performing poorly – one leg had completely separated from the centre connector! With the help of several coffee morning attendees, the new antenna was soon up in position and the feed coax fed inside the clubrooms, (see separate article). After we learnt how to drive the new Icom rig again, we had a look at the performance. Sweet spot on 80m was 3.745MHz with which I was disappointed as I was expecting a hundred KHz lower than that. However the internal tuner tuned the rig across the whole of the band so no worries there. Then 40m where the sweet spot was 7.15 MHz, very happy with that. A check of the 20m, 15m and 10m bands showed that the internal tuner of the Transceiver coped with the W3DZZ antenna without a problem. Check 20m again, workable FT8 signals were easily heard. John and I used the Icom and antenna for Friday's Club Net. Reception was poor, with a minimum of S9 noise, however our signal was heard 5/9 by everyone that night. So there we are, now we need some operators to work the world.

## Raising the New Club Antenna

Thanks to Andrew, ZL1AF, the Clubrooms have a new HF antenna. It is a W3DZZ trapped Dipole. It is designed to operate without an antenna tuner on 80m and 40m and with an antenna tuner on all the remaining HF bands. The antenna is in flat-top configuration about 8m in the air. The two coaxial traps are resonant at 7.05MHz and there is a 1:1 coaxial balun at the centre into 75 ohm coaxial cable leading to the front of the clubroom. To everyone's delight, Merv played an impromptu tune on his trombone, which he has since named "The Ballard to the Antenna," as the antenna was being raised.





Ian ZL1BYI Attaching one end of the Antenna



Tony ZL1TLC controlling the Coaxial cable as the Antenna was raised



Merv ZL1SK with an Appropriate Tune for the Antenna Raising



Andrew, ZL1AF, admiring his Handiwork

## Te Puke Amateur Radio Club Used Equipment Sale

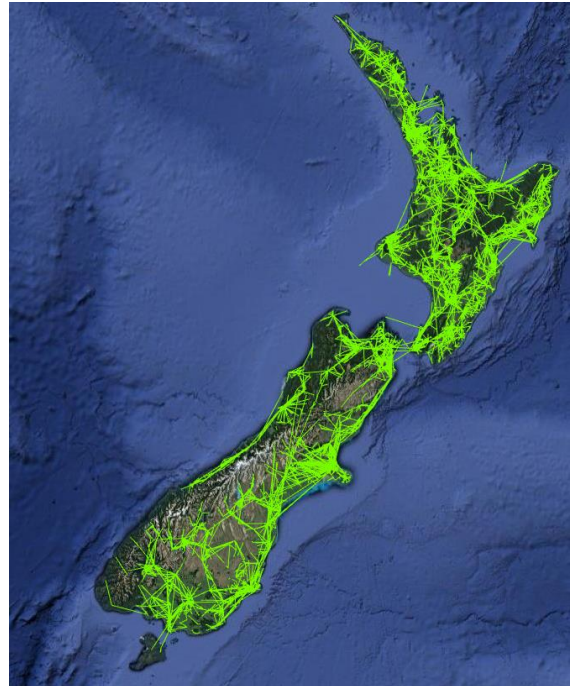
This was to be held on the 28<sup>th</sup> March however, it has been cancelled due to the Covid 19 virus Pandemic.

### Repeater Link Map

I stumbled across this site a few weeks ago while searching for information.

<https://wirelessmap.markhansen.co.nz/>

The map shows the radio links between repeaters. The green lines are the path of the link. It is necessary to zoom in to see the individual links between repeaters. Hovering over a line and then right clicking will bring up information on the repeater link.



### Club Fees

Club Fees are Now Due. Please send your payment to:

Western Suburbs Radio Club  
3000 Great North Road  
PO Box 15-122  
New Lynn  
WAITAKERE 0640

NAME \_\_\_\_\_

Callsign \_\_\_\_\_

Please Tick	Standard Membersh	<input type="checkbox"/>	\$30.00
	Family Membership	<input type="checkbox"/>	\$35.00
	Rural Membership	<input type="checkbox"/>	\$10.00

Total Paid \_\_\_\_\_  
\_\_\_\_\_