



The Official Newsletter of  
the  
**PAPAKURA RADIO  
CLUB INC.**

*May 2023*



*Showing the Community what we do*



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### This Month's Meeting:

Wednesday 3<sup>rd</sup> of May will be the next meeting for 2023. Following general business, we will discuss two remits, and then we will have a Video presentation from Rob ZL1RJS.

There will be a cuppa and biscuit afterwards so we can socialise, radios optional.

**If transport is a problem, let the committee members know, and we may be able to assist with arranging a ride for you.**

Dates: Wednesday 3 <sup>rd</sup> May	General Meeting + Remits + Video
Saturday 6 <sup>th</sup> May	Papakura Streetfest (stand 20)
Wednesday 10 <sup>th</sup> May	Project Night
Wednesday 17 <sup>th</sup> May	Committee Meeting
Saturday 20 <sup>th</sup> May	Ham Cram (part 1)
Wednesday 24 <sup>th</sup> May	Activity Night
Saturday 27 <sup>th</sup> May	Ham Cram (Part 2)
Wednesday 31 <sup>st</sup> May	AREC Training Night

## CLUB ACTIVITY:

Some special events over this month with the Papkura Street Fest giving us the chance to show off what we do to the community. There has been a strong interest in Amateur radio following on from the recent flooding events, and the subsequent outages of the Cellular network which has resulted in many people becoming interested in having access to radio equipment to stay connected.

In addition, the hobby and experimentation sides of the hobby are of interest to many others who may be looking at backup power options or wish to develop some technical skills. Getting out into the community and showing of our hobby is a key part of promoting Amateur radio to all areas of the community over 2023.

Don't forget we will be having another Ham Cram on May 20<sup>th</sup> and 27<sup>th</sup>, So if you know anyone who might like to attend, let us know.

## REMITTS FOR NZART AGM 2023:

1) NZART to create a digital only membership, for those wanting a digital only copy of Break-In with discounted membership fee.

NZART needs to get with the times with increasing costs, several members don't need or want a paper copy of Break-in these days. There needs to be a cheaper option for those wanting a digital version. A digital version can be searched and indexed with a couple of mouse clicks unlike the paper copy. This also helps to save the planet with reduced paper use.

Christchurch Branch 05

*Council Comment:*

*Council does not believe that opting out of a hard copy subscription of Break In would lead to reduced costs. It would likely lead to increased costs. Council does not support this remit.*

2) NZART to reduce membership fees for members associated to clubs that are charities or the club does not meet the criteria to be covered under NZART public liability insurance.

Recently it's been discovered that several clubs are not covered by the NZART Public liability insurance policy. These branches need to know that they are or are not covered before any event, so that no one assumes they are covered when in fact they are not.

Christchurch Branch 05

*Council Comment:*

*NZART has no control over whether branches do or do not meet the requirements to be covered under NZARTs insurance. Therefore, NZART does not believe it should reduce the membership as it may lead to perverse outcomes with clubs opting out of insurance cover to reduce costs. Currently there are only 5 branches to which this may apply. Council does not support the remit*

In addition, the editor notes that these remits are very similar to previous remits from the same branch, which have been previously voted against. We will put these to a member vote at the meeting on the 3<sup>rd</sup> of May.

## PORTABLE POWER WORKSHOP



When: Saturday, May 13, 2023, 0900 to 1200.

Where: At the Branch 29 clubrooms, 400 East Coast Road, Sunnynook, Auckland. Parking is available in both the lower and upper car parks.

Organisers: Terry James ZL1HOG, Bill Girimonti ZL1BG, and the Branch 29 committee. Terry is the Chairperson and Bill is the Treasurer of Branch 29.

Cost: The workshop is free as is morning tea.

Who can attend: The workshop is open to any operator with an amateur license who is considering power options for portable operation.

Please RSVP with the organisers so we can ensure sufficient seating and morning tea supplies.

Rain check: As the event is indoors it will go ahead rain or shine.

Description: We often take for granted the readily available power for base station operations in our shacks. What if we lose power? What then? Or better yet, what if we wanted to participate in some of the outdoor operating schemes such as POTA, SOTA, ZLFF and others? How do we ensure we can operate away from mains power?

This workshop will explore the three main power options available for off-grid radio communications. It will cover design considerations, the bare minimums and the optional extras. We will also demonstrate some of the options available with our own equipment to give you an idea of what can be done. Perhaps it will inspire you to come up with your own portable power solutions. If you have built a portable power solution previously then bring it along and share your design, ideas, and knowledge with the wider community.

An article on this workshop will appear in Break-In.

Questions? If you have any questions about the workshop, and to RSVP, please email Terry ZL1HOG at [tcjhog@icloud.com](mailto:tcjhog@icloud.com) or Bill ZL1BG at [zl1bg@proton.me](mailto:zl1bg@proton.me)

## DX Calendar May 2023

01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31						
JD1BMH										T88SM																JW5E										
3D2LYC										T88HZ														VP2EAQ VP2EAR												
8Q7KB																			OJ0																	
T30UN																							V47JA													
H44MS																																				
DX0NE																																				
TU7C																																				
5X2I																																				
				9X2AW																																
JG8NQJ/JD1																																				
	HK0																																			
FO/F6BCW																																				
5UA99WS																																				
VK0AW																																				
FH4VVK																																				

## Featured DX

### T88SM & T88HZ

Mike, JA6EGL will be active again as T88SM from Koror Island, IOTA OC - 009, Palau, 11 - 17 May 2023. He will operate on 160 - 6m, CW, SSB, Digital modes.

At the same time JH6HZH will be active as T88HZ from Koror Island, IOTA OC - 009, Palau, 11 - 17 May 2023. He will operate on HF Bands.

with two stations active from Palau over the same 11<sup>th</sup> to 17<sup>th</sup> week, the chances of getting at least one must be improved.

So they get our Featured DX for the month.



# UPCOMING CONTESTS

	Start Date-Time	Finish Date-Time	Bands	Contest Name	Mode	Exchange	Sponsor's Website
1	0000	1 0100	1.8-28	K1USN Slow Speed Test	CW	Name, SPC; Max 20 WPM	<a href="http://www.k1usn.com/sst.html">www.k1usn.com/sst.html</a>
1	1300	1 1900	3.5-28	AGCW QRP/QRP Party	CW	RST, serial, class (A/B)	<a href="http://www.agcw.de/contest/qrp-qrp">www.agcw.de/contest/qrp-qrp</a>
1	1630	1 1729	3.5, 7	OK1WC Memorial (MWC)	CW	RST, serial	<a href="http://memorial-ok1wc.cz">memorial-ok1wc.cz</a>
2	0100	2 0159	1.8-28,50	Worldwide Sideband Activity Contest	Ph	RS, age (OM/YL/Youth)	<a href="http://wwsac.com/rules.html">wwsac.com/rules.html</a>
2	0100	2 0300	3.5-28	ARS Spartan Sprint	CW	RST, SPC, pwr	<a href="http://arsqrp.blogspot.com">arsqrp.blogspot.com</a>
3	1300	3 1400	1.8-28	CWops Test (CWT)	CW	Name, mbr or SPC	<a href="http://cwops.org/cwops-tests">cwops.org/cwops-tests</a>
3	1700	3 2100	144	VHF-UHF FT8 Activity Contest	Dig	4-char grid	<a href="http://www.ft8activity.eu/index.php/en">www.ft8activity.eu/index.php/en</a>
4	0000	5 0300	7	Walk for the Bacon QRP Contest	CW	RST, SPC, name, mbr or pwr; max 13 WPM	<a href="http://qrptest.com/pigwalk40">qrptest.com/pigwalk40</a>
4	1700	4 2100	28	NRAU 10m Activity Contest	CW Ph Dig	RS(T), 6-char grid	<a href="http://nrau.net/nrau-contests-in-general">nrau.net/nrau-contests-in-general</a>
4	2000	4 2200	1.8-28,50	SKCC Sprint Europe	CW	RST, SPC, name, mbr or "none"	<a href="http://www.skccgroup.com">www.skccgroup.com</a>
4	2300	5 0300	All, no WARC	MIE 33 Contest	CW Ph	RS(T), age	<a href="http://www.ztv.ne.jp/isoda/33">www.ztv.ne.jp/isoda/33</a>
5	0145	5 0215	1.8-21	NCCC RTTY Sprint	Dig	Serial, name, QTH	<a href="http://ncccsprint.com/rules.html">ncccsprint.com/rules.html</a>
5	0230	5 0300	1.8-21	NCCC Sprint	CW	Serial, name, QTH	<a href="http://ncccsprint.com/rules.html">ncccsprint.com/rules.html</a>
5	2000	5 2100	1.8-28	K1USN Slow Speed Test	CW	Name, SPC; max 20 WPM	<a href="http://www.k1usn.com/sst.html">www.k1usn.com/sst.html</a>
6	0001	7 2359	28	10-10 Int'l Spring Contest, CW	CW	Name, mbr or "none," SPC	<a href="http://www.ten-ten.org">www.ten-ten.org</a>
6	0300	6 0859	3.5-28	RCC Cup	CW Ph	RS(T), mbr or ITU zone	<a href="http://rcccup.ru">rcccup.ru</a>
6	0800	6 1400	All above 902	Microwave Spring Sprint	All	6-char grid	<a href="http://sites.google.com/site/springvhfupsprints">sites.google.com/site/springvhfupsprints</a>
6	1200	7 1159	3.5-28	ARI International DX Contest	CW Ph Dig	RS(T), 2-letter province or serial	<a href="http://www.ari.it">www.ari.it</a>
6	1200	7 1200	3.5-28, 144	F9AA Cup, Digi	Dig	RST, serial	<a href="http://www.site.urc.asso.fr">www.site.urc.asso.fr</a>
6	1300	7 0700	1.8-28	7th Call Area QSO Party	CW Ph Dig	RS(T), 5-ltr state/county code or SPC	<a href="http://7qp.org">7qp.org</a>
6	1500	7 0300	1.8-28	Indiana QSO Party	CW Ph	RS(T), IN county or SPC	<a href="http://www.hdxcc.org/inqp">www.hdxcc.org/inqp</a>
6	1700	7 2359	1.8-28, VHF	Delaware QSO Party	Ph Dig	RS(T), DE county or SPC	<a href="http://www.fsarc.org">www.fsarc.org</a>
6	2000	7 2359	3.5-28	New England QSO Party	CW Ph Dig	RS(T), New England county/state or SPC	<a href="http://neqp.org/rules">neqp.org/rules</a>
7	1000	7 1400	7	WAB 7 MHz Phone	Ph	RS, serial, WAB square or SPC	<a href="http://wab.internip.net/Contests.php">wab.internip.net/Contests.php</a>
8	1900	8 2030	3.5	RSGB 80m Club Champ, SSB	Ph	RS, serial	<a href="http://www.rsgbcc.org/hf">www.rsgbcc.org/hf</a>
10	1700	10 2100	432	VHF-UHF FT8 Activity Contest	Dig	4-char grid	<a href="http://www.ft8activity.eu/index.php/en">www.ft8activity.eu/index.php/en</a>
11	1900	11 2000	3.5, 7	EACW Meeting	CW	RST, mbr, name, EA province or country	<a href="http://www.eacwspain.es/eacwmeeting">www.eacwspain.es/eacwmeeting</a>
13	1200	14 1159	1.8-28	CQ-M International DX Contest	CW Ph	RS(T), serial	<a href="http://cqm.srr.ru/en/rules">cqm.srr.ru/en/rules</a>
13	1200	14 1200	3.5-28	VOLTA WW RTTY Contest	Dig	RST, serial, CQ zone	<a href="http://www.contestvolta.com/rules.pdf">www.contestvolta.com/rules.pdf</a>
13	1200	14 2359	1.8-28,50	SKCC Weekend Sprintathon	CW	RST, SPC, name, mbr or "none"	<a href="http://www.skccgroup.com">www.skccgroup.com</a>
13	1700	14 0300	7-28	Canadian Prairies QSO Party	CW Ph	RS(T), VE4/5/6 district code or SPC	<a href="http://cpqp.ve6hams.ca">cpqp.ve6hams.ca</a>
13	2300	14 0300	50	50 MHz Spring Sprint	All	4-char grid	<a href="http://sites.google.com/site/springvhfupsprints">sites.google.com/site/springvhfupsprints</a>
15	0000	15 0200	1.8-28	4 States QRP Group 2nd Sun Sprint	CW Ph	RS(T), SPC, mbr or pwr	<a href="http://www.4sqrp.com/SSS/sss_rules.pdf">www.4sqrp.com/SSS/sss_rules.pdf</a>
17	1700	17 2100	1.2G	VHF-UHF FT8 Activity Contest	Dig	4-char grid	<a href="http://www.ft8activity.eu/index.php/en">www.ft8activity.eu/index.php/en</a>
17	1900	17 2030	3.5	RSGB 80m Club Champ, Data	Dig	RST, serial	<a href="http://www.rsgbcc.org/hf">www.rsgbcc.org/hf</a>
18	0000	19 0300	14	Walk for the Bacon QRP Contest	CW	RST, SPC, name, mbr or pwr; max 13 WPM	<a href="http://qrptest.com/pigwalk20">qrptest.com/pigwalk20</a>
18	0030	18 0230	3.5-14	NAQCC CW Sprint	CW	RST, SPC, mbr or pwr	<a href="http://naqcc.info">naqcc.info</a>
18	1900	18 2000	3.5-14	NTC QSO Party	CW	RST, mbr or "NM"; max 25 WPM	<a href="http://pi4ntc.nl/ntcqp">pi4ntc.nl/ntcqp</a>
20	0300	21 0900	50-1296	SARL VHF/UHF Digital Contest	Dig	RST, 6-char grid	<a href="http://www.sarl.org.za">www.sarl.org.za</a>
20	0600	20 2100	3.5-28	UN DX Contest	CW Ph	RS(T), Kazakhstan district code or serial	<a href="http://undxc.kz/rules-eng">undxc.kz/rules-eng</a>
20	0800	21 1100	3.5	NZART Sangster Shield Contest	CW	RST, serial, branch no. or serial	<a href="http://www.nzart.org.nz/activities">www.nzart.org.nz/activities</a>
20	1200	21 1200	1.8-28	His Maj. King of Spain Contest, CW	CW	RST, EA province or serial	<a href="http://concursos.ure.es/en">concursos.ure.es/en</a>
20	1200	21 1200	3.5-28	EU PSK DX Contest	Dig	RST, EU area or serial	<a href="http://eupsk.club">eupsk.club</a>
20	1400	21 0200	1.8-144	Arkansas QSO Party	CW Ph Dig	RS(T), AR county or SPC	<a href="http://www.arkqp.com">www.arkqp.com</a>
20	1600	20 2159	1.8-28,50	Feld Hell Sprint	Dig	See rules	<a href="http://sites.google.com/site/feldhellclub">sites.google.com/site/feldhellclub</a>
21	2300	22 0100	1.8-28	Run for the Bacon QRP Contest	CW	RST, SPC, mbr or pwr	<a href="http://qrptest.com/pigrun">qrptest.com/pigrun</a>
22	0800	22 1959	3.5-28	YOTA Contest	CW Ph	RS(T), age	<a href="http://www.ham-yota.com/contest">www.ham-yota.com/contest</a>
22	1900	22 2030	3.5-14	RSGB FT4 Contest	Dig	4-char grid	<a href="http://www.rsgbcc.org/hf">www.rsgbcc.org/hf</a>
24	0000	24 0200	1.8-28,50	SKCC Sprint	CW	RST, SPC, name, mbr or "none"	<a href="http://www.skccgroup.com">www.skccgroup.com</a>
25	1900	25 2030	3.5	RSGB 80m Club Champ, CW	CW	RST, serial	<a href="http://www.rsgbcc.org/hf">www.rsgbcc.org/hf</a>

Note: All dates and times are in UTC,



## **RAMBLINGS FROM THE EDITOR'S DESK**

How did it get to be May? How can we be 5 months into the year?

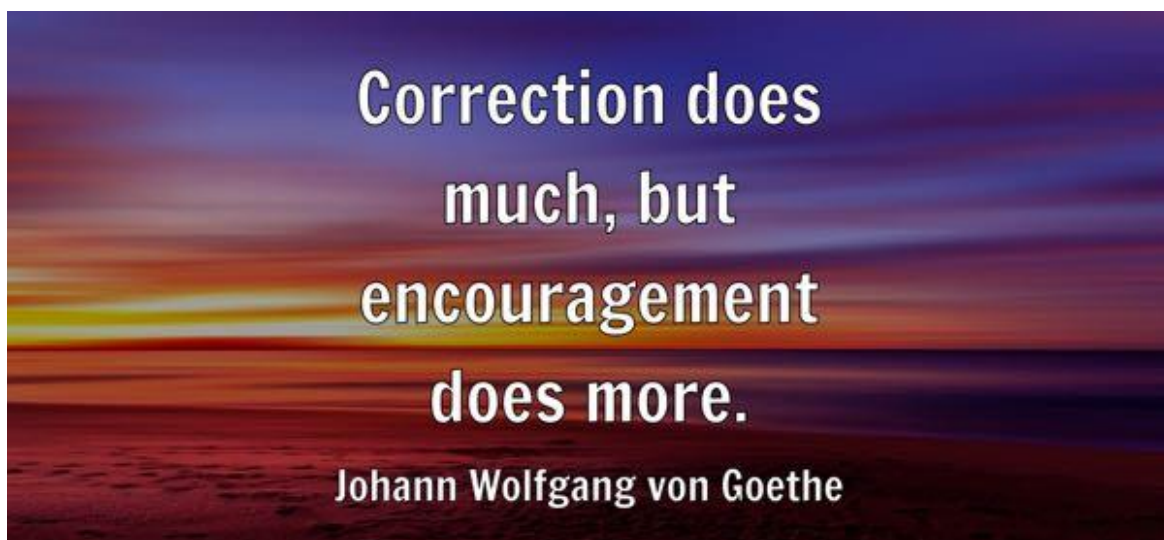
It's another month, and once more we have warnings of an atmospheric river, and the likelihood of more rain and winds for the northern parts of the island. But unlike previous warnings, this one is being pushed out early, and loudly, so while we hope it won't be a major event, it's a good chance to review our "look after yourself for 3 days" plans, Water, heating & cooking should things fall over.

Our thoughts go out to those in the Coromandel who, it seems, while likely be hit with more damage to the temporary repairs from the damage of the last few months. Let's hope the damage it not too extensive.

As amateurs, we should already have our comms plans, and standby power ready and its good to see a workshop on back up power being discussed. Since we are part of a technical hobby, its good to see sharing of our knowledge in these spaces.

Soon we will be promoting ourselves to the community and later in the month we have another Ham Cram, this time the numbers are looking on the higher side, and we may have one of our biggest crams yet. If the Streetfest goes well, then we could be very busy. Our last cram saw 6 new hams get equipped, and so far, we have had 3 on air, with 3 more getting equipment sorted. So, a big thank you to all in the club who have helped our new hams to both get on air, and to feel welcome in the club. Our future lies in our transmitting members, and to be transmitting, they will need help and guidance in how to get on air, and get the right equipment, and getting it all set up. This should be part of the Ham DNA, that desire to help get another up transmitting, and confident behind the mic.

There is a saying that it takes a community to grow a child, and while I think the family grows the child, the community should help the family, the ham community is one in which a new ham is grown by the community. Each member contributing a little, can achieve a lot. So, I hope you will all think of little things you can do to help support our new hams. Maybe some spare equipment, an antenna, some assistance with an installation, some spare coaxial cable, all these small things can go a long way to helping to get those first 50 contacts, and the introduction to the hobby. And of course, answering the call, and giving a word of encouragement can go a long way as well. We were all there once, and its because of the encouragement we received, that we are still here.



So how do we encourage someone if they are doing something different, or they don't join the things I enjoy? This might seem like a strange question in a word that talks about diversity, but sadly, it is difficult when someone doesn't see the hobby, the same way you do. While we talk a lot about diversity, much of what is called diversity, is about making everyone the same. Ham Radio is incredibly diverse, for some, short contacts and contesting is a fantastic way to spend an afternoon, but for some of us, getting 1 or 2 contacts where we chat about what's happening may be more exciting. Digital vs Analogue, HF versus VHF... it's all radio, and yes, it's different, but when someone is having fun, with something that's not how you do it, Can you still encourage them? ... I think so.

Let's face it, as much fun as SOTA may be, I can't see myself climbing hills, Sorry It's just not me. But a Park has much more attraction to me, so I'll be more likely to be trying to play Parks on the air, than summits, and for others driving a car to lake is even better. But no matter how we do our radio, Activator or chaser, Rag chew or Logging as many contacts per hour as possible, we can all learn from each other, and encourage on and other to make the most of what we enjoy.

It's this diversity of interests that makes Ham Radio the vibrant and dynamic thing it is, yes, we use radios to communicate, but we do so much more, We experiment, we trial. We test, we improve our technical skills. Sometimes we use it to work repeaters, Sometime simplex, maybe even to work a passing satellite, What we do, and how we do it is not what defines us, but the common thread of radio gives us small common part, and with this we celebrate both how we are the same, while also enjoying the things that make us different.

“

Happiness is different  
from pleasure.  
Happiness has  
something to do with  
struggling, enduring,  
and accomplishing.

—  
GEORGE SHEEHAN

While we all are linked by a common thread of radio, we are not, and will not be the same – And that only enriches our community.



The main thing that brought this home to me was while laid up with influenza, having a week off work is very unusual for me, I normally fight off most viruses in just a few days, but this one was able to not only floor me, but also to get right into my lungs. This left me knowing that while I very rarely visit a doctor, this was one of those times where some additional support was needed.

I'm not very good at being dependant, I like the idea of doing things my way, but in this case, I needed to accept that I was not going to win without some support and, sadly, medications. So, after an assessment, and large script from the local pharmacy, I set about recovering, and contacting all the people I had promised to help, and asked them to allow me some time to get back on my feet first.

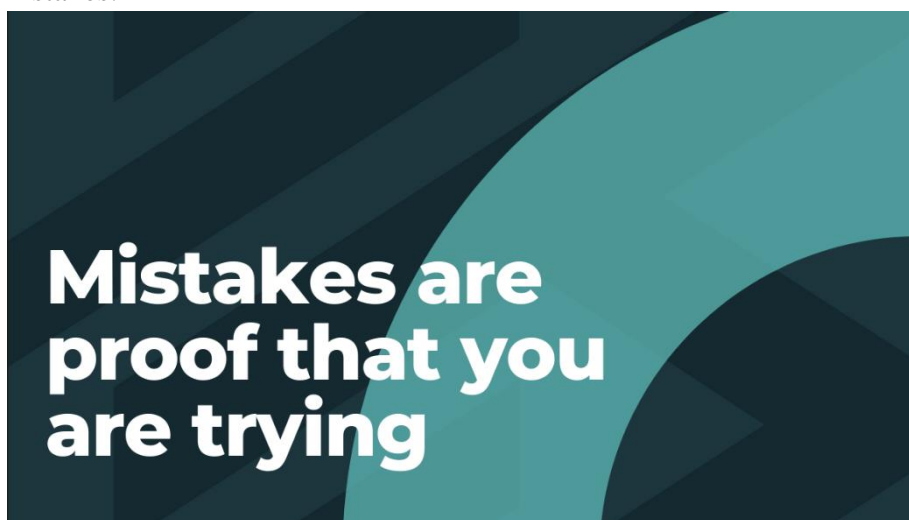
While I'm pleased to report that I have in fact recovered, the backlog of things to do, is still waiting for me to complete the catch up. But during this time, several others stepped up, and took on the task of helping others. I wonder if I had pushed on, would they have had the chance to benefit from helping another?

None of us are experts, Yes we all have different skills, but every one of us is the same, an amateur, a person by definition who is not an expert, skilled? definitely. Talented? maybe even bordering on magical to those who have not yet learnt from our experiences, but we are all just doing the best we can with what we have, but maybe with a little experience along the way.

I remember talking with one of my students recently, and he asked how I knew so much. Easy I said, "Experience". Yes, I know he said, But how did you get the experience? ... Simple I replied. I've made more mistakes than you, I now know not to do things that way, it doesn't work. And that's what experience is .... Its what we learn from mistakes.

Maybe you have heard the old expression, Life isn't Fair ... Get over it!

It may be true many times, but the one time its not true is when it comes to making mistakes. If you fail to learn from someone else mistakes, then life will give you the chance to make the mistake yourself. And I'm happy to confirm, that it is much cheaper to learn from the mistake another has made, than to learn from our own mistakes.



**In fact, I think that making mistakes is better than faking perfection.**

So, this May I'm going to be kind to myself, and allow myself to try things, and even to make mistakes, But I'm and going to try some things, and if they don't work then I'll try something else, and see how that goes.

What about you?

Will you let yourself make mistakes?

Will you be brave enough to tell others about some of those mistakes too, so they can learn from them?

Or will you seek only perfection, and claim to be infallible?

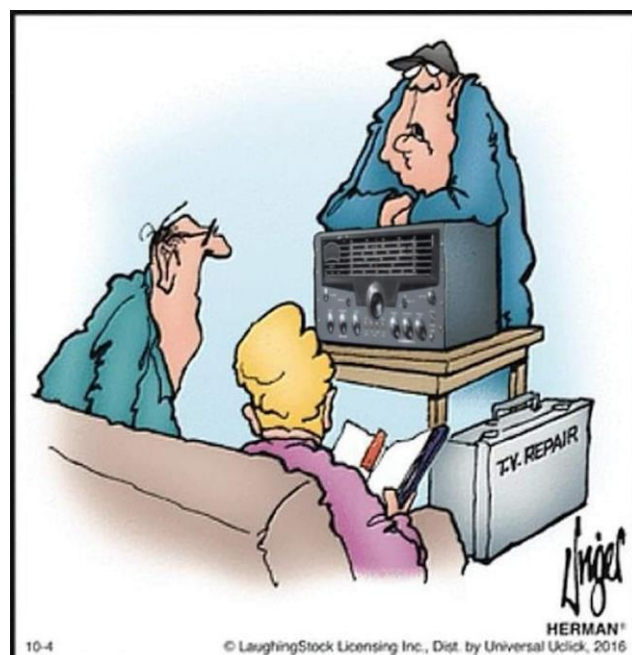
I don't know what the rest of the year holds, but I do not that unless I'm doing something, I'm going to be stagnating, and that means I'll be losing what I have. And since I am not going to be perfect, I'm going to carry on giving stuff a go, and even sometime messing it up, but with each mistake, I will improve, and one day, I may even know as much as some of you.

Maybe you might be willing to join me on this journey, to give something a go, and yes you will likely mess it up, but you may find that others are far more forgiving that you thought, and willing to help you learn from the mistakes, and get better with practice.

And isn't that what a good teacher is, not someone who always knows how to do it right, but someone who is willing to share how they got it wrong, so you won't make the same mistakes.

So, lets get out there and make some mistake ... and have fun doing it.

de ZL1NUX signing



**"Folks, the main reason you can't get a picture is because you bought yourselves a ham radio by mistake."**

## BETAMAX V VHS – A MODERN RETELLING, BUT TOO LATE.

For those of us old enough to remember, and Geeky enough to care, the war of the two main tape recorder standards of Betamax v VHS formats was a interesting conflict of form and function.

From a technical perspective the Betamax system was superior on both Line scan rate, Image stability and superior sound, Yet due to some carefully crafted manoeuvres, smart marketing and of course cost. The VHS format won over the market.

In the PC world, a similar war has quietly raged in the replacement of the Venerable Hard Disk Drive, and the war came home to roost for me over the easter break, when I had to make some decisions around some 10 year old Laptop Hardware.



The machine, was originally designed for windows 7, but had been upgraded to windows 10, and while it ran well, there were a couple of issues that indicated something had to happen to make the machines useful, The 4 GB or ram, should have been enough for Windows 10, and the I7 processor should also be fine, yet the machine had become slow and sluggish, and in addition the HDD led was on almost constantly. And having 2 of them with great displays, Throwing them out was not a though I relished.

A simple test of doubling the ram from 4 to 8 showed absolutely Zero improvement, and the likely candidate would be to swap out the old HDD for a new SSD. ... of should that be an SDHD?

Checking the HDD revealed my most likely issue, The 5400 rpm HDD while good, was a speed bottleneck, and while it should supposedly transfer at 3Gb/s, it was unlikely I was achieving anything like this.

This left me 3 possible options.

1. Swap the Internal HDD for a faster HDD
2. Fit an SDHD. A hybrid drive with SD for performance, while having the HDD in the back to keep the reliability up, or
3. Fit an SSD in place of the Hard Drive.

And What triggered this, The PB tech Easter special where I could get an SSD drive replacement for about \$50, so a small investment might be a way to extend the life of the laptop hardware. But also, while looking a a box of Small hard drives, I found an SDHD drive, so this would allow some testing. And so the “Lets see what happens” experiment began. (And since on drive was already sized, 500Gb drives would be my weapon of choice.)



Not being so familiar with the different drives, I started with some basic research, and looked at the different benefits of each type of hardware.

**HDD** – The benefit here is simple – Size. If you want big then the HDD is going to be a hands down winner, but since my drives are smaller than 1GB, the cost difference between HDD and SSD would be nothing, and possibly even cheaper to get the SSD. But as size increases the cost of the SSD will quickly become prohibitive, while the HDD will remain affordable.

**SSHD** – These are really interesting devices, They have a small area (around 16GB of SSD storage, and then a capacity Hard Drive. Files that are commonly used (like the OS) are moved to the SSD part for performance while larger files are stored on the HDD part. But the problem is cost, these are as expensive as a HDD, and then add some extra.

**SSD**. The 100% solid state option, stores everything in flash memory. They are fast, and affordable in small sizes, but if the controller fails (and they are known to do that) then everything is lost, so backups are critical.

## The Experiment.

A trip to PB tech netted two SSD's, and I had an existing SDHD. So my first experiment did not touch the laptops, Instead doing a straight test on an even older Laptop with a Dual Core processor running Zorin Linux ... OK, But a little slow, and also runs hot. The improvement was amazing. The laptop run much faster, Drive access dropped off, and the temperature of the laptop dropped dramatically. Which given that the screen and processor draw the most current, was seriously surprising. The SSD was able to be cloned (my reason for starting on a system I could afford to lose stuff while cloning). The laptop went from usable to very usable. The practice with clonezilla also meant I now new how to move my partitions to the new drives and copy all the files and drivers, so now when I copy the drives for real, I will be comparing the same installed software, and not comparing with a new install.

So now it was time to hit the drives in the two machines.

## Initial Boots.

With two very similar machines to test, I started with a boot to functionality test, (or how long did the drives take to boot the machines.

Since they were close but not identical (in terms of loaded software) they boot times were 2.5 minutes, and 3 minutes respectively (Windows disagreed, but my watch was stopped, when I had logged in, and could open a file.

I then cloned the drives. One to the SSD (a Crucial Brand if your interested) and the other to the Toshiba SSHD.

This took some time, as you can imagine, but once done, it was a simple matter to open the drive bay, and swap out the HD for the newly cloned drives.

Then with two fingers A simultaneous boot of the two laptops was activated.

Research told me that the drives should have stood apart at this point, The SSD should be way faster, and the SSHD would need a few boots to show any speed benefits, But the boot process for both was almost identical, with boot times just under 1 minute. Again, Comparing the heat of the laptops, the temperatures were clearly lower, (which also meant less power consumption) and performance was almost identical. There was a difference when I loaded a video game, with the SSD loading faster than the SSHD, but even so, the boost over the original 5400 RPM drives was mind blowing.

## So, How does this relate to the Batamax V VHS war?

So having completed the experiment, I decided to price out the different drives, and this is when I realised that like the Betamax, The SSHD drive has already lost the war. The higher cost to both the HDD and the SSD means that the SSHD drive, Like Betamax, may have held some technical advantages over the other two, but at the end of the day, the cost factor has left us with only 2 options, The HDD or the SSD. Making most of this experiment – Futile.

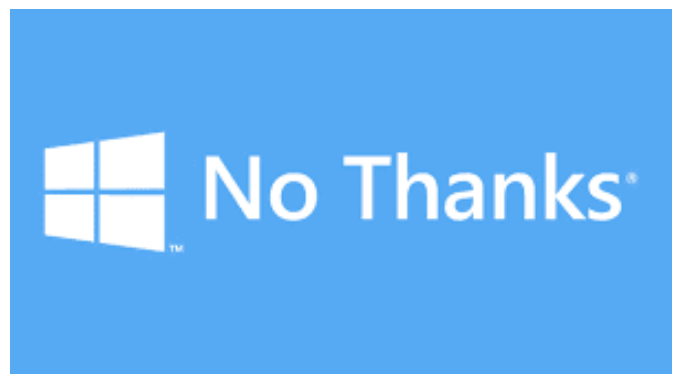
But despite this, if you are looking for a speed boost for an older Laptop, or desktop, and you are looking for best bang for your buck, forget memory and go straight for the SSD, and then get a good network drive, or plug in HDD, and run periodic backups. So, if you lose the SSD, you can restore the drive from the backup.

Your laptop will thank you And so I now have 2 usable 17 inch laptops, and yet another reasons to stick to windows 10, while saying No thanks to a new windows 11 laptop.

And when the run Linux, the performance improvement is even better.

So, 2 machines, No longer destined for e-waste.

Now to convince my wife that keeping these laptops was a good thing. And that may yet prove the hardest step of all.





## STARSHIP & SUPERHEAVY BOOSTER – WHAT HAPPENED?

The Rapid Unscheduled Demolition (RUD) of the first test launch of Starship atop the Superheavy Booster, after the launch of the largest rocket ever made by man was if nothing else, a sight to behold. The vehicle reached a height of 47 kilometres in altitude, before things seemed to start to go very wrong, and the Flight abort System, activated and destroyed the rocket before it could cause any damage to the many people and cities below it.

For those of us, who woke up late at night to watch the launch and subsequent “Big Boom”, which was very impressive, we were treated to an incredible scene of the most powerful launch of any rocket in History. (a rocket with twice the power of a Saturn 5)

However, unless you really dig deep into podcasts or specialist news sites you get the mass media message that the rocket was a failure, and Nasa needs to find an alternative to SpaceX. Like many news items of late, it seems the persona of Elon Musk, and perhaps his often controversial opinions, may have more in deciding the view of SpaceX, rather than the technical aspects of what SpaceX may or may not have achieved with its test.

So how do we get to find out what happened and what lesson should be learnt?

In the short term of course, we won't. Since the Flight Abort System (FAS) terminated the launch the American Federal Aviation Authority (FAA), is required to do an investigation, and since the matter is now under investigation, the details are suppressed while the investigation continues, but despite that there are several key observations, that can be made by looking at the launchpad, and also the launch video, can give us some hints. And thankfully Elon Musk spent an hour on a special twitter discussion on the topic. So, here's what we think we now know.

The start of the launch, is of course a great place to start. Most video was taken from a vantage point across a bay, at a distance of almost 7 Kilometres, the sound was well delayed past the video. The Ignition started a rolling cloud, which quickly obscured the rocket and launch tower, and finally, the rocket began a very slow climb out of the cloud, as the roar of 36 Raptor engines shook the ground and the rocket slowly climbed above the clouds of dust and smoke.





This also was our first sign at the next issue, it soon became apparent that somewhere between 3 and 6 engines, were not operating at full thrust. In a recent interview with Space News, the SpaceX founder pointed out that the booster needed 30 of its engines to operate at full capacity to reach orbit, but the ships onboard sensors did not consider the engines operations to be within the required parameters to bring them to full thrust, yet despite this the ascent passed through the region of maximum aerodynamic pressure (Max Q) and continue to climb.

At T=27 seconds, Engine 19 lost communication, as some kind of “kinetic event” broke off part of the heat shield, and damaged the shields of 3 others, this left visible fires streaming from the rear of the rocket.

At T+62 seconds, there was additional heat shield damage around another Raptor, engine 30, although that engine continued to operate. At T+85 seconds, “things really hit the fan,” Musk said, with the loss of communication with another engine. “Roughly from this point onwards, we lose thrust vector control of the rocket,” he said, meaning it could no longer steer.

It was not clear what caused the engine failures, but Musk said it did not appear to be damage from the “rock tornado” of debris from the concrete pad created by the thrust of the engines at lift-off. “Weirdly, we do not see evidence of the rock tornado actually damaging engines or heat shields in a material way,” he said. “It may have, but we have not yet seen evidence of that.”

SpaceX made no attempt to separate the Starship upper stage from the Super Heavy vehicle as it tumbled in later stages of flight. Musk said while controllers initiated the flight termination system, it took much longer than expected, about 40 seconds, for explosives to rupture the vehicle’s tanks.

Requalifying that flight termination system will be the long-lead item for the next launch, he predicted, with the next vehicle and a repaired pad likely ready in six to eight weeks. “Hopefully, we’ll be ready to fly again in a couple months.”

The second big clue as to where more work will be needed, is to look at the launch pad itself.



The damage to the base of the structure shows the sheer power of the 36 engines. The rocket literally dug a pit beneath the pad before it managed to overcome gravity and rise into the sky.

Reports from the area show that the concrete pad under the structure was broken and chunks of concrete and sand were blasted over a wide area, Sand debris has been located up to 10 Kilometres away from the Boca-Chia site.

“The debris was basically sand and rocks,” he said, “but we don’t want to do that again.”

Changes to the pad include placing a water-jacketed “steel sandwich” below the launch mount. “You have what’s basically a massive super strong steel showerhead pointing up,” he said, with that water deluge system mitigating dust and debris.

SpaceX had been working on that device before the launch, but it was not ready in time. “If we had expected to dig a hole, we would not have flown,” Musk said. Data from the static fire test in February, when 31 of 33 Raptor engines fired at 50% of their rated thrust, caused “fairly modest erosion” of Fondag, the heavy-duty concrete used on the pad. “We thought it would be fine for one launch.”

He said SpaceX will also be replacing damaged tanks in the tank farm at the pad that were already set to be swapped out with vacuum-jacketed versions. The launch tower itself suffered no “meaningful” damage, he added.

The next launch will use a Super Heavy booster called Booster 9, but he said the company had not decided which of the Starship upper stages will fly. “The engines on Booster 9, which is next, are much newer and more consistent, and with significant reliability improvements,” he said, along with improved shielding. “I think we’ll see a much more robust engine situation with Booster 9.”

He was optimistic that the second launch will get at least through stage separation. “Our goal for the next flight is make it to staging and hopefully succeed in staging and get to orbit,” he said. “I think we’ve got a decent shot of getting to orbit on the next flight.”

Musk estimated SpaceX will attempt four to five Starship launches this year. “I would be surprised if we exit this year without getting to orbit,” he said, giving the company an “80%-plus probability” of doing so, increasing to nearly 100% within 12 months.

He said the company will spend about \$2 billion this year on Starship, which he argued the company can support without raising outside funding. After all, SpaceX is mass producing Starships and Boosters, and is not short of replacements ready to be launched.



“Once again, excitement is guaranteed,” Musk said of the next launch. “Success is not.”

## HEARD AROUND THE SCENES

### FIRST TRANS-TASMAN RADIO CONTACT 26 APRIL 1923.

On the 26th April this year, it will be 100 years since the first amateur radio contact between New Zealand and Australia was made, between Frank Bell of Shag Valley Otago, and Charles Maclurcan, 2CM of Sydney Australia.

A special event callsign ZL100 has been issued for 3 months to commemorate the event, commencing 26 April – 25 July 2023. Persons wishing to use the special callsign, can arrange bookings via Debby Morgan at NZART head office.

WIA has also been granted a special callsign of VK100ZL to commemorate this event also.

### WANGANUI BRANCH TABLE SALE REGISTRATION (MAY)

When: Saturday 6th May

Where: Blind & Low Vision Hall 102 Peat Street, next to ZL2JA Clubrooms

Start time: 9am

More information and registration (*No table sales on the day*), so please register early.

Mike Newman ZL1BNB  
[jandcwakely@gmail.com](mailto:jandcwakely@gmail.com)  
Secretary Branch 48  
Wanganui ARC



## RADIO ELECTRONICS GROUP – ANNUAL EQUIPMENT SALE IN MAY

You are invited to the Radio Electronics Group annual new and used equipment sale.

When: Saturday 20th May

Where: Glenview Club, 211 Peacockes Road, Fitzroy, Hamilton.

Start time Vendors: 8:30am

Doors Open: 10am

Vendors please email completed registration forms to <ZL1REGSALE@gmail.com>

The sale day team are looking forward to catching up with you all on the day.

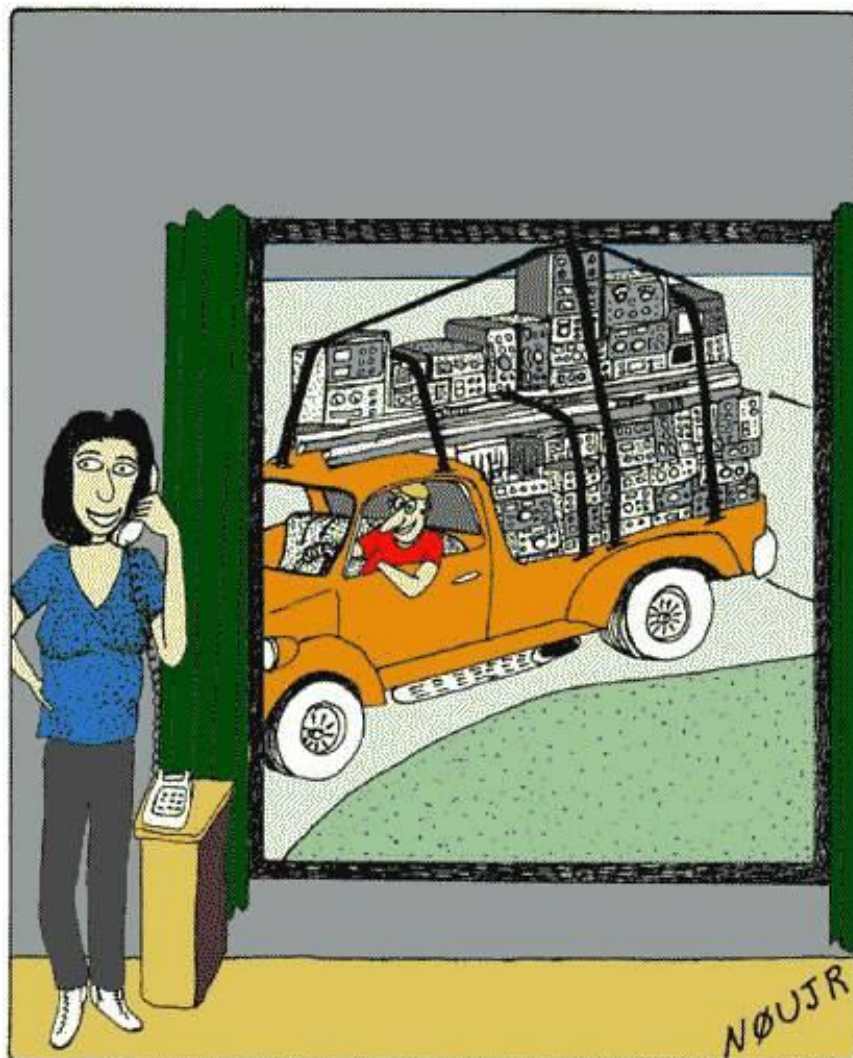
73 de ZL1PO

John Lisignoli

President

Radio Electronics Group (Inc.)

Mob: 0212045990



"No Greg went to the ham auction this afternoon, to get rid of a couple old radios that were cluttering up the place...Oh I think I hear him pulling in now!"

**THE NEXT OFFICIAL BROADCAST WILL BE HELD SUNDAY 28TH MAY 2023.**

It will be rebroadcast in the Auckland area on the 6625 Repeater





## 2023 QRP DAY (JUNE 17)

The interest in QRP activities is everlasting in amateur radio community worldwide. QRP radio communications testify high ability of radio amateurs, and offers advantages concerning, among others, the reduction of QRM on the amateur bands.

The 10th IARU Region 3 Conference held in September 1997 in Beijing has resolved the following recommendations based on the document (97/X/14) submitted by NZART, which says; "That Region 3 Societies help to promote the IARU objectives for QRP operation, specifically:

- i) to support QRP operation on June 17 each year;
- ii) to foster QRP activities by their members;
- iii) to encourage regular publication of QRP articles in their national magazines;
- iv) to provide QRP sections in any national contests; and
- v) to assist other Societies with the promotion and development of QRP."

Accordingly, member Societies are requested to note the above resolution and take appropriate actions with reference to the holdings of the following events, for example, in order to contribute to more effective use of radio spectrum:

- 1) QRP Field Day;
- 2) QRP Contest;
- 3) Distribution of QRP Transmitter Kits and Reference Book; and
- 4) Workshop of QRP Operation.

## 2023 IARU HF WORLD CHAMPIONSHIP CONTEST (JULY)

The 2023 IARU HF World Championship Contest takes place the second full weekend of July, beginning 1200 UTC Saturday and ending 1200 UTC Sunday (8-9 July 2023). Both Single and Multi operator stations may operate the entire 24-hour period.

All licensed amateurs worldwide are eligible to participate in this contest.

The objective of this contest is to contact as many other amateurs as possible, especially IARU member society HQ stations, around the world using the 160, 80, 40, 20, 15 and 10 meter bands.

Multipliers are the total number of ITU zones plus IARU member society HQ stations worked on each band (not mode).

Thus, your Society's HQ stations participation is very important for the multipliers.

IARU officials represent a maximum of four multipliers per band (AC, R1, R2 and R3).

Our two regional AC members have the option of using "AC" or our regional designator "R3".

Regional EC members who are not AC members must use our designator "R3".

You can find the complete rules at; <http://www.arrl.org/iaru-hf-world-championship>

Enjoy and good luck!

## SOME NETS – FOR WHEN YOU ARE LOOKING FOR SOME COMPANY

Day	Time (Local)	Freq (MHz)	Group
Sunday	08:00	3.750	Southern Net
	09:00	3.700	Bch 10. Franklin.
	09:15	3.755	Bch 65. Papakura.
	19:00	146.700	YL Net
	20:00	3.710	Bch 42. Titahi Bay
	21:30	3.595	Duran WIA Net.
Monday	19:30	3.757	Bch 12. Hamilton
	20:00	3.540	CW Practice Net
	20:00	3.605	Br 80. Hibiscus Coast
	20:00	Nat System	W.A.R.O
	20:30	3.870	O.T.C (Old Timers Club)
Tuesday	09:00	7.096	Ex Post Office Techs
	21:00	1.850	160m Net _ Ron ZL4JMF
	19:30	3.690	QRP ZL2BH
	20:00	3.581	CW improvers Net
Wednesday	11:30	3.850	SPAM Net
	20:00	3.660	Geek Net
	20:00	3.645	Bch 02. Auckland
	20:00	3.745	Bch 84. Bay of Islands
	20:30	146.525	W.R.S.C
Thursday	09:00	7.096	Ex Post Office Techs
	19:30	3.690	QRP ZL2BH
	20:00	3.540	CW Practice Net
	20:00	3.615	Bch 89. REG Net
	20:30	3.696	ZL10A
	20:30	3.666	LF Net ZL2CA
	20:00	3.690	ZL QRP SSB Net
Friday	20:30	3.850	SPAM (AM Mode)
	20:30	3.650	W.S.R.C.
	20:30	3.560	Digital Modes Net
Saturday	10:30	28.530	10-10 Down Under
	19:30	3.650	Christian Fellowship
	20:00	3.760	???
	20:30	3.600	Ch 62. Reefton/Buller
Daily or Other	07:30	3.696	ZL20A
	08:30	3.730	ZL3RP
	15:00	14.300	Pacific Seafarers
	17:30	3.760	Home Brew
	05:00 Zulu	14.183	ANZA DX Net
	18:00	7.115	VK7OB
	19:30	3.720	ZL1MO
	18:30	3.766	ZL3LE
	08:30/20:00	3.730	ZL3RP
	20:30	3.725	ZL2HN / ZL4RF
	21:00	3.677	Counties Net ZL2MA
	21:00	3.535	New Zealand Net (CW)

This is designed to be a living list, Please update whenever you are able:



**Papakura Radio Club Inc.**  
**Branch 65 NZART Club Directory 2017**  
**Wellington Park, 1 Great South Road.**  
**PO BOX 72-397 Papakura 2244**  
**PHONE 09 296 5244**

**Westpac 03-0399-0019896-00**

**Club website: <http://www.qsl.net/zl1vk> Club email: [zl1vk.club@gmail.com](mailto:zl1vk.club@gmail.com)**

President	ZL1NUX	Gavin Denby	021 459 192
Vice President	ZL1BNQ	Richard Gamble	021 729 270
Secretary	ZL1AOX	Ian Ashley	021 198 1810
Treasurer	ZL1MR	David Wilkins	021 185 7903
Committee	ZL1DK	David Karrasch	021 560 180
	ZL1IRC	Ian Clifford	021 082 48400
	ZL1RJS	Rob Stokes	021 307 005
	ZL1RIC	Ricky Hodge	027 533 8155
	ZL4MDE	Mike Enderby	021 529 895
AREC Section Leader	ZL1BNQ	Richard Gamble	021 729 270
CD Liaison	ZL1AOX	Ian Ashley	021 198 1810
Newsletter Editor	ZL1NUX	Gavin Denby	021 459 192
Hall Custodian	ZL1AOX	Ian Ashley	021 198 1810
Newsletter.	Contact:	zl1nux@outlook.com	

Our newsletter is published monthly and normally distributed just before the club meeting. Please forward articles etc to the editor Wednesday 1 week before the general meeting. Please notify any change of address. Including E-Mail Address to the secretary.

### Meetings

General Meetings are held at the Clubrooms on the 1st Wednesday of each month, starting at 7.30 pm. Look at your calendar and mark these nights. The speaker follows the General Meeting.

Project Evenings are on the 4th Wednesday of each month.

Committee Meetings are held on the 3rd Wednesday of each month at 7.30 pm unless advised.

Activity Nights are held on the 2nd Wednesday starting at 7.30 pm.

AREC Meetings are on the 5th Wednesday night, also starting at 7.30 pm

AGM: Held in November

**Subscription:** Full membership and newsletter \$25.00 Family Membership and newsletter \$40.00

Bank Account number: 03-0399-0019896-00 Working Bees As required.

Branch 65 21 Award: For contacts with ZL1VK (5 Points) and 8 Papakura Radio Club Members (2 Points each) after January 2011. Total 21 Points. Cost \$5-00. Certified list and \$5-00 to Secretary, Papakura Radio Club. Address above.

### ZL1VK Club Nets

146.625 MHz Sunday at 8.30 am. Controller ZL1NUX, Gavin Denby. If the repeater is not available, listen 146.475MHz simplex.

3.755 MHz Sunday at 9.15 am. Controller ZL1BNQ Richard Gamble. (Linked to 146.675 & 438.775)