



HQ Infoline
A Service From
New Zealand Association of
Radio Transmitters



NZART Headquarters Infoline Issue 227
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Message from Break-In Editor

"The Break-In Editor John Walker ZL3IB has advised that he is assuming Break-In will be published as usual although it maybe slightly late."

From The Business Manager ZL2DL

Debby says...

Rugby World Cup 2011: NZART Council has declared the Rugby World Cup to be a Special Event and encourages you to use the ZM prefix. In declaring this a special event it allows hams to use the ZM prefix eg ZM3TNT. In it's April "Business Update", RSM states: ***"To Promote the Rugby World Cup, New Zealand Amateurs are encouraged to use the ZM callsign prefix during September and October 2011"***.

A Map of New Zealand has been placed on the NZART website with game locations linked to contact details of local branches, any planned special events, on air events, and local repeater

frequencies. Branches are to be encouraged to invite visiting hams to attend meetings and any special events. Any proposed changes or additions to this are to be forwarded to myself or the NZART webmaster.

Suggested special event call signs are as listed below

ZL6RWCN Northern Districts

ZL6RWCC Central Districts

ZL6RWCM Midlands Districts

ZL6RWCS Southern Districts

Anyone interested in picking up any these callsigns and being a trustee may contact myself zl3tnt@nzart.org.nz for further details.

Individuals are encouraged to apply for "**RWC**" suffix callsigns and print QSL Cards.

My thanks are extended to Paul Ormandy ZL4PW for his assistance in putting this project together.

Ann Fraser ZL3TNT

Break In April/May issue: Due to the recent earthquake in Christchurch, the April/May issue of Break In will be dispatched from Christchurch on or about the 7th April.

I will be on leave: The office will be closed from Tuesday 13th April until Tuesday 26th April as I will be away. For any urgent enquiries, please contact your local Councillor, or nearest branch.

Talk soon...Debby ZL2DL

FMTAG Notes For Infoline-227

Please click [HERE](#) to go to the FMTAG Applications Being Processed

Proposals

1. **Branch 60 Taupo** has applied for a 2 metre APRS Digipeater at Kururau Road, Topo50 map reference BH33 913938. The transmit and receive frequency will be 144.575 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 81 Waikato VHF** has applied for a 2 metre Voice Repeater at Maungakawa, Topo50 map reference BC34 119.91 565.00. The transmit frequency will be 145.575 MHz and the receive frequency will be 144.975 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 81 Waikato VHF** has applied for a 70 cm Link at Maungakawa, Topo50 map reference BC34 119.91 565.00. The transmit and receive frequency will be 434.350 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.
4. **Branch 81 Waikato VHF** has applied for a 70 cm Link at Te Uku, Topo50 map reference BD32 732.64 067.29. The transmit and receive frequency will be 434.350 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.

Final Recommendations to NZART Council

Published on the NZART website, and in NZART HQ Infoline No.224, for the information of, and inviting comments from, NZART members.

1. **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.

Published on the NZART website, and in NZART HQ Infoline No.225, for the information of, and inviting comments from, NZART members.

1. **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.
2. **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.
3. **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

END

ARISSat-1 [1] to be Switched on in Mid-April

Is everyone ready for ARISSat-1 [1] to be switched on in mid-April to commemorate the 50th anniversary of Yuri Gagarin's first manned space flight? I enjoy listening for the ISS, and my Funcube Dongle [2] has made it really easy.

Anyone working through any educational aspects with a local school? The ARISSat web site has some ideas and some of the Funcube education outreach concepts are also adaptable.

73, Jim ZL2IA

[1] <http://www.arissat1.org/>

[2] <http://www.funcubedongle.com/>

Publicity and Marketing Officer

Message From President Roy ZL2KH

It is with regret that I have to inform you that I have accepted the resignation of David Searle ZL3DWS as Marketing and Publicity Officer.

David would have been ideal for this position - but has made the decision to move with his family to Sydney - as a result of recent seismic activity in Christchurch.

73, Roy ZL2KH

That is rather sad. David was in the job for only a month.

The job is now open again.

See details at:

<http://www.nzart.org.nz/council/jobs/marketing/>

Jamie ZL2NN Editor

Call For a ZL4 Councillor

The incoming council needs the names of members in ZL4 who are interested in being councillors.

Anyone interested should contact either [ZL2KH](#) or [HQ](#)

ZL2KH

E, X and Y Callsign Suffixes to Become Available to NZ Amateurs

Following representations by NZART, Radio Spectrum Management have agreed that Amateurs will, in the future, be permitted to be issued with callsigns whose suffixes start with E (previously AREC) X and Y. The rules for callsigns using these suffixes will be the same as those for existing (A to D and F to W) callsign suffixes - see PIB 46 for details.

This change will:

1. make additional (temporary) single letter single letter callsigns available to contest and similar operators;
2. give a great deal of pleasure to those contesters and DXers who wish to use a more interesting and unique callsign; and
3. allow name-based call sign combinations for those whose names start with the letter E (e.g. Ernie), X (e.g. Xavier) and Y (e.g. Young)

At the same time, RSM will extend the temporary commemorative callsign series from ZL 10 - 99 to ZL 10 – 100.

RSM plan to include these changes in Edition 13 of PIB 46 which they expect to publish in June 2011. The new callsign series will be available for Approved Radio Examiners to allocate from the date of publication.

Don Wallace ZL2TLL NZART Administration Liaison Officer (ALO)

Long Path PSK - an Answer

Another response from the IBMHams group: to the original question about Long Path PSK:

This is called LDE (Long Delayed Echo) and I don't think anyone alive can explain the length of the delays (usually a lot more than 1/7th of a second, the length of time for a signal to go all the way around the world). I have noticed it many times in my 60 years of hamming. I cannot explain the frequency differences, though. It may be that in other than digital modes this effect was not noticeable, although in AM days, it would have caused a significant heterodyne.

John, K2CIB

regards 73 de ZL1GWE John

Invitation to School Radio Clubs to Arrange Lunch-time QSOs[1]

The Public Information Brochure 46, PIB 46 [2] called "Radio operator certificate and callsign rules", a publication from the Radio Spectrum Management Group (RSM), makes provision for Radio Club Stations to train unqualified persons live, on-air, under the direct supervision of a qualified amateur radio operator.

The club's callsign is used with a suffix "XT" (Examination Trainee), and candidates may take an active part in general communication, operate transmitter controls, and engage in calling and signing off procedures.

Reports are encouraged and should be send to: [webmaster@nzart.org.nz?](mailto:webmaster@nzart.org.nz?subject=WEB_ENTRY_SCHOOL_SKEDS)
[subject=WEB_ENTRY_SCHOOL_SKEDS](mailto:webmaster@nzart.org.nz?subject=WEB_ENTRY_SCHOOL_SKEDS)

[1]A detailed note may be found at:

<http://www.nzart.org.nz/news/2011-news/mar-2011-news/#mar-08>

[2] <http://www.rsm.govt.nz/cms/pdf-library/resource-library/publications/pib-46/pib46-edition-011-feb-2011.pdf/view>

Microsoft Scheme Sniffs Out Unused Wireless Spectrum

Volunteered equipment would map white spaces that unlicensed devices could use

By Tim Greene, Network World

March 25, 2011 10:26 AM ET

Microsoft researchers have designed a scheme for measuring whether licensed radio frequencies are actually being used so unlicensed devices can use it, something that may become necessary as demand for wireless applications grows.

The architecture, called SpecNet, would sense and map where spectrum is being used and more particularly where it's not -- so-called white spaces, according to a paper being presented next week at the USENIX Symposium on Networked Systems Design and Implementation in Cambridge, Mass.

Further details can be found at:

<http://www.networkworld.com/news/2011/032511-usenix-microsoft-spectrum.html?hpg1=bn>

New Mars Rover To Feature Morse Code

As the Jet Propulsion Laboratory (JPL <http://marsprogram.jpl.nasa.gov/msl/>) builds the next Mars rover -- this one is named Curiosity -- to deploy to the red planet in the fall of 2011, they're having a little fun with it. Back in 2007 when the Curiosity team was putting together the rover, its wheel cleats had a raised pattern with the letters "JPL," leaving a little stamp of the rover's birthplace everywhere it rolled. "At the time, I asked whether the real rover would have those wheels, and they said, no, they weren't going to get to advertise JPL with each turn of each of the rover's six wheels; the real rover would have some other pattern," said Emily Lakdawalla of The Planetary Society in her blog <http://www.planetary.org/blog/article/00002967/>. Lakdawalla is the organization's Science and Technology Coordinator.

Lakdawalla said that there is nothing special about the shapes of the markers in Opportunity's wheels; they are just square holes through the wheels through which the wheels were bolted to the lander during cruise and landing. "Opportunity is the name of the rover that went to Mars back in 2003. "But Curiosity didn't need holes in its wheels for attaching to any lander -- there isn't one. So the engineers got to make the markers in any shape they wanted to."

But in March 2011, she saw a video <http://www.youtube.com/watch?v=G019Jci0abs> of the rover as it is today: "I had to chuckle at those 'visual odometry markers' [on its tires]. Before I explain why, I'll point out that they really are useful things to have in rover wheels. The repeating pattern of the 'visual odometry markers'...makes it fairly easy for both the rover and human operators to determine visually how far the rover has roved using rear-view imagery." So what pattern did JPL choose to put on Curiosity's wheels? One that Lakdawalla called "very amusing. The holes are in a pattern of short squares and longer rectangles -- almost like dots and dashes.

"Morse code" And what does it spell out in Morse code? **JPL** .- - - .- -. .-..

According to JPL, Curiosity is about the size of a small SUV -- 10 feet long (not including the arm), 9 feet wide and 7 feet tall -- or about the height of a basketball player -- and weighs 2000 pounds. It features a geology lab, rocker-bogie suspension, a rock-vaporizing laser and lots of cameras. Curiosity will search areas of Mars for past or present conditions favorable for life and for conditions capable of preserving a record of life. It is set to launch between November 25-December 18, 2011 from Cape Canaveral, Florida and will arrive on Mars between August 6-20, 2012. The prime mission will last one Mars year, or about 23 Earth months.

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 - 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

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/>

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) (<http://www.vhf.org.nz/VHF-UHF-SHF-ContestRules>)

Contest Calendar 2011

Contest Name	Date(s) 2011
Thelma Souper Memorial	09/10-APR-2011
KDMG RTTY 80 m	16-APR-2011
KDMG RTTY 40 m	23-APR-2011

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Housekeeping

1. **Break-In-Closing Date Reminder:** Copy for the MAY/JUNE issue of Break-In-closes on 10-MAY-2011
2. **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:
zl3qr@nzart.org.nz or zl3ov@nzart.org.nz
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Next NZART Official Broadcast is on SUNDAY 24-APRIL-2011

Next HQ-Infoline e-mailed on SUNDAY 17-APRIL-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 zl2nn@nzart.org.nz