

HQ Infoline

A Service From New Zealand Association of Radio Transmitters



NZART Headquarters Infoline Issue 228 17-APRIL-2011

NZART Website: http://www.nzart.org.nz/home/

In This Issue

- *Ukrainian Radio Amateurs Lose Many Frequencies and Bands
- *NZART AWARDS
- *From The Business Manager ZL2DL
- *FMTAG Notes For Infoline-228
- *World Amateur Radio Day 2010
- *World Amateur Radio Day 18th April 2011 ZL2WARD
- *Change of IARU Region 3 Secretary
- *DX Code of Conduct Update
- *Wide Bandwith Digital Modes on The Major HF Bands Comments By ZL2TLD
- ====NZART Monitoring Service Coordinator Replies
- ====Further Comment From The NZART Monitoring Service Coordinator
- *Pirate Alert ZK5A Bill
- *IntruderWatch OTHR (Over the Horizon Radar) 80m
- *The IARU Region 3 Newsletter Headlines
- *Jock White Field Day Results Delayed
- *From The VHF-UHF-SHF Contest Manager
- *Kiwi Digital Modes Group
- *TC57A Special Event Station From The Battlefields of Gallipoli
- *New on The Web For April
- *VHF Convention 2011 Provisional Programme Subject To Change
- *NZART Annual Conference 2011
- *Alternative Programme 2011
- *Upcoming Events
- *VHF/UHF/SHF Contest Notes
- *Housekeeping
- *Attachment(s) for Branches: infoline-228.doc

Ukrainian Radio Amateurs Lose Many Frequencies and Bands

Dear friends,

11.03.2011

Ukrainian government has confirmed the new rules for radioamateurs. We lost following frequencies: 10100-10150 kHz, 14250-14350 kHz, 1240-1300MHz, 2300-2450 MHz, 5670-5850 MHz, 10-10,1GHz, 10,15-10,5GHZ, 24,05-24,25GHz, 76-77,5GHz, 78-81GHz, 122,25 -123,0GHz, 134-136GHz, 136-141GHz, 241-248GHz, 248-250GHz.

Video: HamRadio Must Die

http://www.youtube.com/watch?v=7IA93UBDOWk

Best regards, Alexander, uy0ll

Website of ukrainian regulator in communication

http://www.nkrz.gov.ua/uk/activities/news/1299057512/

Website of Ukrainian Amateur Radio League (UARL)

http://uarl.org.ua

NZART AWARDS

The NZART Awards Manager will be away from 9 May-2011 till the end of June-2011.

If you are going to send an application for an award please have it to me before the end of April. You are welcome to send it to my Call Book address. (You will get a quicker response if you do.)Otherwise hold the application until the end of June.

73

Alan Chapman ZL3GX

NZART and IARU Region 3 Awards Manager

From The Business Manager ZL2DL

Debby says...

The following has been received from the *Radio Spectrum Management*, in regard to the 'E', 'X' and 'Y' call signs.

We will soon be releasing "E, X and Y callsigns" to the amateur service. A new edition of PIB 46 permitting the use of the new series will be emailed to all ARX's in June. The effective time and date from which you are permitted to allocate the new series is:

Noon, Wednesday 22 June 2011

Until then, ARX's are not permitted to allocate "E, X and Y callsigns". For the purposes of ensuring allocations are not made in SMART before this, current NZ time can be found at:

http://www.rsm.govt.nz/cms/tools-and-services/contact-us

Please read PIB 46 carefully, particularly the callsign appendix. On 22 June SMART will process ARX allocations on a "first come, first, served" basis.

While the current edition of PIB 46 does not permit the allocation of these series, a small number of "E" callsigns have already been issued in error. Withdrawing these now would cause unnecessary costs, especially in the context of QSL cards etc, so they will be permitted to remain.

Regards

Wayne Wedderspoon | Senior Advisor | Radio Spectrum Management

Break In...Due to the Christchurch earthquake on the 22nd February, Break In has been delayed. I understand from the mailing contractors that the magazine was dispatched on Tuesday 12th April. If you do not receive your copy in the next few days, please contact me at HQ.

I am presently on leave until the 26th April, however leave a message or send me an e-mail and I will rectify the problem if possible.

Talk soon...Debby ZL2DL

FMTAG Notes For Infoline-228

Please click HERE to go to the FMTAG Applications Being Processed

FMTAG at VHF Convention 2011 (23-24 April)

FMTAG has been invited to attend the Forum session of VHF Convention 2011, at Easter, next weekend. Details of VHF Convention can be found elsewhere in this issue of HQ Infoline.

Proposals

1. Branch 74 Wellington VHF has applied to increase the power of, and add the P25 digital mode to, its Colonial Knob 7075 Voice and Data 2-metre repeater, located at Topo50 map reference BP31 513.49 426.17. An Engineering Evaluation, in accordance with the MED's Radio Licence Certification Rules (PIB38), shows that the transmit frequency can remain on 147.075 MHz and the receive frequency can remain on 147.675 MHz, and that there will be no interference to other stations.

Final Recommendations to NZART Council

Published on the NZART website, and in NZART HQ Infoline for the information of, and inviting comments from, NZART members.

At its April 2011 meeting, NZART Council approved the following Final Recommendations.

- Branch 83 Raglan has applied for a 2 metre Voice and Data repeater at Ward Street, Topo50 map reference BD33 007.88 154.66. The transmit frequency will be 145.350 MHz and the receive frequency will be 144.750 MHz. An Engineering Evaluation, in accordance with the MED's Radio Licence Certification Rules (PIB38), shows that there will be no interference to other stations.
- 2. Branch 83 Raglan has applied for a 70 centimetre Voice and Data repeater at Ward Street, Topo50 map reference BD33 007.88 154.66. The transmit frequency will be 439.425 MHz and the receive frequency will be 434.425 MHz. An Engineering Evaluation, in accordance with the MED's Radio Licence Certification Rules (PIB38), shows that there will be no interference to other stations.
- 3. **Branch 74 Wellington VHF** has applied to relocate its 2 metre Bulletin Board to Ngaio Reservoir, Topo50 map reference BQ31 494.92 316.02. An Engineering Evaluation, in accordance with the MED's Radio Licence Certification Rules (PIB38), shows that the transmit frequency can remain on 146.025 MHz and the receive frequency can remain on 146.625 MHz, and that there will be no interference to other stations.
- 4. **Branch 74 Wellington VHF** has applied to relocate its 70 centimetre Bulletin Board to Ngaio Reservoir, Topo50 map reference BQ31 494.92 316.02. An Engineering Evaluation, in accordance with the MED's Radio Licence Certification Rules (PIB38), shows that the

- transmit frequency can remain on 434.875 MHz and the receive frequency can remain on 439.875 MHz, and that there will be no interference to other stations.
- 5. **Branch 74 Wellington VHF** has applied to change the frequency of the 70 centimetre repeater located at Ngaio Reservoir, Topo50 map reference BQ31 494.92 316.02. The transmit frequency will be 434.550 MHz and the receive frequency will be 439.550 MHz. An Engineering Evaluation, in accordance with the MED's Radio Licence Certification Rules (PIB38), shows that there will be no interference to other stations.

Comments and Applications

Please send your comments and suggestions on the above matters and recommendations, and on any other FMTAG matters, by e-mail to: fmtag@nzart.org.nz

Applications for repeaters, beacons, digipeaters, point-to-point links, and so on, should be made on the latest version of FMTAG Form 10. The latest versions of FMTAG Form 10, and the explanatory Form 10A, are available on the NZART web site: http://www.nzart.org.nz/nzart/fmtag/

Completed forms should be sent by e-mail to fmtag@nzart.org.nz

World Amateur Radio Day 2010

Each year on 18 April, radio amateurs celebrate World Amateur Radio Day. On that day in 1925 the International Amateur Radio Union (IARU) was founded. In 2010, the theme of the event is "Amateur Radio: Combining communication experience with modern digital techniques."

See more at:

http://www.iaru.org/worldAmRadioDay.html

World Amateur Radio Day - 18th April 2011 - Special Event Station ZL2WARD

BRANCH 74

Listen for Special Event Station ZL2WARD on the National System on Monday the 18th of April 2011.

Email the details of your contact with ZL2WARD and receive a QSL card, to: ZL2WA@clear.net.nz

Change of IARU Region 3 Secretary

Dear Colleagues

The Directors of IARU Region 3 very much regret to announce the resignation for personal reasons of Seiichi (Jay) Oka JA1TRC as Secretary of IARU Region 3 from 9 March 2011.

Jay became Assistant Secretary to Keigo Komuro JA1KAB then the IARU Region 3 Secretary in September 1998 and on Keigo?s resignation, Secretary in June 2009.

The Directors have formally recorded their acknowledgement of his contribution to amateur radio and IARU Region 3 over so very many years.

As required by clause 41 of its Constitution, the Directors have appointed Katsumi (Ken)

Yamamoto JA1CJP as Secretary of IARU Region 3 on the nomination of JARL.

In nominating Ken as Secretary, JARL President Shozo Hara JA1AN reaffirmed his society?s strong and continuing support of IARU Region 3 and its secretary, at the same time stressing the importance of the regional secretary?s independence from any member society.

Ken holds a Bachelor of Science degree in electronics engineering and worked for KDD, now KDDI, in the satellite communications field for many years.

During that time he worked in many countries, including five years stationed in the United Kingdom working with the International Maritime Satellite Organisation.

He retired from KDDI in 2002.

Ken is currently head of the JARL International Section on a part time basis.

He was first licensed as a radio amateur in 1967 and today continues to have an active interest in DX and contests.

He was a member of the Japanese delegation representing the amateur service to the recently concluded ITU Conference Preparatory Meeting for WRC 2012.

I am very confident that Ken will make a significant contribution to IARU Region 3 and I am delighted that he has accepted this appointment.

Sincerely Michael Owen VK3KI Chairman IARU Region 3

Thanks to Peter ZL2SJ

DX Code of Conduct Update

The DX Code of Conduct can be found here: http://dx-code.org/
Update 2011-04-09



We have received over 12,700 unique visitors to our website. This is a significant accomplishment given that we have now been "in business" for just a year and our budget is zero. Over 80% of the visitors are NOT from the U.S.A. so we are achieving our goal of having this be a truly universal, international movement.

We have added more clubs and more DXpeditions who endorse the Code. Feedback from some DXpeditions suggests that we are making good progress.

We have recently developed a new logo. We should have done this a year ago but getting it

translated into over 30 languages seemed more important at that time. So here it is.

I hope each of you will put this on your website or QRZ.COM page and use it as a link. Ideally, every DXer, particularly the ones who NEED to align their operating practices with the Code, will see it and realize how strong the support is.

To that end, it is incumbent on each of you to carry this message

- 1. to your HF operator friends, particularly DXers,
- 2. to your club, especially if it is a DX club,
- 3. to your national society and encourage them to send information about the Code to their memberships and to post the logo at their society website

Get EVERYONE to put the logo up on the web so we can increase our visibility.

We have a Power Point that is intended for use at Club meetings. It is available with an audio track, or you can narrate it yourself.

Finally, we have a new publication at the website *THE NEW DXER'S HANDBOOK by K7AU* at http://dx-code.org/newdxer.pdf I think you will find in enjoyable, even if you are a pro. Tell your club about it and make sure that new members get a copy. After all, it's an e-book and it's free.

I want to thank the many who have written encouraging words of support to me. It means a lot to the Committee and I know this project means a lot to you too. I always am delighted to get feedback so keep the e-mails coming. Respond to w6si@arrl.net

For the DX Code of Conduct Committee

Randy W6SJ

Thanks to John ZL1GWE

Wide Bandwith Digital Modes on The Major HF Bands - Comments By ZL2TLD

What is it with the wide-bandwidth digital emissions within the traditionally narrow-bandwith portions of the 20, 30 and 40 m band (amongst others)? PSK31, QRSS, and other modes are going on, yet these automated, unattended stations blat away whenever they please.

Others suggest that it is PACTOR-3 - used by mainly marine-mobile hams for internet email access. The content seems to be encrypted, yet the callsigns are unencrypted. Suggestions are that the (encrypted) content is unlikely to fall within the amateur non-commercial, without pecuniary interest categories, being internet email.

I think that this type of communication is outside the defined bounds of digital communications on the amateur bands, as the content is not clear, and the stations do not appear to listen before transmitting, causing interference to other narrowband digital users.

If this type of communication is deemed to be within the Amateur service, I suggest that these types of BBS or Mailbox systems could be appropriately shifted to the very top 10 or 20 kHz of the 15, 20 and 40 m bands, as the very top ends of these band are quite underused. This could be an appropriate use of the upper end of the bands, encouraging use of the whole band, and discouraging commercial or pirate incursion.

Glenn in	IV	lasterton	Ζ	L2T	ĽD
----------	----	-----------	---	-----	----

======

John ZL1GWE Comments:

NZART Monitoring Service Coordinator Replies

There are some experimental work going with DRM transmissions, especially with the Australians on particular transmissions - there are some fixed frequencies..

I will dig out the frequencies and verify what I know.

But they send the identification within the transmission as a picture for instance.

It is legitimate, if it is DRM, sending pictures via Amateur Radio, it just uses a different encoding system.

One can use a software tool called EasyPal (I will check this, verify) I raised this in one of my monthly reports and within Break-in

I actually carried out a dialogue with the Aussies about it.

It would be good if the person could actually provide details on when/date/time and frequencies used, so that we can verify whether they are amateur or commercial.

It goes back to the issue of people reporting what they suspect might be an intruder or not.

When I heard the DRM transmissions for instance on 40M, I immediately investigated and followed up the people involved and they responded, providing me with additional information on what they were doing - they were Radio Amateurs for instance.

If they provide information to us (intruder watchers) we can investigate and verify plus provide an update or report any commercial systems as intruders etc.

With no information, we cannot support them - we need their ears and hands to report what they suspect and we can then go out and verify it.

We need their support. I have also previously mentioned EasyPal for DRM digital transmissions within Break-in too.

I have commercial rated software from http://www.wavecom.ch/, to decode and identify these transmissions, if they give us samples or frequencies, so we can capture them live.

John ZL1GWE

======

Further Comment From The NZART Monitoring Service Coordinator ZL1GWE

I have done some more research in this area:

A recent RSGB article in April 2011 RADCOM on Data Mode Identification:

The level of data modes in use has grown massively with many sub modes and speeds.

Patrick Lindecker, F6CTE, the author of the popular data mode package. Multipsk, has introduced a robust identifier that is sent as a short burst before each data transmission.

The receiving station detects this, with Multipsk automatically setting itself as soon as the identifier is detected.

The signalling burst is known as the Reed Solomon Identifier (RSID) from the robust error correction scheme it uses.

Through the use of Multipsk it is possible to identify the actual signal and data mode.

Yahoo Digital Radio Group: http://groups.yahoo.com/group/digitalradio/

RSID details http://www.w1hkj.com/RSID description.html.

I support Glenn's suggestion, it would be a good idea to use some of the wider modes i.e. SSTV digital version and DRM on the higher end of bands to occupy them.

It would also disrupt many of the non-amateur transmissions or intruders we often find.

John ZL1GWE

John has also supplied a list of Digital Communications Modes and Frequencies. See these at:

http://www.nzart.org.nz/info/map-bp/digital-modes-freqs/

Pirate Alert - ZK5A Bill

ZK5A

7014 kHz, ZK5A Bill, 599 hr still going at 1147z. First spotted 1056z.

Call not listed RSM.

Bill claims to be on Atafu Is (Tokelau), using 70W, GP.

Luke VK3HJ

Any reports appreciated.

John ZL1GWE ms@nzart.org.nz

IntruderWatch - OTHR (Over the Horizon Radar) 80m

We have never come across Over the Horizon Radar on 80 meters. However any thing is feasible.

With my ears, it sounds very similar to the Stereo Radar system, which has been plaguing the 40 meter band in the CW and digital segments.

Any reports, are as always welcomed - samples would be appreciated, if heard.

John ZL1GWE ms@nzart.org.nz

Sample sound file available on NZART Wesite at:

http://www.nzart.org.nz/assets/ms/2011/2011-04-07-1838z-3556Hz-OTHR.mp3

The IARU Region 3 Newsletter Headlines

Issue 21 - January to March 2011, Released April 2011

>>> HEADLINES <<<

- * A Word from the Chairman of IARU Region 3 Michael Owen VK3KI
- * Radio Amateurs in Japan Provide Communications Support
- * JA1CJP New IARU Region 3 Secretary
- * High Speed Telegraphy Contest
- * APG Meeting in Pusan, Korea
- * 2011 8th Region 3 ARDF Championships A reminder
- * Rugby World Cup 2011
- * ITU Telecom World 2011
- * WRC-12 Region 3 Preparations
- * Seanet 2011

* The 2012 International YL Meet MS Word version of this newsletter is available at http://www.iaru-r3.org/news/r3nl-11-04.doc Acrobat PDF version is also available at http://www.iaru-r3.org/news/r3nl-11-04.pdf

Jock White Field Day Results Delayed

The reults for Field day would normally be ready for release by now.

Unfortunately this year four branches have failed to submit logs. This makes my life a lot harder as I have no idea whether or not these stations were valid for branch points. I do not have the time this year to plough through other entries counting contacts made to sort this out.

I have tracked down two of the branches so far and are working on two more.

If you were active as a field station and have not sent in a log, please contact me ASAP at:

zl2tw@nzart.org.nz

Regards Stuart Watchman ZL2TW Jock White Field Day Manager Stuart Watchman

From The VHF-UHF-SHF Contest Manager

A reminder

The time for submitting your Log for the Low Band Contest (50 to 440 MHz) is fast running out. Please send any remaining Logs to:

ZL2WA@clear.net.nz

Our thanks to all those who took part and have already submitted their Logs.

The Next Contest

The next contest is the Hibernation Contest, 50 MHz and up, on Saturday the 11th and Sunday the 12th of June 2011. This is the weekend after NZART Conference. The operating times are: Saturday 1700 to 2300 NZST and Sunday 0700 to 1300 NZST.

All contest logs should be sent, to arrive within two weeks, to:

zl2wa@clear.net.nz

with Contest Log in the subject line.

The Rules are available at:

http://www.vhf.org.nz/VHF-UHF-SHF-ContestRules

Kiwi Digital Modes Group

2011 VK/ZL RTTY SPRINT CONTEST

The third running of the Kiwi Digital Modes Group RTTY contest will take place in April 2011.

For full rules please see:

http://www.nzart.org.nz/activities/contest-rules/rules-kdmg/

TC57A Special Event Station From The Battlefields of Gallipoli

Dear OM,

TCSWAT will be once more activating the TC57A special event station from the battlefields of Gallipoli / Gelibolu. We hope to set up the station between 21-25 April 2011. First activated as TC57ALAY in 2007, the special event-commemorative station for the 57th Regiment Martyrs, is active every year at the end of April as TC57A. Special emphasis is on contacts made with VK / ZL stations. QSI via TCSWAT at POB 73 Karakoy,34421 Istanbul TURKIYE or via bureau. Details and photos from previous activities are on the website http://www.tcswat.org

73 de TA1HZ

New on The Web For April

IARUMS Region 1 report for March 2011

IARU Region 3 Newsletter for JAN-MAR 2011

Stations Licenced For April

VHF Convention 2011 Provisional Programme - Subject To Change

Tawa College, Duncan Street, Tawa

Theme: Technology Frontiers

FRIDAY 22 APRIL 7075 Repeater Talk In

1600 to 1900 Arrival, Registration and informal get together

1900 Pay as you go dinner at a local Restaurant

SATURDAY 23 APRIL

0800 Arrival and Registration

1000 Flea market (A.K.A. Amateur Radio EXPO) opens

1300 EXPO closes. Convention opens

1310 Keynote speaker

- 1345 Technical presentation 1 Technology Industry Leader
- 1425 Technical presentation 2 Project 25 digital voice communication
- 1500 Afternoon tea

Demonstration of the Ipstar communication system as used by LandSAR

- 1520 Mobile Rally and Operating Contest
- 1800 Free
- 1900 Pay as you go dinner at a local Restaurant

SUNDAY 24 APRIL

- 0830 Doors open
- 0900 KiwiSAT project update
- 1000 Morning tea
- 1020 Technical presentation 3 Microwave transceiver design
- 1100 Technical presentation 4 Contesting made easy
- 1140 Technical presentation 5 UHF power amplifier secrets
- 1220 Lunch
- 1300 Construction activity

Please bring soldering iron and small tools such as sidecutters, etc.

- 1340 Technical presentation 6 Weak signal communication
- 1420 Technical presentation 7 High speed data and Digital TV
- 1500 Afternoon tea
- 1520 Forum
- 1720 Free
- 1720 National System Repeater-Trustees-Only Forum. Restricted entry
- 1830 On-site. Informal evening meal (small additional charge) and prize-giving

MONDAY 25 APRIL

Convention Venue closed

Technical visits, subject to availability and weather

Depart for home

MORE INFORMATION:

http://www.vhf.org.nz/convention2011

REGISTRATION FORM:

http://www.wallace.gen.nz/VHF Convention 2011.pdf

APRIL Q-BIT

April Q-Bit will available for collection at the Registration Desk on Friday and Saturday. Uncollected

Q-Bits will be posted after Easter.

NZART Annual Conference 2011

The NZART CONFERENCE PROMOTION STATION ZL2VH will be operating on 80/40m from Monday 2nd May until Tuesday 31st May on most evenings.

The proposed approximate frequencies for general announcements will be 3.715 MHz and 7.080 MHz.

The promotional material broadcast will include the venue details, the provisional programme and the registration desk attendance times.

QSL cards will be issued upon request and will be sent via the QSL Bureau or alternatively may be picked up upon arrival at the venue.

Information will be updated as it is released.

Mark ZL2UFI

======

Alternative Programme 2011

Saturday 4 June 2011

- 9.50 am Board our NCS Bus and travel to Wellington
- 10.30 am Tour of Parliament no cameras or cellphones allowed in here!
- 11.30 am Short tour of Old St Pauls Anglican Church
- 12 noon Back on our bus and we head for Lunch at Te Papa
- 12.30 pm 1.30 pm Free time at Te Papa to visit exhibits
- 1.40 pm Back on Bus to travel to Lambton Quay
- 1.40 pm 2.45 pm Free time shopping along Lambton Quay (including Kirkcaldies)
- 2.45 pm Arrive by foot at Cable Car and travel to Kelburn where we will be picked up by the bus and taken to the Wellington Botanical Gardens
- 3.00 pm Afternoon Tea at the Picnic Cafe after afternoon tea feel free to wander around the gardens and the Summer House
- 4.15 pm Back on the bus to go back to the Retreat
- 5.00 pm Arrive back at Silverstream

Sunday 5 June 2011

- 10.00 am Board our Tranzit Bus and enjoy travelling over the scenic Rimutaka Ranges
- 11.15 am Arrive at Te Kairanga vineyard for tastings
- 12.15 pm Lunch at the Village Cafe Martinborough a yummy platter along with a glass of wine and coffee. Afterwards enjoy a wander around Martinborough Village
- 1.30 pm Wine tastings at Muirlea Rise a lovely family owned vineyard enjoy Shawn's humour and lovely reds.
- 2.30 pm Depart for Greytown where you will have 45 minutes to wander this historic village which

is full of boutique shops and maybe taste some yummy Schoc Chocolate!

3.45 pm - Depart Greytown travelling back over the Rimutakas - stopping on the way back at Stonestead for Devonshire Teas and a visit to the Quiltery.

5.30 pm - Arrive back at Silverstream

Upcoming Events

- 1. Wellington EXPO-11 & VHF Convention 23-April-2011 http://www.nzart.org.nz/activities/events/expo-2011/
- 2. **UPPER HUTT NZART Conference 2011 04/06-June-2011**http://www.nzart.org.nz/activities/events/2010-upper-hutt-conf/

Contest News

VHF/UHF/SHF Contest

VHF++ Hibernation Contest (1st SAT JUN 2nd if Conf) 11/12-JUN-2011

THE VHF CONTEST RULES (http://www.vhf.org.nz/VHF-UHF-SHF-ContestRules)

Please think of the environment before printing this e-mail

Housekeeping

- 1. **Break-In-Closing Date Reminder:** Copy for the MAY/JUNE issue of Break-In-closes on 10-MAY-2011
- Copy for Break-In: Copy is welcome in most electronic formats but word.doc files are
 preferred. Photos and other graphics should be send as separate discrete files (*.jpg
 preferred); not as embedded pix in the body of the text. Please ensure that suitable
 descriptive captions/legends are included with your copy.

All received copy will be acknowledged to confirm receipt.

Thank you for your cooperation.

John Walker ZL3IB Editor.

- 3. Break-In: Early receipt of copy is much appreciated
- 4. Break-In-AREC Column: The close-of-copy date is the 03-MAY-2011 for articles for publication in the AREC COLUMN OF BREAK-IN. Photos, if available, to be on a separate floppy or CD (with captions), posted DIRECTLY TO US. Use Call Book address. All other material can go to e-mail:
 - zl3gr@nzart.org.nz or zl3ov@nzart.org.nz
- 5. The ARRL and WIA Weekly News
- 6. Subscribe TO/FROM Infoline

Next NZART Official Broadcast is on SUNDAY 24-APRIL-2011

Next HQ-Infoline e-mailed on SUNDAY 08-MAY-2011

Headquarters-Infoline is a twice-monthly bulletin of news from NZART Headquarters. News and items of a general or technical interest are also included. These are obtained from various sources. The bulletins are e-mailed directly to Branches, the amateur radio packet Bulletin Board

Service and to others that subscribe through the NZART Website at: http://www.nzart.org.nz/join/e-mail-lists/join-infoline-list/

Regards, Jamie Pye ZL2NN, Editor <u>zl2nn@nzart.org.nz</u>