



Auckland Branch 02, NZART

NEWSLETTER

September 2011



BBQ

on Saturday, 17th September 2011
at 1200—1300 hours
at Clubroom

To be followed by:

General Meeting

at 1330 hours

To be followed by:

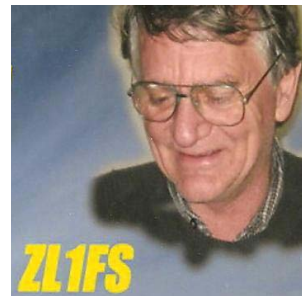
Ian Ashley ZL1AOX

demonstrating and talking about
Software Defined Radio (SDR)

Come early to get a seat because a big turn out is expected

From President Steve, ZL1FS

Montgomery Cup: This heading has been at the top of this column for the last three months. Indeed we now have this cup on our boardroom table. We are grateful to Papakura Branch who engraved our name on it for this year. The history of this cup is interesting. Originally it was awarded to individuals, then from the 60s, thirteen Branches have been successful at one time or another. Our Branch has won it 14 times whereas Papakura and Western Branches have won it 11 and 9 times respectively. In searching for this trophy, I fear that we may have stirred up more interest by our competitors, so we shall have to be on our mettle to retain the cup next year. Any contributed ideas to improve our performance will be welcome.



Next General Meeting: This meeting will commence with a photo-opportunity for our Jock White National Field Day team. Gwynne will accept it on their behalf from the Secretary of Papakura Branch, Ian Ashley ZL1AOX. Our usual BBQ runs from 1200 to 1300 hours, to give us time to clean up before the meeting that starts at 1330. Afterwards, Ian will talk to us about modern developments in amateur radio in which he has a special interest, e.g. Software Defined Radio. Last year he presented and demonstrated Quicksilver in action at the NZART Conference at Alexandra Park. I found it fascinating and I predict you will too.

Videos: Whereas we had originally planned to hold a Fox hunt in August, we got cold feet (literally) and decided to defer this event until summer. However the day turned out to be pleasantly sunny as we partook the usual BBQ on the front lawn. We decided against showing the CDs that I had ordered from NZART, nevertheless, they may still be seen on the next two Saturday mornings, starting at 1100 hours. The titles are: "Hamvention 1987" and "Happy Flyer RDF". We should have used the latter for our fox hunting training day because it graphically explains the problems of ambiguity while fox hunting with VHF equipment and presents a cleverly designed receiver using phase shifted.

Electric Car: Instead of the videos Japie treated us to a demonstration of Mitsubishi's innovative Electric Car. Whereas most members were taken for a drive, I was given the keys and invited to drive it around the block. What makes this car so different to petrol / diesel motors is the fact that electric motors deliver constant torque at all revs. Such is the acceleration that before you know it, you are at the speed limit. The batteries are in series and the inverter produces 300v for the rear wheel drive motor. I wonder if there is a career opening in the motor trade for electricians.

Bookshelves: Wallace and I have completed the task of filing the magazines that date back to 1946. Titles include: Break-in, QST, CQ, 73 and Ham Radio. We have dumped the duplicates. The ugly makeshift shelves on the west wall that once reached to the ceiling have been removed.

Used Equipment Sales: Much of the junk that clutters one corner of the clubroom, is to be put on sale on 8th October at Western Branch and at Suburban Branch (where we were successful last year) TBA. To get first pickings, Members need to call into the clubroom very soon.

Selwyn ZL1BRC: Just as we go to press, I have been told that Selwyn has suffered a minor stroke and has conveyed the message to us that he will be out of action for a while. I am sure that Members will join with me to wish him a full recovery. He lives for the Branch, always first to open up on Saturday mornings, contributing ideas and keeping ZL1AA on the air.

73

Steve, ZL1FS
021- 0226 - 4981



New Zealand will be one of the first countries in the world to host the highly anticipated Mitsubishi Innovative Electric Vehicle (i MiEV) early next year.

Representatives from national and local government and interested organisations will be invited to drive the i MiEV, reinforcing to New Zealanders that a new age in transport technology is upon us.

Mitsubishi Motors New Zealand will work closely with state owned energy generator Meridian Energy, who will assist in evaluating the vehicle for New Zealand conditions, including energy supply and infrastructure.

The i MiEV employs a highly energy efficient electric motor powered by recyclable lithium-ion batteries and produces no emissions, making it one of the most sustainable transportation options available for individuals.

"This is one of the biggest changes in personal transport since the conception of the motor vehicle," said Mitsubishi Motors New Zealand managing director John Leighton. "Now there is a real alternative to the petroleum dependent internal combustion engine.

"New Zealand is globally renowned for protecting its environment. Meridian Energy has invested heavily in a renewable energy infrastructure to reduce our reliance on CO2-producing fossil fuels. The i MiEV aligns perfectly with Meridian Energy's efforts and vision and their involvement in this launch phase will be invaluable," said Mr Leighton.

Meridian Chief Executive Tim Lusk added "As NZ's largest power provider of independently certified carbon neutral electricity, Meridian is committed to assisting New Zealanders with more sustainable energy fuel choices. We look forward to a long term relationship with Mitsubishi Motors."

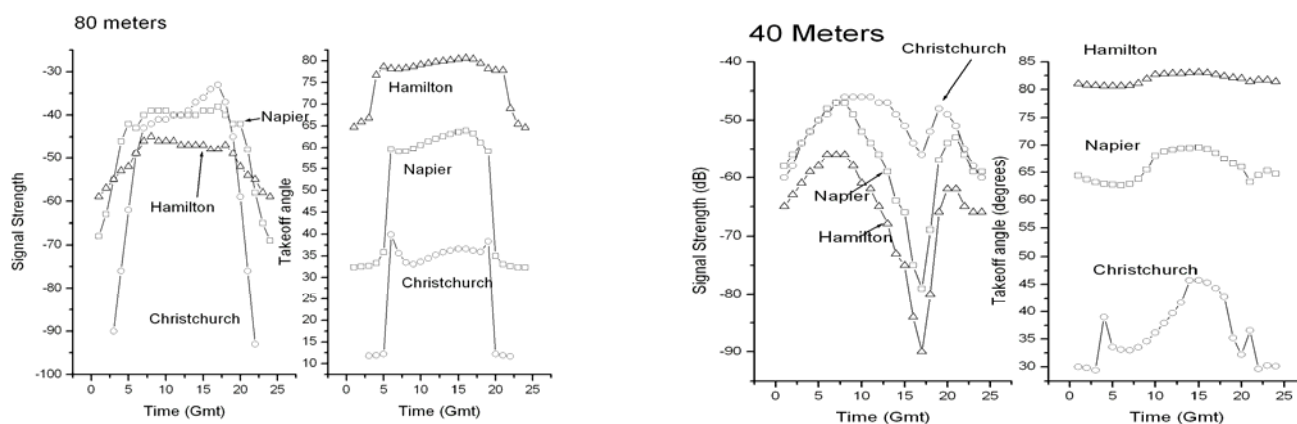
Some thoughts on the development of JCFD antennas at ZL1AA

By David Donnelly, ZL4RR/W1 (Member of Auckland Branch—Ed.)

I was sitting on my deck here in Bethany, Connecticut (USA) reading the ZL1AA newsletter of August 2011 when I came across Selwyn's call to think about ways to improve JWFD performance. "This covered the topics of propagation phenomena, alternative antennas (for operation at dawn) and CW operators." I read this and thought, "By gosh, he is right!" Now, on the east coast, USA, we spend a lot of time figuring out how to improve our signal into Europe to compete against the wall of similar signals from this area. This has given rise to two major areas of inquiry. Firstly an analysis of the radiation angles going to and coming from Europe on the various bands, and secondly an analysis of the ground topography around a specific antenna which determines how the radiation is reflected off the earth and other objects.

The first inquiry gave rise to N6BV's analysis of radiation angles between different earth locations using a computer program, VOACAP (Voice Of America Coverage Analysis Program), that can take into account ionization effects and absorption layers. N6BV computed hundreds of runs over the entire sunspot cycle and over each day of the year and distilled them into "All the right angles", sold as a monograph by the ARRL. Each propagation mode, say between W1 and ZL was expressed as an angle probability and one would desire an antenna with a pattern which covers the possible angles of propagation.

Parts of this approach might be useful for our consideration of JWFD antennas. Since the contest is only held in February and we can readily change antennas from year-to-year, we only need consider one date and one sunspot number. So, here is the first question: what are the radiation angles that we desire on 40m and 80m on February 26th? I ran the prediction from Auckland to three major cities and used a sunspot number of 56, which is the predicted value for next February.



Several interesting results came out. Propagation to each of the different regions were a single skip from the F2 or E layer and and, as expected for a single skip, (potentially) produced similar signal levels. But the takeoff angles were quite different, ranging from 30 to 80 degrees. The signal from Christchurch may be loud, but that is only if you have an antenna which works reasonably well at 30 degrees above the horizon. The following table is a comparison of several antenna configurations over real ground at different takeoff angles as calculated by EZNECv4.0 program from W7EL.

Band	Angle	Dipole@12'	Dipole@30'	Dipole@60'	3 element wire beam @ 30'
80m	80 degrees	0.89dBi	5.83	6.26	
"	60	-0.01	5.11	6.26	
"	33	-3.49	2.2	4.53	
40m	80 degrees	4.13	5.98	-5.76	4.00
"	65-70	3.65	6.02	-2.12	7.18
"	35-45	1.43	4.84	7.04	10.02

A dipole at the perfect height and direction has a maximum gain of about 8dB over an isotropic radiator. (The dipole cardioid pattern gives about 2dB and the reflection off the ground doubles the voltage field. Power, as in Ohm's law, is the voltage squared or 6dB.) For 80 meters, the higher the antenna the better. Getting the antenna up from 12ft to 60ft in the air would improve the signal from Christchurch by 8db which is almost 8-times louder. Perhaps there is something in the Scarborough yard which can get an antenna up this high; else try some kind of balloon support.

Having the 40m antenna fairly low, say 30', seems like a good choice with good coverage at the angles of interest. However, a higher antenna (> 40ft) develops nulls in the pattern which considerably reduce signals of interest from near-in locations. But best of all I suggest that you put up the 3 element wire beam at 30' which would make the signals from Christchurch four times as loud.

Best of luck in the contest this year; congratulations on an excellent score this year, and keep an ear out for the W1 station calling you.

AUCKLAND BRANCH, NZART (inc.)

Minutes of Committee Meeting

Date / Time / Place: Tuesday 6th September 2100; 1940 hours; Clubroom.

Attendees: Steve Miller ZL1FS (Chairman); Wallace Bottomley ZL1WAL (Secretary / Treasurer); Ray Chapman ZL1AJR; Japie Nels ZL1JJN, Ian Robinson ZL2ATD.

Apologies: Gwynne Rowe ZL1AAR.

Sustained ZL1WAL / ZL1FS

Minutes of the previous Committee meeting on 2nd August as published in the newsletter

Taken as read and accepted ZL1WAL / ZL1AJR

Correspondence In:

- Newsletters from neighbouring branches: North Shore, Franklin, VHFG, Papakura, Suburban
- Meadowbank Pony Club asking for more information about the route and sample of wire used.
- Selwyn advising Ross Reddell ZL2VRR-SK.
- Ian Ashley ZL1AOX advising that engraving of Montgomery Cup is done.
- NZ Post advising that applications are closing for their community postal subsidy.
- D Donnelly ZL4RR/W1 with modeling results and suggestions for antennas for the JWFD in 2012.
- Japie: Minutes of AREC meeting held at Papakura Branch.
- Pauline Ross advising that Selwyn ZL1BRC has had a minor stroke and will be out of action for a while.
- Selwyn ZL1BRC analyzing history of JWFD contacts and multipliers.

Correspondence Out:

- To VHFG, Manukau and Western Branches advising a change of email addresses for Newsletter distribution
- To Andrei ZL1TM asking for amendment to our website.
- Watchman asking when Certificates for JWFD will be issued.
- To Vaughan Henderson giving thanks for the Gel cell battery that he obtained for us.

Approved ZL1WAL / ZL1FS

Finance: The Treasurer presented the year to date report.

Received ZL1WAL / ZL1JJN

- **Reimbursement** has been received from NZART for Gel cell batteries purchased for the 2m foxes.

Expenses requiring approval for payment

- | | |
|-----------------------------------|------------------------------------|
| • R Higgins – Lawns in August | \$34.50 (invoice not received yet) |
| • NZART for subscription for 2012 | \$95.00 |
| • NZART for hire of videos | \$10.00 |
| • Wallace for stationery | \$29.99 |

Approved ZL1WAL / ZL1JJN

General business:

- **Selwyn ZL1BRC:** A "Get well" card was signed by the Committee for Wallace to deliver at Selwyn's QTH.
- **Program for General Meetings:**
 - 17th September
 - BBQ and brief General Meeting
 - Presentation of Montgomery Cup. Photograph opportunity for the JWFD 2011 team.
 - Software Defined Radio by Ian Ashley ZL1AOX. He will bring his own projector.
 - Wallace will circulate the updated list of Members to the Committee requesting that the Phone Tree is used to ensure that we have a good turnout of our Members.
 - Steve will invite Suburban Branch members. Wallace is to invite Western Branch members.
 - Wallace is to ask Ian if the presentation may be recorded by video. James is to be consulted.
 - 24th - 27th September Region 3 ARDF Championships are to be held at Maldon near Melbourne.
 - 15th October. James ZL1KNI is authorised to ask his friend to present the "Marine System".
 - 19th November – to be arranged.
- **AGM** will be on Tuesday 13th December at 1930 hours.
 - Notice for it will have to be given before the last Committee meeting.
 - The Committee was asked to consider nominations for jobs for 2012 before the next meeting.
 - It was decided to create a Membership Liaison Officer to perform roles such as Almoner, Contact and Recruiting as defined in a paper by Wallace written in 2009. Steve stated that he is willing.
- **AREC:** Nothing to report
- **Examinations:** Nothing to report
- **Montgomery Cup:** Thanks to Ian Ashley ZL1AOX of Papakura Branch who engraved it, this is now in the clubroom. There will be photo opportunity for the JWFD team at the General Meeting on 17th September.

Minutes of Committee Meeting (Continued)

- **RFI:** Selwyn's observations about radiation coming from the tower, guys and roof were noted. Steve will obtain a second expert opinion. The earth wire at the base of the mast was ripped up by the mower.
- **Tenure.** No change. Scarbros has cleared much of the area nearest to our clubroom. This suggests that the rumour about them vacating the property seems more and more likely by February 2012. Four thick walled long aluminum poles might be procurable from Scarbros. Steve is authorised to negotiate for these.
- **Filing:** Done. Duplicates of magazines have been dumped. The ugly shelves have been removed.
- **Junk:**
 - **TradeMe:** Steve will identify the big ticket items and their known problems. Wallace will place them on TradeMe and handle receipts and despatch.
 - **Western Branch Sale:** Since this has been advanced to Saturday 8th October, little time is left to select what we intend to take. Wallace is to book 2m of table space and draw \$100 as a float. Japie will transport the junk. Other members will be co-opted to assist with selling / haggling for the day.
 - **Suburban Branch Sale:** The date is not know yet, but our representation there is certain.
 - **Phone line:**
 - The Meadowbank Pony Club requires more information. Steve has obtained and supplied a sample of the wire and is taking it to their next Committee on Monday. Brian ZL1UXB says that the wire is not UV proof. Steve considered that Pony Club would object to anything thicker than a wire. Since most of the fence is in shade, no conduit is deemed necessary in the short term (10 years).
 - A loop of 'phone wire should be included along the fence line in anticipation of a slip by the bank.
 - Auckland City's Retail Leasing Department has not given consent while negotiations with Scarbros are still on. The Committee suggests that Plan B for a route along the front of the aggregate bins should be considered also.
 - Next, we shall meet with Scarbros to ask for the trench to be dug. We do not expect to be charged.
 - Brian ZL1UXB is to be advised when the trench will be ready.
- **Maintenance / projects**

	Action by
• 80m antenna.	Steve – The Pony Club will be asked if we can reposition our pole at the east end on their fence line, so as to keep the antenna away from the influence of the metal roof of our clubroom. Leith Jackson will assist him this week.
• Realignment of the beam	Steve – in the summer when the ground is firm for his truck.
• Painting the roof	Steve / Graham – a summer job.
• Painting the walls	Working bee to be scheduled
• Battery replacement	Vaughan Henderson has obtained a 100Ah battery for us and is looking for another. Japie and Steve have to find proper connectors
• Coax measuring,	Ray - In progress. The lengths of each have yet to be measured.
• Printer sharing on LAN	Wallace.
• Alarm and smoke detector	Steve.
• Surveillance	Steve – George will obtain 2 cameras.
• NZART 2m fox hunt gear	Japie is charging the gel cell batteries of foxes 1, 3, 4 and 5. Fox 2 is faulty but its gel cell will be given to Japie next weekend.
• 80m sniffers	Steve has one sniffer for modification. Five have not been found.
• New Sniffers.	To be discussed again.
- **Remotely Operated Station:**
 - The band switching kitset has been built and tested. Next is the subject of available antennas for it. This subject is to be debated further.
 - The operating manual No progress with editing / rewriting it.
- **Planning for JWFD 2012:**
 - Selwyn will not be available to carry out experiments with some alternative antennas that he had intended to do. Fortuitously D Donnelly has modeled various antennas and takeoff angles for JWFD in February 2012. These are not documented here for competitively sensitive reasons.
 - Appointment of a manager. In view of Selwyn's health, and Gwynne being away in January and early February, Wallace is authorised to make an appointment.
 - Selwyn has contributed a discussion paper analyzing the history of contacts made.

Meeting closed 21:00 with supper provided by Ray ZL1AJR and Ian ZL2ATD.

Signed _____ Date _____
(Chairman)

AUCKLAND BRANCH, NZART (inc.)

General Meeting Minutes

On: Saturday, 20th August at 1335 hours

At: Branch clubrooms

Present: Steve ZL1LS (Chairman). Others are recorded in the attendance book.

Apologies: Gwynne ZL1AAR.

Sustained ZL1WAL/ ZL1FS

General Business:

- **Minutes:** The minutes of the previous General meeting held on 16th July 2011 was taken as read (having been published in the July Newsletter).

Accepted ZL1FS / ZL1WAL

- **Correspondence:**
As listed in the August newsletter under the minutes of the Committee meeting held on 2nd August 2011.

- **Finance Report:** The Treasurer circulated the Report dated 2nd August that was presented to the Committee.
Accepted ZL1WAL /ZL1FS

- **Reports:**

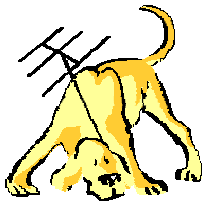
- **Battery:** Vaughan Henderson ZL1ATG delivered a 100 amp hour gel cell battery to us this morning. The Secretary will write to him to express our thanks.
- **Phone line:** The Meadowbank Pony Club is asking for more information about the 'phone wire that we intend to run along their boundary fence.
- **AREC:** Japie attended a meeting at Papakura Branch at which Auckland City's Civil Defense explained and documented their new centralized organization structure. Politics is alive and well. CD is badly informed about the value of Hams in an emergency, but they are looking for volunteers to operate their (unfriendly) equipment. Various data-bases of resources are fragmented. Nor can we update our records on it.
- **Montgomery Cup:** Japie collected this from Papakura Branch who had generously engraved it for us.
- **Woosh modem:** Japie delivered a 5v wart (not switched mode) for it.
- **Examinations:** We have had several student enquiries. Vaughan has advised us that North Shore Branch intend to conduct a weekend course (for up to 8 students) – on the last weekend of October.
- **Shelves:** All magazines have been shelved and duplicates dumped. The bookcase on the west wall is next to be rationalised. (Steve did this after the meeting).
- **Maintenance:** Selwyn has been doing maintenance. Easing the door (to make it easier to lock), cleaning moss off the guttering and soldering the earth bus that runs along the front of the building.

Meeting closed at 1400 NZST.

Instead of showing the videos as intended after this meeting, Japie ZL1JJN demonstrated, and took members for a ride in, a Mitsubishi innovative Electric Vehicle – New Zealand's first all electric car. Already there is a fleet of them in use at the Beehive. The rear wheel drive motor runs on 300v AC from Lithium-Iron batteries at floor level. Acceleration is rocket-like and reaches 100 + kph impressively. The range is 150 km between charges, from either of its receptacles: 15A (taking 6 hours) or 3 phase (taking 30 minutes) at a cost of \$5.00. Purchase price is \$60,000 after Govt. subsidy.

Japie told us about a compressed air driven car that is under development in India. Its claims are almost too good to believe, e.g. release date in August 2011. However, if you Google it, you will see the practical problems that have yet to be overcome.

Members dispersed at 1530 hours.



The Fox Hunting Page

de Wallace, ZL1WAL



Adrian Crowder W4MWC-SK, (but his son Chris now has the call) built the Happy Flyer RDF and I believe he won EVERY fox hunt he entered using it. NO overshoot, and NO confusion from multipath. It was truly amazing.

Here is what was reported about the RDF unit:

- It utilizes a pair of phased verticals to develop a cardioid pattern.
- A square wave (audio frequency) switches the phasing line via PIN diodes to flip the antenna pattern back and forth at that frequency.
- Audio that is tapped after the receiver's detector, is compared for a phase differential as received off of each flip of the antenna pattern.
- This phase difference is displayed on a center-zero ammeter.
- Apparently, when the fox's signal is straight ahead, there's no phase difference.
- When the signal is 90 degrees to either side, phase difference is greatest and the meter is fully deflected.

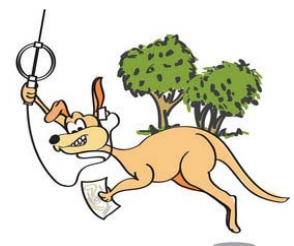
Multipath interference was detected as fast swings from left to right phase indications. These are typically faster than the meter could respond to, so LED's were wired across the meter in opposite polarity. If they started flashing, you knew not to absolutely believe the meter indication. Still, even under the influence of multipath, the meter usually indicated the correct direction if not the right amplitude of deflection.

Adrian's search technique was to go in a wide circle to get an indication of the general direction to the fox. Then he'd head toward the xmtr. He'd keep going till the signal was fully left or right of him, then turn in that direction. Then go straight until he was fully to the side again, and turn again. Of course, paths don't always take one all the way to those extremes, but generally, he'd simply zig-zag his way in, with each zig and zag getting smaller until he arrived at the hidden transmitter.

"Happy Flyer" is the title of a video that may be seen at the Clubroom. It explains the problems with using VHF equipment when seeking an EPRB from a grounded aircraft. (This was before the advent of GPS. Ed).

New Q Signals for Old Timers Only

- QAR:** Is your arthritis acting up today? My arthritis is acting up today.
- QBP:** How many bypasses (or stents) do you have? I have ___ bypasses (or stents).
- QDF:** Does (or did) your ICD (implantable cardioverter-defibrillator) zap you when you key down? My ICD zaps (zapped) me when I key down.
- QDN:** Are you wearing dentures? I am wearing dentures.
- QFO:** Do you fart often? I fart often.
- QGC:** How many grandchildren do you have (or do you have a new grandchild)? I have ___ grand children (or I have a new grandchild).
- QGM:** Are you operating golf cart mobile? I am operating golf cart mobile.
- QID:** What kind of incontinent diapers do you use? I use ___ diapers for incontinence.
- QJR:** How many joint replacements have you had? I have had ___ joint replacements.
- QLO:** Do you know what LOL (or IMHO, ROFL, etc.) stands for?
- QLW:** Do you watch Lawrence Welk reruns? I watch Lawrence Welk reruns.
- QMD:** Who is your geriatric physician? My geriatric physician is ___.
- QOT:** Are you an Old Timer and were you licensed before no-code licensing? I am an Old Timer and I was licensed before no-code licensing.
- QPA:** What is your PSA level (or have you had your PSA level checked)? My PSA level is ___.
- QPG:** Was that QRM or did you just pass gas? No, that was QRM.
- QPJ:** Do you drink prune juice? I drink prune juice.
- QPM:** Did you just pull a muscle? I think I just pulled a muscle.
- QPP:** Do you need to take a bio-break? I need to take a bio-break.
- QRX:** What medications are you taking? I am taking the following medications ___.
- QSS:** Have you gotten your social security check? I have received my social security check.
- QVC:** Do you know how to program your VCR? I can program my VCR.
- QWH:** Do you think Betty White is hot? I think Betty White is hot.
- QSH:** Do you have a sense of humor? I have a sense of humor.



**8TH IARU REGION 3
ARDF CHAMPIONSHIPS**
Maldon Victoria Australia - 23rd to 28th of September 2011

Region 3 ARDF Championships
are to be held at Maldon near Mel-
bourne on 23rd - 28th September
2011 See <http://r3.ardf.org.au>



ZL6RWC Special Event callsign.

NZART Council have issued the special call ZL6RWC to Papakura Radio Club inc. for NZ amateur radio operators use from 1st September through to and including 31st October 2011. John Balsillie, ZL1ALZ will manage the special ZL6RWC callsign. John will run a spread sheet to record operator details and the band / modes used during their allocated time.

If you would like to operate with this special callsign, contact John at gibit@xtra.co.nz and give John the date/dates, bands and modes you would like allocated for your use.

All operators who use this special call will be required to supply an electronic log to John via email. For anyone who does not have email or a way to generate and supply an electronic log, it will be their responsibility to have someone complete this for them as 'paper' logs will not be accepted and John will not be converting any hand written logs received. This will not exclude anyone, just requires them to take an extra step to ensure that their contacts get recorded in the master log. John will normally upload logs daily to the master log.

We suggest that QSL confirmation is via Club Log and LOTW. Printed QSL cards will also be exchanged via the bureau.

Another NZART initiative.

A special Request:

My father was an avid HAM operator in the late 40's and 50's. We lived on Waiheke Island in Auckland until he was drowned in a boating accident in 1957. His call sign was ZL1MG. I remember he had a lot of call cards from other operators and he sent out a few as well. I was wondering if any of your members would happen to have one of his original cards and be willing to send me a copy or be willing to sell it.

David Parkin.

T (home) 09 5253923 E (Home d.parkin@xtra.co.nz)

T (work) 09 3014471 E (work) dave.parkin@gen-i.co.nz

NZART Subs for 2011

Subscriptions for 2012 are now due, and most members who have received their Break In should have received an invoice included behind the front wrapper. Just to clarify, there is **no rebate for early payment this year.**

Doug Gorman Frequency Measuring Contest Monday 12th September 2011 at 2100 NZST

1. Listen to ZL6A on 3895 kHz LSB for instructions on the frequencies that will be used and the procedure to be adopted. Following the voice instruction an unmodulated carrier will be radiated on 3895 kHz for calibration and/or practice. This frequency will be within +/- 1 Hz of 3895 kHz. Measuring this frequency is not part of the contest but it is to encourage participation with simple equipment.

The contest itself will start at 2115 on the first frequency for five minutes, and every five minutes on a new frequency, for a total of five frequencies. All transmissions will be made within 5 kHz of 3895 kHz. Individual transmission start times may be delayed slightly due to equipment setup and adjustment.

Each transmission will be identified in 10 wpm Morse (CW) for about three minutes to allow the frequency to be located and will then remain key-down for the remaining minutes. At the end of the five minute period the transmission will cease. For station competing in the Ultra Category (see below) note that the last 10 seconds or so of carrier will be considered the reference frequency.

2. Read each frequency as accurately as possible. To qualify for an award it is essential to read at least three of the five frequencies. Only one entry will be accepted for each participant.

3. Post your entry to: Doug Gorman Frequency Measuring Contest, NZART, P0 Box 40-525, Upper Hutt.

73 de John ZL4JY

Oceania DX Contest Dates/Times:

PH - 08:00 UTC Saturday 1 October to 08:00 UTC Sunday 2 October 2011

21:00 NZSDT Saturday to 21:00 NZST Sunday

CW - 08:00 UTC Saturday 8 October to 08:00 UTC Sunday 9 October 2011

21:00 NZSDT Saturday to 21:00 NZSDT Sunday

Log deadline for PH and CW logs - 28 days after the end of the CW contest.

2011 Rules

The Oceania DX contest has been around since the mid 1920s and was known previously as the VK/ZL Contest. Activity has increased in recent years due to a huge promotional effort by the joint Australian and New Zealand [Contest Committee](#).

Montgomery Cup

Branches

Year	Individuals	02	03	10	12	16	17	20	21	23	28	33	51	58	63	65	88
1952	ZL1TF																Whakatane
1953	ZL1KG			Franklin													
1954	ZL1KG			Franklin													
1955	ZL1KG			Franklin													
1956	ZL2AJB							Manawatu									
1957	ZL1KG			Franklin													
1958	ZL2AFA							Manawatu									
1959	ZL2CP					Horowhenua											
1960	ZL1KG			Franklin													
1961	ZL1KG			Franklin													
1962		Auckland															
1963	ZL1AIX	Auckland															
1964	ZL1TP																Tauranga
1965	ZL2KY																Upper Hutt
1966										Marton							
1967																	Papakura
1968					Hamilton												
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1970					Hamilton												
1971					Hamilton												
1972		Auckland															
1973																	Hellensville
1974												Rotorua					
1975																	Hellensville
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2011		Auckland															
Count																	
=	13	14	9	6	4	1	1	2	1	1	2	1	1	4	1	11	1