



Headquarters - Info - Line

... a service from ...

The New Zealand Association of
Radio Transmitters Incorporated



18 March 2007

Issue # 134

Greetings Everyone

Welcome to Headquarters-Info-Line a fortnightly bulletin of news from NZART Headquarters E-mailed directly to Branches and to others that subscribe through the NZART Web Site.

In This Issue

- The NZART Business Manager Debby ZL2TDM Says
 - Two discussion papers submitted to MED
 - NZART Conference
 - Election 2007
 - Branch Circular
 - Annual subscription 2007
- 5 MHz Usage
- NZART Report from meeting the MED - 2.4 GHz
- NZART Conference 2007 – Palmerston North
- Contest News
- Auto-Subscription and Un-Subscribe
- Dates for Official Broadcast (OB) and Head Quarter's Info-Line (HQIL)
- Attached are: *This document NZART HEADQUARTERS INFO LINE #134.doc*, conference 2007 Accommodation Information.pdf and Registration Form.pdf

The NZART Business Manager Debby ZL2TDM Says

Two discussion papers submitted to MED: NZART has submitted two discussion papers recently, the 2007 Radio Spectrum Licence Fees Review (submitted 9 March 2007) and the Radio Licences: Security of Tenure (submitted 14 March 2007).

NZART Conference 2007: Registration forms and accommodation information for the Radio Waves ~Symposium 2007 NZART Conference AGM are up on the NZART web site and available for downloading from the links on the front page or from the Events page at:
<http://www.nzart.org.nz/nzart/Update/Events/>

Election 2007: Election voting forms must be received at this office by Tuesday 20th March before close of business. Please send them to me urgently if you want a chance to vote for your Council members and President.

Branch Circular: I will be sending out a Branch Circular at the beginning of April. Included in this will be your Branch membership details for remit voting at the AGM. If you would like anything included in the Circular please forward to me by the Friday 30th March.

Annual subscription 2007: Final Reminders for the 2007 annual subscription will be posted out in the coming week.

Talk to you all again soon... Debby ZL2TDM

5 MHz Usage

Introduction

Since 24 August 2006 New Zealand radio amateurs have had temporary access to two spot frequencies near 5 MHz with the convenience names of 5320 and 5395. (Radio amateurs should view these two frequencies as two separate "bands", each 2.8 kHz wide. Editor)

Rules as to usage were developed by NZART, approved by the licensee of the two frequencies, and access conditions added to the two licenses by RSM on 23 August 2006.

NOTE: This operation occurs in an area of spectrum which is NOT an amateur band and the negotiated "grace and favour arrangement" was a major concession obtained and one which should not be subject to abuse in any form.

In essence the basic rules clearly spell out a number of key features such as:

- * Temporary access on a non interference basis.
- * Checking and confirmation of frequency accuracy.
- * Nature of SSB transmissions.
- * Avoidance of creating adjacent-channel interference.
- * Use of AREC callsigns.
- * NO amateur radio contests and NO amateur radio award activity at any time.

A policy was developed and placed on the NZART web site at:

<http://www.nzart.org.nz/nzart/policies>

called: Amateur Operation on two 5 MHz spots (a PDF file).

A copy of this policy is at the end of this document.

Reports about your use of these two bands are requested to be sent by e-mail to [NZART HQ, nzart.hq@nzart.org.nz](mailto:nzart.hq@nzart.org.nz).

Reports are important to ensure this access continuing and to provide and to collect information about the purpose being served by, and the usefulness of, frequencies near 5 MHz for amateur radio operations.

The name and callsign of the reporter are requested for following-up for further experience information if needed later.

The Experience So Far

NZART has had some direct feedback on usage but it is insufficient to base any conclusions on, as to any interference issues suffered by the licence holder nor as to any inconvenience caused as a result of usage of the band.

It is known that several AREC callsigns have issued but proper data as to usage has not been provided. We do not know in an informed way the extent of usage, the extent of cross band or overseas contacts.

Request For Information

NZART is requesting that radio amateurs using this band provide information of their usage of these two spot 5 MHz frequencies, specifically covering of callsigns used, dates and times, cross band usage, overseas contacts and experiences gained or noted. These reports can be completed by either users or those listening to the frequencies; all input is sought and welcomed.

A database of usage is required before any additional approach can be made to the licence holder or if the current policy is to be changed, extended or the status quo to remain.

Reports about your use of these two bands are requested to be sent by e-mail to:

[NZART HQ E-mail: nzart.hq@nzart.org.nz](mailto:nzart.hq@nzart.org.nz).

Access by NZ radio amateurs to spot frequencies near 5 MHz

Rules to be observed

1. The "bands"

From 24 August 2006, subject to these rules and conditions, the licensee of two frequencies is permitting temporary access by radio amateurs on a non-interference basis to 5.3214 MHz and 5.3964 MHz. These are the "centre frequency" for 2K8 SSB emissions (i.e. ± 1.4 kHz). Note: This access is a privilege. These are NOT amateur bands.

Radio amateurs can view them operationally as two separate "bands", each 2.8 kHz wide.

For easy amateur radio reference purposes, they will be given the convenience names:

5320 = 5.3200 MHz to 5.3228 MHz and

5395 = 5.3950 MHz to 5.3978 MHz.

SSB transmissions to be as follows:

USB with a suppressed carrier frequency ("dial") of 5.3200 MHz, and
USB with a suppressed carrier frequency ("dial") of 5.3950 MHz.

For narrower modes, any carrier frequency between the "band limits", with appropriate spacing from the band edges determined by the emission bandwidth, may be used.

2. Your equipment

Before operating, please check and confirm the frequency accuracy, the stability and the signal quality of your transmitting apparatus. Avoid creating adjacent-channel interference. Get it checked by a station you work.

3. A major condition of access

Operation by radio amateurs on these two bands is on a strict NON-INTERFERENCE basis to any non-amateur user. This means that if the band is busy with other traffic, or if a non-amateur station suddenly appears, ALL AMATEUR traffic MUST CEASE. Failure to observe this requirement will jeopardise the access arrangement. These are NOT amateur bands.

4. Operating practices

Normal amateur radio procedures and the requirements of the amateur radio GURL and the Radio Regulations are to be observed.

5. Callsigns

AREC callsigns are to be used. It is anticipated that after an initial trial period, general operator callsigns may be permitted, and may be notified in a later issue of this document.

6. Activities

NO amateur radio contests and NO amateur radio award activity at any time.

7. Reports

Reports about your use of these two bands are requested, to be sent by e-mail to [NZART HQ, nzart.hq@nzart.org.nz](mailto:nzart.hq@nzart.org.nz)

Reports are important to ensure this access continuing and to provide and to collect information about the purpose being served by, and the usefulness of, frequencies near 5 MHz for amateur radio operations. The name and callsign of the reporter are requested for following-up for further experience information if needed later.

(These Rules developed by NZART, approved by the licensee of the two frequencies, and access conditions added to the two licenses by RSM on 23 August 2006.)

NZART Report from meeting the MED - 2.4 GHz

Introduction

On Friday 9 March 2007, NZART President Bruce Douglas ZL2WP and

Councillor Mark Gooding ZL2UFI attended a meeting, at the MED, 33 Bowen Street Wellington. (As previously stated InfoLine's, Bruce and Mark are in the temporary role of Administration Liaison Officers.)

MED were represented by Brian Miller (MED - Manager, Radio Spectrum Policy and Planning), Alex Orange (MED - Engineer, Radio Spectrum Policy and Planning).

Also present were Doug Ingham ZL2TAR (NZART - FMTAG, ARE038) and Fred Johnson ZL2AMJ (ARC067).

The meeting commenced at 11.45 pm and concluded at 12.45 pm.

Meeting commenced with an introduction of persons present, and their roles. Bruce took the opportunity to explain the recent changes at NZART, and the role of ALO (Administration Liaison Officer). He advised that both Mark and he were now the ALO's, appointed by NZART Council at the recent Face-to-Face meeting in February 2007. As Brian had been overseas in Geneva, he was unaware of the change and the exact nature of it.

Mark then questioned as to why everyone was present and their roles in the meeting.

Mark stated that both Bruce and he were present as NZART's ALO's. That Doug was present as a resource both as an ARE (Approved Radio Engineer) and as NZART FMTAG representative. The reason Brian and Alex were present is that Brian is in charge of the MED Policy area, and Alex was filling in for Chris Perera. as she was unwell, and unable to attend.

Mark pursued the notion as to why Fred was present. After some discussion, Brian stated that Fred was invited for his "institutional knowledge".

NOTE: this meeting was called by the MED. It was their meeting to invite who they choose, and NZART had no input into this.

Purpose

The purpose of the meeting was then stated by Brian. In 2010 the Management Rights for the band 2.300 GHz - 2.400 GHz comes up for review. The MED are looking to pre-empt this review by having the review completed by the second quarter 2007 (by 30 June 2007). Currently, the MED have approached the management rights holders with some success in getting them to agree to a review prior to 2010. One rights holder is not agreeing at this point - this is a commercial interest. It is unclear if the 2007 review will proceed unless all rights holders agree.

As the amateurs have an allocation in the band namely at 2.396 GHz - 2.400 GHz then this meeting is the first step in a discussion/consultation process.

Brian made it clear that no decisions were being made today.

It was noted that the amateur community have a 4 MHz allocation on a secondary user basis. It was also stated that this allocation in effect was offering a "guard band" allocation position.

The main purpose of this 2007 review is the increasing pressure on the 2.300 GHz - 2.400 GHz band by broadband wireless technology - namely WiMAX. (see Appendix One). The comment was made by MED that to some extent global WiMax use was such that we are in New Zealand in large measure at the mercy of the International community.

NZART Information

Bruce then presented to the MED a series of e-mails sent to him from various amateurs in New Zealand. These e-mails stated concerns about the allocation. They also contained comments about how it was being used on a regular basis, contest work and various opinions about what should or should not happen. As these e-mails were sent to NZART, Bruce supplied to the MED paper copies of these e-mails as background and support material for the continued allocation. Prior to the meeting all e-mails were supplied to both Mark and Doug - Mark as ALO, and Doug as an Officer of the Association but not to Fred.

Brian then stated that all options for use by amateurs are still available - as it was prior to the meeting. He further stated that "there is no intention to do us out" of this allocation.

NZART was asked what usage it had for the allocation.

Doug replied that a proposal for using the allocation for linking, in particular as a linking resource for the National System. The linking was proposed to use two linking pairs of an approximate 2 MHz bandwidth, which with only 4 MHz total means only two linking channels. The channels were to be a city based one on 2446-2450 and on 2396-2400. The rural based one would be a reverse of the city channel (i.e. 2396-2400 and 2446-2450).

Doug explained the fact that through commercial interests some equipment for channel linking had been proposed, but for various reasons this supply of equipment had failed to come through, and had never been implemented.

The question was put "What are the reasons for usage in the 2.4 GHz band as opposed to another band?"

Doug answered the question, "Well we don't have enough bands as it is now".

Doug further expanded on this answer by stating that as amateurs we have few bands available for such purposes, and also that if commercial equipment was to be used then we (amateurs) had to consider what was available. In these bands above 1 GHz, there is commercial equipment available at various frequencies but not all either tune to the amateur bands or are in bands that amateurs don't have, an example being the 1.5 GHz band, where amateur's closest band is 1.2 GHz or 2.4 GHz. A quick explanation of the current in-band linking (within the UHF band) for the National System was

explained. Doug stated that he had produced a document for Break-In in the early 2000's on in-band linking for the National System for the 2.400 GHZ band. (This is attached - Appendix Three)

Australian Bandplan

A discussion of the Australian allocation of 2300-2302 GHz was had. It was noted, as this had also been expressed in some of the e-mails, was it a good time to align ourselves to the Australians? This point wasn't progressed other than to state perhaps this was worth noting and considering.

Standardised Equipment

The discussion on the use of standardised equipment, adjacent channel issues and the use of guard bands was had. One option was to have the amateur radio allocation within one of these guard bands?

It was stated that the 2.300 - 2.400 GHz band was coming under increasing pressure for use in consumer products, and internationally the future usage is expected to expand. The pressure is expected to move from the lower part of the band all the way up to the limit of 2.400 GHz limit, and this would then of course cause all sorts of issues for the amateurs. The importation of products and services is monitored but it was expected that various countries would ignore any band planning and produce consumer products for usage in the band. These could come into New Zealand without knowledge and their usage would then present various problems, in effect this is an attempt to head this off.

Primary V Secondary Allocation

The amateur secondary allocation status (versus primary) in the allocation, plus secondary amateur satellite allocation were noted and discussed. The ability to share the allocations, but sharing where the usage is mobile or cellular in nature makes this proposal difficult to police let alone use. No formal decision or change was noted on either secondary or sharing.

Managed Spectrum Park

The concept of a Managed Spectrum Park was put forward. A Managed Spectrum Park is a governmental approach to set aside allocations for use by groups/communities outside of the Managed Spectrum Rights holders. An example would be rural usage criteria to provide broadband Internet to remote communities. Under this approach amateurs could also benefit from such an allocation of between 10-15 MHz in band width as an example. This Managed Spectrum Park may or may not have access fees, would need coordination (within the allocation) and that radio amateurs and interested community groups should be able to co-exist in some harmony.

ISM

A comment was made about ISM (industrial, scientific and medical) as there is extensive space allocated here for these services. (see Appendix Two).

Another Option

Based on the discussion above a suggestion was put forward about possible usage of 2.310 - 2.315 GHz for linking which is at the top of the allocation. The problem is that this would put the allocation outside the Australian band plan. Again, nothing should be read into this suggestion at this point.

Security of Tenure

As final comment, the MED stated the importance of a submission in relation to the Security of Tenure paper, and that NZART should submit their view on this matter.

No date was set for the next meeting on this subject.

The meeting concluded at 12.45 pm.

Any feedback on these notes can be directed at Bruce Douglas ZL2WP and Mark Gooding ZL2UFI via the e-mail address of: alo@nzart.org.nz.

NOTE: the appendices are for reference purposes of the reader of this document, and did not form, or were available at the time of the meeting. Appendix Three was later e-mailed to MED.

A further resource also worth reading is that of Cabinet Paper, *Broadband Wireless Spectrum Allocation* situated at:

<http://www.rsm.govt.nz/spp/bwa/cabinet-paper/index.html>.

Glossary

ARE - Approved Radio Engineers
ARC - Approved Radio Certifiers
ALO - Administration Liaison Officer
ISM - industrial, scientific and medical
MED - Ministry of Economic Development
NZART - New Zealand Association of Radio Transmitters
RSM - Radio Spectrum Management
WiMAX - Worldwide Interoperability for Microwave Access

Appendix One (taken from: <http://en.wikipedia.org/wiki/WiMAX>)

WiMAX is defined as Worldwide Interoperability for Microwave Access by the WiMAX Forum, formed in June 2001 to promote conformance and interoperability of the IEEE 802.16 standard, officially known as Wireless MAN. The Forum describes WiMAX as "a standards-based technology enabling the delivery of last mile wireless broadband access as an alternative to cable and DSL".

Uses

The bandwidth and reach of WiMAX make it suitable for the following potential applications:

- * Connecting Wi-Fi hotspots with each other and to other parts of the Internet.
- * Providing a wireless alternative to cable and DSL for last mile (last km) broadband access.
- * Providing high-speed mobile data and telecommunications services.
- * Providing a diverse source of Internet connectivity as part of a business continuity plan. That is, if a business has a fixed and a wireless Internet connection, especially from unrelated providers, they are unlikely to be affected by the same service outage.
- * Providing Nomadic connectivity.

Broadband Access

Many companies are closely examining WiMAX for "last mile" connectivity at high data rates. This could result in lower pricing for both home and business customers as competition lowers prices.

In areas without pre-existing physical cable or telephone networks, WiMAX may be a viable alternative for broadband access that has been economically unavailable. Prior to WiMAX, many operators have been using proprietary fixed wireless technologies for broadband services.

WiMAX subscriber units are available in both indoor and outdoor versions from several manufacturers. Self install indoor units are convenient, but the subscriber must be significantly closer to the WiMAX base station than with professionally installed units. As such, indoor installed units require a much higher infrastructure investment as well as operational cost (site lease, backhaul, maintenance) due to the high number of base stations required to cover a given area. Indoor units are comparable in size to a cable modem or DSL modem. Outdoor units allow for the subscriber to be much further away from the WiMAX base station, but usually require professional installation. Outdoor units are roughly the size of a textbook, and their installation is comparable to a residential satellite dish.

Limitations

A commonly held misconception is that WiMAX will deliver 70 Mbit/s, over 70 miles (112.6 kilometers). Each of these is true individually, given ideal circumstances, but they are not simultaneously true. In practice this means that in line-of-sight environments you could deliver symmetrical speeds of 10 Mbps at 10 km but in urban environments it is more likely that 30% of installations may be non-line-of-sight and therefore users may only receive 10 Mbps over 2 km. WiMAX has some similarities to DSL in this respect, where one can either have high bandwidth or long reach, but not both simultaneously. The other feature to consider with WiMAX is that available bandwidth is shared between users in a given radio sector, so if there are many active users in a single sector, each will get reduced bandwidth. However, unlike SDSL where contention is very noticeable at a 5:1 ratio (if you are sharing your connection with a large media firm for example), WiMAX does not have this problem. Typically each cell has a whole 100 Mbps backhaul so there is no contention here. In practice, many users will have a range of 2-, 4-, 6-, 8- or 10 Mbps services and the bandwidth can be shared. If the network becomes busy the business model is more like GSM or UMTS than DSL. It is easy to predict capacity requirements as you add customers and additional radio cards can be added on the same sector to increase the capacity.

Mobile applications

Some cellular companies are evaluating WiMAX as a means of increasing bandwidth for a variety of data-intensive applications; indeed, Sprint Nextel has announced in mid-2006 that it will be investing about US\$ 3 billion in a WiMAX technology buildout over the next few years. [1]

In line with these possible applications is the technology's ability to serve as a high bandwidth "backhaul" for Internet or cellular phone traffic from remote areas back to an Internet backbone. Although the cost-effectiveness of WiMAX in a remote application will be higher, it is not limited to such applications, and may be an answer to reducing the cost of T1/E1 backhaul as well. Given the limited wired infrastructure in some developing countries, the costs to install a WiMAX station in conjunction with an existing cellular tower or even as a solitary hub are likely to be small in comparison to developing a wired solution. Areas of low population density and flat terrain are particularly suited to WiMAX and its range. For countries that have skipped wired infrastructure as a result of prohibitive costs and unsympathetic geography, WiMAX can enhance wireless infrastructure in an inexpensive, decentralized, deployment-friendly and effective manner.

Appendix Two: (taken from: http://en.wikipedia.org/wiki/ISM_band)

The industrial, scientific and medical (ISM) radio bands were originally reserved internationally for non-commercial use of RF electromagnetic fields for industrial, scientific and medical purposes.

The ISM bands are defined by the ITU-R in 5.138 and 5.150 of the Radio Regulations. Individual countries' use of the bands designated in these sections may differ due to variations in national radio regulations. In the United States of America ISM is governed by Part 18 of the FCC rules and should not be confused with Part 15 rules. Communication is not permitted under Part 18 (ISM) rules.

In recent years they have also been shared with license-free error-tolerant communications applications such as wireless LANs and Bluetooth:

- * 900 MHz band (33.3 centimeter wavelength) (North America and Australia)
- * 1.8 GHz Band (16.7 cm wavelength)
- * 2.4 GHz band (12.5 cm wavelength)
- * 5.8 GHz band (5.2 cm wavelength)

(using an approximation to the speed of light of 3×10^8 m/s)

IEEE 802.11b/g wireless Ethernet also operates on the 2.4 GHz band, and most microwave ovens use 2.45 GHz. Although these devices share the (Part 18) ISM band, they are not ISM devices in the United States, and fall under the regulation of Part 15[citation needed].

Appendix Three: (Extract from FMTAG column in March/April 2001 Break-In, Page 44 & Extract from FMTAG column in May/June 2001 Break-In, Page 39).

This extract was supplied to the MED after the meeting by Doug Ingham ZL2TAR, as requested by the MED. The purpose of this was to demonstrate the purpose/intention that we as amateurs have for this allocation.

Extract from FMTAG column in March/April 2001 Break-In, Page 44.

Interim Recommendations to Council

Branch 74, The Wellington VHF Group, has negotiated with an equipment manufacturer for the long-term loan of multi-channel digital transceivers and has requested frequency coordination. Each transmission has a bandwidth of about 1.5 MHz. In accordance with the existing band plans (page 4-13 of 2000 Call Book) we have selected the centre frequencies shown in Table 2.

Table 2

Site name and antenna direction	Transmit	Receive
Klondyke south facing	2447 MHz	2397 MHz
Egmont north facing	2397 MHz	2447 MHz
Egmont east facing	1259 MHz	1299 MHz
Wharite west facing	1299 MHz	1259 MHz
Egmont south facing	2399 MHz	2449 MHz
Belmont north facing	2449 MHz	2399 MHz
Belmont south facing	2447 MHz	2397 MHz
Blue Duck north facing	2397 MHz	2447 MHz
Blue Duck south facing	2399 MHz	2449 MHz
Parnassus north facing	2449 MHz	2399 MHz
Parnassus south facing	1259 MHz	1299 MHz

Marleys Hill north facing	1299 MHz	1259 MHz
Marleys Hill south facing	2447 MHz	2397 MHz
Studholme north facing	2397 MHz	2447 MHz
Studholme south facing	2399 MHz	2449 MHz
Cargill north facing	2449 MHz	2399 MHz

Extract from FMTAG column in May/June 2001 Break-In, Page 39.

Final Recommendations to Council

Branch 74 Wellington VHF Group. Frequency coordination for the Digital National System in the 1.3 GHz and 2.4 GHz bands. The list of frequencies was published in March/April 2001 Break-In.



NZART Conference 2007 – Palmerston North

The 2007 NZART Conference & AGM will be held at the Palmerston North Convention Centre from the 1st to the 4th of June 2007. The convention centre is located at 400 Main Street Palmerston North and is only a stones throw away from the central business district and accommodation amenities. A map showing accommodation providers is attached to this issue of Info-line.

As well as the usual Sunday forums for OTC, WARO, SPAM etc additional forums of interest include a talk by a representative from Tararua Television which is a local TV station that operates out of Pahiatua, Fred Johnson ZL2AMJ will hold a forum on The Electromagnetic Wave: Introductory Demonstrations in Radio Technology. If you have never seen a standing wave then this is a good opportunity to see one. Local Government Liaison Officer Mike Newman ZL1BNB will host a forum on Antennas and the Resource Management Act, an interesting forum this should prove to be especially with the way that local councils are currently going with trying to introduce height and antenna restrictions.

Also attached to this edition of Info-line is a copy of the registration form for the conference in a PDF format. We are now able to receive registrations for the conference but please note we need "ONE Registration Form per Person". If you wish to pay your registration via internet banking then please do so, the bank account details are to be found at the bottom of the registration form. When paying via internet banking please include your callsign in the reference field and also return the completed registration form (s) to: Accommodation information and conference registration form also available at <http://www.nzart.org.nz/nzart/>.

Radio Waves Symposium 2007
P O Box 1718
Palmerston North 4440

We look forward to seeing many of you at Conference 2007 and hope that you will have an enjoyable stay whilst you are here.

73 de Allan Chandler ZL2SKY & Ian Thompson ZL2IAN 2007 Conference Co-convenors

Contest News

Thanks to Frank Hunt, ZL2BR (ZL4BR), Team Captain of the NZ RSGB Commonwealth Contest Team and the "Black Caps" for their efforts in last weekend's BERU. By all accounts a very competitive (and hopefully a winning) score was posted. Thanks to all who took part in pretty trying band conditions.

Next weekend is the CQWW WPX SSB Contest and a good opportunity to find new prefixes and countries. One participating, and rare prefix/country will be Kermadec (Raoul Is.) in the guise of ZM8CW. Jacques is bound to be in keen demand by all and sundry.

UPCOMING NZART CONTESTS

NZART WARO Thelma Souper Memorial Contest

Mar 31 - 2000 - 2200 (Sat NZDT) and

Apr 1 - 2000 - 2200 (Sun NZDT)

Sangster Shield QRP CW Contest

May 19/20 - 2000 - 2300 (Sat/Sun NZDT)

NZART Memorial Contest - All Modes 80M

July 7/8 - 2000 - 2300 (Sat/Sun NZDT)

UPCOMING CONTESTS

9K 15-Meter Contest	1200Z-1600Z, Mar 18
Bucharest Contest	1500Z-1559Z, Mar 19 and 1600Z-1659Z, Mar 19
CQ WW WPX Contest, SSB	0000Z, Mar 24 to 2359Z, Mar 25
SP DX Contest	1500Z, Apr 7 to 1500Z, Apr 8
EA RTTY Contest	1600Z, Apr 7 to 1600Z, Apr 8
UBA Spring Contest, SSB	0600Z-1000Z, Apr 8
JIDX CW Contest	0700Z, Apr 14 to 1300Z, Apr 15
Holyland DX Contest	0000Z-2359Z, Apr 21
YU DX Contest	2100Z, Apr 21 to 0500Z, Apr 22 and 0900Z-1700Z, Apr 22
SP DX RTTY Contest	1200Z, Apr 28 to 1200Z, Apr 29

I am away from my home today and am compiling this in somewhat unfamiliar surroundings, so please excuse the abbreviated nature of this week's post.

I trust all were not badly affected by the high winds we experienced a few days ago. appear to have fortunate to have missed property damage - a neighbour had their chimney blown down.

73, John Powell ZL1BHQ, NZART Contest Manager

Auto-Subscription and Un-Subscribe

It has never been easier to subscribe to the Info-Line distribution list and have Info-Line sent to you direct by E-mail. Just check into the NZART web page. <http://www.nzart.org.nz/nzart> Look for **Info-Line Subscribe**. Supply your name, callsign and e-mail address and that's all you need to do. You will receive an e-mail confirmation of your auto-subscription and you can un-subscribe (see instructions at bottom of Web page) at any time.

Dates for Official Broadcast (OB) and Head Quarter's Info-Line (HQIL)

2007 OB Sunday 8 pm. Broadcasts dates are: Mar 25, Apr 29, May 27, Jun 3 CONF OB, Jun 24, Jul 29, Aug 26, Sep 30, Oct 28, Nov 25, Dec 23, 2008 Feb 24, Mar 30,

- **NZART Official Broadcast Sunday 25 March 2007**
- **Next HQ-Info-Line E-mailed on Sunday 1 April 2007**

2007 HQIL Sunday publishing dates are: Apr 1, Apr 15, May 6, May 20, Jun 10, Jul 8, Jul 22, Aug 5, Aug 19, Sep 2, Sep 16, Oct 7, Oct 21, Nov 4, Nov 18, Dec 9 Dec 23, 2008: Jan 13. Feb 3, Feb 17, Mar 2, Mar 16,

Regards, Jamie Pye ZL2NN, Editor zl2nn@nzart.org.nz

Attached are: *This document NZART HEADQUARTERS INFO LINE #134.doc*, conference 2007 Accommodation Information.pdf and Registration Form.pdf



ACCOMMODATION INFORMATION

Kings Gate Palmerston North **Map Number K**

110 Fitzherbert Ave, Palmerston North

Website <http://www.millenniumhotels.com>

Email kingsgate.palmerston@millenniumhotels.co.nz

Palmerston North Holiday Park **Map Number 42**

133 Dittmer Drive, Palmerston North

Phone (06) 358 0349

Website N/A

Email N/A

Great site for Campervans, Cabins and located about 5min drive from town.

Palmerston North Motel **Map Number 33**

66 Linton St, Palmerston North

Phone 0800 225 692

Website <http://www.pnm.co.nz>

Email enquiries@palmerstonnorthmotel.co.nz

Only about 5min walk from the Convention Centre.

Camelot Motor Lodge **Map Number 20**

295 Fergusson St, Palmerston North

Phone 0800 321 295

Website <http://www.camelotmotorlodge.co.nz>

Email camelotmotorlodge@xtra.co.nz

Only about 5min walk from the Convention Centre.

Legends **Map Number 31**

114 Fitzherbert Avenue, Palmerston North

Phone 0800 44 24 72

Website <http://www.legends.co.nz>

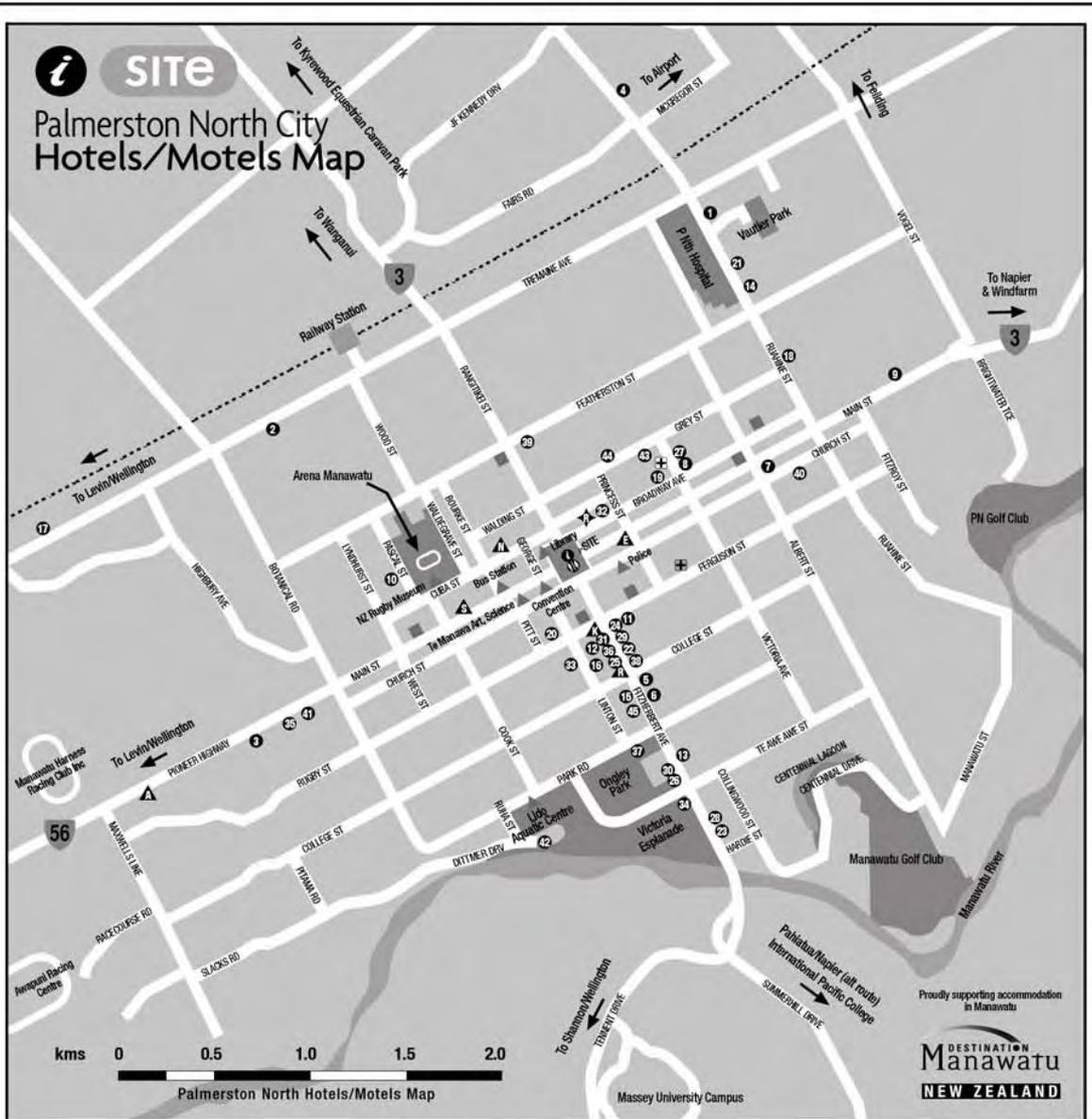
Email book@legends.co.nz

Only about 5min walk from the Convention Centre.

This is just a selection of a few motels around the Palmerston North Convention Centre. If you would like more accommodation information please go to the following website <http://www.manawatunz.co.nz>.



Palmerston North City Hotels/Motels Map



MOTELS

- 1 A-Abode Motor Lodge
- 2 Acacia Court Motel
- 3 Accommodation Gateway Motel
- 4 Airport Motel
- 5 Ambassador Motel
- 6 A'La Vista
- 7 Asprey Motor Inn
- 8 Alpha Motor Inn
- 9 Always Inn Motel
- 10 Arena Lodge
- 11 Aubyn Court Motor Lodge
- 12 Avenue Motel
- 13 Awatea Park Motel
- 14 Aztec Motel
- 15 Bella Vista Motel
- 16 Bentley's Motor Inn
- 17 Birch Trees Lodge Motel
- 18 Braemar Motor Lodge
- 19 Broadway Motor Inn

- 20 Camelot Motor Lodge
- 21 Carramar Motor Inn
- 22 Chancellor Motor Lodge
- 23 Colonial Court Motel
- 24 Cornwall Motor Lodge
- 25 Fitzherbert Castle
- 26 Fitzherbert Regency Motor Lodge
- 27 Hacienda Motor Lodge
- 28 Harrington's Motor Lodge
- 29 Illuzions
- 30 Kauri Court Motor Lodge
- 31 Legends Motel
- 32 Mid-City Motel
- 33 Palmerston North Motel
- 34 Pavilion Motel
- 35 Pioneer Motel
- 36 Rose City Motel
- 37 Settlers Motel
- 38 Shadzz Motel
- 39 Sherwood Motor Inn

- 40 Terrace Court Motor Inn
 - 41 United Motel
- ## HOTELS
- ▲ Awapuni Motor Hotel
 - ▲ Empire Hotel
 - ▲ Kingsgate Hotel
 - ▲ Rydges Coachman Palmerston North
 - ▲ The Shamrock Inn
 - ▲ Novotel Palmerston North
- ## BUDGET ACCOMMODATION - BACKPACKERS - HOSTELS
- 42 PN Holiday Park
 - 43 Grandma's Place
 - 44 Peppertree Hostel
 - 45 Civello Hostel
- Supermarkets
 - Ⓜ Public Toilets
 - ⚕ City Doctors
 - ⚖ The Palms Medical Centre
 - ⚡ Regent On Broadway



i-SITE
Visitor Information



Your first stop shop for information and bookings on what to see and do around Manawatu and throughout New Zealand.

- Activities
- Accommodation
- Sightseeing Tours
- Coach Travel/Tours
- Ferries
- Rail Travel
- Flights

i-SITE PALMERSTON NORTH

Ph: +64 6 350 1922 Fax: +64 6 350 1929
The Square, Palmerston North, Manawatu, New Zealand
email: palmerstonnorth@i-SITE.org
www.manawatunz.co.nz



Registration Form
~ Radio Waves ~ Symposium 2007 / NZART AGM 2007
Queen's Birthday Weekend – 1st to 4th June 2007

**** Please Note ONE Registration Form per Person ****

Full Weekend

- A – Amateur Programme – Includes Teas, Lunch, Dinner and Entertainment \$160**
 - B – Alternative Programme – Includes Transport, Teas, Lunch, Dinner and Entertainment \$160**
- If you wish to do the Alternative Programme on Saturday and Amateur on Sunday. *Please Tick Here*

Below is for those who do not want to pay for the whole weekend but choose selected Programmes

Saturday Only

- C – Amateur Programme - Includes Morn / Afternoon Teas and Lunch. No Dinner \$45
- D – NZART AGM 2007 - Doesn't include Morn / Afternoon Teas, Lunch FREE
- E – Alternative Programme - Includes Morn/Afternoon Teas and Lunch. No Dinner \$55
- F – Evening Programme - Includes Dinner and Entertainment \$60

Sunday Only

- G – Amateur Programme - Includes Teas and Lunch. No Dinner \$45
- H – Alternative Programme - Includes Morn/Afternoon Teas and Lunch \$55
- I – Evening Programme - Includes Dinner \$45

**** If paid after 10th May 2007 please add \$10, for late registration.**

Total Payment \$ _____

Please tick the following box(s) with your choices.

A		B		C		D		E	
F		G		H		I			

Participation in Mobile Rally Yes / No *Please Circle one*

First Name

Surname

NZART Membership No **Call-sign**

Handle for Name Tag

Please post your Registration form to: ~ Radio Waves ~ Symposium 2007, Box 1718 Palmerston North

Payment Options – Cheque / Internet Banking *Please cross out one*

For payment via Internet Bank details are.

Bank - ANZ Bank, Palmerston North / Account Name - Manawatu Amateur Radio Society Inc

Account Number - 01-0745-0496805-01

Please use your call sign as reference

Please make Cheques payable to “Radio Waves Symposium” *Please Enclose Cheque with Registration Form*

I will be requiring transport from Palmerston North Airport:

Arriving Flight Number: Time:

Gold coin donation will be gratefully accepted for pick-ups from the Airport.

Any special dietary or disabilities requirements:

.....

Office Use Only	
Name	
Call-sign	
Name Tag	