



# Headquarters - Info - Line

... a service from ...

The New Zealand Association of  
Radio Transmitters Incorporated



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Issue # 61

Greetings Everyone,

Welcome to **Headquarters-Info-Line** a fortnightly bulletin of news from NZART Headquarters E-mailed directly to Branches.

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This issue of HQ Info-Line includes an important message from NZART Council concerning **Power lines, the Internet, and the future of the HF Spectrum**.

It is an issue of importance to us all.

It would be beneficial for Branch newsletter editors to wherever possible include this message in their next Branch newsletter and for Branch Secretaries to ensure the message is conveyed to your next branch meeting.

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## **NZART Business Manager Debby ZL2TDM Says:**

**Branch Visits** - I am writing this from the QTH of ZL1BOK, having started my journey around some of the Northern Parts.

On Thursday 2<sup>nd</sup> October, I was invited to speak at Hamilton branch, also attending the meeting were representatives from Cambridge, Huntly and Te Awamutu branches. The enthusiasm and commitment for promoting amateur radio was very evident from those who attended. Thanks to Tony ZL1UD and branches for your hospitality.

My next Branch meetings are in the North Shore Branch 29 on this Monday night 6<sup>th</sup> October and Whangarei Branch 28 on Wednesday night 8<sup>th</sup> October. I am looking forwards to meeting old and new friends in these branches. Please feel free to bring along one of your non-amateur friends.

**Promoting Amateur Radio** - Saturday 4<sup>th</sup> October saw a gathering of ZL1BOK, ZL1DK, ZL2BHF, ZL1DTE, ZL2KH, Steve and myself in Auckland to discuss the best methods of promoting amateur radio. A promotional committee has now been formed, and details of an E-group to progress the promotion of Amateur Radio will be advised soon. I do ask that only those committed to promoting amateur radio visit this site to offer ideas and talents

**Subscriptions for 2004** - On my return to HQ, Monday 13<sup>th</sup> October, I will be posting out reminder notices to all have yet to pay their 2004 subscription. Please remember to include your details, if you want to order the free CD Rom Call book for 2004.

Talk soon....  
Debby ZL2TDM

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## **A message from NZART Council:**

### **Power lines, the Internet, and the future of the HF Spectrum**

Around the world, the debate is hotting up about PLC (Powerline Communications), also known as PLT (Powerline Telecommunications) and by various other names too. This is the technology that claims to provide broadband high-speed internet services using domestic power lines for the last few kilometres to the home. PLC injects the data signal into the powerline near the electricity substation and it travels along the line to the user.

The problem, of course, is that powerlines are not radio frequency cables. They leak rf energy causing a level of wideband noise in the vicinity of the cable. The mains powerline is a very "noisy" transmission medium, with spikes and other noise, so PLC operators have to use higher injection powers to get their data signals to propagate along the cable. Higher injection powers mean higher emissions, and this is bad news for HF radio operators.

Current proposals in Europe, for example, would raise the level of the background noise level on HF by some 60-70 dB in the proximity of the cable within (3 metres). Further away, the rise would be less, but still considerable.

PLC poses a threat not only to amateur radio! Users of low power devices (for example security systems that tag products in shops) are worried. HF broadcasters are fighting to support sensible emission limits for PLC. The security services privately are worried. But in some countries, government departments involved in security have been told to not object to PLC as the government policy is to support it! Civil Aviation communication and aero-navigation can be threatened by PLC. There are reports of an air accident in Canada being directly attributable to interference from broadband cable systems. And this is only the beginning. New plans for PLC will attempt to use much higher frequencies (beyond 30 MHz even up to 80 MHz) which could immediately pose a threat to some emergency service communications.

One thing is certain. Governments are beginning to realise that there is no compromise here. It is a stark choice between radio communication and internet access. The injection power level being sought by the PLC operators will have a serious and lasting effect on conventional radio communication. If emission limits are set to protect radio, then PLC will find it impossible to operate.

This is an extremely serious issue for amateur radio and for other users of the HF spectrum.

Please be on the lookout for any signs that PLC is being planned in your district. Alone, it is unlikely that amateur radio can fight the supporters of PLC. But if we work with other users of the HF spectrum to build an alliance to protect the HF frequencies there is much more chance of success. That is the challenge for us all.

*(The above text was developed from text by Don Beattie, G3BJ, Secretary IARU Region 1)*

### **It's here - PLC is here in New Zealand right now!**

A PLC trial in Karaka Street, Takapuna, is known to have taken place in June. Reports are that it had "mixed results". The problem found is that the HF modulation will not pass through the pole-mounted step-down transformers but it worked fine on the low voltage side. Tests over the 400V and 1100V lines gave the same problem. It is understood that development work is being done on a "bypass" to allow PLC data to get around the pole transformers and to use PLC over the high voltage network.

No information has been obtained on whether or not the tests considered the level of HF radiation from the lines.

One application envisaged for PLC by the power company is to automate power-meter reading. For cost reasons, internet service providers may share the system. If one power company is interested in PLC for any purpose, expect others to be interested too.

### **What do we do about it?**

Please keep your local NZART Councillor promptly informed with any PLC information or activity you may observe or obtain. The topic is under intense study both locally and internationally. Further bulletins and reports of actions can be expected.

More information can be obtained from the following websites:

<http://www.arrl.org/tis/info/HTML/plc/>

<http://www.rsgb.org/emc/pltnew.htm/>

<http://www.darc.de/referate/emv/plc/>

<http://www.powerlinecom.net/faq.htm>

Please be ever-vigilant and keep your local NZART Councillor promptly informed with any local information or PLC activities you may find.

## **From the NZART Administration Liaison Officer:**

### **The Ministry launches “SpectrumOnline”**

The Ministry of Economic Development, Radio Spectrum Management Group, has announced public access to its licensing database. All software, training guides and updated databases are available from its website at:

<http://www.med.govt.nz/rsm/publications/software.html>

Of more direct interest to radio amateurs are the facilities and the two special reports for radio amateurs at:

<http://SpectrumOnline.med.govt.nz>

Click on “radio or spectrum licence” and then enter your callsign or other query details and press the “Submit” button. Click on the licence number and the details of the licence will be revealed!

An “electronic callbook” is available for downloading too. Click on “Other Reports” to see a list of download-able reports including (scroll down to the bottom of the page) a list of “Amateur Operators” and also “Beacons and Repeaters”.

You can download a spreadsheet with up-to-date “CallBook” or “Beacon and Repeater” licence information. The spreadsheet can then be electronically sorted and searched in the usual spreadsheet way (use “Ctrl+F” – remember: F for Find.)

The register is updated daily at 22:00 NZST (10:00 UTC).

If you find difficulty getting access, temporarily disable your firewall and try again.

The Ministry has advised that some of the data may contain inaccuracies and encourages amateurs to contact it to have these corrected. If your personal licence information or your club record is incorrect, please advise the Ministry in writing of the corrected details. Please give the present entry detail followed by an explanation of the changes needed, and if it is a club record, the authority that you have from the club to make this correction. The Ministry’s aim is to have this information 100% correct and appreciates your assistance in achieving this.

Contact details are:

Ministry of Economic Development  
Radio Spectrum Management,  
PO Box 2847  
Wellington.

Phone: 0508 RSM INFO (0508 776 463)

Fax: 04 499 0797

Email: [info@rsm.govt.nz](mailto:info@rsm.govt.nz)

Some ten years ago, the Ministry put a stop on releasing the traditional licensing information for the NZART Annual Callbook citing the Privacy Act as the reason. After numerous submissions from NZART and even an appearance at a Select Committee considering changes to the New Zealand Radiocommunications Regulations, all these difficulties seem to now be resolved.

The published 2003/2004 NZART Callbook contains information extracted from the Ministry of Economic Development's database, reproduced exactly as received and not changed in any way by NZART. With these online up-to-date facilities and the two amateur reports now available, it is time to thank the Ministry for finally providing these various access methods to the licence information.

Although a long time coming, the direct access to this licensing information will be appreciated by the amateur radio community.

**Again, please note that the licensing database is run by the Ministry and NOT by NZART, so if you find any errors or have any other questions, please direct them to the Ministry using the contact addresses given above.**

**Note:**

The following reference has just appeared (dated 3 October) on the Ministry's web page.

The official report of the Ministry of Economic Development, Radio Spectrum Management, about the recent World Radiocommunications Conference, WRC-03, Geneva, is available at:

<http://www.med.govt.nz/rsm/whatsnew/index.html>

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**Dates To Remember:**

- **Next HQ-Info-Line E-mailed on Sunday 19<sup>th</sup> October**
- **Next NZART Official Broadcast 8pm & 9pm on Sunday 26<sup>th</sup> October**
- **Straight Key Night Sunday, 2nd November 2003**

73

Jim Meachen ZL2BHF

**Editor**