

NZ QRP GROUP NEWSLETTER

Thursday Night QRP Net is on **3.690Mhz** +/- QRM at **07.30 UTC** during NZ Daylight Saving time. All and any Check Ins welcome. We operate **QRP**, i.e.: **5w** or less, but are OK with rigs that can only drop to **10w**.

MISSION: To encourage and share the use of QRP (low power) operation, equipment, antenna ideas and information.

From the Editor:

Welcome all to 2019 and I hope everyone has recovered both financially, weight and health-wise from the festive season! Let's hope the new year brings us an improvement in Band conditions, be it ever so slowly. We also wait to see what action will be taken with the **60M band**. **(Be patient – the wheels of bureaucracy turn ever so slowly!)**

TNX to those who have expressed an interest in the Newsletter and the three or four not on my email list who have requested a copy.



BARTG Proposed 40m Band Plan Change

My attention has been drawn to an apparent proposal by BARTG (**British Amateur Radio Teledata Group**) that the data section of the 40m band be moved from 7040 – 7060 to 7080 – 7100, citing "problems caused to QRP CW operators". Apart from other considerations, any such new allocation would encompass the current QRP SSB frequency (7090kHz). Perhaps a simpler solution would be for data operators to be far more diligent in their observance of the currently allocated data band plan limits.

Peter Barville G3XJS G-QRP Club

GOOD DX for QRP:

Antoine, **3D2AG** is on the air as T2AR from Funafuti until 31 January. Activity is on the HF bands, including 160m. QSL to his home call sign. In addition, Apinelu, **T2AT** is operating on the HF bands using FT8. QSL via N7SMI.

No.2. 20th January 2019

WANTED DEAD OR ALIVE:

Photos, captions, articles, web sites, group member news for the next newsletter.

QRP USERS and BAND PLAN PROBLEMS:

QRP Club members continue to express concerns over the apparent inability of some operators to observe internationally agreed band plans, or even to admit knowledge of their existence. Low power stations can be 'easy targets' for the less conscientious stations operating outside normal band plan limits. This is a particular problem during some contests, and members would like to see RSGB take an active lead on progressive contest spectrum management. It is a commonly held view that, despite the relatively small minority of amateurs who are active participants, contest activity all too frequently precludes any other (non-contest) band users. This used to be a problem largely restricted to weekends, but the RSGB has set what is potentially a dangerous precedent by introducing weekday evening contests. These do not respect **the 80m QRP CW frequency**, although they do protect other minority interests (e.g. PSK). By way of suggestion, perhaps spectrum should be apportioned in a manner more related to percentage of the amateur population (on a per band basis). In this way, a contest such as the 80m Club Championship with less than 200 participants per session would have far less spectrum available than they do at present. In the ethos of "self - training", it would encourage contesters to make more efficient use of their shared bandwidth.

Peter Barville G3XJS G-QRP Club

We don't have this problem in ZL, do we.
Editor.

60 METERS

After the QRP Net on 3.695 each Thursday night, a few QSY to 5.353 Mhz and although the conditions can vary it is an interesting Band. In light (Pun intended) of our experiences, to QSY to the 60M frequency **BEFORE** the **8.30 net** would be a better option. Worth a try at say **8.00pm next Net night.?**

AUSTRALIAN HF PROPAGATION SITE

For those interested here is the web site for the Aussie BOM Propagation site
www.sws.bom.gov.au/HF_Systems/1/4

CAUGHT IN THE NET !

Nice to hear a new callsign on the net on Thursday 3rd January and a welcome to **ZL2BW, Dave**, who was portable at the Paratai Camping ground (as also was **ZL2PO**) and was using QRP for the first time. A great signal too. We hope to hear you again soon Dave.

Paul, ZL2PO, made the **shocking** revelation that the rig he was using was a commercially built one!! Don't worry about it Paul, we are all allowed an occasional lapse! Lol.!

THE HONORABLE 2ATH??

Spotted while browsing my QRP log that we have an **MP** in our group! I almost did a double take, then realised it meant "Marine Portable"! Well done Wynne ZL2ATH, **MP**. (Member for Wainuiomata?)

Ron ZL4RMF has one advantage living in the "Deep South"; At times when some of us can't even copy

our closest neighbours, Ron steps in with complete ZL coverage, as happened on 60M after a recent 80M net. Well done and Thanks Ron.

Wynne ZL2ATH was QRP portable in Whangarei on a recent net. I wonder if he got there by **MM** or **CP** portable? (Caravan Portable) Hope the trip went well.

Colin ZL2FC is struggling with local QRM. Isn't it a pain! It can really limit one's enjoyment and participation. Any Plasma TV sets in your area Colin?

NEW on the QRP NET

Good to hear a couple of new callsigns pop up on recent nets. A welcome to **Dave ZL2BW**, **Steve ZL2ASC**, and Ron(?) **ZL2XRF**. Great to hear from new callsigns, even if only checking in on the odd occasion.

Apologies if I have any names wrong. Ed.

MIKE ZL1KAN QRP DX with a MAG LOOP ANTENNA.



Having a go with a mag loop 40 -10mtrs. QSO to VK on 20M. Have had a QSO to Spain on 20M as well. Quite impressed how it works when propagation is good. 40M QSOs as well.

De Mike ZL1KAN

FT817 tests on AA BATTERY USAGE:

Some years ago, I carried out tests on usage time for AA Alkaline batteries. My intention was to carry a set as standby power in case of a flat Gelcel or some similar disaster. NB: So far that has not occurred but I still carry a set Of AA's just in case. Besides, they are also used as backups for my head torch and little pocket AM/FM radio. I recorded the results in a notebook which I found recently. The batteries were/are in a separate battery holder, (Jaycar) and with an inline fuse.

TEST 1: 8 ENERGISER AA BATTERIES. *Run at 1w on the FT817 ran for 27+ hours TX/RX before the radio shut down. An estimated > than 60% of that time on TX.*

TEST 2: 8 ENERGISER AA BATTERIES. *Run at 2.5w on the FT817 ran for 9 hours TX/RX before close down. I didn't worry too much about the %age of TX vs RX but a lot of TX was done in the time.*

NB: Both sets gave several more minutes of TX/RX after being left overnight to recover. The set needs to be disconnected from the battery pack when not in use as there appears to be some drainage if still connected. I have also tested 8 x 1.2V NmHi batteries @ 2400MAhr. A shorter TX/RX time, but of course rechargeable.

My biggest use in the field tends to be comms with DoC.

ZL2OZ

SOLAR STORMS – STORMS in a TEA CUP??

Solar storms could leave Britain with £16 billion worth of damage, the first economic risk analysis has found, as experts at Oxford University called for urgent updates to space weather forecasting satellites.

Earth is vulnerable to space weather events such as solar flares which fling huge amounts of electromagnetic radiation at the planet, potentially causing severe disruption to power grids, air transport and satellite communications.

The most severe incident - known as 'the Carrington Event' - happened in 1859, shorting Telegraph circuits, starting fires and causing the northern lights to dance in the sky as far south as Hawaii.

In 1989, a geomagnetic disturbance caused a voltage collapse of Canada's Hydro-Québec power grid, leaving six million inhabitants without power for nine hours and in 2005, X-rays from a solar flare disrupted the GPS system for about 10 minutes

More recently, a solar flare, or coronal mass ejection, narrowly missed Earth during London's 2012 Olympic Games.

But the inability to forecast and prepare for events could be catastrophic for the economy, Oxford University has warned, costing the country billions, due to the ripple effects on vital infrastructure, businesses and homes.

Their model suggests that blackouts would be likely in the northeast and north west of England, East Anglia and Wales, where power supplies are most vulnerable and where transformers failed in the 1989 solar storm.

Dr Edward Oughton, of the Infrastructure Transitions Research Consortium (ITRC),

currently at the University of Oxford, said: "If the Earth were to experience a Carrington-sized event without upgrading our current forecasting capability, it could cost the UK up to £16bn in the most severe scenario.

"The 'do nothing' scenario where the UK fails to invest or invests minimally in replacing satellite monitoring capabilities means existing forecasting skill levels will decline.

"This increases the risk of critical national infrastructure failure because there may be little early warning that an event is taking place. There would be less time for infrastructure operators to implement mitigation plans."

A solar storm of the size which hit Earth during the Carrington Event is estimated to happen every 100 years, to the planet is already overdue such a catastrophe.

If it happened today researchers estimate there is a 71 per cent chance the British power grid would be affected, while mobile phone reception could die, and airlines would be grounded without GPS.

But many of the satellites which currently monitor coronal mass ejections are nearing the end of their lives. The authors, which include experts from The Met Office, are calling for a fleet of new spacecraft equipped with Heliospheric Imagers and Solar Coronagraphs, in different locations to monitor the Sun.

Such a system would increase the current early warning system from a maximum of four days to up to a week ahead and would be more exact in predicting when the storm would hit Earth, narrowing the current window of six hours to four.

The research estimates that investment could reduce the GDP impact on Britain to £0.9bn.

Catherine Burnett of The Met Office Space Weather Operations Centre, said: "Our forecasting ability is very dependent on a small number of satellite observations.

"This research assesses the UK's risk in terms of different levels of space weather forecasting capability, which is especially important given existing monitoring satellites are nearing the end of their lives."

This research was published in the "British Risk Analysis Journal".

World Amateur Radio Day

Every April 18, radio amateurs worldwide take to the airwaves in celebration of World Amateur Radio Day. It was on this day in 1925 that the International Amateur Radio Union was formed in Paris.

Amateur Radio experimenters were the first to discover that the short wave spectrum — far from being a wasteland — could support worldwide propagation. In the rush to use these shorter wavelengths, Amateur Radio was "in grave danger of being pushed aside," the IARU's history has noted. Amateur Radio pioneers met in Paris in 1925 and created the IARU to support Amateur Radio worldwide.

Just two years later, at the International Radiotelegraph Conference, Amateur Radio gained the allocations still recognized today — 160, 80, 40, 20, and 10 meters. Since its founding, the IARU has worked tirelessly to defend and expand the frequency allocations for Amateur Radio. Thanks to the support of enlightened administrations in every part of the globe, radio amateurs are now able to experiment and communicate in frequency bands strategically located throughout the radio spectrum. From the 25 countries that formed the IARU in 1925, the IARU has grown to include 160 member-societies in three regions. IARU Region 1 includes Europe, Africa, the Middle East, and Northern Asia. Region 2 covers the Americas, and Region 3 is comprised of Australia, New Zealand, the Pacific island nations, and most of Asia. The International Telecommunication Union (ITU) has recognized the IARU as representing the interests of Amateur Radio.

NB: Today, Amateur Radio is more popular than ever, with more than 3,240,000 licensed operators! **IARU.**

WHAT IS "QRP"?

"QRP" was a "Q" signal used by the old-time radio telegraphers who initiated the "Q CODE" to speed up their CW comms. "QRP" in their language meant 'Reduce power', and if followed by a question mark, meant "Shall I reduce power", which was usually single digit watt power or even milliwatts.

QRP today could mean a reduction in power from 1000W to 100W, but the original term "QRP" meant any TX with a power of 5W or less CW, and 10W or less PEP on SSB.

Many Hams consider "QRP" to be a fruitless exercise, but when you see QRPers often gaining DXCC and other DX Awards by making QSOs covering thousands and even tens of thousands of Kilometres per watt, it proves the old saying: "Power is no substitute for Skill".

When the first FT817s came out there was a rush to increase the output power to 10W, 15W, or even more, usually resulting in burnt out final transistors. Human nature, I guess!

Many Hams get a far greater "buzz" out of a 1w QSO than a Kilowatt or even 100W QSO, quite a bit more skill involved. QRP has had a resurgence of interest in the last twenty or so years as Hams discover the challenges, rewards and excitement a DX contact using QRP gives! Human nature again.

De ZL2OZ



ZL2FH Peter's Station.

Peter hails from Omahanui Farm, Wharekopae, which is NW of Gisborne and fairly remote. The Wharekopae River is home to the Rere Falls - Spectacular when in high water. A great place for Amateur Radio - being a bit off the beaten track and cut off at times in bad weather. Nice gear and station set up Peter. Tnx.



Paretai Girl Guides Camp. Where Paul ZL2PO, Dave ZL2BW and Steve ZL2ASC were hanging out over the New Year break. Looks like a great venue for QRP op, and maybe a bit of trout fishing? Thanks to Steve ZL2ASC for the photo.

NZART Portable Activity Day

January 1 @ 12:00 am - 11:59 pm UTC+13

The Christmas/New Year holiday period is a great chance to get on the air.

Accordingly, New Zealand's national society **NZART** is promoting New Year's Day, 1 January 2019, as a portable activity day.

This is an opportunity to get outdoors and operate knowing there will be others doing the same. As an activity day this is not a contest, so it is up to you where, when and how you operate.

There will be a lot of Summits on the Air ("SOTA") activity on this day (ZL and VK) owing to them being able to claim double activation points by operating either side of 0000z 1 January UTC (1pm NZDST). You could therefore activate a SOTA summit, or if that is a bit much, participate in the NZART awards programme by activating a lake, lighthouse or National Park (make sure you know the rules before you start) [1].

Alternatively, you could just park up at your favourite spot and make a few QSOs. Apart from SOTA which stresses portable activity without your station being connected to a motor vehicle, you are free to use any method of portable operation you like.

This could be a chance to take the family on a picnic, a branch activity, or you could get together with a bunch of mates, head to different places and meet up in the pub afterwards to swap "the DX that got away" stories.

It is entirely up to you. It is also a great chance to test your portable emergency capability.

There is no fixed operating period, although as a rule of thumb SOTA activators will generally be operating between 12pm and 2pm NZDST, and you can operate as long as you like.

Based on SOTA activity suggested frequencies.

SSB: 5353 kHz (as long as you have a permit),

7080-7115 kHz, 14300-14330 kHz (great to VK);

CW: 5362 kHz (with permit), 7030-7040 kHz, 14060-14070 kHz (for VK). FM: 146.500

simplex. **Note:** repeater contacts are generally not acceptable for awards but can be used to organise simplex operation. If you are not award chasing, then repeater contacts are fine.

Can't get away? Then just fire up the rig at home and work as many stations as you can. Who knows, by the end of it you may be able to claim an award. If you are going to go portable, post your intentions on the NZART members email reflector [2], or email cqdx@nzart.org.nz.

Nearer the day we will look to publish a comprehensive list of activity on the major email reflectors, Infoline and Facebook groups so people know who to listen out for and where they will be.

Good luck and we hope to hear you on the air!

<http://www.nzart.org.nz/activities/awards/>

(A bit "After the Fact" but might be useful for next year. Put it in your diaries. ZL2OZ)

NZART AWARDS *I note going through the NZART Awards, that few of the Awards have, or mention a QRP section. E.g.: The NZ Lakeside Award would be an excellent award for QRP. Would be nice to see QRP given more emphasis in the Awards, after all QRPers do have to go the extra distance! Thoughts?*

PROPOSAL: 60 METER BAND SUBMISSION to NZART: *I am wondering if it would be worth as many members of the QRP Group, and others we could rope in, sending a submission to NZART re keeping a small segment of any proposed 60M Band allocation specifically for QRP use. At this point there is NO official QRP segment in any NZ Band plan. If we were able to get enough support for such a proposal, it may have effect, after all, apart from 5.353 Mhz, there is no other OFFICIALLY allocated frequency in the NZ Band plan for QRP use. This maybe a good opportunity to get an officially recognised QRP segment. I would be happy to initiate such a proposal. WHAT DO MEMBERS THINK? Sound out other Hams to see what they think. I know I'm pushing it a bit, but I think if we don't at least try, we'll lose out. ZL2OZ QRP*

This Newsletter out a day or two early as Ed in the wops! Cheers all. Send in those Photos, captions, articles, anything welcome. Ed.

WHAT THE QRP NET LOOKED LIKE THURSDAY 10th JANUARY

DATE	CALLSIGN	HANDL	RPT	FREQ	COMMENTS
10-Jan-19	ZL2OZ QRP	WAYNE	5 8-9	3.690	NL.S: 7+ QRN: 7-8. VERY noisy band. Not sure if local QRM. Diff to copy some stns. In spite of QRN/M sigs weren't too bad.
	ZL4RMF QRP	RON	4 5-6		Hooray for Ron. Saved my bacon a couple of times. See Ron - Living at the extreme end of the Mainland does have advantages.
	ZL2JU QRP	LES	5 7-9		Also having probs copying one or two. On Micro Bitx. Sounds deeper audio than usual. Gd steady signal.
	ZL2FC QRP	COLIN	5 4 -8		Deep QSB. Also struggling with the NL. 60M going well. 10w on the TS50. Later switched to TS440 ? TS 50 sounded better.
	ZL2ATH QRP	WYNNE	4 5-7		Been Tiki touring to Cape Reinga. Back at Taupo. QSB bad and faded right out a few times.
	ZL2ASC QRP	STEVE	5 6-8		**New Call Sign on net. Good to hear. (Took vid clip of Camp Paretai from Drone.) On MicroBitx. Gd solid sig and Audio.
	ZL2BH QRP	JOHN	0 0		N/C. Knew he was there but that's all.
	ZL2XRF QRP	??	5 8- 9+		**New on net. Welcome. Masterton. From Petone. Doing a big concrete job. Bunny shoot. No noise @ his QTH. TS440
	ZL2CTM QRP	??	5 7+		Checked in quickly but then disappeared.
	ZL3OCT QRP	GRAHAM	5 7-8		Gd copy except for a bit of QSB. Off to Rotorua for week. May not be on next week.
	ZL1KAN QRP	MIKE	5 5-7		OK copy. Bit of QSB.
60M	ZL2OZ +	WAYNE		5.353	A couple went to 5.353. Ron was good copy as was Wynne. QRN quite a bit lighter on 60M.

THURSDAY 10th NET was probably one of the noisiest nights for quite a while. Taken from my EXCEL LOG so a bit squashed up. ZL2OZ

COMING EVENTS:

Thursday 18th APRIL - World Amateur Radio Day. (See Article above.)
February 20th - QRP NEWSLETTER 3.

CONTRIBUTORS to this NEWSLETTER:

With Thanks from the Editor

Mike ZL1KAN - QRP DX with a MAG LOOP ANTENNA.

Peter ZL2FH - Home Station Photo.

Steve ZL2ASC - Photo of Paretai Camp site.

NZART & Paul ZL2PO: NZART Portable Activity Day.