

SEPTEMBER 1991

THE GROUNDWAVE



NEXT MEETING WILL BE HELD
WEDNESDAY, SEPTEMBER 4, 1991

Club Call VE3RC

Repeater VE2CRA



Official Bulletin of the Ottawa Amateur Radio Club, Inc.

The Ottawa Amateur Radio Club, Inc., Box 8873, Ottawa, Ont., K1G 3J2

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THE OTTAWA AMATEUR RADIO CLUB, INC. is an association of Radio Amateurs devoted to the promotion of interest in Amateur Radio communications in the National Capital Area; and to the advancement and achievement of club members.

REGULAR MEETINGS of the OARC, Inc., are held on the first Wednesday of each month (except July and August) in the Champlain Room (2nd floor of the Old Teacher's College) of the RMOC HQ complex on Lisgar St., Ottawa, at 1930 hours. A bulletin board is available for posting notices of interest to other members about 1915 hours. Further details about each meeting is elsewhere in this publication.

PACKET RADIO MEETINGS will be held at 7:30 p.m. on Nov. 29, 1990; Jan. 31, 1991; March 28, 1991; and May 30, 1991, at the McNabb Community Centre, Percy and Gladstone. This is an OARC technical meeting open to all who have an interest in packet radio.

THE OARC EXECUTIVE normally meets on the second Wednesday of each month at 1930 hours. Contact the President to confirm the date of the next meeting.

DEADLINE FOR COPY is the second Wednesday of each month. Make yourself better known to fellow members and other amateurs, too, by giving us an article, technical or otherwise, relative to our hobby.

MATERIAL PUBLISHED herein does not necessarily represent the official OARC viewpoint. Items may be reprinted by Amateur Radio or other publications provided that proper credit is given to the author and to the OARC, Inc.

JUNIOR MEMBERSHIPS - To encourage young people to join the club and to participate in amateur radio, the club is opening a junior class of membership. Dues will be at a 50% discount but the junior member must pick up his/her copy of the Groundwave (preferably at the meeting).

RADIO AMATEUR CALL BOOKS are available at many local libraries. Ask at the information desk.

SAFETY BELTS, 2-METER RIG AND AN ENGRAVING PENCIL are available for loan to club members. The 2-meter rig may be borrowed by members who are hospitalized. The engraving pencil (to mark valuables for

identification in case of loss or theft) and the safety belts with pole straps are available to any members. For the belts, a refundable deposit consisting of a cheque equal to the replacement value of the belts is required. Contact the President for the 2-meter rig or the engraving pencil; and Paul, VE3ICV, at 820-6643 (West End) or Brian, VE3JKZ, at 523-1535 (East End) for the belts.

THE CAPITAL CITY NET meets every Monday at 2000 hours on the Club Repeater VE2CRA (146.34/.94) to pass traffic and to make announcements of interest to amateurs in the National Capital Region.

PACKET RADIO VOICE NET meets following the Capital City Net on VE2CRA at 2040 hours. This is an informal net to answer questions about packet radio, pass along operating hints and provide information for future packet operators.

THE SWAP NET is a service provided and conducted by Ed Morgan, VE3GX. This feature appears on the Capital City Net, noted in the foregoing paragraph. To list items and make inquiries, call Ed Morgan at 733-1721.

POT-HOLE NET is a SSB/HF net sponsored by the Ottawa Valley Mobile Radio Club, and conducted every Sunday at 1000 hours on 3.760 Mhz. All amateurs are welcome to check in. The Swap-Net is a regular feature.

POT-LID CW NET is an informal slow-speed CW net sponsored and conducted by Ed, VE3GX, and meeting every Sunday, except during July and August, at 1100 hours on 3.620 Mhz, to promote interest in CW and CW procedures.

REPEATERS

VE2CRA Voice	146.94/34	443.300/448.300
VE3OCR	223.34/224.94	
VE3OCR Packet	145.01(sx)	Inter city links
VE3OCR Packet	145.07(sx)	Local area net for QSO and Packet QRS.
50 kbps Packet	220.55/433.55	
VE3XDX DX Info	146.25/146.85;	packet
	145.11 (SX)	

For further information, please contact repeater chairman.

**MINUTES OF THE OARC GENERAL MEETING
OF JUNE 5, 1991**

The June meeting of the Ottawa Amateur Radio Club was called to order by the president VE2ZP at 1945 local.

The first order of business was the CARF bulletin, read by VE3PAP. This was a special news release, indicating that CARF and CRRL had reached an agreement in principle on merging.

The next item of business was the annual election of officers. The nominating committee was not able to secure a nomination for vice-president. No nominations were forthcoming from the floor, and the following positions were filled by acclamation:

President	- Peter Jago, VE3PWJ
Secretary	- Mike Spenuk, VE3JTQ
Treasurer	- Mike Kelly, VE3FFK
Directors	- Clare Fowler, VE3NPC
	- Dave Parks, VE3GSA
	- Rob Morrison, VE3ZZR

The guest speaker for the evening was VE3SLW, who gave a very interesting talk on SW Utility DXing.

VE3RMM and VE2ZP gave a talk and demonstration of the DX Group's PacketCluster node VE3XDX.

There being no further business, the meeting was adjourned at 2220.

V.P. NEEDED

The Club still needs a Vice-President. Anyone interested in this position, please call Peter Jago, VE3PWJ, at 836-1013.

(SEE PAGE 8 FOR THE AGENDA AT SEPTEMBER'S MEETING.)

**JOE NORTON TRUST AWARD FOR THE
ADVANCEMENT OF AMATEUR RADIO**

by Jeff Wilson, VE3RCI

As this year's chairman of the JNTA selection committee, it is my distinct pleasure to announce that this year's winner is Roxanne Delmage, VE3VON. Roxanne's initial interest in amateur radio was sparked by husband, Craig, VE3KKU, but her vocation as a Victorian Order Nurse (hence the callsign!) has given her an excellent use for amateur radio.

Roxanne has performed missionary work in the Dominican Republic and enjoys communicating with missionaries around the world through the International Mission Radio Association (IMRA) Net. Roxanne maintains a twice-weekly sked with Sister "Bernie" Murdoch, 9L3BM, in Sierra Leone, to help maintain her radio link with her Canadian family. She also acts as the QSL manager for 9L3BM.

Roxanne, who is on the health committee of NOW (Nepean Outreach to the World), together with Craig, are assisting NOW to obtain a formal third party traffic agreement with Sierra Leone. This will allow Roxanne to set up phone-patches for Sister Bernie and for Nepean officials to talk to officials from the town of Bo, which is twinned with Nepean.

Roxanne plans to continue doing missionary work through amateur radio and plans to become active in CLARA to share the Amateur Radio hobby with other women. She is active in the Ottawa Valley Mobile Radio Club, but the planned arrival of their first harmonic in late August will provide yet another outlet for Roxanne's energy.

Depending upon harmonic interference, Roxanne hopes to be at the September OARC meeting to receive the Joe Norton Trust Award cheque, which should be in the neighbourhood of \$700. Best wishes Roxanne, and congratulations!

IN CASE YOU MISSED IT

All Canadian Amateurs should support the Defence of Amateur Radio Fund (DARF) to ensure that, at WARC-92, maximum protection is available for those valuable Amateur frequencies so coveted by commercial interests. Contributions to: CARF, c/o Tim Ellam VE6SH, 107 Strathern Rise SW, Calgary, AB, T3H 1R5. (Item 1, CARF News Bulletin 09-91.)

If your summer vacation plans include a trip to Toronto in mid August you should put a visit to VE3CNE at the top of your 'must visit' list. VE3CNE, located at the Canadian National Exhibition, 'The Ex' is the premier display of Amateur Radio in Canada. The station is housed in the Arts and Crafts building, a few steps from the Dufferin Gates at the west end of Exhibition Place.

VE3CNE will be in operation for duration of 'The Ex', from Wednesday 14 August to Labour Day, Monday 2 September. The station will be in operation from 1000-2200 daily, and will be equipped with HF and VHF gear capable of operating most of the popular modes, from CW to Packet. All Amateurs and prospective Amateurs are welcome to operate. If you can't visit in person then look for us on the air to collect a VE3CNE card. See you at 'The Ex'. (Item 9, CARF News Bulletin 09-91.)

The CARF and CRRL boards of directors met in joint session at Cobourg, Ontario, on Sunday, June 2, 1991. Considerable progress was made towards the creation of a new, single, Canadian Amateur Radio organization. The joint boards

1. accepted in principle the new Constitution and By-laws prepared by the CRRL-CARF merger committee;
2. accepted recommendations of the Legal, Administrative and Publications subcommittees;

3. agreed to eventually locate the headquarters of the new organization in the National Capital Region; and
4. agreed to supply members of the new organization with "The Canadian Amateur" Magazine, which will include features now found in 'QST Canada'.

The CARF and CRRL boards of directors also approved a name and basic logo design for the new organization. These will be released to the Canadian Amateur Radio community after title search and registration.

Original document signed by:

- J. Farrell Hopwood VE7RD, President, CARF
 - B. Balla VE2QO, President, CRRL
- (Item 1, CARF News Bulletin 10-91.)

CHOP! CHOP! In the U.S.A. the FCC have notified the Amateur community that amateur stations may not transmit in the frequency band 220.000-222.000 MHz after 000 hrs UTC 28 August 1991. This frequency band has been given to commercial business interests for land mobile service.

Amateur operation in the U.S.A. will still continue exclusively on the 222-225 MHz portion of the band. Credit W5YI Report. (Item 2, CARF News Bulletin 10-91.)

HOW LOW CAN YOU GET? New Zealand Amateurs have been given a new band which runs from 165-190 kHz. Amateurs are secondary users and the maximum power is 5W EIPP (effective isotropic radiated power). This is similar to the U.S. 1750 metre band (160-190 kHz) which allows a maximum of 1W into an antenna, plus feedline of no more than 50 feet. Perhaps Canadian Amateurs should explore the possibilities of requesting authorization to use this band for experimentation. Just imagine a half-wave dipole on this band - 2650 feet. (Item 4, CARF News Bulletin 10-91.)

"VE6TRH/VE3 LISTENING"

At 4:05 AM on July 17 Marathon Runner Al Howie had already begun his 27th day of running on his way across Canada. His escort vans are equipped with ICOM HF and VHF rigs, but they had been silent until the evening of 16th July when VE3ICP got on board near Rockland. A couple of contacts were made on VE3MPC that evening, and on the morning of the 17th there was an early contact on VE2CRA before checking in on the 'rubber ducky' net on VE3MPC.

The runner had started early that morning from east of Orleans in order to reach the Terry Fox Memorial downtown before 8 AM. He was met there by the Mayor of Ottawa, and others, for a ceremonial greeting, before running on to the Centennial Flame for further presentations and media interviews.

As we proceeded out the Western Parkway I was not able to find further contacts on the local repeaters, and the HF bands seemed blacked out. On 40m there were frequent 'whistlers' as well as crash QRN. Beyond South March contacts on VE3STP began and continued through the day at intervals, including checkin on the Champlain Mini-net. The overnight stop was at Arnprior, and on the 18th more contacts were logged on VE3STP. The HF bands were still dead.

It is unfortunate that we learned of this opportunity for mobile operations too late to organize full manning of VE6TRH while they were passing through this area. I understand that relays of operators will operate the station from Thunder Bay westward, that is from about July 30 to Sept. 2 or whenever the run is completed at Victoria. I will be looking for them on the 20m calling frequency, and on the Aurora Net on 7055 in the evenings. It was a very interesting two days as the operator of VE6TRH Mobile VE3.

de Ernie, VE3ICF

BUNNY HUNT A BOUNDING SUCCESS

by Doug Carswell, VE3ATY

The OVMRC/OARC Bunny Hunt got off to a good start on a bright warm Saturday on 1 June with registrations and check-in at Black's Rapids (pronounced Black's Rabbits on this occasion), just south of Ottawa. Twenty or more contestants registered for the hunt, some operating in teams. The quarries were two 2-Meter bunnies, one fixed and one roving.

Contestants used a variety of techniques to direct their various modes of transportation toward the bunnies.

The over-all winner of the hunt was Dave Perry, VE3IFB, assisted by two non-amateurs. Dave used a 16-element array of 1/4-wave verticals spaced out in a circle and linked to a LED display that told him which way to drive.

Dave found both bunnies in a total elapsed time of one hour, ten minutes and fifty seconds. His first prize win precluded his taking the prizes for first to find bunnies 1 & 2. Dave has promised the Club a talk on his antenna system.

Neal Herber, VE3PUE, teamed with Don Kernohan, VE3PUZ, took second prize for finding bunny number 2 in ten minutes and 39 seconds. They were using a time delay between wave front arrival system. When time delay was zero, they were pointed directly at the target.

Third prize winner was Jeff Wilson, VE3RCI, using a simple dipole to find bunny number 1.

The prize for the most inventive method of direction finding went to Ted Starr, VE3TSG.

Harrie Jones, VE3HYS, used a simple method of signal strength to locate the bunnies and was awarded fifth prize.

The group of 20 competitors and ten officials gathered at Andy Haydon Park in the afternoon for the awarding of prizes and to compare notes on the various techniques. It was agreed that every one had had a hoppy time and they declared the day a bounding success.

GETTING OUT

... bits and pieces on this and that...Aug 14/91

Remember back in March, when you promised yourself that you would get that antenna work done as soon as the snow was off the ground? Well, the weather isn't going to get any better than this, so get to it!

Field day has come and gone again. I had more fun this year than at any previous one. How about u? I still had field day in mind this past weekend, while camped out at a car race at Mosport. I tossed up a 40 meter dipole and worked a bunch of stations on cw and ssb from inside my tent. I seldom, if ever, get on the hf bands from home, so it was a nice change from the two meter routine. It was also an excellent way to introduce some of my non-ham friends to hf operation (they have already seen what 2 meters is about). If you are apartment bound, or have neighbour trouble, why not try portable operation? If you have only a Basic license, then try working from some of the higher hills in the area. An evening call on 146.52 from a high location can be the start of some pretty interesting conversations. If you have 2 or 6 meter ssb gear, then so much the better. The bottom line is, get yourself outdoors before the snow flies. Summer (and spring and fall) is the wrong time to do all your hamming from the basement.

On a related topic.. try, at least once a year, to do something different within this thing called hamming. It needn't be something that costs a bundle, like getting into satellite work, or exotic like ham-tv. It might be the kind of thing that others find routine. Some examples: public service events; traffic handling; net controlling; bicycle/ski/skate/innertube mobile operation; ragchewing on one of the "ward" bands. If you haven't tried it, then it fits this category. There is help around to get you started in most of these things (anybody know anything about innertube mobiling?). Most people who do things in some aspect of ham radio are eager to show others how to get started. Just ask.

LAST WORD...LISTEN!

73 de VE3FFK, mike k.

MEMBERSHIP RENEWAL TIME

It's time to renew your OARC membership for 91-92. You will find a membership application form attached to the back of this month's Groundwave. Although I will be accepting applications at the September OARC meeting, the preferred method is for you to fill out this form and mail it and your cheque (made out to the Ottawa Amateur Radio Club) to me at my home address: 5-2959 Richmond Rd., Ottawa, Ont., K2B 6S6. Note that unless the bottom of your Groundwave mailing label says OK91-92 this will be the last issue of the Groundwave that you receive. So get those renewals in early.

de Michael, VE3WMB
(Your membership chairman)

1991 FIELD DAY REPORT

by Jeff Wilson, VE3RCI

Well, once again Mother Nature blessed our joint OVMRC/OARC Field Day with blissful sunshine and no rain. But, because we were appearing to have too much fun, she let loose the mosquitos (as usual) and turned the thermostat way down low! The graveyard shift complained of QRM from the teeth chattering of the operators as it got down to around 8°C. You could see your breath! Thanks to Judy (VE3PAB) and Fred (VE3PAA), we had a nice warm bonfire to huddle around between shifts. A great breakfast by chef Doug, VE3ATY, helped shake the chill off on Sunday morning.

The VE3RAM (2A Ontario) Field Day site at Fred and Judy's on Leitrim Road proved to be an excellent choice. Yours truly managed a sling shot over the highest poplar tree for a 50-foot support for all the wire antennas - 40 and 80 meter dipoles and a G5RV that was thrown together on the spot, thanks to Vic, VE3BSV, Duncan, VE3OM, and Bob, VE3YBC, who joined the Club at Field Day!

The army tents, obtained by Rob, VE3ZZR, were delivered by Sharon, VE3TDW and Mike, VE3FFK in a race against time during Sharon's summer bus route. Great job! We all got a lesson on how to put these tents together...lots of fun! We had three tents for phone station, CW station, a general junk food/coffee tent (or in case of rain).

The two generators from CFRA, courtesy of Harrie, VE3HYS, worked flawlessly. Clare, VE3NPC, had his excellent satellite station there and several people got their first taste of satellite operation. I managed three CW contacts via satellite in the waning hour of the contest. Packet Radio was there as well, thanks to Doug, VE3OCU, and Marcus, VE3MDL, although conditions

were not that great for Packet - only one contact, but that equals 100 points!

The highlight came before the starting gun as CJOH TV (Cable 7) showed up to interview everyone (almost) and to film us operating. Did you see Vic and Judy talking up amateur radio and Field Day on the News at 6 and 11 p.m. June 23?

In addition, Harrie and I were interviewed on *Eye on Ottawa* a week earlier. Funny how you can get nervous in front of a camera, but not a microphone. Come to the September meeting to see the videos!

As far as the Field Day contest is concerned, we didn't do as well as the last two years, but we had a lot of fun. More time was spent teaching our new amateurs how to operate the various rigs during a contest and how to keep logs and dupe sheets up to date. John, VE3ACI, showed us how to use colourful phonetics to get a weak signal to California - ask him about it!

For those interested in numbers, our SSB QSOs per band were 24 (15M), 112 (20M), 65 (40M), 93 (80M), and 101 (Satellite). The CW QSOs were 16 (15M), 14 (20M), 342 (40M - guess which antenna worked best?), and 118 (80M). With bonus points we should break 4,000 points, which is about the same as the last two years.

For all those who made it out, and there were lots, thanks for your efforts. For those who missed it, well, just wait until next year! Vic, VE3BSV, is our Field Day Committee Chair and is already thinking about how to better this year's fun. Please lend Vic a hand and volunteer early.

73, Jeff, VE3RCI,
1991 Field Day Co-ordinator.

PENETROX AND ANTENNA CORROSION

This corrosion inhibiting medium is used, or should be, when assembling beam antennas or making electrical connections that could corrode. It can be purchased at any Electrical Wholesaler and some Building Supply Houses. It comes in a plastic bottle and is enough to do one person a lifetime, so get together with your buddy and share. It is manufactured by: Ideal, Burndy, etc. and may have a name other than 'Penetrox'.

The old saying that 'some is good, so more must be better' is NOT true in this case. Penetrox is a moist paste and with time DOES dry out. If too much is initially applied, it now becomes a white/gray powdery layer, as it dries out, with VERY POOR electrical conducting qualities and hence a sudden change in antenna performance. Rain will moisten this white/gray cake and things may seem to be OK for a while only to wreak havoc at a crucial moment.

Now, for the proper application! Most of us use this medium when assembling beam antenna elements to prevent corrosion at the element joints. Clean the tubing, at the joint, inside the larger tube and outside the smaller tube, with coarse steel wool. Now apply a thin layer of Penetrox to both surfaces (a dowel is useful for both inside cleaning and Penetrox application).

Work this thin layer into the metal by use of steel wool and a bit of elbow grease. When done, use your finger to smooth the whole thing out and remove excess. Slide the tubes together and use a small sheet metal screw to lock the joint into place and make a good electrical connection.

This medium can also be used on coax connectors but again sparingly and work it in with an old toothbrush.

VE7ECE & Burnaby Connection
in The TCA Magazine

SOLDER TO ALUMINUM?

From the St. Paul ARC Newsletter and the Allen County Amateur Radio Technical Society. "State of the Art".

You can solder aluminum! Do it this way: place a drop of motor oil on the location you plan to solder, next, take a sharp pointed tool (a pocket knife works well) and thoroughly scratch up the surface. Do not wipe off the oil. Now take your soldering iron, heat the spot and apply a good resin core solder. You will find the solder will adhere completely - both physically and electronically. Works great for making connections to an aluminum chassis.

The TCA Magazine

AGENDA FOR SEPTEMBER OARC MEETING

John Henry, VE2VQ, will provide an update on the satellite scene.

Dave Goodwin, VE2ZP will demonstrate his new Kenwood TS850.

And much, much more!

We urge everyone to come to the first meeting of the new administration!!