

April 2014

INTERFACE

MONTHLY BULLETIN - MARLBOROUGH AMATEUR RADIO CLUB INC.
P.O. BOX 432 BLENHEIM NEW ZEALAND

CLUB CALENDAR:

AGM; 10 April. EOC, 19.30hrs

Social Group; 17 April. 12.00hrs - The Vines

Committee Meeting; 24 April 07.30hrs - EOC

BRANCH 22 NOTICES

1. Graperide 5 April
2. Conference Q/birthday
3. Silver Fern Car Rally November

Editor: Caryl Simpson
caryl@simtronics.co.nz



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

Net Controller; Ken Hynds ZL2KHZ

HF Net Fridays 1930
3.575MHz

VHF - USB Net Wednesdays 1930
144.150MHz

SUNRISE AT ICP, ACHERON SAREX



©Paul Rennie

MARLBOROUGH AMATEUR RADIO CLUB 82nd ANNUAL GENERAL MEETING
Held at EOC on 13th March 2014 @ 19:35 Hrs.

Present: Kaye Hannagan (Chair), Bill Cousins (Sec), plus 19 members as per register.

Apologies: Harry Stephens, Derek Harding, Wayne Parker.

Minutes: Minutes of the 81st AGM were taken as read in view of their being published in Interface. A vote was taken to accept them as a true and accurate record.

Helen Harris/Bernie Lankshear – Carried

Business Arising: Nil

Financial: The audited report was circulated among the members for review and comment. Ken Menzies moved that this Financial Report be accepted.

Ken Menzies/Bill Cousins - Carried

The Treasurer requested payment for the Insurance premium on Repeater sites be approved.

Helen Harris/Kaye Hannagan - Carried

Correspondence: Nil

Reports: The following listed reports published in Interface were taken as read:

QSL Manager Exam Supervisor Social Group Repeaters

Thanks were expressed to those who had prepared the reports and it was moved that the reports be accepted.

Ken Menzies/Bernie Lankshear - Carried

The following listed reports were read:

President AREC

It was moved that each of the reports be accepted.

Ken Menzies/Gerard Van Antwerpen and Willie Wilhelmus/ Stuart Watchmen - Carried

Election of Officers: Incumbents of the following positions have agreed to continue in office:

President: Kaye Hannagan **Secretary:** Bill Cousins **Treasurer:** Ken Hynds

Committee Members: Grant Simpson, Stuart Watchman & Paul Rennie.

Rob Carter offered to step down from the position of Vice-President (but continue as a committee member) in view of the nomination of Grant Simpson to the position of VP.

Chris Grant was also nominated as a committee member.

It was moved that these positions be confirmed and that the willing incumbents of the following positions be confirmed:

QSL Manager: Bill Cousins

Exam Supervisors: Bill Cousins and John Neal

Morse: Ken Menzies

Call Sign Trustees: Ian Conway, Stuart Watchman

Training Officer: Stuart Watchman

Repeater Trustees: Grant Simpson, Ken Menzies

Librarian: Gerard. van Antwerpen

Social Group Coordinator: Ross Holdaway

Interface Editor: Caryl Simpson

Web Master: Grant Simpson

AREC Section Leader: Paul Rennie

Auditor: Mrs M. O'connell

Roger Burdon/Tony Whitaker - Carried

Thanks was expressed to Caryl Simpson for her continued willingness to edit Interface

General Business:

There was some discussion on the matter of subscriptions but it was agreed that they should remain at their current level. This is possible due to the income generated by members who assist with various events that attract some remuneration. Thanks was expressed to Stuart Watchman for his continued supervision of a number of these events and the extra time and effort required to ensure they are run efficiently.

Closure: There being no further AGM business the meeting was closed at 2002 Hrs and followed with the Club's Monthly General Meeting.

MARLBOROUGH AMATEUR RADIO CLUB GENERAL MEETING
Held at EOC on 13th March, 2014 @ 203 hrs.

Present: 20 members

Apologies: Harry Stephens, Derek Harding, Wayne Parker

Correspondence:

In: Quote for cabin from Dashwood Timber

Out: Reply to Dashwood Timber

Reports:

Financial report from Ken Hynds (Treasurer). Ken sought approval for a payment of \$150 to the Auditor and also payment for the portaloos used on Field Day.

AREC report from Paul Rennie.

AREC SAREX 28/29 March.

Thank you letter and \$200 donation from Mountain Bike Club.

Business Arising:

Repeaters: We have yet to hear more from Airways Corporation regarding accommodation at Kaikoura.

March/April 2014 has been earmarked for the modifications at Ward 560. Grant Simpson to approach Harry Stephens this week regarding the frame to hold the solar panels.

Remote HF Site: The MDC have replied to our enquiry regarding a building permit and requested a current chartered engineer's report on the tower and its base.

Both Caryl Simpson and John Neal have indicated possible people we could approach and they have been asked to pursue that to gauge their willingness to assist us and at approx. what cost.

General Business:

Coming Events:

- March 28/29: SAREX
- April 5th: Graperide

NZART National Conference, 2014:

Kaye informed the meeting on current progress towards this event. See also the Committee minutes. Kaye also suggested various raffle possibilities to raise funds.

The Registration form will appear in the March/April Break-In and on the NZART Website.

Silver Fern Car Rally:

Rob Carter informed the meeting of the current situation regarding the rally.

The Rally Base location has yet to be decided.

The route is essentially settled.



Closure: There being no further business the meeting was closed at 2025 hrs.

NEXT RAFFLE FOR CONFERENCE

We are looking for yummy edible treats for another conference raffle.

Make sure they have an expiry date of at least August 2014 though!

Please bring to the next meeting, or give to a committee member. Thank you.



PRESIDENT'S REPORT

March has been a very busy month with a number of events for members to participate and plan. Thank you to everyone who helped out, and especially those members who bear the brunt of organising and making phone calls to operators prior to events.

AGM

Robin Carter stood down as Vice and John Neal resigned from the committee. I would like to thank both Robin and John for their support and hard work over the past years. You have both been a huge support and worked hard for the Club.

The Committee now consists of

Kaye Hannagan – President

Grant Simpson – Vice President

Ken Hynds – Treasurer

Bill Cousins – Secretary

Stuart Watchman, Chris Grant, Paul Rennie, Robin Carter

I would like to warmly welcome Chris Grant to the committee.

Financials

At the AGM a question was asked from the floor regarding the yearly Club fees and whether it was time for review. The information was not available at the time but Ken Hynds has reported to the March Committee meeting as follows:

Club members	54
Exclude Life and Honorary members	4
Over 80 year old member	5
Those who have not yet paid fees	10
TOTAL paying members	35

Income from member subscriptions totals \$655

Fixed outgoings \$2256

- Post box
- Insurance
- Auditor
- Licences for repeaters
- Interface

Our largest outgoings, are in fact, compliance costs for repeaters and insurance.

It may well be time to review fees at the next AGM, please feedback to a committee member if you have a view one way or the other.

Remember that the Club provides communications for a huge number of events. This provides us with the income to upgrade repeaters and build HF towers as well as pay the deficit each year between subs and fixed costs. More than anything these events are a fun way to get out and about, and contribute to the community in which we live.

If you have any questions please feel free to contact either Ken or myself, always happy to hear from you.

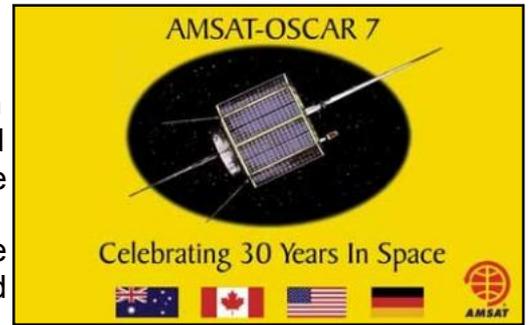
Warm regards
Kaye Hannagan

SATELLITES

In the December Break-In I spotted the call sign ZL2AYZ in an article on satellites. Of course most of us know Bill, and I knew he is pretty active on the bands, but didn't know he was into the satellite operation.

I've always been interested in this too and have made some contacts a few years ago, using just a handheld radio with a whip antenna.

This was through one of the so-called 'easy sats', one of the many Low Earth Orbiting (LEO) satellites, using FM on the 2m and 70cm bands.



These LEO satellites orbit at about 700 to 1000km above the earth and typically take about 1½ hours for one orbit. The path of the orbits have a generally more or less North-South orientation. The time that they are visible from one location is typically 10 - 15 minutes.

As sats orbit around, the earth rotates underneath them (towards the east) and each pass is shifted to the west. This means that you have to know when and where the satellite is to use it. A pass straight over Blenheim is followed an hour and half later by a pass somewhere over Adelaide. Looking at the paths on a map it looks like sinusoidal up and down curves.

As you can imagine at 700km up, you have a nice big view of the earth below. This is typically about a 4000km circle, which means that people within that circle can see the satellite at the same time, and thus use it to make radio contact through it.

The radios in the satellites work just like repeaters, although they operate all in a cross-band mode. A lot of them use the 2m and 70cm bands, so they receive signals in the 2m band and retransmit them in the 70cm band (or sometimes the other way round).

The contacts I made were through a satellite that uses FM, there are only a few of these. Most of them use SSB, which is slightly more tricky, with lower signal levels etc. But it allows more than 1 user, as the radio on board the satellite actually passes a whole band section (about 15kHz) through, rather than just 1 FM channel. So the more 'serious' operators are using these SSB sats.



As the signal levels are rather low, better antennas give better results. I used just a handheld with 4 Watts FM and a whip antenna, Bill has used a discone and a J-pole with his base radio. At the time of my visit he had upgraded to a nice pair of yagi's mounted on a short pole, with automatic elevation and directional rotation to track the satellite as it passes over.

Control of the tracking is done with a computer and some software which turns the numbers that describe the satellite's path into signals that tell the antenna rotor which way to point. It is fascinating to see this happen, from the AOS (Acquisition of

Signal, when the sat starts to come over the horizon), to LOS (Loss of Signal, at the other end of the pass), and at the same time see/hear the signal come up and fade away at the end.

On the evening of my visit we looked at the software to see the list of sats that were making visible passes in the next couple of hours. This was about 4 or 5, some only low passes in the East, so not much activity to be expected (the Pacific is pretty empty out there), one with a CW beacon, which we tracked very well during its pass. But also a few SSB ones, including AO-7 which was launched in 1974! This is an interesting one, as it lost power in 1981, but came back to life in 2002. We heard some VK stations and subsequently made a few successful contacts.



Thanks Bill, for taking the time to show things to me. It was very interesting, and fascinating to think that you're actually using this equipment 700km up in a little box (most new satellites are only 100x100x100mm! AO-7 is somewhat bigger at 28kg) floating around in space. If anyone want to know more about the amateur radios, the place to start would be the AMSAT website.

Gerard, ZL2GVA

All photos in the above article were supplied by Gerard



SAREX WEEKEND

On the weekend of the 28-30 March 2014, Stuart Watchman and I travelled down to Acheron Homestead, which is over Jack's Pass behind Hanmer, to assist the Christchurch Branch with communications for a Top of the South Search and Rescue exercise along with about 50 other search and rescue volunteers. The weather played ball all weekend presenting us with exceptional warm days. The event managers had devised three scenarios with the lost parties being dispatched into the unknown early Saturday morning and try and find some cover as it was very nearly all open country. Richard Smart, section leader from Christchurch, and others had put together a comprehensive communications plan with three portable repeaters dispatched early on Saturday morning. The search teams were also briefed on Saturday morning with Stuart and Richard taking them through the hf and vhf operating protocols and Daniel Ayers and myself taking them through the setting up of the vhf repeaters, being linking and crossband.



Then it was over to the four of us taking turns at operating 3, sometimes 4 radios along with hf, and also changing repeaters that decided to "fall over" during the day, a little bit challenging. The IP STAR was also trialled but not very successful as too many willow trees hindered the signal from the satellite, but worth a try. Also organised for the day was an experiment with UAV's which are unmanned helicopters and/or fixed wing aircraft to fly above the search area and pinpoint objects of interest to the management team. We were given a trial fly

back at camp on Sunday morning, for those who had not seen the action, a worthwhile piece of equipment in calm and very clear surroundings. The “lost parties” were found early on Sunday morning in time for them to return to base and then a very comprehensive de-brief followed by a very enjoyable BBQ, then the task of retrieving the repeaters and dismantling all the antennas and poles etc and departing for home. All in all a very enjoyable weekend, and another chance to work with another AREC group, swap ideas, and hopefully improve some of our operating expertise. My thanks to Stuart, Richard Smart, Daniel Ayers for their company.

Paul Rennie - ZK2EO
(All photos in this article were supplied by Paul)



Guess who won the chocolate fish for the first correct entry?



FORREST
GrapeRide
MARLBOROUGH

SATURDAY
5 APRIL
2014