

# The Cat's Whisker!

The Wanganui Amateur Radio Society Inc.,  
Branch 48 NZART

[www.zl2ja.org.nz](http://www.zl2ja.org.nz)



Club Officials 2014-2015		
Position	Name	Callsign
Patron:	Strath Davis	ZL2AAJ
President:	Jason Wallace	ZL2FT
Vice President:	Jeff Howe	ZL2THO
Secretary:	John Love	ZL2JEL
Treasurer:	Jeff Howe	ZL2THO
Committee:	Stephen Swartz	ZL2SWZ
	Ivan Horn	ZL2ATU
	Mike Newman	ZL1BNB
	Colin Wilson	ZL2WM
<b>Contact Person</b>	<b>Jason Wallace</b>	<b>ZL2FT</b>
Checker:	Leo Boyle	ZL2BGE
Newsletter Editor:	Colin Wilson	ZL2WM
Awards Custodian:	Ivan Horn	ZL2ATU
Webmaster:	Colin Wilson	ZL2WM



**The Next General Monthly Meeting will be held:**

**Monday 2<sup>nd</sup> February, 2015**

**at the Hunters and Stalkers Hall, Peat St.**

**At 7:30pm**

**Business: Jock White Memorial Field Day Contest 2015.**

**All Very Welcome!**

*“Just the Cat's Whiskers”*

## President's Ramble January 2015

First of all I would like to congratulate Colin Wilson (ZL2WM) for offering to do the club's newsletter, and if club members can help Colin with articles of interest that would be great.

I also would like to welcome some new members to the club, first is Terry Crothers who has held the call of VK8KTC and recently returned to Wanganui.

Our second new member is Jason Priston who hopefully will have a call sign in the near future.

I hope everyone has had a good Christmas, New Years break and has enjoyed company of family, and maybe had time to do some maintenance on the radio shack and antennas. Maybe Santa brought you a new piece of equipment for the shack.

The club now has a new Panasonic 40" LED TV which we can play videos of interest from sites like you tube, if you have seen anything of interest on you tube please let us know and we could show the video clip at a club meeting.

There are some great instructional videos on radio subjects to be found on you tube.

One idea if members wish is to do an introduction video showing your shack, antennas and what interests you in this interesting hobby.

Another thing to think about before the next meeting is about the Jock White Memorial Field Day on the last weekend of February, volunteer to do some shifts behind the Mic and test out your operating skills on the HF bands.

I look forward to seeing you all at the next meeting on the 1<sup>st</sup> Monday of February (2<sup>nd</sup> Feb), starting at 7:30pm.

Regards and 73 from Jason ZL2FT.



Image Credit: ZL2AXN

## From the Newsletter Editor

Hello and welcome to my very first Club Newsletter, and I must say, filling Barry's shoes will be a hard act to follow, if not impossible!

So I'm now on the lookout for articles to fill these here pages. Unlike the Web-page, that I also maintain, the newsletter will need (mostly) fresh content in each and every issue.

So if you've got anything, or can point me at some juicy Ham related web-page(s), then please drop me a line at [zl2wm@zl2ja.org.nz](mailto:zl2wm@zl2ja.org.nz).

Or on the telling-bone 344 2414.

Ok, while I have your attention, I'll put my Webmaster hat on, and remind members that Email [alias](mailto:alias) are still available on the "zl2ja.org.nz", and "zl2ja.org" domains.

Eg "zl2wm@zl2ja.org.nz" which will forward to your regular ISP, Gmail, Yahoo, or whatever email account.



## Jock White Memorial Field Day Contest 2015

**Saturday/Sunday February 28 & March 1 2015**

This annual contest is named to honour Jock White ZL2GX, NZART Contest and Awards Manager for over 40 years, for the service that he gave to NZART during that time. This contest is primarily to test Branch organisation and weld a team of workers together. Your team can aim to be as competitive or as social as it likes, or all points in between. There is work for all: spouses/partners, prospective members etc.

<http://www.nzart.org.nz/activities/contest-rules/rules-jock-white-field-day/>



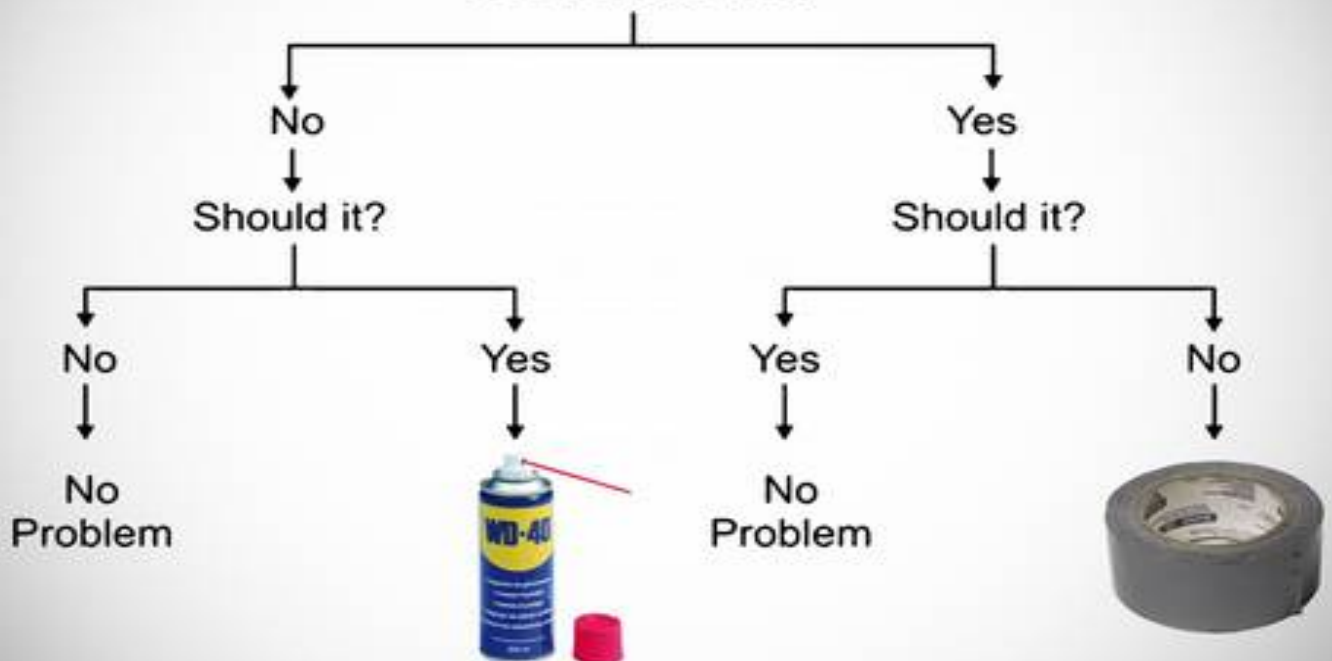
*Image Credit; ZL2AXN*

**CONGRATULATIONS!**

**Congratulations to Nathen Hawtree on the callsign of ZL2NH**

## Engineering Flowchart

DOES IT MOVE?





## Sunday 23rd November 2014 Outing (From John ZL2JEL)

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*"To you missed a once in a life time event."*

On behalf of the Wanganui Amateur Radio Club I would like to thank the following members, wives and families for their attendance at Sunday's outing. I can only say that it was a complete success and for those that were unable to attend, you missed a once in a life time event.

I would personally like to thank Graham for his arranging this day.

Graham & Val Hawtree  
John & Christine Wakely  
Ivan & Pat Horne  
Stephen Swartz  
Leo Boyle  
Colin Wilson  
Mike Newman  
Nathan Hawtree  
Chris Kerr  
Terry Crothers  
Jeff Howe  
Marie Love  
Vanessa Bourne  
Danielle Bourne  
Alyssa Bourne

*Regards John  
Club Secretary  
Branch 48*



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*Members gather around the Carillon in Queen's Park*

*2014\_DSCF2058*



*Cooks Gardens Bell Tower Chime Mechanism*

*2014\_DSCF2029*



*Durie Hill Elevator Mechanism*

2014\_DSCF2094



*Durie Hill Elevator Mercury Arc Rectifier*

2014\_DSCF2089





Close up of part of the Cooks Gardens Bell Tower Chime Mechanism

2014\_DSCF2031



Chris, ZL2LO taking a few snap shots  
2014\_DSCF2017



Cooks Gardens Bell Tower  
2014\_DSCF2012

## Te Rapa Conference and Function Centre, Venue for NZART AGM and Conference 2015 in Hamilton.

NZART Annual General Meeting and Conference 2015 is being held in Hamilton on Queen's Birthday Weekend 29, 30 & 31 May 2015, at the Te Rapa Conference and Function Centre, Te Rapa Racecourse, Ken Browne Drive, Te Rapa, Hamilton.

Further details will be available at - [www.z1lux.org.nz](http://www.z1lux.org.nz)

As accommodation is in great demand over Queen's Birthday Weekend, it would pay to look into making a booking NOW!



A list of Hotel/Motel accommodation can be found here - [http://www.z1lux.org.nz/conference\\_accommodation.html](http://www.z1lux.org.nz/conference_accommodation.html)

## AREC Today Website

AREC has a public facing website AREC Today with general interest stories designed to inform non-amateurs about AREC and what we do. It's also designed to highlight interesting material for key stakeholders, such as the AREC SLA partners including the Rescue Coordination Centre, Police, and NZ SAR.

As well as the catchy <http://arec.today> web address the site also can be reached at the traditional <http://www.arec.org.nz> address arranged by AREC National Secretary Doug Cooke.

AREC has also just started a resource website AREC info to hold technical information relating to AREC. This is at <http://arec.info> and at that site there is some introductory information on the new AREC digital network project. Recently I visited Hamilton to brief the section leader, his deputies, and the local CD Comms Officer on the network and to deliver their repeater. A copy of the PowerPoint presentation I made in Hamilton is attached as a PDF.

I would appreciate any comments or suggestions on these sites. Any interesting stories particularly those with good photographs are welcomed and the best bit is you don't have to write them as I have an experienced journalist on hand to interview you!

Finally please remember to use <http://arec.gen.nz> to log activity reports. These are essential to annual reports submitted to NZSAR.

Best wishes.

73, John

Acting Editor AREC Today

AREC Area Manager Central

Email: [jy@4rf.com](mailto:jy@4rf.com)



**GPS timing is incredibly precise; of all the problems in engineering, it's one of the only ones in which engineers have been forced to include both special *and* general relativity in their calculations.**



## Ofcom Crackdown on Polluting Power Line Devices ?



The Telegraph reports Ofcom proposes that people with 'power line' networking [PLT] equipment could face prosecution if it interferes with radio signals

The newspaper says GCHQ has become increasingly concerned in recent years about "power line" networking equipment. This allows people to use the mains wiring in their homes to transmit data, as an alternative to a Wi-Fi network, and has been distributed to BT and TalkTalk customers to connect their television set-top boxes to broadband.

Ofcom, the communications watchdog, published a consultation on Monday on new regulations that would allow its officials to issue enforcement notices to shut down such networks when the electromagnetic radiation they can emit interferes with radio signals. Those who fail to comply will face criminal prosecution.

An Ofcom spokesperson said: "Ofcom's proposals are designed to update existing regulations to take account of developments in technology. They are not in response to requests from any organisation."

Read the full article at

<http://www.telegraph.co.uk/finance/newsbysector/mediatechnologyandtelecoms/telecoms/11325914/You-could-be-prosecuted-over-your-broadband-thanks-to-GCHQ.html>

Source: [southgatearc.org/news/2015/january/ofcom\\_crackdown\\_on\\_polluting\\_power\\_line\\_devices.htm](http://southgatearc.org/news/2015/january/ofcom_crackdown_on_polluting_power_line_devices.htm)

Ofcom say *"The Proposed Regulations will regulate the intensity of the electromagnetic energy at which electrical and electronic apparatus operates such that it does not cause undue interference to wireless telegraphy apparatus."*

*"Undue Interference"* is referenced on page 68 of the Wireless Telegraphy Act 2006 PDF at

[http://www.legislation.gov.uk/ukpga/2006/36/pdfs/ukpga\\_20060036\\_en.pdf](http://www.legislation.gov.uk/ukpga/2006/36/pdfs/ukpga_20060036_en.pdf)

*(4) Interference with any wireless telegraphy is not to be regarded as undue for the purposes of this Act unless it is also harmful.*

*(5) For the purposes of this Act interference is harmful if—*

*(a) it creates dangers, or risks of danger, in relation to the functioning of*

*any service provided by means of wireless telegraphy for the purposes*

*of navigation or otherwise for safety purposes; or*

*(b) it degrades, obstructs or repeatedly interrupts anything which is being broadcast or otherwise transmitted—*

*(i) by means of wireless telegraphy; and*

*(ii) in accordance with a wireless telegraphy licence, regulations under section 8(3) or a grant of recognised spectrum access or otherwise lawfully.*

## Ofcom Error on English Callsigns (Southgate News)

The regulator Ofcom has been sending written details of the proposed amateur radio licence but recipients in England have been surprised to see their callsign started with GE or ME

One amateur who rang Ofcom was informed that the staff had been told to treat all English licences as having a Regional Secondary Locator (RSL) of "E".

The RSGB has issued a statement which says:

*As you will be aware, Ofcom is required to give all licensed radio amateurs notice that it intends to vary licences in line with its decisions following last year's consultation. That process has now begun and letters are being sent out.*

*It has been brought to the RSGB's attention that some amateurs have received a letter suggesting that their callsign now includes the RSL "E". Ofcom have confirmed that this is an error and not a change in policy. Further details will be published on the Ofcom website.*

Source: [southgatearc.org/news/2015/january/ofcom\\_error\\_on\\_english\\_callsigns.htm](http://southgatearc.org/news/2015/january/ofcom_error_on_english_callsigns.htm)



## High Altitude Balloon in Jet-Stream (Southgate News)

The small Australian balloon circling the southern hemisphere in an easterly direction that left Melbourne, Australia in late December, has now been tracked over the Indian Ocean.

Andre Pretorius V51B in Namibia, and Joe Geldenhuys ZS2JO in South Africa, both heard the balloon near Madagascar, at an altitude of 9500 metres and travelling at 43 km/h.

Andy Nguyen VK3YT, who launched the small solar-powered helium filled strong foil party-type balloon on December 27, has reported its movements since then.

After leaving Melbourne it reached the southern tip of New Zealand, travelled across the Pacific and South America, over the Southern Atlantic

Ocean, exiting the coast of Southern Africa and heading toward Australia.

PS-30 is the latest pico balloon launched by Andy VK3YT who has been described as the 'master of miniaturisation' and developed a skill in the technology.

It includes a 13 grams payload with a 25Mw transmitter on WSPR and JT9, able to send locational and other data.

Andy VK3YT has thanked the new tracking stations involved. At several stages the flight went into circles, seemed to stall, and at one time was thought to be lost, until found by eager radio amateurs in South Africa.

A joyous Andy reports: "Looks like it is straight to



Australia from here."

The National Oceanic and Atmospheric Administration forward trajectory jet-stream forecast is across the Indian Ocean to Western Australia.

The Amateur Radio community in many countries are trying to track the balloon.

How much longer can it stay afloat? Will it circumnavigate the earth?

Jim Linton VK3PC

**STOP PRESS:**

**See last page for update**

Source: [southgatearc.org/news/2015/january/high\\_altitude\\_balloon\\_in\\_jet\\_stream.htm](http://southgatearc.org/news/2015/january/high_altitude_balloon_in_jet_stream.htm)

## FCC Cracks Down on Marriott International (Southgate News)

The BBC reports the hotel group Marriott International is to stop jamming WiFi units

The US Federal Communications Commission (FCC) launched an investigation into the hotel's practices in March 2013 after being contacted by a hotel guest who said they had been unable to connect to the net via a mi-fi device at Marriott's Gaylord Opryland Resort & Convention Center.

"Consumers who purchase cellular data plans should be able to use them without fear that their personal Internet connection will be blocked by their hotel or conference center," said FCC Enforcement Bureau Chief Travis LeBlanc. "It is unacceptable for any hotel to intentionally disable personal hotspots while also charging consumers and small businesses high fees to use the hotel's own Wi-Fi network.

Source and link to the full BBC story at [southgatearc.org/news/2015/january/fcc\\_cracks\\_down\\_on\\_marriott\\_international.htm](http://southgatearc.org/news/2015/january/fcc_cracks_down_on_marriott_international.htm)

## Using a Microsoft Wireless Keyboard?



Wireless keyboards are great. They allow you to avoid at least some of the cable-clutter that is normally associated with the use of a desktop PC and they can make the use of a "set-top box" connected to your TV set far more convenient than poking around with a mouse or other pointing device when tapping out a programme name.

Of course there are potential security issues associated with these devices -- but the manufacturers have built in things such as encryption -- haven't they?

Well it seems that in the case of Microsoft's wireless keyboard and mouse that encryption is so trivial as to be useless and one hacker has come up with a device that effectively allows every single keystroke to be logged and transmitted to any place on the planet.

This is not good.

Arstechnica has details of the hack in this story.

<http://arstechnica.com/security/2015/01/meet-keysweeper-the-10-usb-chtharger-that-steals-ms-keyboard-strokes/>

Owch!

I suspect there are quite a few MS wireless keyboards in use in places they ought not be.

Anywhere that sensitive data is being processed or accessed should not be reliant on such a weak-link as this.

It would even be fair to say that using one of these keyboards on your home PC to access your online banking, PayPal or other services carries a degree of risk that may be a concern.

Any smart-arsed hacker with a few clues and the ability to cobble together a bit of circuitry could, in effect, park up outside your house

(or just dump a small box in bushes outside your window) and log all your keystrokes for days -- later sifting through the accumulated data for those vital passwords.

The hardware to do this is now so cheap that it would probably be economic for someone to knock up a dozen or more of these devices then do a bit of war-driving to find vulnerable households or businesses then dump those devices in a suitable location for a while.

Shame on you Microsoft for using something as elementary as an XOR encryption routine!

Processor power is so cheap these days that surely you could have come up with something a little harder to crack and thus made your wireless keyboards somewhat more trustworthy.

Security by obscurity is not an option and simply hoping that nobody will bother to check exactly how you've implemented such things is utter folly in an age where some types of data (such as passwords) are becoming increasingly valuable to others.

Suffice to say that I am probably not paranoid when I make sure that my confidential data only travels by copper. No wifi, no wireless keyboards. I'm a hardwired kind of guy -- at least for my internet banking and other secure logins.

Of course this doesn't guarantee security, but it does improve the odds quite a bit.

How many readers are using wireless keyboards and if so, have you even bothered to research the type of encryption (if any) that is being used?

Would an audit of government departments, banks and other institutions handling other people's valuable data turn up some worrying results I wonder?



## The Wanganui Award

For Contacts since 01-01-1982 with permanent residents in the Wanganui area: One point.

With Wanganui-based Mobile stations regardless of location: One point.

With ZL2JA: Two points.

Overseas stations require Three points.

New Zealand stations require Five points.

(Repeater contacts are acceptable.)



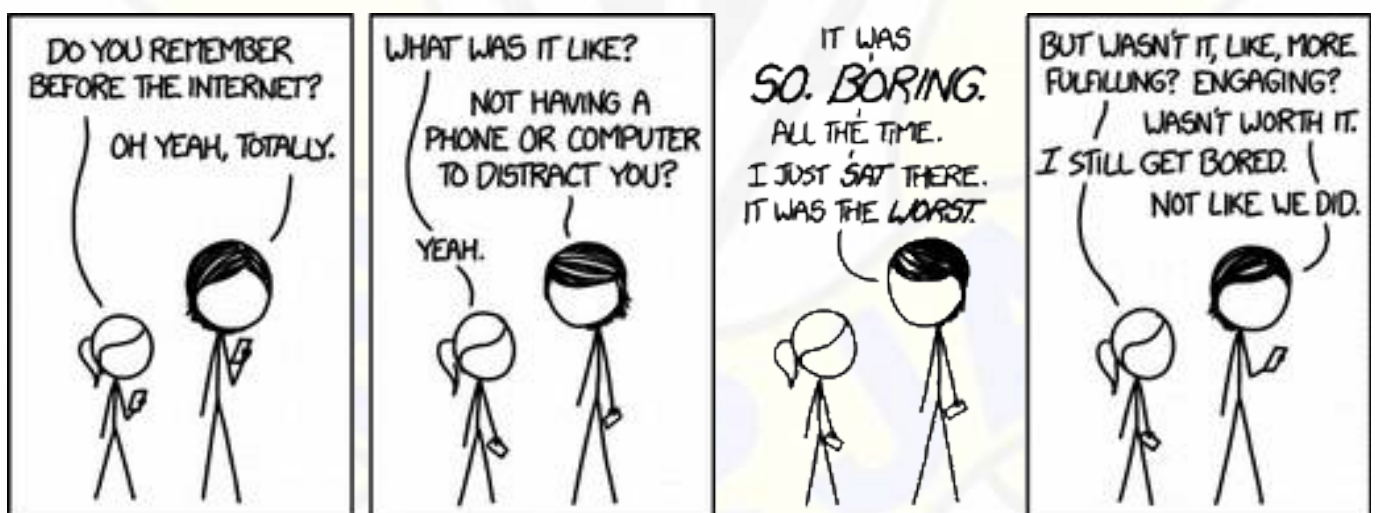
**Cost, (To cover postage)**  
**\$NZ5.00 for NZ**  
**\$A5.00 for Australia**  
**\$US5.00 for the rest of the**  
**World.**

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**Applications to:-**  
**The Awards Manager**  
**Branch 48 NZART**  
**PO Box 7250**  
**Wanganui 4541**

Ivan ZL2ATU, Award Custodian.

*"The old Wanganui Town Bridge showing the swing span open, allowing vessels to serve the wharf at Moutoa Gardens. The last ship to pass through the span was the vessel Huia, with a cargo of material to repair the Aramoho Railway Bridge in early 1902. Built in November 1871 and replaced in 1969 with the new Wanganui City Bridge, opening in December 1970."*



<http://xkcd.com/1348/>

## The Back Info Page

(Links are "clickable" in the PDF version)

### The Internet:

The ZL2JA Webpage:

<http://zl2ja.org.nz/>

The ZL2JA Photo Gallery:

<http://zl2ja.org.nz/photos/>

Listen to the New Zealand National System (Live-ish):

<http://zl2ja.org.nz/listen/>

The Wanganui Award:

<http://zl2ja.org.nz/award/>

ZL2JA on Youtube:

<http://www.youtube.com/user/ZL2JA>

NZART (NZ's National AR Organising Body):

<http://nzart.org.nz>

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### Branch Repeaters:

"Wanganui 690"

Output 146.900MHz, In -600kHz

"Wanganui National System 9875"

Output 439.875MHz, In -5Mhz



### Update 19/1/15: Sadly PS-30 pico flight ends (Southgate News)

The small pico party-type balloon from Australia has not made it home and crashed near Madagascar just east of Africa.

Andy Nguyen VK3YT who put the balloon up in Melbourne on December 27, reports it went down early on January 16, just 25 hours short of three weeks in the air.

Andy VK3YT says: "There was some bad weather in the region, but speculations also include the possibility it was brought down (attacked) by the naughty Penguins on the Island."

Source: [southgatearc.org/news/2015/january/sadly\\_ps30\\_pico\\_flight\\_ends.htm](http://southgatearc.org/news/2015/january/sadly_ps30_pico_flight_ends.htm)