



Auckland Branch
N Z Association of Radio Transmitters Inc.

NEWSLETTER
April 2016



GENERAL MEETING

Clubroom, 400 St. John's Road, Kohimarama
Saturday 16th April, 2016

BBQ at 1200 - 1300 hours

Meeting starts at 1330 hours

Agenda

- Reports from your Committee
- Other business

Afterwards:

- **Travelogue presented by Jeff Low ZL1TOU**

DIRECTORY:

www.qsl.net/ZL1AA

ZL1AA@NZART.org.nz

Contact: 528-1177 (Gwynne)

Secretary: 575-6383 (Wallace)

Box 18-003, Glen Innes, Auckland, 1743

400 St Johns Road, Kohimarama,

Google earth: 36.86973°S; 174.84386°E

ARRL Grid: RF73kr

ASB Bank Account: 12-3047-0076823-00

Nets: Wednesdays 3.645 MHz

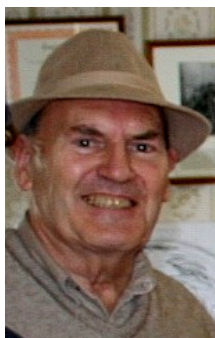
145.775 MHz

Club: Saturdays 145.775 MHz

Skype: ZL1AA_NZ

Remote K3: RCForb > zl1aa

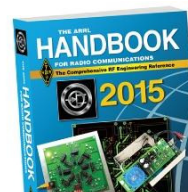
From the Secretary, Wallace,



Editor Wes e-mailed me this morning from Fiji to tell me that he is QRV as 3D2SE (Fiji) in the JIDX CW contest. Within an hour or two of landing, he had his antenna erected and after one hour of operating CW on 15 metres, he had 100 entries in the log. That is slick operating. Wes operates ABL (all bands, low power). We wish Wes “good luck”, for he has a title to defend and I expect that there is room on his wall for another plaque.

Wearing my **Treasurer’s hat** for a moment, I thank Members for making direct debits to our ASB bank account with their subscription payments. This makes my life much easier.

At the Committee meeting on 1st April, the **raffle** was drawn and the prize, comprising the 2015 edition of the ARRL Handbook, was won by Ray Chapman, ZL1AJR. He was delighted to receive this magnificent hard back version of 1320 pages.



There are still a few Members who missed the cut-off date for entitlement to be in the draw. Gwynne has purchased another prize, the latest **ARRL Antenna book** that is updated every five years. We shall be raffling it later in the year. Meanwhile, late payers and those in arrears, should take note of our Bank Account details on the front page of this newsletter.

After various amendments have been made to the **Constitution** over the years (since 1978) Mrs Carolyn Nicoll has retyped it for us. A copy will be e-mailed / sent to each Member as Subs are paid. We did consider doing the same with the Membership list but we ran into a road block when discovering in the Call book, that some people prefer that their details are withheld. Accordingly we have added another question to this effect to our Membership renewal form (see home page on www.qsl.net/zl1aa). Tick the box to opt out of having your details publicized.

Jeff Low ZL1TOU and Lyndon Thompson ZL3DWF are new to our Committee. Jeff has recently turned from touring South America. He is ready to make a power-point presentation at our next General Meeting this coming Saturday—16th April starting at 1330. We traditionally meet in the morning to partake of a BBQ at noon. Then after a General Meeting to report on matters that your Committee is dealing with, we sit back to listen to our guest speaker.

Nally fold-over crank-up tower: Nearly all of the components for the 3-band quad antenna have been located and safely “hidden” under the club-room. It has 100 metres of wire in it; it is enormous as Gwynne discovered when he laid it out on the grassed area. Although he donated it, we are presuming on him to take the lead on this project to erect it. He will need helpers. The Remotely controlled K3 station will take on new significance as three more bands may be selected.



As my final word, allow me to implore each reader of this newsletter to contribute at least one page of material for publication, to Wes w3SE@dxer.com. This will make his busy life easier, and it will make this newsletter relevant to your individual fields of interest.

Auckland Branch 02, NZART (Inc.)

Minutes of Committee Meeting

Date / Time / Place: Tuesday 1st March at 1930 hours / Clubroom

Attendees: Wes ZL3TE presiding, Gwynne ZL1AAR, Jeff ZL1TOU; Logan ZL1LMN; Japie ZL1JJN

Apologies: Wallace ZL1WAL, George ZL1TUJ

Sustained ZL3TE/ ZL1AAR

Minutes: of the Committee meeting on Tuesday 1st December 2015

Approved ZL1AJR / ZL1TOU

Minutes: of the previous Committee meeting on Tuesday 2nd February 2016

Approved ZL1AJR / ZL1JJN

Correspondence In:

Newsletters: Franklin, North Shore (by post); Hibiscus Coast; Auck VHF Group (by e-mail)
Branch reflector of Newsletters from North Canterbury, Hasting / Napier, Rotorua, Hamilton, Gippsland.
Auckland Council – Statement for February 2016
Selwyn advising he is unable to open the clubroom on Saturday mornings.
Selwyn ZL1BRC complaining about reports about Remotely controlled station.

Correspondence Out:

Compass Communications – Full and final settlement
Selwyn – reminding him that the Remote station server announces that it is “experimental”. Meanwhile Members should be patient.
North Shore Branch – ARDF Inter-branch Competition asking for them to convene it.

Received but not discussed

Finance:

Finance Report

Received and approved ZL3TE / ZL1AAR

Expenses

Keys	\$84	Wallace
Paper	\$12	Wallace
Catering for JWFD	\$100	Mrs Nicoll

Approved ZL3TE / AL1AJR

General Business:

Reports: (This heading includes a repository of all matters that have not progressed since their introduction)

Previous General Meeting: Comments?

JWFD:

Gwynne is doing summaries of logs, most of which are electronic.
Lessons learned:
Rain caused static. Therefore a bleed resistor is needed across the antenna terminals.
The K3X does not have sufficient shielding for field day conditions
More help is needed in the week before the contest to erect the loop antennas.
Pics for Newsletter are to be sent to Wes. Some will be sent to Andrei for Web site Misc photos page.

AREC: Nothing to report

Visitors: Aatto Hakkinen OH6PN - Wallace missed him because his home phone was out of action for that week.

Exams: None

QSL cards: Nothing to report

Nets: Nothing to report

Newsletter: Deadline for copy 8th March

Maintenance

Meter reading recorded: 47929.5
Power outlets on South and East side of building: Steve is laid up (with his foot up) temporarily.
Level floor – to be scheduled.

Computers / network / phone line

Our connection to the Vodafone naked broadband is working.
PC at Secretary's corner desk – needs to be replaced.

Remotely controlled station:

Wallace ZL1WAL had reported 50w QSO on 40m ZL1FC at Kaitia and received RST 59+40db with perfect audio.
Overseas members can only be listeners.
Policy about usage is being redefined
Guidelines to operate Station will be circulated when Members are invited to log in and register.

Auckland Branch 02, NZART (Inc.)

Minutes of Committee Meeting

Date / Time / Place: Tuesday 5th April at 1930 hours / Clubroom

Attendees: Wes ZL3TE (presiding), Gwynne, ZL1AAR, Ray ZL1AJR, Logan ZL1LMN, Japie ZL1JJN, Lyndon ZL3DWF; Jeff ZL1TOU, and Mrs Nicoll

Apologies: Wallace ZL1WAL, George ZL1TUJ (pro-forma)

Sustained ZL1AAR/ ZL3TE

Minutes: of the previous Committee meeting on Tuesday 1st March 2016

Arising:

Ray ZL1AJR was at the meeting;

Typo error in "ZL1AJR"

Accepted ZL1TOU / ZL1JJN

Correspondence In:

Newsletters: Franklin, North Shore (by post); Hibiscus Coast; Auck VHF Group (by e-mail)

Branch reflector of Newsletters from North Canterbury, Hastings / Napier, Rotorua, Hamilton, Gippsland.

Auckland Council – Statement for March.

Correspondence Out:

Various Members: acknowledging subs paid by Direct Debit.

Received and approved ZL1AJR / ZL1LMN

Finance:

Finance Report

Received ZL3DWF / ZL1AJR

Te Puke junk sale proceeds = \$125.50 – \$20 (table expense) = \$105.50

Wes' efforts were acknowledged with acclamation / ZL1JJN / ZL1AAR

Subs were received from 27 Members in time for the raffle. 57 Hams are attached (by NZART) to our Branch.

Approval required for:

Donations to Auckland VHF Group \$100

Donation to Musick Point Radio Group \$150

Electric jug \$129

Post Box \$175

Approved ZL3DWF / ZL1AAR

General Business:

Raffle: ARRL Handbook, hard-back 2015 edition, was drawn by Mrs Nicholl and won by Ray Chapman ZL1AAJR.

Reports:

Previous General Meeting: No quorum (requiring that two Officers should be present).

JWFD:

Logs have been submitted

Result are due soon

Wes has been given photos for Newsletter and Misc photos page for our Web site www.qsl.net/zl1aa

AREC: Whangarei Car Rally on 29th April – 1st May and will be attended by Japie and Logan who assist.

Visitors: None

Exams: None

QSL cards: None received

Nets: About six people are checking in. No changes to day and time are necessary.

Wed VHF145.775 MHz at 1930

Wed HF 3.645 MHz at 2000

Newsletter: No issue last month with apologies from the Editor.

Secretarial Matters:

Members will be E-mailed a copy of the Constitution as their subs are paid this year.

Public Liability policy for \$2 million cover – no progress yet.

Health & Safety – New regulations are in force now.

Steve has a portion of the manual under review to meet requirements.

Assembly notice board, First-aid, Fire extinguisher to be checked, etc.

Meeting with ACP to resolve ownership of building – not yet scheduled by Wallace

Computers / network / phone line

PC at Secretary's corner desk – it will be replaced by Logan next weekend.

Maintenance

Meter reading: 48041.7

Steps; Project is being organized by Steve. These need to be painted. Health and Safety could consider these to be dangerous.

Power outlets on South and East side of building: Materials have been purchased and need to be fitted.

Steve has been incapacitated (with his foot up) temporarily.

Level floor (to prevent mobile shelving from rolling eastward). Wallace is to arrange helpers. Steve's jack is available. Japie and Gwynne offered to help.

Minutes of Committee Meeting 1st March 2016 (Continued)

Antennas:

Tower: Assemble rotator and quad antenna. The wire has been found. Rotator has to be found
North end pole for 40m dipole has rotted at base and is presently being propped up.
40m loop has been left on lawn temporarily. ATEED approved our use of their water-filled supports.

Health & Safety – Steve has portion of the manual under review. Legislation is coming soon.

Future Events:

5th March - Te Puke junk sale. Wes will load up on Friday
19th March - General meeting necessary? Wes is trying to get Warren ZL2AJ to talk to us about SOTA.
Suggestions for entertainers / speakers for general meetings should be made to Wes.

Constitution:

Issue Constitution to Members as subs are paid.

Approved ZL3TE / ZL1TOU

Membership categories to be discussed at next meeting.

The meeting concluded at 2100 hours with supper provided by Ray and Mrs Nicholls.

Minutes of Committee Meeting – 5th April 2016 (Continued)

Remotely controlled station

Wes as Trustee, will form a Sub-Committee to review policy to include:
Membership categories
Policy about usage
Guidelines to operate.

Meanwhile its use is for Club members only but they need to be registered to access the Server. Call Secretary.
Anyone else accessing the Server will be notified that the Station is in "experimental mode".

Antennas:

40 m northern pole needs to be fixed before it falls over. Soren ZL1SKL has offered to bring a post hole borer.
Gwynne and Japie will assist.

Tower: The quad antenna is ready to be assembled by Gwynne, but it needs the rotator to be installed first.

Control cable is authorized to be purchased.

There seems to be sufficient coax cable.

It is suggested that another conduit should be laid between the tower and the clubroom. Meanwhile a pole could be guyed to support the cables overhead.

Future Events:

16th April Wes is still trying to get Warren Harris ZL2AJ to talk to us about SOTA

We wish to do a SOTA activity by activating 3 summits leaving Clubroom at 12:30

Jeff ZL1TOU has offered to do a power point presentation of his recent visit to Brazil.

Wes requests suggestions from Members about entertainers / speakers for general meetings for 2016

e.g. Prof. Peter Driessen ZL1XA (as per his address to North Shore branch in February on SDR, skimmers, logging, etc.).

Other business: None.

The meeting concluded at 2052 hours with supper provided by Ray ZL1AJR and Mrs Nicoll.

Extract from **BREAK-IN** March 1976 [This is a repeat Ed.]

Auckland Branch N.Z.A.R.T.

Reporter, Doug Whillans, ZL1AFW

N.Z.A.R.T. and the Auckland Branch thereof were born together on the evening of 16th August 1926. ... The Auckland members present were ... The Chairman was Norm Edwards, ZL1AA.

... finally in 1971 the Branch set up permanent home in the Civil Defence Headquarters area in Kohimarama.

The circumstances are quite interesting. Sir Ronald Algie owned a hall on his property which was, for many years, used by groups belonging to associations in which Sir Ronald was interested. The Northridge Group, which had taken over the property, generously offered to make the hall available to Auckland Branch and to assist in its removal, with the costs to be borne by the Branch.

So we had the hall, but where to put it was the next extremely urgent problem as the bulldozers were poised to go into action. Finally George Michaels, the area officer for the Civil Defence Organisation suggested the we install the hall as part of the complex at the Civil Defence Training Centre with reciprocal rights of use. As finally arranged we were able to have absolute use for our own nights and the costs of removal were arranged between the Auckland City Council and the Civil Defence Organisation.

We now had a site for ourselves with the Club funds intact and the move has certainly changed the running of the Club ...

We hold as Club call, ZL1AA. Not only is it the first call in the list, but Norman Edwards was such a pioneer in many areas of radio amateur work it is a privilege to use the call. ZL1AA was used by the Conference Committee as the call for Golden Jubilee Conference 1976, thus rounding out a full fifty years of use since its first holder chaired the inaugural meeting of radio amateurs in New Zealand which had as its purpose the formation of an Association and also a branch of the association.



Something Technical! The “S” meter. (lifted from the web)

An "S" meter is fitted to Ham Transceivers and Communication Receivers to allow the user to determine the signal strength of the transmission being heard. But what does this all mean?

As a guide; S9 on the S meter scale is reckoned to be equal to a potential of 50 μV signal voltage at the receivers aerial input. Also each "S" point is said to represent a 6 db change (up or down). A 6 db change coincidentally represents a doubling (or halving) of a voltage before/after the aforesaid change. Recalling the well-known textbook formula: The relationship of “S” meter reading to input signal voltage obeys the law $\mu\text{V} = k 2^s$ [k is a constant (derivation shown soon!)] That is; because of the signal voltage doubling for each increase in "S" point the signal voltage is directly proportional to the base 2 raised to an exponent being the "S" number.

To bring this into some perspective: If 50 μV represents S9, then substituting in the above formula $50 = k \times 2^9$; therefore $k = 50/512$

To obtain (say) the signal voltage corresponding to S4 we can substitute in the above formula

$$\begin{aligned}\mu\text{V} &= k 2^s \\ &= 50/512 \times 2^4 \\ &= 50/32 \\ &= 1.5625 \mu\text{V}\end{aligned}$$

Constructing a table of values based on the above we get:

$$\begin{aligned}\text{db} &= 20 \log v_2/v_1 \text{ substituting values} \\ &= 20 \log 2 \\ &= 20 \times 0.3010 \\ &= 6\text{db}\end{aligned}$$

“S” reading Voltage at RX input:

- 9- 50 μV ,
- 8- 25 μV ,
- 7- 12.5 μV .
- 6- 6.25 μV ,
- 5- 3.125 μV ,
- 4- 1.5625 μV ,
- 3- 0.781 μV ,
- 2- 0.39 μV ,
- 1- 0.195 μV

Therefore: as you can see, each change in "S" point represents a doubling (or halving) of its immediate predecessor, all referenced to S9 being 50 μV

Some archaic texts suggest S9 as being 100 μV , but the principle is still the same.



Icom's new IC-7300 in-depth. A detailed look at Icom's innovative IC-7300 Transceiver. Complete review of most features and operation plus your questions answered. Recorded live at AmateurLogic Studios 17th March, 2016. [https:// www.youtube.com/watch?feature=player_embedded&v=yhCd6Z-tSTE](https://www.youtube.com/watch?feature=player_embedded&v=yhCd6Z-tSTE)

**Radio Electronics Group Inc
Branch 89**

Annual Equipment Sale.

Saturday 21st May 2016

**Glenview Club
211 Peacocks Road Hamilton.**

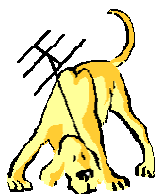
**Vendors from 8.30am
Sale 10.am.**

\$20 per table or \$25 0n the day.

**Plenty of good food.
Motor Home parking (\$10 per night).**

**contact: Radio Electronics Group Inc
c/- G. Thomas ZL1DY
1 Beerescourt Road
Hamilton 3200**

**Ph: (07)8492223
e-mail niagra@xtra.co.nz**



The Fox hunting page

By Wallace, ZL1WAL



USA's national championships of Amateur Radio Direction Finding has returned to the Lone Star state. The Sixteenth USA ARDF Championships is taking place this weekend (9 -10 April), sponsored by the Texas ARDF group and the Austin Orienteering Club (AOC). They will be selecting reps to join the USA team to participate in the World ARDF Championships later this year in Bulgaria



The 2016 World ARDF Championship will be held in September at Albena, a major Black Sea resort in the north west of Bulgaria. It seems that Health and Safety has come to stay; for I noticed when reading the conditions of entry to this event, that participating countries are required to sign a "Child protection Policy document [Ed.].

Competitors may enter in one of the age groups: M15, M19, M21, M35, M50, M60, M70 and Women in these same age groups. Four events are held: 3.5 MHz classic, 144 MHz classic, 3.5 MHz Sprint and 3.5 MHz O'ring. See below for pictures of the terrain, though the contour map suggests otherwise at its extremities.

