

November 2015

INTERFACE

MONTHLY BULLETIN
MARLBOROUGH AMATEUR RADIO CLUB INC. P.O. BOX 432 BLENHEIM NZ



Editor : Caryl Simpson
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Club Calendar

- General Meeting; 12 Nov. EOC, 19.30hrs
- Social Group; 19 Nov. 12.00hrs - The Vines
- Committee Meeting; 26 Nov. 2015 07.30hrs - EOC

VHF Mondays 1930 hrs
146.950MHz, 145.600MHz,
147.225MHz

Net Controller; Ken Hynds ZL2KHZ

Branch 22 Notices

- 1. Car Club Event..... 14 Nov.
- 2. H Night..... 8 Dec.

VHF - USB Net Wednesdays 1930
144.150MHz



Still only \$20.00 for Members and \$25.00 for Family

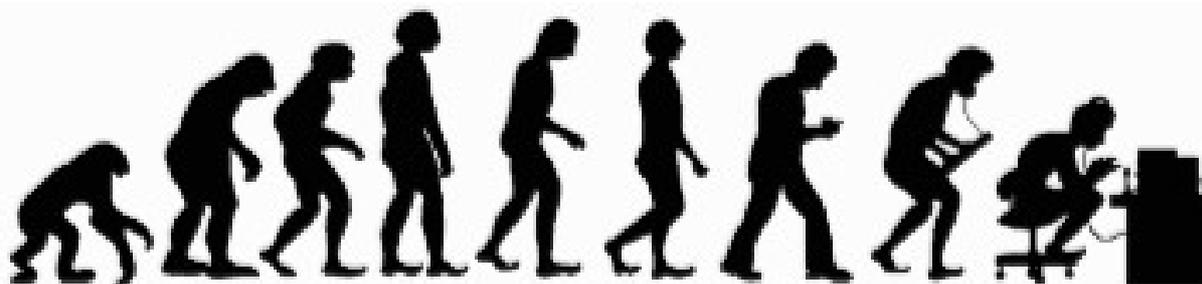


We offer 3 payment options...

Direct banking; Kiwi Bank 38 9002 0114897 00
please put name or call sign in reference

By mail to; Marlborough Amateur Radio Club Inc.
PO Box 432 Blenheim 7240

Give in person; to the treasurer on club nights



Evolution of Ham

MARLBOROUGH AMATEUR RADIO CLUB GENERAL MEETING

Held at EOC on 8th October 2015 @ 1940 hrs.

Present: Grant Simpson (president), Kaye Hannagan (secretary), 11 members and 1 guest.

Apologies: Paul Rennie, Ken Hynds (treasurer), Paul Rennie

Matters Arising: Nil

Correspondence: Nil

Finance: Treasurer provided a report in absentia.

Reports:

Brayshaw Park: Waiting for permission to use truck to mount shed. Harry has measured security covers for windows and roof panel aluminium along with rivets. Expected cost from cheapest supplier is around \$2K.

General Business

- **Monday Net** - Robin reported that the net was on every Monday night. Thanks to those who are coming on.
- **Silver Fern Car Rally** – Robin asked the meeting if there was an appetite for another event. The organiser had changed and potentially there would be a different communication infrastructure. It was mooted to be in the South Island and the date would be dependent on the WRC rally calendar. It seemed attendees were keen for more information so Robin will follow up.
- **H Night** – Planning is well underway. ZL6H is approved as a special event call sign. Contest will be 8 December and AM only. This night is to commemorate the return of amateur radio after WWII. Robin to follow up.
- **Car Club Events** – two events are coming up – October 19th which will require four operational sites. Robin to follow up with those who have put their names forward.

Speaker – Ken Menzies on the evolution of printed circuit boards.

This was a very informative, and well received, presentation on the history and evolution of printed circuit board design and use. We had a peek at Ken's current printed circuit board production system. For more detail, please see Ken's notes elsewhere in Interface.

Meeting closed: 19.50



PRESIDENT'S PRATTLE

A major project for the dub is coming along nicely at Brayshaw Park. The remote HF site now has the hut in position next to the tower and antenna that, some time ago now, came in to the dub's hands after a generous offer from Foss.

There's still a lot of work to get it all finally up and running of course. The sub committee set up to oversee the project is working very well and getting things done. Plenty more to do with the next task being installation of the solar panels as mentioned elsewhere in this newsletter.

Good capacity of the panels, along with plenty of battery capacity, should allow plenty of stable operation at any time.

The broadband link from my house is under development and the 5GHz link equipment has arrived. This will give access to the hut and in the process give broadband access to the Vintage Farm Machinery who own the site we are on.

Gerard has been working on the new dub website which will be hosted by ourselves. He now has the computer and software working so hopes to have it on the internet soon for live testing.

The committee would like to reduce the amount of business conducted at the general meetings so there's less time for the boring stuff. Of course there will always be some things that have to be done at a full meeting and if you have any questions or concerns then they can be dealt with at any meeting. Everyone is welcome to attend any committee meeting as well. The Minutes (minus the 'moved', 'seconded' and procedural bits) are printed in Interface so you should all be informed of what's happening.

Please make time to volunteer to help at the various events we have coming up. They can be a lot of fun and it's a good way to catch up with members who can't get to meetings. If you can't volunteer but can get along to some things, such as the work at Brayshaw Park, then do come. You will be welcome as an observer.

- Grant Simpson, ZL2BK



MARLBOROUGH AMATEUR RADIO CLUB COMMITTEE MEETING

Held at EOC on 22nd October, 2015 @ 20:00 hrs

Present: Paul Rennie (late), Ken Hynds (treasurer), Robin Carter, Chris Grant, Grant Simpson (president), Kaye Hannagan (secretary), Stuart Watchman, Ken Menzies

Apologies: Nil

Correspondence:

Cheque from Car Club – donation

Vintage Farm Machinery Society Inc (BPMVFM) email

BPMVFM: email in response to Stuart's discussion with John Neal regarding indemnity of any and all damage to tower and shed on site at the Park.

Stuart to pursue clarity of purpose and service agreement with BPMVFM.

Grant to follow up regarding the internet link to BPMVFM design and implementation.

Ken Hynds to talk to insurers regarding cover of equipment now on site at Brayshaw.

Reports:

Repeaters: No reports – Mention of replacement turnbuckles on the Ned.

Finance Ken advised the auditor will not be available for future reviews. Kaye to follow up with one of her contacts.

Subs are due – remain at \$20 per person, \$25 per family.

Matters Arising: No matters arising

General Business

- **October Meeting Speaker** - Chris Grant to speak about Palestine and communication.
- **Publicity** - The local paper produced on a Wednesday is looking for clubs and societies for human interest stories. Suggestion was mooted to contact the paper to arrange meeting time and raise the profile of MARC. Grant to follow up.
- **The Ned** - Stuart to follow up replacement of turnbuckles
- **Brayshaw Hut** - Hut is now in position. Requires purchase of regulators, and solar panels: the metalwork and rivets for framing have been purchased, Grant paid for these and will be reimbursed from the Club accounts. Batteries are at Grant's place at no charge. Items for the internet link may still need to be purchased.
- **Meeting Topic Schedule** - Someone on the committee needs to be responsible for organising the speakers.
- **Event Calendar** - Stuart to put together a calendar of events for the next 6 months showing club commitments.
- **Car Club Events** - one event coming up – Saturday November 14 which will require four operational sites and an operator in the Safety Vehicle. Robin to follow up.

Meeting closed 2100



Action List

Item to Action	Who
Pursue clarity of purpose and service agreement with BPMVFM regarding indemnity concerns raised	Stuart
Follow up regarding the internet link to BPMVFM design and implementation.	Grant
Talk to insurers regarding cover of equipment now on site at Brayshaw	Ken
Auditor for future financial reviews	Kaye
Publicity – Grant to follow up.	Grant
The Ned – Organise replacement of turnbuckles	Stuart
Event Calendar for events over the next 12 months	Stuart
Meeting topic for meetings over next 12 months	???
15 th November car club event	Robin
Repeater at Kaikoura	Grant

NOTES FROM KEN MENZIES' TALK ABOUT MAKING CIRCUIT BOARDS

About 1900, electronics was starting to change and the technicians of that day were trying to reduce the size of the bulky circuit boards that were being used ie wooden frames and any other non conductive material that could be used. They used point to point wiring using rivets or eyelets and bolts to use as anchoring points. Solder tags used in valve circuits along with wire looms were also bulky items to put into cases.

In the 1920's Bakelite, Masonite, layered cardboard and wood was used with the above anchoring being used.

In 1925, Charles Ducas from USA put in a patent application for a method of creating an electrical path on an insulated surface by printing through a stencil with electrical conductive ink. However the first true printed wiring board (circuit board) is credited to an Austrian, Dr Paul Eisler, in 1943 I think it was. It was used as a replacement for bulky radio tube wiring. So circuit boards started to be used more often after world war 2.

Away from the brief history bit and to the guts of my talk. Since the age of 12 I have had an interest in making circuit board for my projects. Yes, circuit board material was available when I was 12 years old, although not fibreglass. Many methods were tried, carbon copies of the diagram in the magazine transferred onto the circuit board, then filled with dope or paint. Even covering the whole board with sticky backed paper, cutting out the lands shape through the paper, remove the paper cut outs then spray with paint. Next peel off the paper that masked where the paint wasn't needed. The board was then etched with ferric chloride.

This lead me to printing my circuit board using positive resist sensitized boards and then exposing them to ultra violet light.

The boards, after deaning with Jiff, rinsing off and drying, are sprayed with the positive resist and left to dry in a dark place for 24 hours. The circuit board image is photo copied as a positive onto overhead projector film. I then stack four layers on top of each other to get a good dark image to place on the board, before exposing in the ultra violet light box for 7 minutes.

After 7 minutes the exposed board is developed in a solution of 8g of caustic soda per litre of water.

As soon as it can be seen that the unwanted resist has been dissolved in the developer, the board is washed with fresh water which sets the resist (tracks) left on the board.

The board is then etched using either ammonium persulphate or ferric chloride.

That's it. You should have a nice printed circuit board to work with if all has gone well.

- Ken Menzies ZL2BJV

THE REASON PAUL RENNIE WAS LATE FOR THE COMMITTEE MEETING...

...He was using Marlborough Lines' Hiab to move the hut into position at Brayshaw Park.



The installation of the solar panels is to take place on Saturday morning, 14th November, with the help of Paul and the Hiab again.

We will need about 5 or 6 bodies to help with this so volunteers would be appreciated please.

Come and check it out!

Recently Ron & Helen visited New Caledonia to visit sites where Ron's father was during World War 2. We had a few days in Anse Vata, Noumea and before we collected our rental these aerials on a hill attracted Ron's attention. On collecting the car, a Citroen Cactus, guess where we headed first (a concentrating effort for Ron with driving on the right and a manual to boot, and only 1180cc).

On top of Oeon Toro was a French Military compound, complete with an armed guard patrolling the internal perimeter fence. This provided a very good outlook, mostly over ocean. The antennas appeared to be fixed long and short path into France. There were two big WWII Australian 5" bore guns also on this hill.

There is still some evidence of WWII occupation in New Caledonia but you need to hunt for it. The NZ cemetery near Bourail is immaculate. Our visit reinforced how strategic New Caledonia was in the Pacific War effort as a staging post for action in surrounding and Northern Islands and for evacuation and hospitalisation for the wounded.

HF antennae New Caledonia



French military compound



MARLBOROUGH CAR CLUB GRAVEL SPRINT

Six dub members, and one potential new member Lara, turned up at 8am at the Renwick end of the Tua Marina Track to provide communications for the Marlborough Car Club for their gravel sprint. Members moved to their positions with the organiser Mark.

Ron and Helen ZL2BDD and ZL2HH were on "start" where Ron put up a collinear antenna on his 5m flagpole. Gavin ZL4IY was at "safety one", Gerard ZL2GVA was at "safety two" where Bill ZL2AYZ took over, Ian ZL1BGL and Lara were at "Finish".

A signal test was run on 695 and then the dub simplex 147.575. Simplex gave full scale 9+ signals to and from all stations, so this was used. Communications ran very smoothly, as did car dub organisation, and there was little down time.

There were three break downs; the Vause duo had suspension problems, Fred had ignition problems and Dean Cameron had a diff fail. Richard Bateman was the fastest over the day. Several showers during the day settled the dust a bit but the wind quickly dried it out.

All 17 participants were toured through to familiarise themselves and then over the day, each participant drove singularly over the course against the clock, we recorded 8 groups of cars (9 - 10) through the course over the day.

We were on the road home at 3.30pm. Thanks to all participating members for their work. The cheque was delivered to us during the event and we delivered it to Ken on the way home.

The Car Club will need us again on Saturday November 14th and then in February.



Looking for Christmas gifts for the Ham in your life?

Try <http://www.zazzle.co.nz/ham+radio+gifts> for all sorts of stuff including clothing items, mugs, plates, postcards, greeting cards, bumper stickers, i-phone cases, keyrings, magnets, floor mats, throw rugs, field day water bottles, clocks, coasters, cufflinks and lots of other stuff. Many can be personalised with a "design your own" feature. They range in price from \$1.35 for personalised stationery to \$264.00 for a bag. I see there's a Morse code watch for \$189.00.



Good one for Helen



Tie, not toilet roll!



Get one for next year Bill

As an example of personalisation, the shirt on the left can have the text on the front changed, or deleted, and on the back of the shirt you can have your call sign or whatever else you want added. All the clothing comes in a variety of styles and colours for both men and women. Select what you want as you go.

There are many options of pictures and words for most of the items listed and most are able to be changed.

At the time I looked they had 50% off cards, invitations and postcards and you could personalise Christmas cards with the code given on the page.

It is a NZ address (although USA based) and advertises itself "now available worldwide", so I assume it is \$\$NZ. If you sign up and add something to your cart it already has NZ in the shipping details.



Grant's vehicle doesn't look so bad after all!



CALENDAR OF EVENTS

See what's coming up in **your** dub. Make sure **you** volunteer for something, if able, & mark it on your calendar!

NOVEMBER 2015

14.....Car Club event - Rob Carter coordinating

DECEMBER/JANUARY - Christmas or New Year BBQ?

FEBRUARY 2016

13.....Wine and Food Festival