THE 5 WATTER

THE NEWSLETTER FOR ORP NZ.

MARCH QRP NIGHT REPORT - STAN ZL3TK

STATION	JAN		FEB		MAR		TOTAL	
	QSOs	Points	QS0s	Points	QS0s	Points	QSOs	Points
ZL1AJC	12	57	9	39	4	14	25	123
ZL1FS	7	22	6	21			13	49
ZL2RMC	9	41					9	41
ZL2SAR					3	11	3	14
ZL2WE	6	28					6	28
ZL3ABX			7	29	4	17	11	57
ZL3TK	16	81	10	46	8	37	34	182
ZL4CS	13	62	9	39	6	25	28	141
ZL4CTS			3	11			3	14
QSOs	63		44		25		132	
Logs Rcvd	6		6		5		17	
Stns Active	16		14		7		37	

Easter holiday may have played a part, but a big factor in discouraging activity on the 30th was likely the very high ambient noise on 80 m, one result from a large solar coronal flare a week earlier. A longer lasting effect has been significant QSB.

On the bright side, the low number of participants provided an ideal opportunity to adapt 'WAS' to mean 'Worked all Stations'.

Disappointing that only one station out of a possible four QRPers, responded to the reminder QNC sent on NZ Net the previous Thursday, but at least that one dedicated operator did sterling service by deploying both modes! Another disappointing factor has been operators who ask for an extension to the log closing time, already a generous seven days, but then don't send in a log. Has anyone considered that at least two hours, often considerably longer, is needed to collate, contact ops about corrections and present the results, whereas it takes each operator only a few minutes to complete their log and email it.

Hints:

- I) Minimise the time to fill in your GQN log by entering only a 'Y' where necessary, and don't enter any 'N's which serve no purpose. i.e. blank = N
- 2) Map coordinates are required only for Back Country stations.

Reminder all information and links are available on the QRP webpage https://bit.ly/zlgqn

CALENDAR OF EVENTS



IMAGE COURTESY - ERIC ZL2BMI

ORP NET THURSDAY & SOMITZ

OROTAL

MAY 25. 7.30PM GO ORP NIGHT

MAY 19 & 20. NZART SANGSTER SHIELD

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ORP FROM STEWART ISLAND - DAVID WALKER ZL2DW

3D PRINTING FOR NZ ORPERS - JIM ZLILC

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THE EDITORS DESK - ROB ZL2RMC

NEXT GO ORP NIGHT

ORP FROM STEWART ISLAND- DAVID ZL2DW

A couple of weeks ago a friend of mine (John ZL2MB) was tramping around Stewart Island.

By prior arrangement we had a sched. on the NI Mountain Radio frequency * 3345khz. (close to the amateur 80m band).

While John could hear me (100 watts) fine, I had trouble hearing him (5 watts) (I could recognise his voice and some words but otherwise it was too difficult to read all of his words), however we reverted to the old trick of him giving me a series of rogers or negatives to my questions, all successfully.

John was using a single frequency dipole as high as he could get it, ie stones and string thrown over trees etc.

Yes the MRS is still working from Hawkes Bay (Hastings) and Wellington MRS also, though I must say that we are not very busy these days.

At Hastings we have a trapped dipole and a Codan transceiver (100 watts) at a remote rural site (nice and quiet) remote accessed. So, our "dual frequency" nice resonant trapped dipole is doing a great job, just as it has done for decades. The service and site also supports LandSAR via 5680khz...hence the dual freq trapped dipole.

This is not the first time I have worked QRP stations from Stewart Island and the exchange is consistently difficult but usable (as described above). 5 watts is better than no watts.

Generally (in our primary service areas of the lower two thirds of the North Island and Upper South Island) we rarely have difficultly with QRP reception (into our remote site) and never have difficultly being received by the QRP field stations (using our 100 Watts).

QRP is useful.

Regards and 73, David Walker (ZL2DW Hastings and operator/technician for the HBMRS service

3D PRINTING FOR NZ ORPERS - JIM ZLILC

There are lots of good reasons why 3D printed items are great for QRP operations, especially when going portable. Firstly, you're not putting out much RF, so insulators do not need to provide a long tracking surface. Secondly, items to be carried need to be light, small and preferably cheap.

I have been QRPing for more than a decade, but now I use only QRP and mostly digital modes. I've been playing with 3D plastic printing for about seven years. Items I've made include small insulators, coil formers, antenna winders, waterproof boxes and guy tensioners. Most designs come from the web, but sometimes I create unique designs on TinkerCad. All have been functional but not fantastic pieces of art. Take a look at www.thangs.com and search for 'amateur radio' or the brand of your transceiver or antenna.

The three types of plastic filament I use are all 1.75 mm diameter. PLA is the most common filament and produces nice prints. Every-body uses it, but it slowly deteriorates when exposed to UV. A small pole for a broken garden solar light lasted for more than a year before it wilted and leaned to one side. For infrequent QRP use, PLA is a good start and is ideal inside the shack.

PETG is a little stronger in all respects and will stand a more sun exposure. An antenna insulator will probably fail after three or four years if outdoors permanently. I have yet to see something made from PETG fail, so PETG is my go-to filament for QRP.

ASA is the best material for permanent use, more resistant to UV than any other readily printed plastic. It gives off toxic fumes while printing, so it requires ventilation, prints at a higher temperature than PLA or PETG, and printing needs to be done in an enclosure for temperature stability and ventilation reasons. ASA would be the material for permanent outdoor use.

So what's the cost? A reel of filament weighs I kg and usually contains in excess of 300 m of material. The cost ranges from \$30 to \$60, plus shipping, depending upon the material and brand. As an indication of true cost, a base-loading coil of 60 mm diameter and 140 mm long, expect to use 33 m of filament, or 10 % of a reel. That's about \$5 for the plastic. A good printer can range in price from \$400 to \$4 000, depending upon size, speed, etc.

If you would like something 3D printed for your QRP station, simply email and describe what you have in mind. I'll point you to some 3D print databases to look at, or to a particular design. Once we agree, I'll print it out and post it. There are two conditions. Firstly, you must be a recipient of the '5-watter' newsletter, and secondly you must pay for postage. A donation towards time and material would be fantastic, but is not a requirement.

Have a look at the web page bongoties.com and look at these useful, reusable, toggle-style cable ties. Before they became available in NZ, I'd buy them in the US, and now make my own on the 3D printer. If you email your postal address, I will send you nine kitsets and a made-up sample to make your own. I have two sizes of rubber bands so will include five of each length, and as long as they fit in a standard letter post envelope, there will be no charge. This offer is only for toggle cable ties.

Feel free to email me at zlllc@gmx.com

72/73 Jim, ZLILC



or those that wish to contact me or submit content I'll be keen to hear from you. mcdonald.t.robert@gmail.com or qrpnzl2021@gmail.com or cellphone 0275235253.

THE EDITORS Desk

Hi to all NZ QRP members to the April issue of the 5 watter.

Thanks to the members who have sent through some great content for this months edition.

Hopefully Jim ZLILC does not get too inundated with 3d printing requests! that is a really great offer he has made for his services, thank you Jim!

Personally the radios have not had a lot of action from me lately.

The combination of two badly timed weddings to attend and easter weekend have kept me off the air for Go Qrp Night (GQN).

The calendar is looking a lot leaner for the next couple of months so I will hopefully catch a few more of you on the air!

At the time of writing this, we will have finished our second GQN at the 7.30pm - 9.00pm non daylight savings winter time. Based on Stans report of March conditions were not amazing, but I would be keen to hear any more feedback if this is working as a time, or would we prefer the 8.30pm - 10.00pm time for the whole year, the same as our summer daylight savings time? Or any other feedback regarding GQN is greatly appreciated.

Save your finals and Go QRP

73's Rob ZL2RMC