



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

*February 2020*



*A timely reminder, we may have to use our skills at any time  
Are we ready?*



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### This Month's Meetings:

Our first General meeting for 2020 will be on February 5<sup>th</sup> at 7:30pm, following general business, Ian will talk to us about his experience tracking space teddy, and collecting data from the systems

Club Activity returns to Normal activity for 2020, but watch for changes.

Jock White Field Day 22<sup>nd</sup> and 23<sup>rd</sup> of February will again operate from behind the clubrooms; this makes it easy for you to attend for part of the two days or even all of it.

Saturday 29<sup>th</sup>, we will be hosting a Ham Radio boot sale at the clubrooms. This will be a buy, sell or swap meet, so you can sell exchange or even give away items, as long as you do it from your vehicle, and remove any leftover items at the end of the event. The club will also be selling items in the hall. Tea and coffee, and a BBQ will be needed, so how can you help? We will need many hands on deck to make this work. More details at the general meeting and this will be a major calendar event in a year we plan to connect with the wider Ham community.

March 15<sup>th</sup> will be annual Bombay Pioneer settlers' fun run, and while we have not yet been asked to assist, it is likely we will be asked to provide radio communications for the event. So mark it in your calendar, and let Dave ZL1DK know if you would like to be part of the day.

March 28<sup>th</sup> is the Te Puke Junk Sale – Details are in the Scene and Heard section

# Papakura Radio Club (Inc.)

Minutes of General Meeting 4<sup>th</sup> December 2019 at 19.34  
Clubrooms, Wellington Park.

President Gavin ZL1NUX welcomed visitors Wally ZL1WE & David Probine ZL1TND and 19 members were present as per the roll book.

**Apologies:** ZL1RP, ZL1ABR, ZL2SEA, ZL1RIC.

ZL1DK/ZL1AKM

**Minutes of the October General meeting** as printed in newsletter were reviewed..

**Matters arising:** Nil

ZL1NUX/ZL1BNQ

## Inward Correspondence:

Newsletters from Branches 29, 86

Mercury Energy

\$129.37

Westpac-00

\$2,452.34

Westpac Online account -

\$7,755.81

Westpac term Deposit confirmation advice

\$7,815.43

IRD advising from 1st March 2020 they don't accept cheques.

## Outward Correspondence:

Nil

ZL1AOX/ZL1DK

**Finances:** Dave ZL1MR reported the following statements

<b>Cheque Account Balance</b>	<b>\$2,452.34</b>
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Accounts to pay: Mercury Energy	129.37
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Receipts not on statement	20.00
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<b>Sub total less cheques equals account balance</b>	<b><u>2,342.00</u></b>
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Plus Savings Westpac – 025	7,815.43
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Plus Savings ASB	36,201.35
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<b>Total Funds</b>	<b><u>\$46,359.75</u></b>
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Moved by Dave ZL1MR, Seconded by Rolly ZL1ASN that accounts for payment be approved, carried.

## General Business:

1. Meetings 2019: December 4th: David Probine on Electric Car battery charging December 6th: Xmas social at Pukekohe Cosmopolitan Club 6pm January 1st : Informal Meeting February 5th : JWFD
2. Bushcomm antenna: East and West end posts installed. Centre pole next? Awaiting SS bolts. Ian to attend to prior to 14th December.
3. Waitakere Sprint: David ZL1DK advised that the Waitakere Sprint had not been run since 2011. This is an NZART sponsored activity and David asked if the Club would be interested in activating the contest next year. Some interest shown and David has a copy of the rules. Contest is usually held in July/August and last 1 hour. He asked for a volunteer to run it.

4. Working Bee: Planned for Saturday 14th December.
5. JWFD: held on last weekend in February. Gavin suggested that a portable station outside should be setup for the JWFD.
6. Zenith Catalogue: Ian ZL1AOX showed an old catalogue from 1938. Suggested that a copy could be kept in the library. He may be able to obtain more similar copies. Graham ZL1AUG advised that the Vintage radio Society would be interested in these books.
7. Graham ZL1AUG Sydney trip: Graham gave a brief rundown on his trip and commented on the high security required on the Sydney Harbour Bridge. He also said the driverless trams were being tested on George Street while he was there.

Meeting closed at 1956 and was followed by an interesting talk by David Probine ZL1TND on how using super capacitors can improve the performance of lithium Ion batteries and control for an electric bike and rubbish trucks. Supper followed.

## CLUB ACTIVITY:

- There was no committee or General meetings in January, but informal and AREC nights were well attended. In addition, 3 news Hams passed their exams – More on them later, so a good start to the year.

Feb

- 05<sup>th</sup> – General Meeting – Ian Ashley will speak to us on tracking the space teddy
- 12<sup>th</sup> – Project Night
- 19<sup>th</sup> – Committee Meeting
- 22<sup>nd</sup> - 23<sup>rd</sup> Jock White Field Day
- 26<sup>th</sup> – Project Night -TBC
- 29<sup>th</sup> – Car Boot sale at the clubrooms

## UPCOMING PROJECTS:

The Club has 2 project nights per month. These are on the 2<sup>nd</sup> and 4th week of each month. Feel free to suggest something if you have a topic you would like to see covered.

We have plans for making a “Flower Pot” antenna there is choice of ½ wave or for the brave, a 5/8<sup>th</sup> version. And Richard will be showing how to make a “Slim Jim” from TV 300 ohm ribbon cable, Handy for field activations, so a good chance to get your two meter performance optimized. We are also investigating a number of designs for Field HF suitable for SOTA, POTA or beside the car. We will be looking at expressions of interest for these projects, more discussion on this at the meeting Wednesday.

## **UPCOMING ACTIVITIES:**

### **JOCK WHITE FIELD DAY**

The Jock White field day will again be held at the end of February, we are looking for operators to join us to operate voice on 40 and 80 Metres. Once again we will be located at the back of the clubrooms, and will have our tent city in operations. Come for an hour, a day, or the whole event, as, much or as little as you like.

### **AREC TRAINING OPPORTUNITIES.**

AREC has some training available, for interested persons, and this is a great time to put your hand up to be part of AREC if you're at all interested.

Your first contact will be with Richard Gamble AREC Section Leader, Contact details are on the last page of the newsletter. Current offerings of training include:

- \* **First Aid**
- \* **CIMS 2**
- \* **CIMS 4**
- \* **Psychosocial First Aid**

### **AUSTRALIAN BUSHFIRES – YOU CAN HELP FROM HOME**

Radio Amateurs in International Amateur Radio Union (IARU) Region 3 have been requested to monitor the emergency communications frequencies, per the IARU Region 3 band plan, whenever possible, as well as monitoring repeaters when possible. "Amateurs seeking to establish emergency communication should use these EMCOMM frequencies in the first instance, or repeaters if available," a statement posted on the IARU Region 3 website reminds us.

"Radio amateurs who are volunteers for [WICEN and other emergency communication organizations] should keep themselves updated." "Emergency communication is one of the main reasons radio amateurs have access to RF spectrum. Please assist if and when you can."

The IARU Region 3 emergency "center of activity" frequencies are 3.600, 7.110, 14.300, 18.160, and 21.360 MHz. These are not net frequencies, and monitoring is not guaranteed. But they are recommended as starting points for emergency traffic, and activity may extend 5 kHz above or below the designated center frequency.

While the number and severity of the fires in Australia has reduced, and the operations have moved into a recovery phase, the situation could change again, and this is timely reminder of how we, especially in the low sunspot cycle, might be able to help when skip conditions make local (NVIS) communications difficult, but you may in the skip zone and be able to relay messages.

Even in this recovery time, there is still extensive damage to the local communications infrastructure, with continued risk, with the annual fire season still expected to continue into March or April.

# DX CALENDAR FEBRUARY 2020

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		
		CB0Z								TX4N TX4VK										KP3RE		TU5PCT								
PJ2ND				C21MB C21AA C21GW C21PF C21VA				FS/RW0CN FS/VE7ACN										8Q7HK												
		TO3FM										V6A							C6AA											
				V31VP									FJ/N2IEN																	
	T9A					J8/WJ2O									V47JA															
T9C											ZF2AN																			
	E51DDG															T15/W1USN T15/AA1M														
					5H4WZ												VP8PJ													
				E4CC																										
HU1DL													5H3DX																	
			6Y/G0RNU																											
															6W7/ON4AVT															
			515TT 514ZZ																											
			PJ5/KG9N																											
				H44MS																										
9G5GS																														
FR/F8EN																														
FG/F6ITD TO7D																														

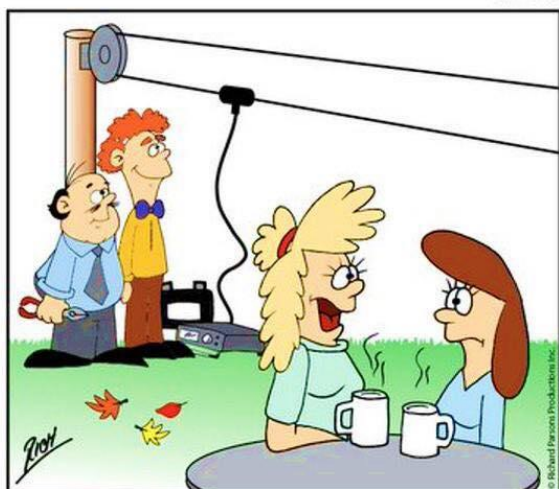
Click on the link (CTRL + Click for some PDF readers) in the PDF versions for information on the Expeditions



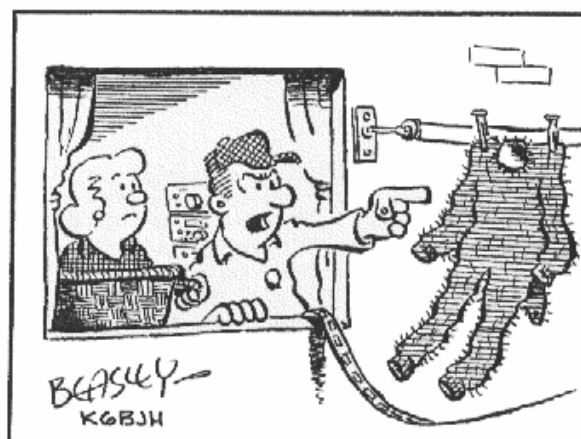
Or check them out at [DX News.com](http://DXNews.com)



## SUCH A HAM

SH-005



Stan & Cliff have been working all day  
on installing my clothesline, Mary.



 THAT LAST PAIR OF LONG JOHNS YOU  
REELED OUT MOVED MY FEEDPOINT  
 CE DERNIER CALÇON LONG QUE TU AS AJOUTÉ  
A DÉPLACÉ MON POINT D'ALIMENTATION

The clothesline antenna by Robert Victor VA2ERY, QST July 1998

# UPCOMING CONTESTS – FEBRUARY 2020

Date-Time	Date-Time	Bands	Contest Name	Mode	Exchange	Sponsor's Website
1 0000	2 2359	1.8-UHF	Vermont QSO Party	CW Ph Dig	RS(T), county or SPC	<a href="http://www.ranv.org/vtqso.html">www.ranv.org/vtqso.html</a>
1 0001	2 2359	28	10-10 International Winter Contest, SSB	Ph	Name, mbr or "0," SPC	<a href="http://www.ten-ten.org">www.ten-ten.org</a>
1 1200	2 1159	1.8-28	Black Sea Cup International	CW Ph	RS(T), ITU zone, Black Sea club info (if any)	<a href="http://bscc.ucoz.ru">bscc.ucoz.ru</a>
1 1200	2 1200	3.5-28, 144	F9AA Cup, CW	CW	RST, serial	<a href="http://www.site.unc.asso.fr">www.site.unc.asso.fr</a>
1 1200	2 2359	3.5-28	Mexico RTTY International Contest	Dig	RST, XE state or serial	<a href="http://www.rtty.fmre.mx">www.rtty.fmre.mx</a>
1 1400	1 2359	1.8-28	Minnesota QSO Party	CW Ph Dig	Name, county or SPC	<a href="http://www.w0aa.org">www.w0aa.org</a>
1 1400	1 2359	1.8-28	FYBO Winter QRP Sprint	CW Ph Dig	RS(T), SPC, name, power, temperature	<a href="http://arizonascrptions.apps-1and1.com">arizonascrptions.apps-1and1.com</a>
1 1600	1 1900	3.5	AGCW Straight Key Party	CW	RST, serial, class, name, age	<a href="http://agcw.org/index.php/en">agcw.org/index.php/en</a>
1 1600	2 2359	1.8-28	British Columbia QSO Party	CW Ph Dig	RS(T), BC District or SPC	<a href="http://orcadxc.org/bcqp_rules.html">orcadxc.org/bcqp_rules.html</a>
1 1700	1 2100	3.5-28	FISTS Winter Slow Speed Sprint	CW	RST, SPC, name, mbr or power	<a href="http://fistsna.org">fistsna.org</a>
2 0000	2 0400	3.5-14	North American Sprint, CW	CW	Other station's call, your call, serial, name, SPC	<a href="http://ncjweb.com">ncjweb.com</a>
3 2000	3 2130	3.5	RSGB 80-Meter Club Championship, SSB	Ph	RS + serial	<a href="http://www.rsgbcc.org/hf">www.rsgbcc.org/hf</a>
4 0200	4 0400	3.5-28	ARS Spartan Sprint	CW	RST + SPC + Power	<a href="http://arsrp.blogspot.com">arsrp.blogspot.com</a>
5 2000	5 2100	3.5	UKEICC 80-Meter Contest	Ph	4-char grid square	<a href="http://www.ukaiccc.com">www.ukaiccc.com</a>
6 1800	6 2200	28	NRAU 10-Meter Activity Contest	CW Ph Dig	RS(T), 6-char grid square	<a href="http://nrau.net/activity-contests">nrau.net/activity-contests</a>
6 2000	6 2200	1.8-50	SKCC Sprint Europe	CW	RST, SPC, name, mbr or power	<a href="http://www.skccgroup.com">www.skccgroup.com</a>
8 0000	9 2359	3.5-28	CQ WW RTTY WPX Contest	Dig	RST, serial	<a href="http://www.cqwprrtty.com">www.cqwprrtty.com</a>
8 1000	9 1000	1.8-28	SARL Field Day Contest	CW Ph Dig	RS(T), number of xmtrs, category, province or "DX"	<a href="http://www.sarl.org.za">www.sarl.org.za</a>
8 1100	8 1300	7, 14	Asia-Pacific Spring Sprint, CW	CW	RST, serial	<a href="http://isfc.org/apsprint/aprule.txt">isfc.org/apsprint/aprule.txt</a>
8 1200	9 1200	1.8	KCJ Topband Contest	CW	RST, JA Prefecture/District code or continent	<a href="http://www.kcj-cw.com">www.kcj-cw.com</a>
8 1200	9 1200	1.8-28	Dutch PACC Contest	CW Ph	RS(T), province or serial	<a href="http://pacc.veron.nl">pacc.veron.nl</a>
8 1200	9 2359	1.8-50	SKCC Weekend Sprintathon	CW	RST, SPC, name, mbr or "none"	<a href="http://www.skccgroup.com">www.skccgroup.com</a>
8 1400	10 0200	All (no WARC)	YLRL YL-OM Contest	CW Ph Dig	Serial, RS(T) SPC	<a href="http://ylrl.org/wp/yl-om-contest">ylrl.org/wp/yl-om-contest</a>
8 1500	9 1500	1.8-28	OMISS QSO Party	Ph	RS, SPC, mbr (if any)	<a href="http://omiss.net/Facelift/qsoparty.php">omiss.net/Facelift/qsoparty.php</a>
8 1700	8 2100	3.5-28	FISTS Winter Unlimited Sprint	CW	RST, SPC, name, mbr or power	<a href="http://fistsna.org">fistsna.org</a>
8 1900	8 2300	1.8	RSGB 1.8 MHz Contest	CW	RST, serial, District code (if any)	<a href="http://www.rsgbcc.org/hf">www.rsgbcc.org/hf</a>
9 1300	9 1700	3.5, 7	Balkan HF Contest	CW Ph	RS(T), serial	<a href="http://hamyo.ro/balkanhf2019">hamyo.ro/balkanhf2019</a>
9 1400	12 0800	1.8-144	Classic Exchange, Phone	Ph	Name, RS, SPC, radio manuf/model	<a href="http://www.classicexchange.org">www.classicexchange.org</a>
10 0100	10 0259	3.5-14	CQC Winter QSO Party	CW	RST, SPC	<a href="http://www.coloradoqrpcub.org">www.coloradoqrpcub.org</a>
10 0100	10 0300	1.8-28	4 States QRP Group Second Sunday Sprint	CW Ph	RS(T), SPC, mbr or power	<a href="http://www.4sqrp.com">www.4sqrp.com</a>
10 1300	14 2359	All (no WARC)	ARRL School Club Roundup	CW Ph	RS(T), Class (I/C/S), SPC	<a href="http://arrl.org/school-club-roundup">arrl.org/school-club-roundup</a>
12 0130	12 0330	3.5-14	NAQCC CW Sprint	CW	RST, SPC, mbr or power	<a href="http://naqcc.info">naqcc.info</a>
12 2000	12 2130	3.5	RSGB 80-Meter Club Championship, Data	Dig	RST, serial	<a href="http://www.rsgbcc.org/hf">www.rsgbcc.org/hf</a>
14 0000	14 2359	1.8-7	PODXS 070 Club Valentine Sprint	Dig	Name, OM/YL, SPC	<a href="http://www.podxs070.com">www.podxs070.com</a>
15 0000	16 2359	1.8-28	ARRL International DX Contest, CW	CW	W/VE: RST + SP; non-W/VE: RST + power	<a href="http://www.arrl.org/arrl-dx">www.arrl.org/arrl-dx</a>
15 1200	16 1159	1.8-28	Russian PSK WW Contest	Dig	RST, 2-letter oblast or serial	<a href="http://www.rdrclub.ru">www.rdrclub.ru</a>
15 1900	15 2059	1.8-28	Feld Hell Sprint	Dig	RST, mbr, SPC, 4-char grid square	<a href="http://sites.google.com/site/feldhellclub">sites.google.com/site/feldhellclub</a>
15 2300	16 2300	1.8-14	AWA Amplitude Modulation QSO Party	Ph	Name, SPC	<a href="http://www.antiquewireless.org">www.antiquewireless.org</a>
17 0200	17 0400	1.8-28	Run for the Bacon QRP Contest	CW	RST, SPC, mbr or power	<a href="http://qrpccontest.com/pigrun">qrpccontest.com/pigrun</a>
19 1900	19 2030	3.5	AGCW Semi-Automatic Key Evening	CW	RST, serial, year first used a bug	<a href="http://agcw.org/index.php/en">agcw.org/index.php/en</a>
21 2200	23 2200	1.8	CQ 160-Meter Contest, SSB	Ph	W/VE: RS, SP; DX: RS, CQ Zone	<a href="http://cq160.com/rules.htm">cq160.com/rules.htm</a>
22 0600	23 1800	3.5-28	REF Contest, SSB	Ph	RS, Department/Prefixed or serial	<a href="http://concours.r-e-f.org/contest">concours.r-e-f.org/contest</a>
22 1200	23 1200	3.5-28	UK/EI DX Contest, CW	CW	RST, serial, District code (if any)	<a href="http://www.ukaiccc.com">www.ukaiccc.com</a>
23 1400	23 1700	3.5-14	SARL Digital Contest	Dig	RST, serial	<a href="http://www.sarl.org.za">www.sarl.org.za</a>
23 1500	23 1700	3.5-28	High Speed Club CW Contest	CW	RST, mbr or "NM"	<a href="http://www.highspeedclub.org">www.highspeedclub.org</a>
24 1300	25 0400	1.8-28	QCC Challenge	CW	RST, name, SPC, rig	<a href="http://grp-labs.com/party.html">grp-labs.com/party.html</a>
26 0000	26 0200	1.8-28	SKCC Sprint	CW	RST, SPC, name, mbr or power	<a href="http://www.skccgroup.com">www.skccgroup.com</a>
26 2000	26 2100	3.5	UKEICC 80-Meter Contest	CW		<a href="http://www.ukaiccc.com">www.ukaiccc.com</a>
27 2000	27 2130	3.5	RSGB 80-Meter Club Championship, CW	CW	RST, serial	<a href="http://www.rsgbcc.org/hf">www.rsgbcc.org/hf</a>
29 1200	1 1159	1.8-28	Russian WW Multimode Contest	CW Ph Dig	RST(Q), oblast or serial	<a href="http://www.rdrclub.ru">www.rdrclub.ru</a>
29 1300	1 1300	3.5-28	UBA DX Contest, CW	CW	RST, serial, province (if ON)	<a href="http://uba.be/en/hf/contest-rules">uba.be/en/hf/contest-rules</a>
29 1500	1 0159	1.8-50	South Carolina QSO Party	CW Ph Dig	RS(T), county or SPC	<a href="http://scqso.com">scqso.com</a>
29 1800	1 0559	3.5-28	North American QSO Party, RTTY	Dig	Name, state/DC/province/country	<a href="http://www.ncjweb.com">www.ncjweb.com</a>
29 1800	1 0559	3.5-28	NA Collegiate Championship, RTTY	Dig	Name, state/DC/province/country	<a href="http://www.w9smc.com/nacc">www.w9smc.com/nacc</a>

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](http://www.contestcalendar.com)

Check for updates and a downloadable PDF version online at [www.arrl.org/contests](http://www.arrl.org/contests).



## RAMBLINGS FROM THE EDITORS DESK

With a new decade just beginning, I have wondered what the year and even the decade may bring, so if you will indulge me, I will allow my mind to attempt to turn patterns into some very general predictions.

The heat of summer, and a new year. I'm sure by now most of you will have discovered the joys of summer heat, dry lawns and hot muggy Auckland night temperatures, and if the reports come to pass we are looking at temperature into the 30's over the next few weeks.

Naturally in light of the Australian temperatures and the fires, our summer seems milder, but as I write this, I'm sitting in a 28-degree room, and the shack is just too hot to consider. But for me I think it's the nights that get to you, much more than the days, so the swimming pool is kept ready, and plenty of cool drinks in the fridge, and when it gets too bad, its time to turn on the Air-Conditioning. Remember when we were complaining how cold it was? – in 6 months we will have forgotten the heat.

Of course the big news is the Novel Coronavirus 2019 (2019-nCoV) which at the time of writing is 12 days into the official outbreak, and has claimed 259 lives (all in China as of this date) and has been declared a "Public Health Emergency of International Concern" Current statistics give us an estimated contagion rate of 2-3 for each infection, and a death rate of approximately 2%, it's a pandemic, but not the worst case scenario, but a reminder to all of us that nature will do as it will, and knowing and following the WHO's standard recommendations for the general public to reduce exposure to and transmission of a range of illnesses, would not do us any harm, and are; as follows:



- Frequently clean hands by using alcohol-based hand rub or soap and water;
- When coughing and sneezing cover mouth and nose with flexed elbow or tissue – throw tissue away immediately and wash hands;
- Avoid close contact with anyone who has fever and cough;
- If you have fever, cough and difficulty breathing seek medical care early and share previous travel history with your health care provider;
- When visiting live markets in areas currently experiencing cases of novel coronavirus, avoid direct unprotected contact with live animals and surfaces in contact with animals;
- The consumption of raw or undercooked animal products should be avoided. Raw meat, milk or animal organs should be handled with care, to avoid cross-contamination with uncooked foods, as per good food safety practices.

In short, basic precautions to prevent the spread of flu are adequate, so at this stage we do not expect that this will create any need to alter our meeting plans, but if the situations changes, we will review options.

And good news, while they might be able to be spread over the internet, we don't have radio viruses yet.





It's also going to be a great year for solar activity, we have never had so many eyes on the sun, the importance to satellites, its potential impacts on earth based systems, and the scientific value of solar weather data have all contributed to the collection of data on a scale the likes of which we have never seen. In addition, we have seen plenty of false starts of solar cycle 25, and the real start can't be far away, the solar flux just keeps rising, and the HF bands will just keep going from strength to strength. It's a good year to be on air.

The amount of solar information will mean that we will get to see a lot more information on the sun and how it works, so expect to see a lot of data over the year, and its bound to make us rethink what happens and how it works, we are only just starting to know, just how much we don't know.

One example is the topic of solar forcing and how it impacts the earths temps, the new IPCC models will be starting to account for this phenomenon, in place of the current irradiance only modelling, and no longer will we have the situation where during a solar storm, the suns output effect is reduced in the models. This should make for some more accurate modelling. But even here, it's only a start, and we are only starting to scratch the surface into the bizarre world of the electro-magnetic effects of our sun and earth's magnetic field interactions. 2020 should be a good year for science.

Of course the SpaceX and Boeing Commercial Crew programmes should also provide some incredible launches, and we while many still laugh at the US Space Force, Other countries , including NZ are already copying it, at least in part, we will see ever greater investment in space and space based equipment. For Hams the "Ham in every Cube" project should give us a new interest in satellite comms, The idea is to fit ham-sat software into every cube-sat launched by a university, Once the primary mission is complete, the CubeSat will become a Ham satellite, and this should help us to get an huge resource of orbiting repeaters,



Will this be a good year for satellite – Why not? We have three active satellite hams in the club now, so maybe its not the new frontier, but its potentially some new fun in this frontier.

Last week we had an AREC night, and it was an open night with some training. Even better it was very well attended. The attendee's were not all from Papakura, and that is a good thing, we are already looking at closer relationships with Franklin, especially in AREC, and other activities, and I think that for many clubs who are looking forward, this could be a model, they may wish to embark on, some activities are easier when we share the load, and working together we can do things we cannot do alone. I think that this year as a club we will be exploring the ways we can better work together, and more combined activities are a real possibility.

The same night also saw three more hams complete their exams, along with our 4 last year, and the 1 new ham from franklin who was there, that makes 8 new-ish hams who are bringing new interests to the hobby, and at the same time older hams who will be looking for more advanced projects, so we may have to review how our project nights work to appeal to our diverse audience, and our many different interests.

Some old friends may return, Rotorua club have started Morse classes and on-air Morse practice sessions, and even held a "Build your own unique key" contest. The numbers interested just keep growing. Maybe we will see more and more Morse ops, it was certainly an advantage at solar minim. Will we see more CW ops in 2020 or will digital mean its forgotten? *I'm leaning toward Morse.*

My next one is a bit more challenging. I think the price of Ham gear must fall. Not so much new, in fact it's already falling, due to a competitive market. It's the second hand market that worries me. Having attended a few equipment sales, I am amazed at the high prices sought for what is really of little value, (in fact I got better deals from the commercial dealers) we have a surplus of equipment, and a dwindling group to sell to, and this should have brought prices down, instead the equipment is not going to the sales.

A lot of sales have been moved to Trademe, where the seller can get a better price, but who is getting the gear? We all know we are supposed to ensure that it's going to a ham, and some auctions do state that license must be produced. But I have been asked to program ham equipment onto commercial channels (which is illegal for the record) that was purchased on trademe, and worse, we have had cases where Ham gear has been brought for the CB market, or worse by unlicensed persons just so they can cause problems to legitimate users. It's not hard to check the signature of a transmitter, and the common ones are easy to recognise. We are not talking handhelds, these are serious base transmitters being used to, among other purposes, interfere on amateur repeaters, and they came from estate sales. We should be making sure that we only sell to licensed hams, and know they are not buying on behalf of (unlicensed) friends. But do we, or are we trying to get a few extra dollars?

We cannot complain about the poor-quality low-cost transmitters on air if we keep the old units out of the hands of our newer Hams. They will only be able to get, what is available and what they can afford.

As clubs we have a responsibility to help families get fair prices for estate gear, but also ensure that it goes to the right people. We have a responsibility to do the right thing by everyone.



So on that note, let's remember that the privilege of being a licensed operator, requires that we are not the wild west, we have codes of conduct, and behaviours. We don't call break on a repeater unless it's an emergency, we just slip in our call-sign during the break between overs (3 seconds) so they can bring us in.

We follow the DX code of conduct:

- I will listen, and listen, and then listen again before calling.
- I will only call if I can copy the DX station properly.
- I will not trust the DX cluster and will be sure of the DX station's call sign before calling.
- I will not interfere with the DX station nor anyone calling and will never tune up on the DX frequency or in the QSX slot.
- I will wait for the DX station to end a contact before I call.
- I will always send my full call sign.
- I will call and then listen for a reasonable interval. I will not call continuously.
- I will not transmit when the DX operator calls another call sign, not mine.
- I will not transmit when the DX operator queries a call sign not like mine.
- I will not transmit when the DX station requests geographic areas other than mine.
- When the DX operator calls me, I will not repeat my call sign unless I think he has copied it incorrectly.
- I will be thankful if and when I do make a contact.
- I will respect my fellow hams and conduct myself so as to earn their respect.

Remember - The right thing is always right, even when no-one else is doing it and the wrong thing is always wrong, even if everyone is doing it.

On AREC activities, I will pass my message efficiently, and listen otherwise, I will not chat on frequencies or make my messages longer than they need to be, If unsure of a message reception, I will wait for a gap, and seek clarification before repeating it.

Being a professional comes as a result of the practice of always doing it right. As I often teach my apprentices. If you seek to do it right, speed comes naturally, if you seek to do it fast, quality never comes.

And in final thoughts, I think this will be the year of the field operator.



With home QTH noise reaching s7- s9 and antenna restrictions being put in place by councils, (or grumpy neighbours) the days of the big home station (at least in places like Auckland) will be a rarity, that leaves two options, either members will seek to access the clubrooms and use the club equipment more (and that would be a good thing too) or they will have equipment that they can take to quiet spots to work in low noise, SOTA, POTA, lighthouse weekends, Jock White, and the like encourage field operation, add to that the new lightweight battery operated HF rigs from ICOM Elecraft and Yaesu, add homebrew and uBitx as well as the lightweight portable antenna systems that are selling and there is already a worldwide move to portable HF and VHF operations. (and Morse is good for QRP)

So there are a few thoughts for 2020 and beyond, and I think there is enough reasons to think that this is a hobby that has a whole lot going for it, and plenty to interest to bring new people in. Do you agree?

And now I need to spend some time brushing up my on-air behaviour, and techniques, Cause there's some nagging guilt about some of my practices I may just now have to deal with. 73 for now catch you on air.

*If you have an interesting story to tell, or enjoy an unusual part of the hobby, maybe you would be willing to share it with others. We always have room for your story, and if you don't feel you can write the story yourself; then get in touch, and we can do it together.*

*This hobby is too big for me to cover it all alone. Your input may help another ham!*

Email me: [z11nux@outlook.com](mailto:z11nux@outlook.com) and share your story, not matter how big or small.



# LOOKING TO THE SKY

## LUNAR FORECAST FOR 2020

...13 full moons and 2 supermoons during the same year... Keep your cameras close.

Astronomy experts say two supermoons will be shining in the sky this year, and one month — October — will have two full moons, making the second a “blue moon” that will be glowing on Halloween.

Although blue moons occur once every two or three years, they are even more rare on Halloween, says AccuWeather meteorologist Brian Lada. “After the blue moon on Oct. 31, 2020, trick-or-treaters will need to wait until 2039 to see the next blue moon on Halloween,” he noted.

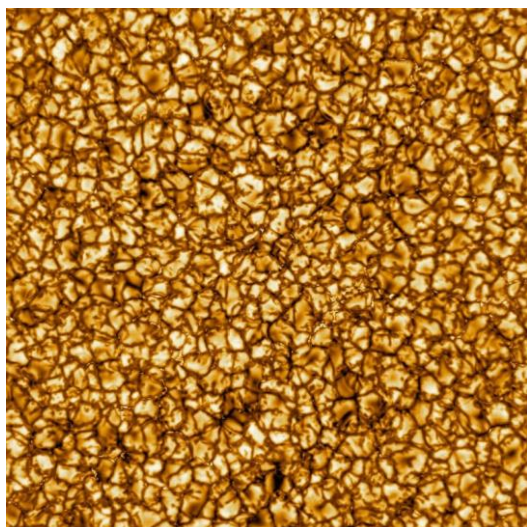
Supermoons are moons that become full when their orbits are closer than average to the Earth — making them appear to be slightly bigger and as much as 30% brighter than ordinary full moons.

Although the precise definition varies in the astronomy world — and some experts say the average star gazer won’t notice the size and brightness difference — most say a supermoon is a moon that tracks less than 223,000 miles from the Earth during its full phase. (Some say any full moon that is 226,000 miles or closer to the Earth can be classified as a supermoon, and others set the cutoff at the precise distance of 223,694 miles.)

Regardless of the exact definition, astronomy websites seem to agree that 2020 will feature at least two supermoons — one on March 9 and another on April 7. Worth marking down on your calendar: Space.com says the April full moon will be the biggest of the year, because it will be the closest one to our planet.

## SOLAR (SPACE) WEATHER

The official start of solar cycle 25 just keeps on teasing, but just seems to have trouble getting started, expect a lot of news and views as the Parker Solar Probe (PSP) and other solar satellites as well as earth based telescopes just keep showing us more details or surprises about our closets star.



I have always wanted to get a really good view of the surface, and boy have my wishes been granted, and then some, the Inouye Solar Telescope is an earth based telescope near the summit of Mount Haleakala on the Hawaiian island of Maui, and one of the largest for solar observations, and its first images have given us details of the surface, like we have never seen before.

Just check the granules detail to the left, and after 700 academic papers the new IPCC report will for the first time take solar forcing into consideration, this could greatly help produce climate models that might be accurate for a change.

And the all important number just keeps getting better, with only a single bright region, we have manager to remain in the low to mid 70’s for x-ray flux, so even without sunspots, Yet, we have improving propagation, so its looking like the year is off to a good start, and its going to get better.

## TOUR DE RANGES 2020

One of the major events for the year, this year's tour de ranges cycle race may have been the quietest yet, lacking most of the drama of previous years, the event appeared well run, and most of us experienced a fairly quiet event.

Traffic was well managed, and apart from one farmer who objected to use of his "private road, the event seemed to part without any real issues.



With approx. 20 operators, 500 cyclists and well over 100Km's of "track", there is plenty of potential for issues, and given the three changes to the final setups, as well as a number of minor variations on the day, Richard ZL1BNQ did an amazing job of coordinating all of this.







*Some photos of Richard's Base Setup.*

Ann-Maree and I were grateful for the location at Kaiaua on the shore of the beach, and it was a good opportunity to test out the features of the van, but with coverage so good, I hardly needed to deploy any equipment.



Nevertheless, the opportunity was too good to pass up, and I have to say the entire system, from solar panels to cold drink storage and of course the radio equipment operated optimally



My next opportunity to use it in anger will probably be for the Bombay Pioneer Settler's fun run, but of course we also have plenty of parks that will at some stage need to be activated, so there should be some good radio before the summer comes to an end.

And with the Gazebo on the back of the van, we have the perfect site for Jock White.

So We are ready to rock and radio ...

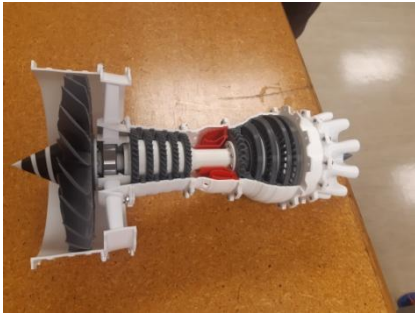
Let the games begin.



## SEEN OR HEARD AROUND THE SCENES

### AMAZING WHAT YOU CAN PRINT 3D

Jack ZL1IJ brought to one of the January meetings a gift from his son, which is a 3d printed, Jet engine (the more astute will pick up a few modifications to make it ... cooler) this is based on a model ink below, and make on a \$250 3D printer.



Here is the link to a Thingiverse article complete if you want to know more about the project.

<https://www.thingiverse.com/thing:2351087>

Hope you enjoy it Jack, and thanks for sharing it with us.

### PAPAKURA STREETFEST 2020

#### PAPAKURA STREETFEST 2020

**Saturday May 2<sup>nd</sup>, 10am – 2pm**

(Please note the rain save date is May 9<sup>th</sup>)

The Papakura Business Association is taking expressions of interest for stall sites at this year's Papakura StreetFest. It's an event for our local community which attracted around 7,000 people in 2019. We have the ability to book a space (3x3 metres standard stall site).

This could be a good opportunity to promote the club and the hobby, we will be canvassing interest at the general meeting



## WELCOME TO SOME NEW FACES

January saw three new hams sit, and pass their exams, and we are pleased to welcome them to the fold,



From left to right, Mike, William and Jess, have passed their exams, and are waiting for their callsign and GURL from NZART, please take the time to welcome them at meetings and listen out for them on air. And congratulations to all of you for passing the exams.

## GRAHAM STREET PUBLISHED IN SILICON MAGAZINE

The February Silicon Magazine has been pointed out by Graham Street as of interest in 2 main articles. The Editorial View Point on the Internet of Things (IoT) points out the security risks of connected devices, where security updates in software may be lacking. In addition, there is a letter from graham street to the editor re Old double adaptors that are not very safe due to Phase neutral reversals as well as missing earths.

## HUSKYSAT-1 WITH VHF/UHF LINEAR TRANSPONDER

By now this should have been launched into space. HuskySat-1's 1,200 bps BPSK beacon on 435.800 MHz should be active and decodable with the latest release of AMSAT's *FoxTelem* software. HuskySat-1 is expected to carry out its primary mission before being turned over to AMSAT for amateur radio operation.

HuskySat-1 features a 30 kHz wide V/U linear transponder for SSB and CW. The uplink passband will be 145.910 – 145.940 MHz LSB/CW. The downlink passband will be 435.840 – 435.810 MHz USB/CW (inverting). Telemetry will be transmitted on 435.800 MHz, 1k2 bps BPSK with an experimental downlink at 24.049 GHz. The "Fox-in-a-Box" *FoxTelem* software has been updated for HuskySat-1 operation at its [download website](#). The new release now contains the SD card image, FIAB-distro8-V1.08w.zip. This file, when unzipped and written to a 16 GB SD card will provide the latest software for *FoxTelem* and will run on a Raspberry Pi 4. The 1.08 versions can switch bands between listening on VHF and UHF, based on which Fox and Husky satellites are overhead at the time.

The linear transponder and telemetry system carried aboard AMSAT's Fox-1E was designed for use in different CubeSats merely by adding an interface adapter for connection to the host bus. Noting the prevalence of CubeSats built and launched by universities and other organizations, AMSAT adopted a goal of "amateur radio in every CubeSat." Interested CubeSat programs wanting to fly an amateur radio payload may partner with AMSAT to carry one of these modules on their spacecraft.



By providing amateur radio capability, the CubeSat program gets a worldwide ground station network to receive telemetry and experiment data, while the amateur radio community gets a transponder to use in orbit. Additional information is posted on the University of Washington [Husky Satellite Lab site](#). Thanks to AMSAT News Service via the HuskySat-1 Team, AMSAT Engineering, AMSAT Operations, the Fox Telemetry Team, and NASA

## CHRISTMAS 2019

Finally, some photos from the Christmas party

There was good food, good company and plenty of familiar faces, It will be our turn to host next year.



## CAR BOOT SALE – PAKURA BRANCH 29<sup>TH</sup> FEBRUARY 2020

Saturday 29<sup>th</sup> Feb we will be hosting at the clubroom a car boot sale.

The format will be Buy, Sell or Exchange, you must operate from a single car park slot (car optional) and all unwanted items must be removed at the end of the day) (approx. 1pm)

The time will be 8am to 12pm, and there will be BBQ, Hot drinks, Cold drinks etc ... available

There will be more details at the general meeting

## BRANCH 53 - TE PUKE AMATEUR RADIO CLUB – MARKET DAY

Saturday March 28<sup>th</sup>  
Paengaroa Community Hall, Old Coach Road, Paengaroa

Tables are now being booked

\$20.00 for a 1.8 (*assume its 1.8 metres*) Table,      \$25.00 on the day.

\$12.00 for ½ a Table,      \$15.00 on the day.

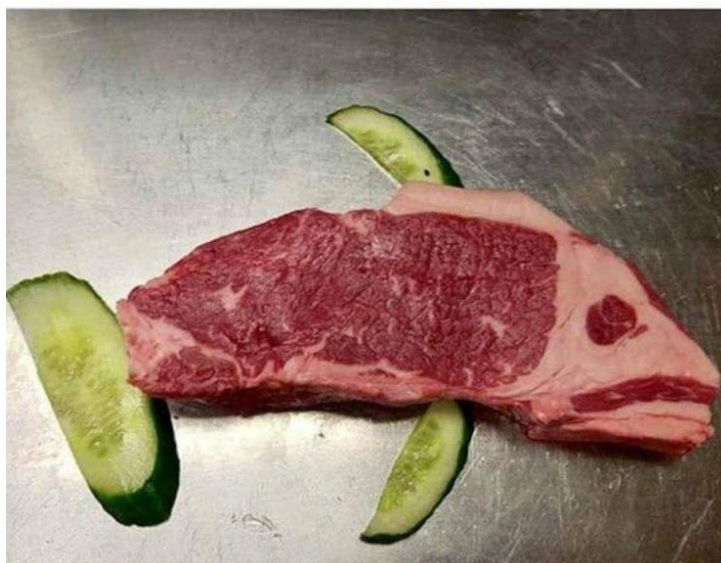
For further information & Table Booking's, Contact:

Syd Rowe ZL1LWR Phone (07) 533 1029,

Mobile: 0272488664, Email [sydrowe@xtra.co.nz](mailto:sydrowe@xtra.co.nz)

Postal Address: 223 State Highway 33, RD 9, Te Puke 3189.

The doctor said I need to eat  
more fish. . .



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

Day	Time (Local)	Freq (MHz)	Group
Sunday	08:00	3.750	Southern Net
	09:00	3.700	Bch 10. Franklin.
	09:00	3.755	Bch 65. Papakura.
	16:00	7.125	SPAM Net (AM Mode)
	19:00	146.900	YL Net
	20:00	3.710	Bch 42. Titahi Bay
	21:30	3.595	Duran WIA Net.
	21:30	3.595	VK2WI
Monday	19:30	3.757	Bch 12. Hamilton
	20:00	3.540	CW Practice Net
	20:00	3.687	Br 80. Hibiscus Coast
	20:00	3.695	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	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
	20:30	3.696	ZL10A
	20:30	3.666	LF Net ZL2CA
	20:00	3.690	ZL QRP SSB Net
Friday	20:00	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
	17:30	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

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

Also: Calling Frequencies:      Daily    Sunset-Sunrise    3580 USB    NZ FSQCall  
 Courtesy of Murray ZL1BPU      Daily    Sunrise-Sunset    7105 USB    NZ FSQCall  
    Daily    24/7                    7104 USB    International FSQCall

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

**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)

**Elected Officers**

<b>President</b>	ZL1NUX	Gavin Denby	Ph 09 299 3415	021 1046946
<b>Vice President</b>	ZL1BNQ	Richard Gamble	Ph 09 5371238	021 729270
<b>Secretary</b>	ZL1AOX	Ian Ashley	Ph 09 2981810	021 1981810
<b>Treasurer</b>	ZL1MR	David Wilkins	Ph 09 2999346	021 1857903
<b>Committee</b>	ZL1RJS	Rob Stokes	Ph 09 2961152	021 307005
	ZL1IRC	Ian Clifford	Ph	021 8248400
	ZL1ASN	Rolly Adams	Ph 09 2966107	021 0427760
	ZL1DK	David Karrasch	Ph 09 296 8264	021 560180
	ZL1RIC	Ricky Hodge		021 666421
<b>AREC Section Leader</b>	ZL1BNQ	Richard Gamble	Ph 09 5371238	021 729270
<b>CD Liaison</b>	ZL1AOX	Ian Ashley	Ph 09 2981810	021 1981810
<b>Newsletter Editor</b>	ZL1NUX	Gavin Denby	Ph 09 299 3415	021 459 192
<b>Hall Custodian</b>	ZL1AOX	Ian Ashley	Ph 09 2981810	021 1981810
<b>Newsletter.</b>	Contact: <a href="mailto:zl1nux@outlook.com">zl1nux@outlook.com</a>			

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

**Meetings**

General Meetings are held at the Club rooms on the 1st Wednesday of each month, starting at 7.30pm. 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 3rd Wednesday of each month at 7.30pm, unless advised.

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

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

**AGM:** Held in November

**Subscription:** Full membership and newsletter \$20.00

Family Membership and newsletter \$30.00

Student or Country DX membership \$10.00

**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**

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

3.755 MHz Sunday at 9.00am. Controller ZL1BNQ Richard Gamble. (Linked to 146.675 & 438.775)