



## ZL2VH Newsletter – October 2015

### President's Report

#### KiwiCon 10-11<sup>th</sup> Dec 2015

Anybody that has seen the presentation by Michael Ossmann on Ham Radio Now will be aware of his background as a hacker/security researcher who then subsequently discovered ham radio. In his presentation he mentions that at a recent **def-con** (a US hacker conference), a large number of attendees sat the ARRL exam and got their radio tickets.

In NZ we have **KiwiCon** which is described as an all-ages computer security conference (Hacker con). It's been held in Wellington annually since 2007.

The people that attend these conferences are very technically literate and extremely inquisitive and are ideal candidates for ham radio, if only they could see there is more to it than just old folks rag-chewing on 80m.

To this end Simon Stannard ZL2FAE suggested that at this years KiwiCon the club run a booth demo-ing D-Star / SDR etc along with tuition/exams over the two days. We need volunteers to help run the booth and NZART approved examiners.

Simon volunteered to co-ordinate the BR63 presence at KiwiCon, if you want to help contact him at [simon@stannard.com](mailto:simon@stannard.com)

Links: -

Michael Ossmann on Ham Radio Now: <http://youtube.com/watch?v=LpSIGKqeZ4I>

KiwiCon: <https://kiwicon.org/>

DefCon Ham Radio Presentation: <https://www.defcon.org/images/defcon-16/dc16-presentations/defcon-16-jonm.pdf>

The following e-mail received from Simon ZL2FAE.....

Further to my 10 minute spiel on Branch 63 putting up a stand at Kiwicon in December please find further info below. This year's Kiwicon theme is the Cold War. It's advantageous if our display was in theme, and it would be more fun.

### **The Proposal**

Kiwicon (December 10 & 11) at the St James Theatre is the premier IT Conference for IT security specialists, programmers and hackers. We have a unique opportunity to promote AR at minimal cost (only our time) to a group of 1,000 IT Techs. I have had, official notification, that if we can have two table display space to promote Ham Radio to the IT people attending Kiwicon.

### **The Aim**

Have fun, promote AR, and we may just get 10-30 young bright IT literate people into AR to ensure a future in this digital age. Many of them are able to cut code, hack into systems and work out how they work and interface disparate systems.

### **Options for converting some of them to AR**

**1) Ham Radio display** in a Cold War (optional) theme with an emphasis on Digital modes and say D-Star. These guys are IT gurus so we would ideally push the digital modes that mix Radio and IT but still want to show the breadth of AR. From this display we will raise the profile of AR to this group and some may follow up on their own but it's a good baseline.

**2) Forum / Presentation on AR** (half hour) with presenter(s) touching on aspects of AR. A combo of D-Star 101 as John and Mark have done, mixed with edited Video clips of Project Moonraker using the Warkworth Satellite station raking the moon with an ERP so strong they could clearly hear FM modulation, Hacker turned Ham (edited short clip from the Dayton forum), etc and maybe a guest appearance via skype (I know a few interesting people in AR.)

**3) Training and Exam day** on Wednesday 9th December, the day before the convention. The organisers of Kiwicon suggested that as an option for those not confident enough to pass the exam raw. This would be advertised on their website but we would need to advise cost and secure a venue. (They offered to collect the \$ for us.)

**4) Exam sessions during the conference.** Some of them are conversant with radio theory but never got around to turning up and sitting the exam. We could run exams on the Thursday and Friday 12:00 – 1:00 (issue it's a 2 hr exam?) and early Thursday evening. (Again Kiwicon can collect any fees etc.)

We can run any of the options but option (1) should be the minimum. We need Volunteers please advise your availability (dates & - hours).

### **Volunteers**

**Branch 63 Stand** We will need ideally at least one (preferably 2 during busy times) on the stand at all times (2 hr shifts?) I will be taking leave for 3 days so can do quite a lot of the work. *This is where we need plenty of people over the two days.*

**Forum** - If we do the Forum/ Presentation, Mark? and myself. Do we know a good presenter for the ham radio general stuff Neil M? Also ZL2OLY has offered.

**Exams** - Eric ZL2SET emailed me but we need others.

**NZART liaison** - Mark ZL2UFI has offered.

**Training Day** - Eric ZL2SET ?? (I can assist) + additional Examiner

**Co-ordinator** - Simon ZL2FAE has offered.

Regards

Simon ZL2FAE

### **Mesh Network Upper Hutt Node**

There was a decent turn-out to Ted ZL2TB and James ZL2ET Presentation on the Ham Mesh Network that they are setting up. The club is looking a putting a node up at Mt. Climie. A site survey will need to be done to check suitability. For more info take a look at <http://www.broadband-hamnet.co.nz>

(See later article – Ed.)

We are always looking for articles to fill the pages of newsletter. Please forward anything no matter how large or small to the editor - Eric ZL2SET – [ericwilby@gmail.com](mailto:ericwilby@gmail.com).

73's and good DX

Simon ZL2BRG

President.

## **Branch 63 Repeater Update – September 2015**

### **Status Updates**

#### **WebSDR**

Am gathering together hardware to put the SDR together. Had a single band test SDR installation running. If you want to help please get in touch

Links:-websdr home page [www.websdr.org](http://www.websdr.org).

Southampton University Wireless Society's setup [www.websdr.suws.org.uk](http://www.websdr.suws.org.uk).

### **3cm Beacon**

On Air,

Last month I made a trip to Mt. Egmont on a misty winters day to test beacon reception. Results were extremely encouraging. ZL2VHX was extremely strong. I could receive it with the dish pointed in almost any direction. (Simon).



### **Repeaters**

#### **1292 23cm**

On Air

#### **860 Dstar**

On Air.

D-Star Users may have noticed that CCS the call sign routing module has been turned off. This is because the IRCDDDB Developers are in the middle of rolling out a substantial update to the CCS system

The reasons for this are that the old 4 digit CCS numbering system could not handle the number hams wanting to use it and also it became apparent there was a legal requirement to validate call sign registrations. So they are moving to a numbering system based on the DMR call sign / number allocation methodology. So until the New CCS7 system has been rolled out and has stabilized. CCS will be disabled on ZL2VH

#### **5425 DStar**

On Air

#### **730 2m FM Repeater**

On Air

#### **53.950 6m FM Repeater**

On Air

## From the Treasurer

Recently, the \$10,000 Term Deposit matured having earned \$450 in interest.

Your executive decided to re-invest the total amount, plus \$1,550 from the cheque account. The Term Deposit is now \$12,000 and will mature in September 2017.

You will recall that some years ago, the Club decided that our insurance premiums were too expensive. The decision was made to invest what would have been the insurance premium and thereby cover our own risk.

Gavin Smith ZL2ACT

Branch 63 Treasurer

## Congratulations...

...to Ted Byrne (Carterton), who has passed the exam and now has the callsign ZL2JTD.

## Further Mesh News

Malcolm ZL2UDF passed on the following e-mail from Mike Woods ZL1AXG to Simon ZL2BRG following a visit to Mt. Climie. It may be of interest.....

Simon

I am not sure if James has had time to update you?

We discovered back in Wellington that the mesh node at Mt Climie is actually connecting to Ngaio, not Colonial Knob! It is marginal - dropping in and out (hence the red light going on and off) with only about 10dB signal/noise at best. We need another 6-10dB of gain on the circuit, which of course an Airgrid can easily supply (20dBi cf 11dBi with the nanostation NS2). There can't be too much signal coming off the side of the NSM2 at Colonial Knob, for Ngaio to be stronger, given it is further away. The NSM2 at Ngaio is, pointing towards Climie, but the one at Colonial Knob points South. There's probably 30dB or more difference there to start with. We will have to wait and see what happens when we put an Airgrid up at CK shortly, but I suspect it will give rock solid performance.

What a fantastic location you have at Mt Climie, but it was cold enough yesterday, that I wouldn't want to be up there in a snowstorm!

It looks like the guys up in Kapiti are going to be on air soon, so we will have to get them a decent north-bound signal from Colonial Knob as well. A group of us are going up to Kapiti on October 14th as they are talking about a remote station (which of course links to the Quartz Hill project). Then in November, one Saturday, we will be doing a show and tell about the mesh.

One of the things we think is most valuable about this whole mesh experiment is the links we are forming with other branches. It was great to meet you and the other two guys on Saturday morning.

Oh, and by the way, there is a brief article and a pic, I believe, of Brian ZL2CHV on our website at [www.ZL2WB.com](http://www.ZL2WB.com)

James will assemble a report for [www.broadband-hamnet.co.nz](http://www.broadband-hamnet.co.nz) in due course, that will contain a whole lot more photos. The one on ZL2WB.com is a snap I got on my phone, but Doug took a number of photos on his DSLR camera.

73

Mike

## Training videos

John ZL2TWS wishes to draw attention to the following link. Episode 9 discusses the training in UK for hams and activity of the Essex group.

<http://www.txfilms.co.uk/txfactor/txfactor.shtml>

Club members are encouraged to download all 9 episodes and start watching from No.1. The videos are also available on YouTube.

## Notices

**Ham junk sale - 21st Nov** at power boat club Onepoto, Porirua 10am start. Contact Bruce ZL2ABC for more info.

### **Manawatu Table Sale - Saturday 10 October 2015**

At Longburn Hall, Longburn, on SH 56 near the rail over bridge.  
Doors open for vendors at 8:00 am, 9:00 am for public

Tables at \$25 full size and \$15 for half.

Payment can be by Internet Banking to ANZ 01-0745-0496805 00  
(please use name & call-sign as a reference.)

Register by email either to: <[President@zl2ko.co.nz](mailto:President@zl2ko.co.nz)> or to the Secretary at <[iceni@clear.net.nz](mailto:iceni@clear.net.nz)>.

Refreshments will be available.

Note – the sale is a week later than usual.

**Kapiti Branch, Branch 69**, will be holding their annual equipment sale on **Saturday 7 November 2015** at the clubrooms behind the Memorial Hall, Tutanekai St Paraparaumu.

Open for equipment drop off from 8:00 am, selling from 9:00 am.

Contact [kapitibranch69@gmail.com](mailto:kapitibranch69@gmail.com),

**Branch 63 Club Net.** - You will be aware that the 'old' club net on 80m is no longer active. However, it *does* still exist in the form of a 2m chat. We would welcome some extra members to join in and chew the rag on **Wednesday** evenings at **8.00 pm** local time on the **730 repeater**. The net controller is normally Morrie ZL2ADP.

## **J.O.T.A 2015**

Is anyone interested? Haven't heard anything from Olly so Marie was approached. Her reply is....

I don't know if there is any groups in the Upper Hutt area having a JOTA independently. Lower North Island Scouts are having a big camp over at Brookfield and hopefully involving Oliver. Branch 18 Lower Hut are involved but you and you Branch are more than welcome to come over to help.

We are setting up on Friday after lunch, putting up aerals and setting up radios. The Scouts start coming in after 6pm. We official start on the Saturday about 8am through to about 6 pm. There will be a campfire at 8pm and then open up the radio's again till there are no Scouts up and about. I stayed up till 2am last year but willing to stay up longer if there is any action. We reopen again in the morning at about 8am through to 2pm. We then pack up all the gear and finish about 4pm when we can all go home.

Hope that is of help to you. We would love to see you over at Brookfield. The more the merry. We are hopefully having about 300 youth and leaders.

Thank you for your time

Marie Smolnicki

ZL2 JOTA, ZL2 THE

If anyone is interested in helping please let myself or Simon ZL2BRG know. Thanks. Eric ZL2SET. (Sorry Olly, didn't mean to tread on your toes but time is getting short).

## New Bigger LB Cebik CD for 2015

After some 7 years in storage, we are pleased to offer this NEW CD-ROM version for 2015 containing 90 more articles by L.B. Cebik in addition to the 800 articles in previous CDs. The collection contains information of interest to radio amateurs as well as professionals interested in antennas, antenna modelling, and related subjects, such as antenna tuners and impedance matching. LB's notebooks are geared to helping other radio amateurs and antenna enthusiasts discover what he has managed to uncover over the years--and then to go well beyond to new discoveries.

If you are one who has admired LB for his vast knowledge in this intellectual field, this new CD will be exciting news and the CD considered a treasure piece in your reference library!

For more info and to place an order, please click the following link:

[http://www.antennex.com/Sshack/cd\\_cebik.htm](http://www.antennex.com/Sshack/cd_cebik.htm)

## Vintage Radios – again

At the risk of sounding like 'The Morseman' in *Break-In* with his monthly problem, here is another question that's arisen during G8CQR's efforts at radio renovation. This time it's a valve (tube) question that he has.

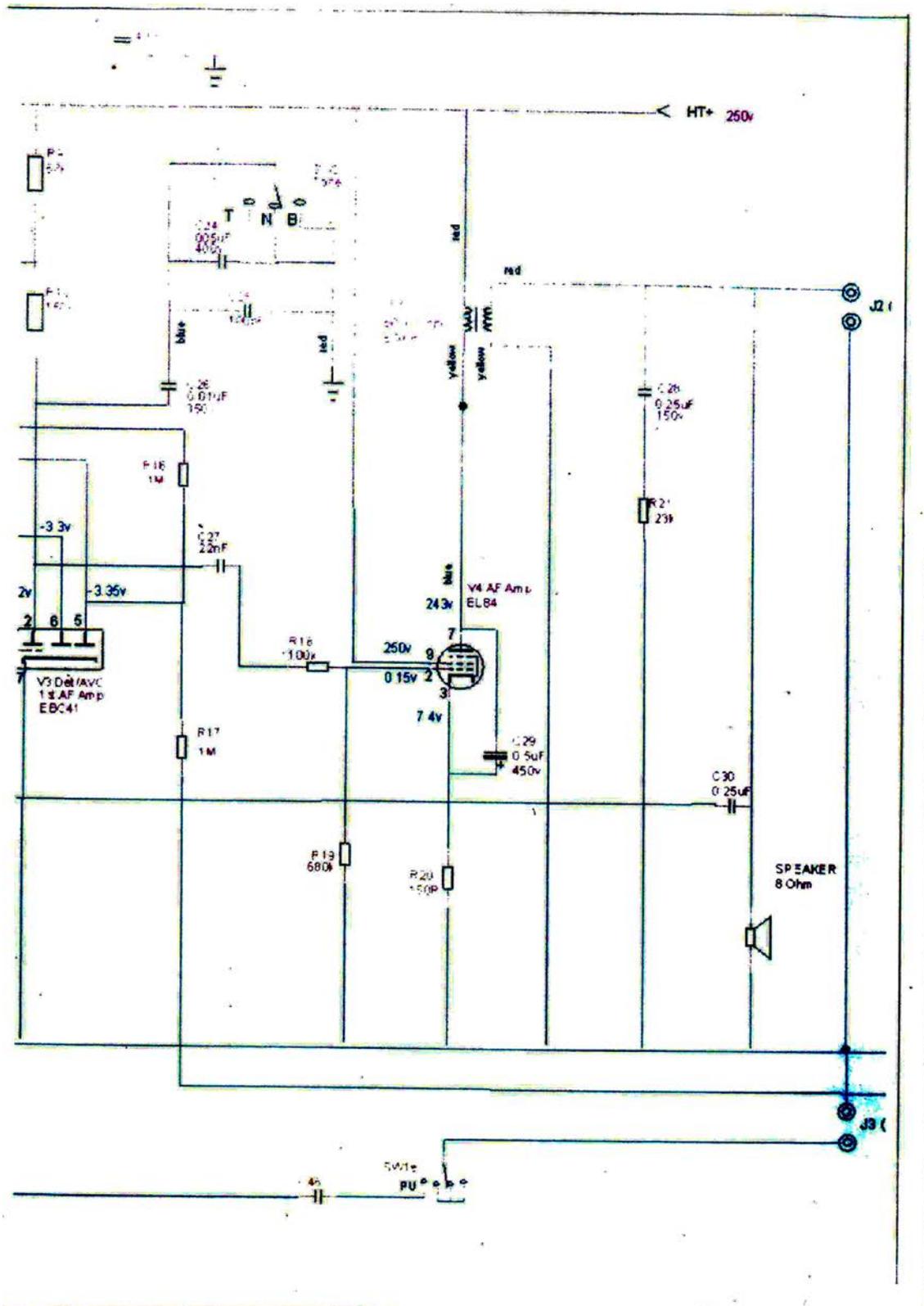
The (rather poor) circuit diagram on the next page is the audio output stage of an ST655 Westminster broadcast receiver.

It now works very well and we have worked out the fact that the EL84 is strapped to operate as a triode instead of a pentode (common practice). However, we aren't sure why C29 is connected between anode and cathode. It looks like positive feedback (in an amplifier ???) and is it shown with the correct polarity?

Any ideas please to [ericwilby@gmail.com](mailto:ericwilby@gmail.com). Thanks. Eric ZL2SET.



*The ST 655 Westminster  
concerned.*



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