The Official Newsletter of the

PAPAKURA RADIO CLUB INC.







2021 - Time to think different





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This Month's Meetings:

All face to face meetings are cancelled until we return to level 2 or lower

Meetings for November.

Meetings will only occur at alert level 2 or lower. We cannot have social meetings at level 4 or 3. This means we will only open the clubrooms on Wednesdays when we are at alert levels 1 or 2 following current government guidelines.

Wed 3 November – Listening on 690 repeater

Wed 10 November – Virtual AGM – Invitations and link have been emailed

Wed 17 November - Committee Meeting -A Virtual Meeting may be scheduled

Wed 24 November - Listening on 690 repeater

Papakura Radio Club Inc.	
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▶ 2021

CLUB ACTIVITY:

While off to a good start the Arduino training is on hold – While we explored options for online training to continue, no solution was found. Waiting is the best we can do since meetings are likely to remain on hold for some time to come.

UPCOMING PROJECTS:

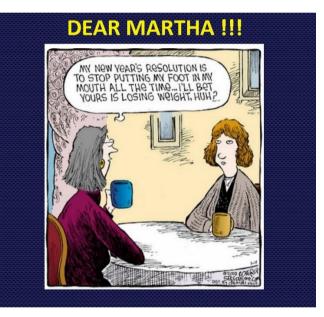
PROJECT AND ACTIVITY NIGHTS

On Hold until further notice - Like most of Life

AREC training will be rescheduled on return to alert level 2 or lower





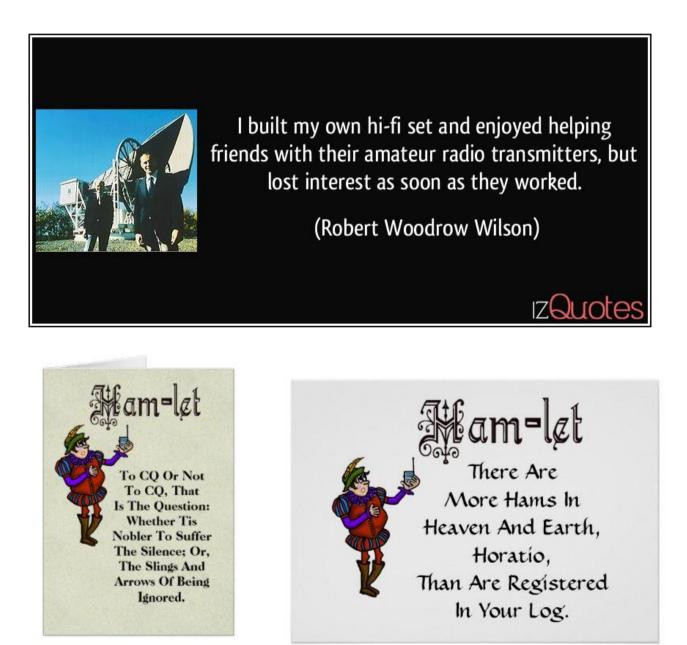




UPCOMING ACTIVITIES:

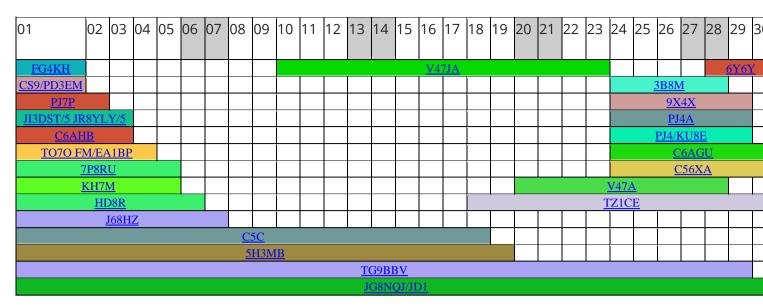
(ALERT LEVELS PERMITTING) WED 3 NOVEMBER – LISTENING ON 690 REPEATER WED 10 NOVEMBER – VIRTUAL AGM – CHECK YOUR INBOX WED 17 NOVEMBER – VIRTUAL COMMITTEE MEETING WED 24 NOVEMBER – LISTENING ON 690 REPEATER

AS THESE ARE SUBJECT TO CHANGE - PLEASE LISTEN FOR UPDATES ON THE SUNDAY MORNING CLUB NETS. (SEE BACK PAGE FOR FREQUENCIES AND TIMES)



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DX Calendar August 2021



Featured:

V47JA Saint Kitts Island

W5JON will be active again as V47JA from Saint Kitts Island, IOTA NA-104, 10 - 24 November 2021. He will operate on 160 - 6 m (Including 60m), SSB, FT8.



PJ4A PJ4/K4BAI PJ4/KU8E PJ4/W4EF Bonaire Island

Jeff, KU8E will be active as PJ4/KU8E from Bonaire Island, IOTA SA - 006, in CQ WW DX CW Contest, 27 -28 November 2021.

He will operate in Single Operator Single Band Category.

He will operate as PJ4/KU8E 24 November - 1 December 2021.



Click on the link (CTRL + Click for some PDF readers) in the PDF versions for information on the Expeditions



Or check them out at DX News.com

CONTESTS NOVEMBER 2021

Papakura Radio Club Inc.

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Date	e-Time	Dat	e-Time	Bands	Contest Name	Mode	Exchange	Sponsor's Website
1	0000	1	0100	1.8-28	K1USN Slow Speed Test	CW	20 WPM maximum; name, SPC RST.	www.k1usn.com
1	0600	1	0859 2130	3.5, 7 3.5	Memorial Contest RSGB 80-Meter Autumn Series, Data	CW	RST, serial	skmc.hu/en/rules.html
2	0100	2	0159	1.8-50	ROOD do-meter Addinin Genes, Data	Ph	RS,	wwsac.com/rules.html
2	0100	2	0300	3.5-28	ARS Spartan Sprint	CW	RST, SPC,	
2	1700	2	1900	3.5-14	RTTYops Weeksprint		Other's	
3	0230	3	0300	1.8-21	Phone Weekly Test – Fray	Ph	Name, SPC	perluma.com/Phone_Fray_
								Contest_Rules.pdf
3	1300	3	1400	1.8-28	CWops Mini-CWT Test	CW	Name, mbr or SPC	
3 3	1700	3 3	2000 2000	144 1.8-28	CWops Mini-CWT Test	CW	Name, mbr or SPC	
3	1900 2000	3	2100	3.5	UKEICC 80-Meter Contest	Ph	Name, mpr or SPC	ukeicc.com/80m-rules.php
4	0000	5	0300	7	Walk for the Bacon QRP Contest	CW	13 wpm max: RST, SPC, name, mbr/power	ukeicc.com/oom-rules.php
4	0300	4	0400	1.8-28	CWops Mini-CWT Test	CW	Name, mbr or SPC	
4	0700	4	0800	1.8-28	CWops Mini-CWT Test	ĊW	Name, mbr or SPC	
4	1700	4	1900	3.5-14	RTTYops Weeksprint		Other's	
4	1800	4	2200	28				nrrlcontest.no
4	1900	4	2000	3.5,7	EACW Meeting	CW	RST, mbr (if any), nickname,	eacwspain.es/eacwmeeting
					ů		EA province or DXCC	
4	2000	4	2200	1.8-50	SKCC Sprint Europe	CW	RST, SPC, name, mbr or "none"	
5	0145	5 5	0215	1.8-21	NCCC RTTY Sprint	CW	Serial, name, QTH	www.ncccsprint.com
5 5	0230	5	0300	1.8-21 1.8-28	NCCC Sprint K1USN Slow Speed Test	CW	Serial, name, QTH 20 WPM maximum; name, SPC	www.ncccsprint.com www.k1usn.com
6	0500	6	1200	3.5-28	IPARC Contest, CW	CW	RST, serial, IPA, US state (if USA)	www.iparc.de
6	1200	7	1200	1.8-28	Ukrainian DX Contest	CW Ph	RS(T), 2-letter Ukraine oblast or serial	www.iparc.ue
6	1300	6	1330	144	Two-Meter Classic Sprint	CW Ph	No(1), 2-letter Oktaine Oblast of sella	fwrc.info
							Serial, precedence, your call,	
6	2100	8	0259	1.8-28	ARRL Sweepstakes Contest, CW	CW	check, ARRL/RAC Section	www.arrl.org/sweepstakes
7	0500	7	1200	3.5-28	IPARC Contest, SSB	Ph	RST, serial, IPA, US state (if USA)	www.iparc.de
7	0800	7	1200		EANET Sprint		RS(T)	
7	1400	7	1700	3.5-28		CW	RST, mbr or "NM"	
10	1700	10	2000	432				
10	2000	10	2130	3.5	RSGB 80-Meter Autumn Series, SSB	Ph	RS, serial	
13	0000	14	2359	3.5-28	WAE DX Contest, RTTY		RS, serial	darc.de/der-club/referate/conteste
13	0000	14	2359	3.5-144	of the YLs Contest	CW Ph	RS(T), YL/OM	
13 13	0000	15 14	2359 2359	1.8-7 28	Low Band		RST, SPC Name, mbr or "0," SPC	www.podxs070.com
13	0500	14	1100	50-1296		CW Ph	Name, mpi or 0, SPC	
13	0700	14	1300	1.8-28	JIDX Phone Contest	Ph	RST, JA prefecture number or CQ zone	
Î					1			okomdx.crk.cz/index.
13	1200	14	1200	1.8-28	OK/OM DX Contest, CW	CW	RST, 3-letter OK/OM district code or serial	
13	1200	14	2359	1.8-50	SKCC Weekend Sprintathon	CW	RST, SPC, name, mbr or "none"	
13	1600	13	1800	3.5-28	Sprint	CW	RST, SPC, name, mbr or "0"	
13	1900	15	0500	1.8-432	CQ-WE Contest		Name, location code,	
13	2300	22	0300	1.8-14	AWA Bruce Kelley 1929 QSO Party	CW	RST , name, QTH, equip-	antiquewireless.org/homepage
-					FIRAC HF Contest			
14	0700	14 17	1700	3.5-28	FIRAC HF Contest Phone	Ph Ph	RS(T), serial Name, RS, SPC,	www.firac.de
14 15	1400 0100	17	0800 0300	1.8-144 1.8-28	Sprint	CW Ph	RS(T), SPC, mbr or power	www.4sqrp.com
18	0000	19	0300	1.0-20	Walk for the Bacon QRP Contest	CWPII	13 wpm max: RST, SPC, name, mbr/power	www.+sqip.com
18	0130	18	0330	3.5-14	NAQCC CW Sprint	CW	RST, SPC, mbr or power	nagcc.info
19	1600	19	2200	3.5	YO International PSK31 Contest	011	RST,	nagotinit
20	0000	21	2359	50-1296	ARRL EME Contest			
	1200	21		3.5-28	LZ DX Contest	CW Ph	RS(T), 2-letter LZ district or ITU zone	
20		20	2359	1.8	All Austrian 160-Meter Contest	CW	RST, serial, district code (if OE)	www.oevsv.at
20	1700	21	0100	1.8	REF 160-Meter Contest	CW	RST, serial, department code	concours.r-e-f.org/regle-
						000		ments/index.php
20		20		1.8-50	Feld Hell Sprint	014/	RST, mbr, SPC,	
20		20	2300	1.8	RSGB 1.8-MHz Contest	CW	RST, serial, district code (if UK)	
20	2100	22	0259	1.8-28	ARRL Sweepstakes Contest, SSB	Ph	Serial, precedence, your call, check, ARRL/RAC Section	www.arrl.org/sweepstakes
					Homebrew and Oldtime			
21	1300	21	1700	3.5, 7	nomobiew and Oldline	CW	RST, serial, class	qrpcc.de/contestrules/hotr.html
- ·]	2100	21	2300	3.5-28	Sprint	CW	RST, serial, SPC, name, mbr or "0"	
		22	0100	1.8-28	Run for the Bacon QRP Contest	CW	RST, SPC, mbr or power	
21	2300			1.8-50	SKCC Sprint	CW	RST, SPC, name, mbr or "none"	
21 21 24	0000	24	0200					· · · · · · · · · · · · · · · · · · ·
21 21 24 24	0000 2000	24 24	2100	3.5	UKEICC 80-Meter Contest	CW		ukeicc.com/80m-rules.php
21 21 24 24 25	0000 2000 2000	24 24 25	2100 2130	3.5 3.5	RSGB 80-Meter Autumn Series, CW	CW	RST, serial	
21 21 24 24 25 27	0000 2000 2000	24 24 25 28	2100 2130 2359	3.5	UKEICC 80-Meter Contest RSGB 80-Meter Autumn Series, CW CQ Worldwide DX Contest, CW RSGB FT4 Contest Series		RST, serial RST, CQ zone	ukeicc.com/80m-rules.php www.cqww.com/rules.htm

All dates and Times are in UTC and are not adjusted for local time

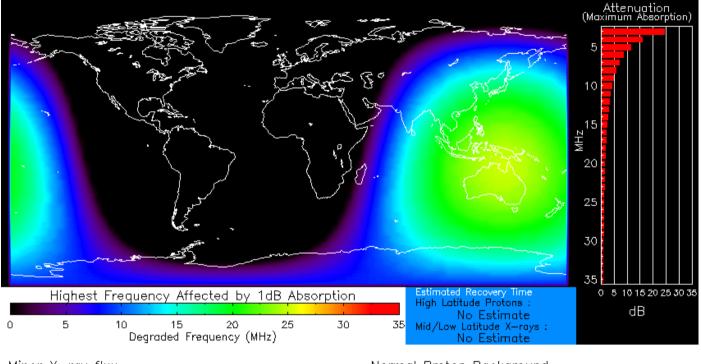
Mbr = Membership number. Serial = Sequential number of the contact. SPC = State, Province, DXCC Entity. XE = Mexican state.

Listings in blue indicate contests sponsored by ARRL or *NCJ*. The latest time to make a valid contest QSO is the minute listed in the "Finish Time" column. Data for Contest Corral is maintained on the WA7BNM Contest Calendar at **www.contestcalendar.com**

Check for updates and a downloadable PDF version online at www.arrl.org/contests.

SOLAR CYCLE 25 - A SURPRISING UPDATE?

With the cycle 25 data coming in and more information from the Parker Solar probe, we are getting a better idea of what is going on with the sun, and its good news, but with more than just a twist. Sadly, we are not looking at a sudden rise that would indicate a stronger solar cycle to come, but its still rising faster than prediction, so it's unlikely to be worse than cycle 24. The sun however is showing two very different faces. One side is calm with very few sunspots or bright regions, which means the solar flux sits around the mid 70's (this will of course rise as the cycle strengthens). As the sun turns on it's 28 day rotation, the other side is active and not only has sunspots and bright regions (over 100 sunspots) but also has been firing of several X-1 flares, several earth directed, and several have created some serious D-layer absorption on earths dayside



Minor X—ray flux Product Valid At : 2021—10—26 02:50 UTC Normal Proton Background NOAA/SWPC Boulder, CO USA

The image above shows what happened Wednesday afternoon NZ time, and the bands went from wide open to totally dead in just a few short minutes fortunately the higher frequencies recovered in hours, but it showed the effect of our closest star on HF propagation, and just how little we know about the solar cycles.

As the solar cycle ramps up, the conditions will of course stabilise, but the cyclic effects of the rotation are making for some very interesting band conditions. Sadly, we cannot get a backside view of the sun at the moment as the Stereo A satellite is currently on the earth facing side, while Stereo B is unable to provide us any pictures, so we have to wait for the rotation to reveal what's happening, Much like the early hams would have done.

Changeable conditions, and a cyclic sun with variable conditions, Bands that fluctuate and open right up to 10 metres if you are willing to wait for the right time. 15-20 if your feeling impatient.

So, it's a good time to fire up the HF rig put out a few calls. You might be surprised. Unless of course you have better things to do.

RAMBLINGS FROM THE EDITORS DESK

As we ready for our AGM with the lockdown count now over 75 days and with no sign of any change soon, it has become clear that we are living in very different times, and the reaction to this lockdown is very different from the first.

I have avoided the topics of politics and covid throughout my time as editor in as much as was possible, I have always sought to make this as uplifting and as entertaining I could, but in the current climate of fear, that is tearing at the very heart of amateur radio, I feel I need to make an exception this time.

If I was to find a word for this difference the word would be "Isolation". In our earlier lockdowns we had hope and reason, people were connected and spoke with concern for each other, for although we were physically isolated, we remained connected and compassionate, our enemy was a virus, not a person, or group, we were all on one team. But sadly, like Russell Coutts, I see it no more.

The differences were slow but steady, as the lockdowns became regional, so too did the separations, Auckland, then Wellington, then Auckland again, each regional case set regions against each other, but this too had little impact, there were a few who felt out of towners were evil, but on the whole, the nation still stood as one. Until the border was placed south of Auckland, I had to cross it, and the fear that it was like something out of World War 2 sat uncomfortably in my mind, but the border opened again, and we seemed to have backed away from fear and loathing model.

But this was short lived when masks and record keeping was introduced, those who did not, or could not wear a mask were met with suspicion, masks were only required on public transport then, and the evidence overwhelming showed that they did little, or in some cases worse than little to prevent the viral spread, yet in spite of this when the mandates became essential for indoors, many started calling the police to report anyone walking down the road without a mask, People walking together became threats to all mankind. Anyone with a medical exemption was required to reveal why, much to the horror of those with PTSD, the rape victims or the autistic. They became sub-human. This was not isolated to just a few, it became the norm, and even invaded the realm of Ham Radio. The very group where avoiding the subject of politics was consider the norm, instead became a battlefield for the minds of the masses, and a medium for propaganda.

But as concerning as that was, the worst was yet to come, the vaccine was the next weapon. Even before the mandates began, anyone who did not want the single type and brand of vaccine available in New Zealand was pressured on all sides and called "Anti-Vax", the voluntary choice became enforced medical treatment, and we accepted it. In fact, many of us encouraged it.

You may think you already know where this is going, but if you bear with me, I think you may find this a little different from what you may have heard before, and perhaps not what you think.

Many years ago, while studying social anthropology, I was involved in a discussion on the holocaust, we all asked how ordinary people could turn into the group that would turn over their Jewish neighbours, and even publicly assault them, and once they were moved out, Take their possessions, even their home without a thought. The fact is it did not start off this way, it was a slow process. First, they were simply vilified, then they were identified, then they were forced out of work, and into the slums, until eventually the "final solution" saw them sent to the camps.



Hilter did not take all of Europe by force, nor did he invade all of Europe, Austria, for example, welcomed him. He was a popular orator, and was seen at first as a uniting force, even when he invaded Poland, England and Europe did nothing, going so far as to call him a man of peace, and a model for youth to look up to. Following the 1939 invasion of Poland, there was an outbreak of typhus, probably caused by the destroyed sewer systems from the German bombing, The Jewish communities had lower levels of typhoid due to their eating rituals, and higher than normal hygiene, but instead this was used to claim that they were carriers of the disease, any doctors who opposed this view (often Jewish) were removed from office, and replaced by German doctors who followed the official narrative, and this led to the creation of Jewish areas, for the safety of the public, of course.

German physicians and public health officials in the Nazi regime did not acknowledge it was about race; instead, German medical professionals published essays blaming Jewish people's supposed "low cultural level" and "uncleanliness" for the typhoid epidemics. Posters depicting Jews as lice, which transmit from person to person the bacteria that causes epidemic typhus, were publicised, and the respected status of German doctors helped spread the belief that the Jews were responsible for spreading typhus. Eventually this spread to cover all anti-social groups, political prisoners, Jehovah Witnesses and Roma (Gypsy's), homosexuals... anyone who was not "Ayran"

The Nazis had a phrase which covered all of these actions: 'Für Ihre Sicherhei' this literally translates as ensure your safety, or Keep yourself safe.



"Those who don't study history are doomed to repeat it. Yet those who do study history are doomed to stand by helplessly while everyone else repeats it."

If any of this seems familiar, it should. There are similarities and there are differences, there is also another side to this sad time in history, and one worthy of consideration.



By now some will have accused me of being anti-vaccine, I am most certainly not, I have been vaccinated for many different diseases, but in some cases have had to seek a different vaccine on religious grounds, this has always been the right of every New Zealander. In fact, NZ purchased 4 different Covid vaccines, yet only 1 is currently available to New Zealanders. The AstraZeneca was given away, we have not uplifted any Janssen, and have yet to receive Novavax. So, we are not talking about people refusing to be vaccinated, they are only choosing not to use Pfizer. (*Novavax is undergoing medsafe approval process as I write this*)

So indulge my background, and I will tell you the much loved tale about the heroic act of solidarity by Denmark's King Christian X in 1940.

The legend has it that when the Germans ordered Jews in occupied Denmark to identify themselves by wearing armbands with yellow stars, King Christian X of Denmark made his daily morning horseback ride through the streets of Copenhagen sporting the star and explaining to citizens that he wears the Star of David as a demonstration of the principal that all Danes are equal. Non-Jewish Danes follow their king's example by wearing the armband as well which prevents the Germans from identifying Jewish citizens thus rendering the order ineffective.

It's a great story.

Unfortunately, the tale is somewhat of a myth, told for a purpose. In fact, Danish Jews never wore the yellow badge either, nor oddly enough did German officials ever issue an order requiring Danish Jews to wear it. (No doubt well aware of the kings views.) The Danes did however perform many symbolic gestures of defiance against their occupiers, such as wearing four coins tied together with red and white ribbons in their buttonholes (some denominations of the Danish coins have a hole in the middle of them). Red and white are the Danish colours, and four coins totalling nine øre represented the date of the occupation, April 9. In 1941 Foreign Minister Erik Scavenius said to Hermann Göring "There is no Jewish question in Denmark".

It was King Christian X habit to ride his horse alone through Copenhagen every morning to underline his continuing claims for national sovereignty, unarmed and without escort. He became a national symbol for rich and poor alike and he rejected many aspects of the occupation, made speeches against the occupying force and was known as a protector of the Jews. In 1933 he had attended the 100th anniversary of the synagogue in Copenhagen. Reputedly the Rabbi pointed out to the King that given the situation in Germany where the Anti-Semitism was rife it would be understandable if he were to choose not to attend, and the King answered, "Are you mad? Now there's twice as much reason to attend!" This is actually a true historical account and not myth and I can absolutely imagine the King saying this because it's something the Danes say a lot in their vernacular language 'Er du helt vanvittigt?' - 'Are you completely crazy?...'



Naturally each of us in influenced by their own past, and my case is also impacted by both by my own awareness of European Jewish history, told by my great grandfather, and the stories told to me by my grandfather of his experiences in World War 2, It impacted me so much that it resulted in my own time of service in the NZ armed forces. I think that if "heroic altruism", either covert or overt, is part of your national and personal history it will strongly influence your own perception of life. My mother, for example, has always been strongly against the death penalty, believing even the worst person has some good in them, and extremely tolerant of people who may be 'different' in any way, whether that's religious, ethnic, cultural, or individually. I know it has certainly influenced me greatly in becoming the person I am today – I can put up with all sorts of "idiots", Of course I am not required to agree with them, just understand, and accept they have a different view.

I would suggest that if we are to live up to the international understanding and common values that we as Hams share, then we should not be afraid of those with different views, and if you do know someone who cannot accept the Pfizer option, then maybe help them stay safe until another choice is available, after all, it may not be a "choice" for them and since most of us are choosing to stay home and stay safe anyway, how much difference will their choice make to you or I? Especially if you are already vaccinated.

We need to follow the science, and you know how much I love science, but science deals in theories and opposing theories, A theory is called a thesis, the opposition is called the anti-thesis, and the result of the debate is the synthesis. We test it, and if it doesn't work, we move on. There is no consensus in science, it requires constant opposing views, without these opposing views science becomes religion, and like every religion it does not play well with others. Pure science is incapable of any morality, it is cold and heartless, and it must be so. It is therefore vital that we also temper it in the fires of justice and forge it on the anvils of liberty. We must follow the science, even when it asks uncomfortable questions, and challenges our beliefs, but it is not a god, and must never treat it as divine truth. It will be different tomorrow.

I was recently asked to place in this newsletter a notice from another radio club that has decided only vaccinated members may attend meetings (once they again can have them), and with the traffic light system, this would permit them to get together at a lower level on the new system. I have included this, even though it does not sit well with me. We seem to be repeating history. It seems that those who do not learn from the past are doomed to repeat it, while those who of us who did learn it's lessons, are doomed to watch others repeat it.

Anyone listening on the RF bands will tell you people we used to hear, we no longer hear, People we know are not talking, why?

Is it possible they feel isolated, perhaps even threatened? The path of fear makes some people harsh, but it can potentially bring out their best. Like many of you I have wondered if I was a German under Nazi law, would I have the courage and conviction to stand alone against the crowd, and hide an outcast? would I protect them? would I help them?

My ego makes me want to say of course, But internally, I wonder what price becomes to much, when do I draw the line. What would it take for me to lay my convictions aside and just take the easy option? Thankfully I don't have to make those decisions, we are not trucking people off to camps, armed thugs are not kicking in the doors but we are doing some monstrous things to some who are different from us, let's hope we do not make them into monsters.

These images are hard to think about, and they might be divisive, but this is not about vaccines, or lockdowns or even freedoms, I will let others decide what is right and what is wrong. Ethics is very complicated. It's about how we get through this very difficult time, and how we stay connected with others. Dave Dobbyn said it well when he said. "Fight Covid, not humanity"

Ham radio is a medium of communication, and a medium of connections. It's about being inclusive, and about being better than others. Otherwise, it would be a free for all public radio system. We have all shown an ability to learn new skills, we have learned from different cultures, we have seen times change, Modes change and technology change, yet we have remained connected to each other, but the connections are being strained.

It's time to choose, will we connect and support each other, or will be barricade the gates, and develop a siege mentality? If we hide ourselves away, what are we doing to ourselves? What are we doing to our most vulnerable? Or will we reach out to those around us, and treat them with respect, even if we disagree? Will we find the common ground, and encourage one and other to hold on? Not seeking that they act for anothers benefit but supporting them to be the best that they can be, knowing that no virus can pass the RF barrier, but toxic attitudes and opinions can.



And so, we need make my choice. Will we choose to treat every amateur radio operator as an equal and not seat in the seat of judgement? Will we make demands of others, or seek the path of honour, and stand for freedom of choice? Will we learn the lessons of history, and the example of a king?

So I will ask if your OK, knowing that you probably are not, and that it's ok to not cope, maybe all I can do is listen, But I will listen. It seems to me the kiwi way, and the way of the ham radio operator, "Understanding through communication". So, let's talk.

de ZL1NUX 73 for now

TECH-TIPS CORNER

DC POWER SUPPLIES.

Having discussed batteries, solar and system, it come to the time to look at one of the most under considered, or overlooked part of any equipment installation, or shack build, The humble DC power supply.

Checking out any site selling ham equipment or any on-line site like tradme or ebay can result in confusion as to what is required, which system is best, and what factors do is need to consider, so in this Tech Tips, I hope to have a serious discussion on what you should consider when selecting power supplies for your shack, or station setup.

In considering the power supply we need to consider:

- Types of supplies
- Efficiency
- Size (current output)
- Duty Cycle
- Protection methods
- Noise

I will not consider voltages, other than a short consideration of variable supplies compared to fixed voltage offerings. This is because 12-volt supplies (actually normally 13.8 volts) are pretty much the standard for most off the shelf hardware. Naturally you will need a supply that is designed to operate your equipment.

VARIABLE OR FIXED?

While there are many who use (very successfully) a variable power supply, the risk that you may set the voltage too low, or too high can mean that you are risking the set to which you are connected. For this reason I would recommend the use of fixed supplies for powering shack radios. Of course repair techs prefer variable, as these types of repairs are usually straight forward, and expensive for the end user.

SWITCHMODE OR LINEAR?

Switchmode power supplies are more energy efficient, smaller, lighter and normally cheaper; These are the most common types of supplies in modern use. Historically the RF noise generated by the switching circuits used to drive the voltage regulation (normally achieved by pulse width modulation) resulted in RF interference, but more recent units not only have reduced emissions, they also have the ability to frequency shift any interference to move it out of band (noise offset) Many shacks will find these more than acceptable for daily use, but the noise issue can be a problem for serious HF users.



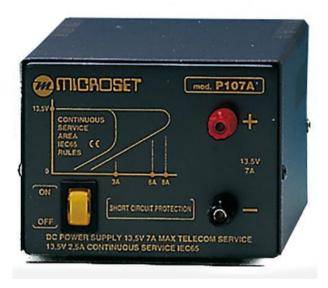
Linear supplies require large transformers and with high copper prices, reduced efficiency and the need for large heatsinks, these can dominate a shack, and empty a wallet. For many hams the low noise makes these the preferred power supply, and when you see these at a sale, they are work checking out if you have the space.

HOW MANY AMPS DO I NEED?

When looking at the ratings on a supply, there are three figures we need to consider. The peak current, the rated current, and the duty cycle.

The peak (also called surge) is, as the name suggests, a maximum value, and this is not a current that the power supply can deliver for any period of time, sadly this is the figure that is most often advertised by sellers, If you draw 7 amps on transmit, you will need a supply able to deliver well above 7 amps, and the peak may need to be higher than 11 amps. Use this value with care, but clearly, a bigger peak means the occasional loud signal, of surge current will not result in the same level of distortion. This is obviously not the most critical value.

The rated current must therefore be the value we need to find, but it too is not the current that can be drawn continuously. We need to also consider the Duty Cycle.



The duty cycle is the ratio of on/off current at the rated current. The rated current is always at a duty cycle, with 100% duty cycle the rated current is the continuous current, but most supplies are rated at 50%, this means we can draw the rated current for a period, so long as the off period is equally as long. As the current is further reduced, the duty cycle allows longer on-time, so for a 7 amp radio, a 10 amp power supply should be adequate.

Take the time to read the labels on your supply, an underrated supply will fail, while an overrated supply will add unnecessary cost and will increase your power bill for no benefit.

FINALLY PROTECTION.

It's strange that in a time when keeping safe has become the primary concern of most people, the safety of their shack, and most importantly the risk of fire, is overlooked, Fuses and resettable circuit breakers are not nice to have options on your installation, they are critical. Especially if you have storage devices (batteries) on the supply that can provide high currents.

Ensure your fuses (or circuit breakers) match the specification given by the manufacturer.

Additional protection can be worth considering if you have a lot of cables can include:

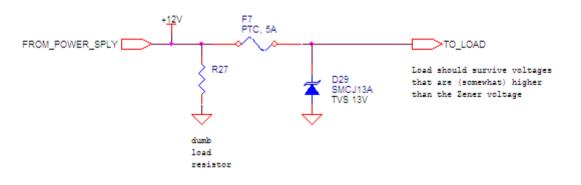
- Reverse Voltage protection
- Overvoltage protection

Papakura Radio Club Inc.

Two very simple protections you may want to consider consist of the fuse or circuit breaker above, but with the addition of a diode (or two).

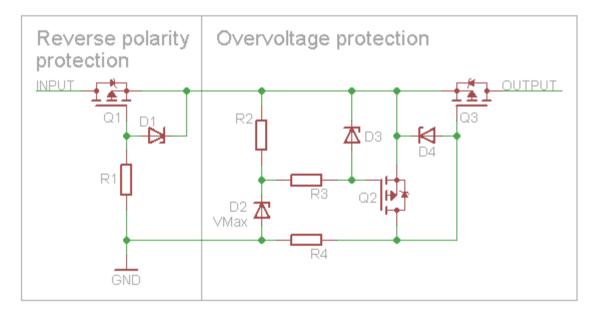
One way to prevent accidentally reversing the polarity to your expensive radio is to insert a power diode (rated to carry the current) in series, but as the voltage drop over the diode will reduce the supply voltage by about 0.7 volts a 13.8 volt will become 13.1 and the diode (which must carry the current) will get hot.

A simple alternative is to connect the diode across the radio input in reverse polarity (many radios actually have this built in) then if you reverse the wires a high current will flow blowing the fuse and protecting the radio and supply.



Over voltage can be achieved the same way using a zener diode (I traditionally use a 15 volt zener) as shown above to protect a 12 volt rail.

There are more advanced circuits you can consider too, like the one shown below which uses FETs as switches to isolate the supply in fault conditions



All this to replace a battery, which shows nothing in a shack is really that simple

But if you understand the basics, you can make the right purchasing decisions... or at least, Less bad ones

NASA UPDATES

JAMES WEBB TELESCOPE

The world's largest and most complex space science observatory has arrived in French Guiana and will now be driven to its launch site, Europe's Spaceport in Kourou, where it will begin two months of operational preparations before its launch on an Ariane 5 rocket, scheduled for Dec. 18.

Once operational, Webb will reveal insights about all phases of cosmic history – back to just after the big bang – and will help search for signs of potential habitability among the thousands of exoplanets scientists have discovered in recent years. The mission is an international collaboration led by NASA, in partnership with the European and Canadian space agencies.

After Webb is removed from its shipping container, engineers will run final checks on the observatory's condition. Webb will then be configured for flight, which includes loading the spacecraft with propellants, before Webb is mounted on top of the rocket and enclosed in the fairing for launch

LUCY STABLE IN CRUISE MODE

The Lucy spacecraft, the first mission to the trojan asteroids, and a record-breaking number of asteroids, flying by one asteroid in the solar system's main asteroid belt, and by seven Trojan asteroids, remains in cruise mode, which is the standard flight mode for outbound flight and allows for substantial autonomy for the spacecraft. The spacecraft has successfully executed several small planned manoeuvres, which have had no adverse effect on the one solar array that is not fully deployed. On Oct. 29, NASA will adjust Lucy's position to point toward Earth in preparation for instrument checkout.

Most recently, the spacecraft's position was adjusted on Oct. 26 to allow the team to measure how much electric current is moving through the partially deployed solar array and thus understand how close that array is to the fully latched position. Analysis indicates that the array is between 75% and 95% deployed. It is currently being held in place by a lanyard, specifically designed to help unfurl the arrays during deployment.

An anomaly response team continues to work on establishing what caused the solar array to not fully deploy. NASA and SwRI are evaluating a range of options, including the possibility of leaving the array in its current state. Any attempt to safely redeploy the array would occur no earlier than Nov. 16.

PARKER SOLAR PROBE

NASA's Parker Solar Probe is speeding in toward the Sun after a swing past Venus on Oct. 16, successfully using the planet's gravity to shape its path for its next closest approach to our star. The spacecraft counts on the planet to reduce its orbital energy, which in turn allows it to travel closer to the Sun and measure the properties of the solar wind near its source.

This was the fifth of seven planned Venus gravity assists. The flyby reduced Parker Solar Probe's orbital speed by about 6,040 miles per hour (9,720 kilometers per hour), and set it up for its 10th close pass (or perihelion) by the Sun, on Nov. 21.

TEXT MESSAGE SCAM INFECTING ANDROID PHONES WITH FLUBOT

New Zealanders are currently being affected by a malicious app, known as FluBot, which is being spread via text messages on Android phones. The wording of the text messages may be about a parcel delivery or that photos of the recipient have been uploaded or a voicemail. In all cases there will be a link, asking you to install an app or a security update.

The wording of these texts is changing so be wary of any suspicious text messages you receive asking you to click on a link, and forward these texts free-of-charge to 7726.

The malicious app will only infect your phone if you click the link **and** download the app. Receiving the text does not mean you are infected. Apple phones can receive the message but cannot be infected. The link will take you to a page that either tells you to download a tracking app for the parcel delivery or tells you that your phone is infected with FluBot and to download anti-FluBot software.

Until you download the application and install it, your phone is not infected.

If you have received a message:

If you have received this message, it is important that you do not click the link. Apple phones can receive the message but cannot be infected.

- Please report the message by forwarding it free-of-charge to 7726, then delete it. If you receive multiple messages, report as many as you can to 7726, and then delete them.
- Messages are sent from phones infected with this app so there is no simple way to prevent your phone from receiving these messages. Forwarding them to 7726 helps the Department of Internal Affairs (DIA) and CERT NZ to shut down the links in the text messages and contact people who have been infected by the app.

If you clicked the link, but did not download anything:

If you clicked the link but took no further action, you should not be affected. However, CERT NZ strongly recommends that you change all your online account passwords and contact your bank as a precaution.

- As above, forward the message free-of-charge to 7726, then delete it. If you receive multiple messages report as many as you can to 7726 and then delete them.
- If you entered any personal information into a form, especially credit card details, then we recommend you contact your bank and check for any unusual activity.
- If you clicked the link and downloaded the app:

If you clicked the link and downloaded the app, you need to take the following steps immediately.

- Forward the message free-of-charge to 7726, then delete it.
- You will need to factory reset your phone or restore it from a back up made before you received the text. A reset will delete any data on your phone including photos so if you have any questions we recommend talking to an IT professional first.
- Contact your bank and check for any suspicious activity.
- Change all of your online passwords.
- Report the incident to CERT NZ

WHY RADIO AMATEURS ARE CALLED "HAMS"

Have you ever wondered why radio amateurs are called "HAMS?" Well, it goes like this: The word "HAM" as applied to 1908 was the station CALL of the first amateur wireless stations operated by some amateurs of the Harvard Radio Club. They were ALBERT S. HYMAN, BOB ALMY and POOGIE MURRAY.

At first they called their station "HYMAN-ALMY-MURRAY". Tapping out such a long name in code soon became tiresome and called for a revision. They changed it to "HY-AL-MU," using the first two letters of each of their names. Early in 1901 some confusion resulted between signals from amateur wireless station "HYALMU" and a Mexican ship named "HYALMO." They then decided to use only the first letter of each name, and the station CALL became "HAM."

In the early pioneer days of unregulated radio amateur operators picked their own frequency and call-letters. Then, as now, some amateurs had better signals than commercial stations. The resulting interference came to the attention of congressional committees in Washington and Congress gave much time to proposed legislation designed to critically limit amateur radio activity. In 1911 ALBERT HYMAN chose the controversial WIRELESS REGULATION BILL as the topic for his Thesis at Harvard. His instructor insisted that a copy be sent to Senator DAVID I. WALSH, a member of one of the committees hearing the Bill. The Senator was so impressed with the thesis is that he asked HYMAN to appear before the committee. ALBERT HYMAN took the stand and described how the little station was built and almost cried when he told the crowded committee room that if the BILL went through that they would have to close down the station because they could not afford the license fees and all the other requirements which the BILL imposed on amateur stations.

Congressional debate began on the WIRELESS REGULATION BILL and little station "HAM" became the symbol for all the little amateur stations in the country crying to be saved from the menace and greed of the big commercial stations who didn't want them around. The BILL finally got to the floor of Congress and every speaker talked about the "...poor little station HAM." That's how it all started. You will find the whole story in the Congressional Record.

Nation-wide publicity associated station ""HAM" with amateur radio operators. From that day to this, and probably until the end of time in radio an amateur is a "HAM.

Update: This story was posted 1959. Since that time, research has been conducted by members of the Harvard Wireless Club regarding the veracity of the claim. It concludes as follows:

"Back in 1999, the late K3UOC, who received his Ed.D. from the Harvard Graduate School of Education and was very active with our club, wrote:"

"Note: This legend has been published and told by word-of-mouth countless times over the past 90 years. Unfortunately, "it isn't so." HWC members researched this story, even obtaining the copy of the Congressional Record for the date in question. We could find no record of Mr. Hyman appearing before congress. We have to admit, though, it's a very entertaining story!"

Also, "We could not find those three guys [Hyman, Almy, and Murray] in our alumni directory either."

BTW, WIAF apparently nowadays goes by the name "Harvard College Wireless Club."

... So I guess we are still non the wiser

SEEN OR HEARD AROUND THE SCENES

H-NIGHT

A reminder that the Society for the Preservation of A.M.'s annual "H" night is on Wednesday December 8th this year, and in previous years some of us have participated. It is one of the friendliest "contests" – more ike an award really, that I have been involved with. H-Night celebrates the day that Amateur radio operators were allowed to resume transmission after the end or world war two, there will be a number of vintage rigs in operation, and more than a couple of ZC1s will be operational

Hopefully the full contest rules will be published next month, but briefly, there are 5 half hour periods from 7.30 to 10PM, and the aim is to make as many contacts with AM (only!) stations. Repeat contacts are encouraged! There are multipliers for WW2 and valve only (except in the power supply) rigs. Logs can be sent by (preferably) email, post, or horseback!.



Right Image is Infantry walkies for the purpose of close radio communication with tanks, year 1936 Power 0.3 W, frequency range 51-64 MHz 6m Mag Loop for portable operation...1936

THE WSJT-X DEVELOPMENT TEAM ANNOUNCE THE AVAILABILITY OF WSJT-X VERSION 2.5.1

This release mainly contains improvements and repairs defects related to Q65 and JT65 when used with non-standard and compound call signs. Those planning to use Q65 or JT65 to make weak signal contacts involving a non-standard call sign should upgrade to this version. Also included is a new feature for microwave aircraft scatter, as well as repairs for bugs detected since the general availability release of version 2.5.0. A complete listing of changes is available in the Release Notes. Links to WSJT-X 2.5.1 installation packages for Windows, Linux, and Mac are available.

IARU REGION 1 PREPARING FOR THE FUTURE WORKSHOP

The 'Shaping the Future' Workshop came to an end on Saturday 23 October with the delegates looking at the core values of amateur radio and then formulating the Core Purpose and determining the Overarching Goal. The issues shared with members attending should seem familiar to every organisation:

The message being shared in this session is clear. IARU societies are losing members; loss in members in some societies is remarkable in the last ten years, even with good examination throughput. Next to this, persons in leadership roles in these societies are getting older. Not all Member Societies have top team members under the age of 35 years.

The IARU Region 1 Executive Committee shares that it's time for change and we need to start moving forward. Working together and changing the current trends. We need to refocus our thinking and way of operating.

Main questions and topics which will be covered in the Workshop are: What is amateur radio today? How is it changing? Where are tomorrow's radio amateurs? How do others see amateur radio? What do we need to do for the future?

The work started by dealing with fundamental values that should characterize the amateur radio hobby: Experimentation, Innovation, Learning, Social Benefit, "Ham spirit" - and not least that it should be a fun and engaging hobby. Then the discussions turned to the vision of the future and there the workshop landed with something like "Amateur radio is popular throughout region 1 and is seen as a source of expertise in science and technology. Amateur radio is recognized for its opportunities for personal development and is seen as an asset to society. The outcome of the meeting was to develop a framework for the future based on eight strategic objectives. The Region 1 Executive and Member Societies will now continue to work with the eight strategic objectives to create concrete activities that will be defined in coming months.

At the time of printing the IARU have not yet published any detail documentation on these 8 objectives, but we will await these with interest but in principle they are to lead to future concrete activities that will be defined in detail in the coming months. We will await these with interest.

NVRS (VINTAGE RADIO SOCIETY) BAN'S ANYONE WHO IS UNVACCINATED

"It has been decided that future meetings should only be attended by those members who are fully vaccinated for Covid. We politely ask that any members experiencing flu like symptoms and/or lack full vaccination status (of two vax jabs at least) stay away. The signing in register for the meeting will include the declaration that the attendee is fully vaccinated. If you are worried about not having proof of your vaccination status until covid passports arrive there is the MoH website that can provide an overnight service if sufficient details are provided (longer if not);

https://www.health.govt.nz/our-work/diseases-and-conditions/covid-19-novel-coronavirus/covid-19-vaccines/covid-19-requesting-proof-vaccination

The committee urges all members to get vaccinated and this prior notice should allow members time to receive the two vax shots before mid-November.

Shared as requested – But I feel I must point out that asking for a person's medical records is currently illegal, they can be shared, but at this stage only by the individual concerned, unless the workplace is one listed by a medical health order. This may change once the NZ government reviews the NZ Bill of Rights Act later in the year. Collecting this is a logbook would breach the privacy act too. I would urge caution in these actions





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690 AND 670 THE OTHER REPEATERS

With the 6625 repeater down until further notice, the other repeaters are finally getting some traffic. 5775 (Musick Point) is quite active if within your coverage, and Rodney on 730 is also a good chance to talk with others, 670 has become the new home of the XYL net on Sunday nights, we are keeping the club net on 690 despite its coverage issues.

In addition, there are several simplex frequencies including 146.475 call frequency that have regular calls, so do take the time to keep in touch, even if you don't have HF at your location.

A WALK ON THE DARK SIDE





OLD FART PRIDE

It's not a bad thing to be called an Old Fart.

Old Farts are easy to spot at sporting events; during the National Anthem, Old Farts remove their hats and stand at attention and sing without embarrassment. They know the words and believe in them.

Old Farts remember World War II, Normandy , Spitfires and Hitler. They remember the Atomic Bomb, Vietnam , the Korean War, the Cold War, the Moon Landing and all the Peacekeeping Missions from 1945 to 2005.

If you bump into an Old Fart on the pavement, he will apologize. If you pass an Old Fart on the street, he will nod or tip his cap to a lady. Old Farts trust strangers and are polite, particularly to women.

Old Farts hold the door for the next person and always, when walking, make certain the lady is on the inside for protection.

Old Farts get embarrassed if someone swears in front of women and children and they don't like any filthy language on TV.

Old Farts have moral courage and personal integrity. They seldom brag except about their children and grandchildren.

It's the Old Farts who know our great country is protected, not by politicians, but by the young men and women in the Air Force, Army, and Navy. This country needs Old Farts with their work ethic, sense of responsibility, pride in their country and decent values. We need them now more than ever. **Thank Goodness for Old Farts!** Pass this on to all the "Old Farts" you know.

P.S.

I was taught to respect my elders. It's just getting harder to find them.

SOME CRAZY PHYSICS

According to Einstein's theory of gravity, general relativity, clocks tick faster the farther they are from Earth or another massive object. Theoretically, that should hold true even for very small differences in the heights of clocks. Now an incredibly sensitive atomic clock has spotted that speedup across a millimetre-sized sample of atoms, revealing the effect over a smaller height difference than ever before

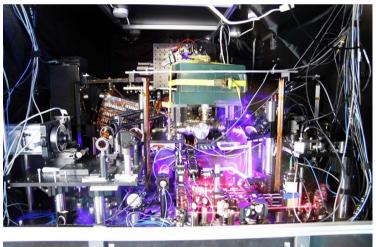
An inherent property of atoms allows scientists to use them as timepieces. Atoms exist at different energy levels, and a specific frequency of light makes them jump from one level to another. That frequency — the rate of wiggling of the light's waves — serves the same purpose as a clock's regularly ticking second hand. For atoms farther from the ground, time runs faster, so a greater frequency of light will be needed to make the energy jump. Previously, scientists have measured this frequency shift, known as gravitational redshift, across a height difference of 33 centimetres

In the new study, physicist Jun Ye of JILA in Boulder, Colo., and colleagues used a clock made up of roughly 100,000 ultracold strontium atoms. Those atoms were arranged in a lattice, meaning that the atoms sat at a series of different heights as if standing on the rungs of a ladder. Mapping out how the frequency changed over those heights revealed a shift. After correcting for non-gravitational effects that could shift the frequency, the clock's frequency changed by about a hundredth of a quadrillionth of a percent over a millimetre, just the amount expected according to general relativity.

What's more, after taking data for about 90 hours, comparing the ticking of upper and lower sections of the clock, the scientists determined their technique could measure the relative ticking rates to a precision of 0.76 millionths of a trillionth of a percent. That makes it a record for the most precise frequency comparison ever performed.

In a related study, also submitted September 24 to arXiv.org, another team of researchers loaded strontium atoms into specific portions of a lattice to create six clocks in one.

Shimon Kolkowitz of the University of Wisconsin–Madison and colleagues measured the relative ticking rates of two of the clocks, separated by about six millimeters, to a precision of 8.9 millionths of a trillionth of a percent, which itself would have been a new record had it not been beat by Ye's group. With that sensitivity, scientists could detect a difference



between two clocks ticking at a rate so slightly different that they'd disagree by just one second after about 300 billion years. Ye's clock could detect an even smaller discrepancy between the two halves of the clock of one second amassed over roughly 4 trillion years. Although Kolkowitz's team didn't yet measure gravitational redshift, the setup could be used for that in the future.

The ability to precisely compare different clocks is also important for a major goal of timekeeping: updating the definition of a second. The length of a second is currently defined using an earlier generation of atomic clocks that are not as precise as newer ones like those used in the two new studies.

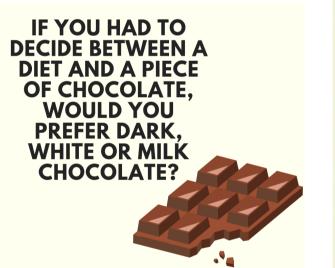
"There is a very bright future for the clocks,"

JUST FOR FUN - TO LIGHTEN THE MOOD

I changed my car horn to sound like gun shots... **People get** out of the way much faster now!











OMG, i have Finally **Discovered what's** Wrong with my **Brain: On the Left** Side, there is nothing right, and on the right side there is nothing left !!

I DON'T LIKE FOUR **LETTER WORDS...**



			ARE LOOKING FOR SOME COMPANY
Day	Time (Local)	Freq (MHz)	Group
Cundou	00.00	2 750	Couthours Not
Sunday	08:00	3.750	Southern Net Bch 10. Franklin.
	09:00	3.700 3.755	
	09:15	7.125	Bch 65. Papakura.
	16:00 19:00	146.625	SPAM Net (AM Mode) YL Net
	20:00	3.710	
	21:30	3.595	Bch 42. Titahi Bay Duran WIA Net.
	21.30	3.393	
Monday	19:30	3.757	Bch 12. Hamilton
	20.00	3.540	CW Practice Net
updated	20:00	3.605	Br 80. Hibiscus Coast
updated	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
· acoudy	21:00	1.850	160m Net Ron ZL4JMF
	19:30	3.690	QRP ZL2BH
	20:00	3.581	CW improvers Net
		2.662	
Wednesday	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	ZL1OA
	20:30	3.666	LF Net ZL2CA
	20:00	3.690	ZL QRP SSB Net
Friday	20:00	3.850	SPAM (AM Mode)
Thady	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	ZL2OA
, 01 00101	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	VK70B
	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)

SOME NETS - FOR WHEN VOU ARE LOOKING FOR SOME COMPANY

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

Also: Calling Frequencies: Courtesy of Murray ZL1BPU Daily Daily Daily

Sunset-Sunrise3580 USBNZ FSQCallSunrise-Sunset7105 USBNZ FSQCall24/77104 USBInternational FSQCall

I'm told the last of these sees some amazing DX, especially around sunset.

Papal	kura Radio Club Inc.	Page 24	Noven
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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: <u>http://www.qsl.net/zl1vk</u> Club email: zl1vk.club@gmail.com

Elected Officers			
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	ZL1RJS	Rob Stokes	021 307 005
	ZL1IRC	Ian Clifford	021 082 48400
	ZL1ASN	Rolly Adams	021 042 7760
	ZL1DK	David Karrasch	021 560 180
	ZL1RIC	Ricky Hodge	027 533 8155
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\$25.00Family Membership and newsletter\$40.00Bank Account number: 03-0399-0019896-00\$40.00

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

146.900 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)