THE OTAGO BRANCH OF THE NEW ZEALAND ASSOCIATION OF RADIO TRANSMITTERS INC.

September Edition 2010 update

Visitors Always Welcome
Club Nights Wednesdays 7.30pm
109 Macandrew Rd, South Dunedin / PO Box 5486 Dunedin

From The Editor:

Welcome to the September edition of the newsletter. Here we go with my third newsletter. Did you notice last issue was 10 pages long? Many thanks to all of the contributors. I hope you enjoyed the read from last edition. Hopefully this edition is just as good.

Keep those articles coming in and all those home brewed spring projects moving along. Many thanks to Monica (my XYL) for helping me with this edition.

73 de Geoff ZL4TUX editor@zl4aa.org.nz

Branch 30 – Honorary Life Members:

HG Hedge (ZL4FD), PW Johnson (ZL4LV), AJH Gilchrist (ZL4PZ), DW Carr,
A Watson (ZL4WAH), DK Watson (ZL4GR), DJ Stevenson (ZL4SB)

Branch 30 – Committee:

(President)	Alan Wilden	(ZL4FM)	453-4420 / 021-145-2682 / alan@navcom.co.nz
(Vice President)	Lindsey Ross	(ZL4KS)	487-8946
(Secretary)	Dave Howell	(ZL4TAQ)	
(Treasurer)	Mike Beattie	(ZL4DM)	476-6120
(Immediate Past President)	Arthur Curline	(ZL4TIK)	488-4032 / 027-488-2802
Brady		(ZL4PDX)	
Maurice Howell		(ZL4MH)	effsec@paradise.net.nz
Ross Chapman		(ZL4RC)	487-6825 / 027-481-6260 / zl4rc@slingshot.co.nz
Bob Smith		(ZL4OC)	477-0969 / bob_smith@clear.net.nz

Branch 30 - Officers Of The Club:

AREC Section Leader	Lindsey Ross	ZL4KS	487-8946
Contact Officer	Ross Chapman	ZL4RC	487-6825
Awards Manager	Dave Howell	ZL4TAQ	
Contest Manager			
EMC Officer	Peter Johnson	ZL4LV	489-5884
Club Librarian	Anne Watson	ZL4WAH	467-5620
Branch Newsletter	Geoff Barkman	ZL4TUX	55-3494
QSL Manager (ZL4)	Dave Adams	ZL4OZ	453-3274
Repeater Trustees	Martin Balch	ZL4JH	454-3262
	Don Watson	ZL4GR	467-5620
ZL4AA Webmaster	Paul Hayton	ZL4PH	456-4246
Packet Sysop	Mike Beattie	ZL4DM	476-6120

Fast Facts:

- Annual Subscription: Full $25.00 / Family $30.00 / Junior-Associate $11.00
- Meetings each Wednesday evening at 7.30pm (except holiday period)
- Postal Address: **ZL4AA, Otago Branch 30, New Zealand Association of Radio Transmitters, P O Box 5485, Moray Place, Dunedin.**
- Branch 30 - Website http://www.zl4aa.org.nz
- Branch 30 - Packet BBS / DUD Digipeater (144.650 MHz)
- Branch 30 - 2 Metre Club Net 7.30pm every Sun (146.900 MHz) repeater
- Branch 30 - 80 Metre Club Net around 8pm every Sunday (3.613MHz)
- National Repeater System Local Node (439.925 MHz)
- Mosgiel Link to 146.900 (438.200 MHz simplex)
- Queenstown Link to 146.850 (438.300 MHz simplex)
- Dunedin 915 Repeater (439.150 MHz) Currently at ZL4RC's Place
- Dunedin 665 Repeater (146.650 MHz) *
- Operates on 6675 (146.675 MHz) for special events for portable communications eg Car Rallies etc.

Sunday Night (690) Net Controllers – Who's On & When?

Sept.		Oct.		Nov.	
5	ZL4RC	3	ZL4LDY	7	ZL4RC
12	ZL4LDS	10	ZL4DC	14	ZL4LDS
19	ZL4US	17	ZL4DM	21	ZL4SB
26	ZL4SB	24	ZL4TAQ	28	ZL4LDY
		31	ZL4TIK		

The Branch 30 weekly net runs most Sunday evenings of the year from 7.30pm for approximately 30 minutes. Logins are a mixture of local and out of town operators who want to take part. Balclutha 675 is being linked to 690 using 2 IRLP nodes. The NZART monthly official broadcast, from ZL6A, is linked in to the 690 repeater from 2000 hrs at the end of weekly net.

If you are scheduled as a net controller and are unable to host the net on your allocated night please arrange cover prior to your rostered net.

If you would like to join the team contact one of the existing controllers to find out more info.

Projected Activities – October - December 2010:

Please bring along a project that you are working on or you may want to volunteer to give us a talk.

Visit http://www.zl4aa.org.nz for an updated list of events at any time.

Oct 20th	Activity Night
Oct 27th	Spring Cleaning the Clubroom. (Please bring a bucket, mop and rags)
Nov 3rd	John ZL4JR – Airmail from Dusky (Cruising & Communications from Southern Fiordland)
Nov 10th	Activity Night and Committee Meeting
Nov 17th	Activity Night
Nov 24th	Activity Night
Dec 1st	Branch 30 AGM Starting at 8pm.
Dec 4th	Old Timers Afternoon
Dec 8th	Activity Night
Dec 15th	End of year breakup, BYO and please bring a plate.(Anyone got a Karaoke machine?)
Dec 22nd	Club Rooms Closed
Dec 29th	Club Rooms Closed

Silent Key: ZL4MS - P.J.C. (Peter) Dalliessi

It is with sadness that we record the passing of Peter Dalliessi ZL4MS on the 23rd of September 2010, aged 77.

Peter operated Radio Engineering in King Edward Street, South Dunedin and among other things was agent for Yaesu, and Kenwood amateur equipment.

Peter was licensed as ZL4MS in 1951 according to my records and also held the call ZL4OK as a second call from around 1958 to 1960 - at that time you had to have a separate call sign for mobile/portable operation.

Thank you Alan ZL4PZ for passing on this information.

President's Report:

Thank goodness winter has all but gone.

The commencement of the Tait conversion kit project is well under way. Club activity nights over the last few weeks have been very well attended. Smoking soldering irons and people constructing and testing their radios. Many people have commented about how it has reminded them of the 70s when the 70cm branch project was being built and even earlier when Peters HF Branch project was under way. Thank you Terry ZL4TAE and Martin ZL4JH for lugging your test gear along to assist us. We really do appreciate it.

In the next 3 months, as the evenings get lighter, I would like to get up on the roof, do some work on the clubs HF aerial and have a sort out of the garage and the shack.

Ok, I think that's about it for this issue.

Catch you on the air and at the branch.

73 de Alan (ZL4FM)

Tait Conversion Kit Project

As mentioned in the President's report the latest club project has been converting old Tait T198 radios into 16 channel amateur transceivers for under $70. This is good value as a set of crystals for just one channel can cost up to $100.

The converted radios will be useful for other club activities such as car rallies and SAR exercises. Up to 10 club members most weeks have been toiling over a hot soldering iron.

The project involves constructing the circuit board, modifying the 6 way rotary switch to 12 way and using our ingenuity to work out how to fit the circuit board behind the channel switch. Before this many of us hadn't realised how many variations (at least 4 or 5) there were on the Tait T198 design.

The circuit uses a Silicon Labs SI570 device to produce a frequency between 10Mhz and 210Mhz with a stability of 20ppm. It is driven by an I2C serial interface programmed to a group of common frequencies used by amateur radio operators in this part of the country. *(Excerpt from instructions supplied with the kits)*

Many thanks are due to Brian Houghton (ZL3BCO) for making the kits within New Zealand reducing cost. His design was based on that of Dr. Andrew Smith C.Eng ACGI G4OEP. More information is available at Dr Smith's website http://g4oep.atspace.com/ .

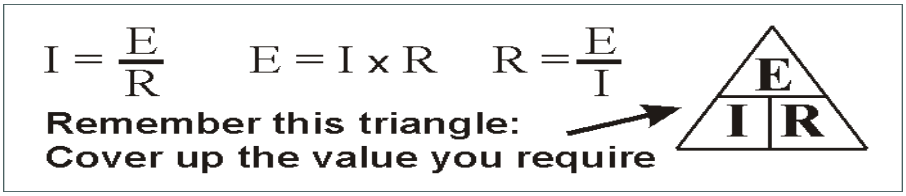
If you are interested in having a go yourself, contact the New Zealand circuit board kit creator Brian Houghton (ZL3BCO) zl3bco@gmail.com.

Ohm's Law Revision

This study is about the application of Ohm's Law to examples using more than one resistor.

You will recall Ohm's law: Where E = Volts; I = current in amperes and R = resistance in ohms. By transposing we get the following:

$$I = \frac{E}{R} \qquad E = I \times R \qquad R = \frac{E}{I}$$



Remember to cover up the value you seek and the formula to get it using the two remaining values is given.

Resistors in Series

To INCREASE resistance just add-up the value of each of the resistors in series.

Example: a 10k, 47k and a 56 k resistor are in series. Total = 113k. (This answer is a nominal value).

Resistors in SERIES: **Remember** - you ADD their values up.

Resistors in Parallel

Resistors in parallel must always have a resultant value that is less than the smallest of any of the component resistors. The current divides between the parallel resistors. The SMALLER resistor will carry the LARGER current. The total current will be the sum of the currents in each leg of the network.

Remember: Where the component resistors are different values, the resultant parallel value must be less than the smallest component value alone.

TWO resistors of the same value in parallel will act the same as one resistor of HALF that value. The wattage rating will be TWICE that of one of the component resistors.

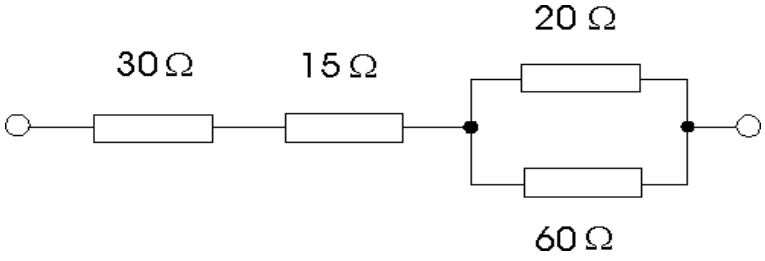
For example: Two 10k resistors in parallel = 5 k.

THREE resistors of the same value in parallel will be ONE-THIRD of the value of a single resistor (but three times the wattage rating).

Example: Three 10k resistors in parallel = 3.3k and so on.

Networks of Resistors

Look at this example:



The 30 ohm and the 15 ohm in series, together could be replaced with one (30 + 15) = 45 ohm resistor.

The 20-ohm could be replaced with three 60-ohm resistors in parallel. A 20-ohm and 60-ohm in parallel could be replaced with FOUR 60-ohm resistors in parallel.

The resulting resistance of the two parallel resistors is one-quarter of 60, i.e. = 15 ohm.

The value of this whole network is (45 + 15) = 60 ohm.

*(**http://www.nzart.org.nz/exam/sg/sn06-resis.html** – abridged)*

Waipapa Point.. International Lighthouse Weekend

I stand to be corrected but there was only 8 lighthouses registered in New Zealand. Robin (ZL4IG) and myself (ZL4ACG) were the only operators in the South Island with Waipapa Point registered for the weekend. Hundreds registered world wide.

Fantastic day out with near perfect weather (for the 2nd year running). Plenty of contacts all over the world Chile, Australia, Wales, Spain, France USA, Canada and New Zealand. We were pretty pleased with what we got, being a three fold improvement on last year.

We even managed to go looking for paua's on the rocks nearby... they were too small .. bugga !!

Using G5RV and vertical antennas across 20, 40 and 80 metres.

For a social fun event can only recommend.

Alan G (ZL4ACG)

Royal Yacht M.V. Gothic

This story has more to do with the ZLB site on the Awarua swamp between Invercargill and Bluff than the fire on the Royal Yacht. Awarua was world renowned for radio and still has the Unwin Radar *(http://en.wikipedia.org/wiki/Unwin_Radar)* and links with the European Space Agency rocket tracking facility *(*http://www.nzs.com/blog/nzs-blog-post/european-space-agency-tracking-station-in-awarua-southland-new-zealand/*)* on the site today.

Apologies as my father has not got beyond portable typewriters and carbon paper. He is in his 91st year and was manager of Awarua when he retired in 1976

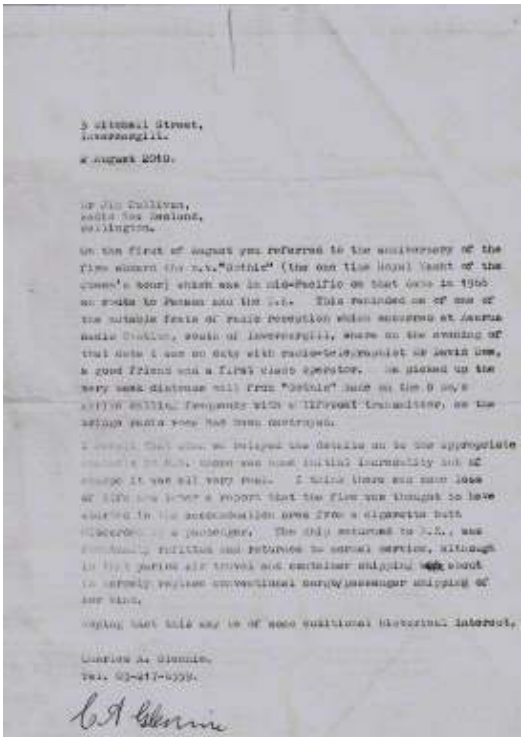
Background

On August 2, 1968, having left New Zealand several days earlier, Gothic suffered a devastating fire on board. The crew were valiant and extinguished the fire. Sadly seven lives were lost and the ship suffered considerable damage. She had to make it back to Wellington in bad weather conditions and the following photograph was carried in the Wellington Evening Post when she finally arrived.

The Gothic encounters stormy seas as she approaches Wellington -Wellington Evening Post

SS Gothic seen after the partial fire repairs Forward windows were sealed and cabins remained closed after the fire

Transcription of letter describing a 'notable feat of radio reception'



Dr Jim Sullivan

Radio New Zealand,

Wellington

On the first of August you referred to the anniversary of the fire aboard the M.V. “Gothic” (the one time Royal Yacht of the Queen's tour) which was in the mid-Pacific on that date in 1968 en route to Panama and the U.K. This reminded me of one of the notable feats of radio reception which occurred at Awarua Radio Station, south of Invercargill, where on the evening of that data I was on duty with radio-telegraphonist Mr David Dow, a good friend and first class operator. He picked up the very weak distress signal from “Gothic” made on the 8mc/s marine calling frequency with a lifeboat transmitter, as the bridge radio room had been destroyed.

I recall that when we relayed the details on the the appropriate channels in N.Z. there was some initial incredulity but of course it was all very real. I think there was some loss of life and later a report that the fire was thought to have started in the accommodation area from a cigarette butt discarded by a passenger. The ship returned to N.Z. Was eventually refitted and returned to normal service, although in that period air travel and container shipping were about to largely replace conventional cargo/passenger shipping of her kind.

Hoping that this may be of some historical interest,

Charles A. Glennie

Alan Glennie (Jnr) (ZL4ACG)

Next Issue Due: December 2010

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ZL4AA, Otago Branch 30
New Zealand Association of Radio Transmitters
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