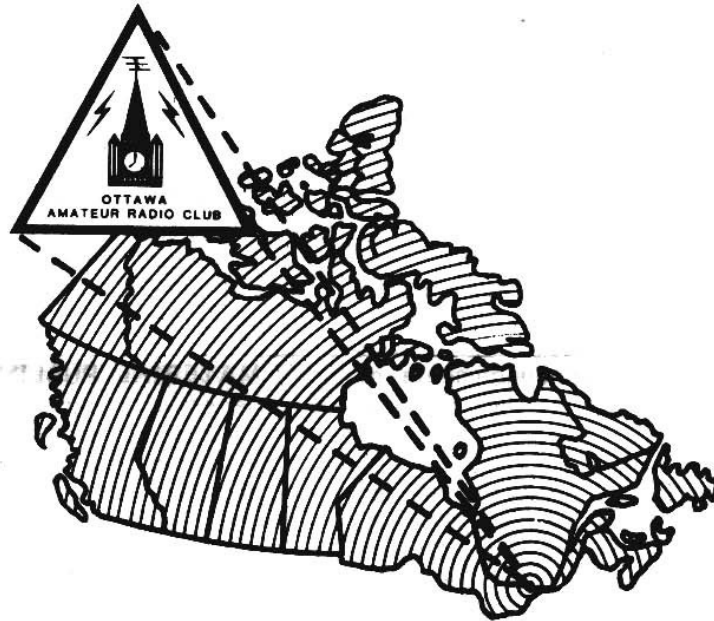


FEB 86

THE GROUNDWAVE



Club Call VE3RC

Repeater VE2CRA



THE GROUNDWAVE

Official Bulletin of the Ottawa Amateur Radio Club, Inc.

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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.

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.

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

THE OARC EXECUTIVE normally meets on the second Wednesday of each month in the Board Room of CFRA, 150 Isabella St., Ottawa, at 1930 hours. Contact the President to confirm the date of the next meeting.

DEADLINE FOR COPY is 4 weeks before the next meeting. Make yourself better known to fellow members and other amateurs, too, by giving us an article, technical or otherwise, relative to our hobby. They may get reprinted in far away places; and the family will be proud of you.

REGULAR MEETINGS of the OARC, Inc., are held on the first Wednesday of each month (except July and August) at the National Research Council Auditorium, 100 Sussex Drive, Ottawa, at 2000 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.

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.

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 member.

A \$100 refundable deposit is required for the belts. 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.

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

MINUTES OF THE OARC MEETING,
JANUARY 8, 1986

The meeting was called to order at 2005 hrs. On a request by Brett Delmage, the call sign of Doug Griffiths was corrected on the last minutes from VE3KKV to VE3KKB. On a motion by Chris Rochefort, seconded by Ernie Brown, the minutes of the December meeting were adopted as corrected. Doug, an administrator with the C.N.I.B. addressed the audience. He requested help in the maintenance of machines used by the blind. Also, he would like to find volunteers to help in the training of and act as sponsors for the blind. A call from any interested ham would be greatly appreciated.

Brett Delmage spoke next about packet radio. He gave a brief overview of the beginning of the hobby in this area and the formation of a group. He would like to see that group strengthened by joining forces with OARC with mutual advantages being derived by both groups. Dick Atkinson, the chairman of that group, was introduced at that time. Dick mentioned that he recently put the TNC board on the air and that at least 30 to 40 calls became active. He re-emphasized the benefits ahead for the two groups and felt very satisfied with the decision of the executive to encourage the development of packet radio and help it flourish within the existing club.

The Groundwave needs YOU. This is an invitation from Ernie Brown to offer your services in the production of your GROUNDWAVE.

The trial date for the Jack Ravenscroft case was set for January 15 according to Ralph Cameron. Ralph assured the audience that everything was being done to ensure that Jack's interests and those of radio amateurs in general are being defended in the best possible way.

VE3AYE has collected 36 names of people who want to be involved in building the direction finder project. More volunteers are still needed.

Harrie Jones would like people and some equipment for the ski marathon. If you can help, he would like to hear from you.

Keith Bedal, on behalf of Jack Belrose, asked if there were people interested in the rebroadcast of the teleconferencing materials. A show of hands revealed some interest in the matter. The date agreed upon was for January 23rd.

VE3NPT was welcomed as a visitor.

The main topic of the evening was introduced by the chairman: discussion of the DOC proposals for a possible restructuring of amateur radio service in Canada. He underlined the fact that the OARC executive would not write a submission. The individual members were urged to voice their opinions and take steps to write their own submissions. Several speakers took the opportunity to make their opinions known. The chairman expressed his satisfaction in the manner in which the members conducted the discussion. The following motion by Doug

Burrill, seconded by Chuck Baker, was carried:

That the Ottawa Amateur Radio Club write a letter to DOC commending them on their interest in amateur radio as indicated by the discussion paper.

The meeting was adjourned at 2230 hrs.

ANNOUNCEMENTS
FROM THE EXECUTIVE

1. Constitutional Amendment

The following motion will be voted on at the February meeting:

"Proposed that the Packet Radio Group chairperson shall be appointed as a member of the Board of OARC."

This motion has been proposed by the Club's Board of Directors because they feel that packet radio represents a major innovation in Amateur Radio and that it will come to have great importance in the relatively near future.

2. For Sale

Gestetner Model 460 copying machine. Previously used for printing the Groundwave. Original cost - \$750. Please make an offer. (Note - despite having produced the Groundwave, it will not produce 80 meter waves. However, it might make waves in your club or office work.)

3. Field Day

Volunteers are needed for a

field day co-ordinator, 4th weekend in June. If interested, please call the President, Dan, at 746-0968.

COMMENTS FROM THE PRESIDENT

At a recent general meeting I spent some time soliciting articles from members for our monthly publication. During this process I was reminded that the president should be contributing as well. My natural lethargy in this regard is secondary to my usual reluctance to fill columns of newsprint when there is nothing of interest to be said.

However, the recent D.O.C. paper on the restructuring of the amateur service brings a very important issue front and center. They have intimated that they wish to divest themselves of much of the regulation of the amateur service. Obviously then, the amateurs are going to have to pick up the slack if we are going to pursue our hobby in a reasonably orderly environment.

We have had paid civil servants to create and conduct our licencing exams, regulate our bands, etc. etc. If, however, they place these necessary functions in our hands, who is going to do it?

Why, of course, that's simple! The clubs and federations will do it! That's you and that's me!

Executive meetings already go until the late hours, simply handling ongoing business. There are waiting lists of good

ideas, projects et al which are just waiting time and people to initiate them.

In this club we have new amateurs with the ink still wet on their tickets and even one or two whose tickets are still in the hoped for stage, working like crazy for the club. Then there are the old timers who have been with us for years; on the executive, on committees and working on special projects. We also have a considerable number who have done yeoman service over the years and have justifiably decided to see if home and family still exist and have decided to take a rest.

So who is going to take on the new workload that may come our way? When you are considering your submission to the D.O.C. in response to their paper, take it one step further. Consider that restructuring the amateur service is not only a matter of licencing. It is a matter of involvement.

Dan - VE3EBI

SKI MARATHON

February 8 and 9 is the Ski Marathon weekend. As in the past years, VE2CRA will be used for Marathon traffic on Sunday. We still need people to ski or to operate from various exotic places along the route. If you are interested, call me at 233-6241, ext. 237, or at home, 237-6427.

Harrie, VE3HYS

JOE NORTON TRUST AWARD
FOR AMATEUR RADIO

The Ottawa Amateur Radio Club Inc. awards annually the Joe Norton Trust Award for the advancement of amateur radio. The amount of the award this year is \$800.00.

To be eligible a candidate must:

1. Be a resident of the National Capital Region as defined by the official federal government map;
2. Have received the first Amateur Certificate of Proficiency in radio from the Department of Communications during the 12 months preceding the closing date for the submission period;
3. Send a written submission of no less than 600 words and no more than 900 words to the Executive of the Ottawa Amateur Radio Club Inc., setting out his/her interests, achievements and plans to contribute to the advancement of amateur radio; and
4. Present him/herself for an interview if so requested by the judges.

RULES

1. Entries must be received on or before May 31, 1986. No entries received after that date will be considered.
2. The club will send acknowledgement in writing upon receipt of an application.

- 3. A panel of judges appointed by the Executive of the Ottawa Amateur Radio Club Inc. will evaluate all entries submitted before the deadline.
- 4. Finalists may be interviewed by members of the Executive of the Ottawa Amateur Radio Club Inc. or the panel of judges or both.
- 5. Submissions will not be returned and become the property of the OARC.
- 6. If the judges do not select a candidate in any year, no award shall be made in that year and the monies shall return to the Fund to be awarded in subsequent years.
- 7. The decision of the Executive of the Ottawa Amateur Radio Club Inc. in the selection of a recipient of this award is final.
- 8. The winner will be notified on or before August 1st.
- 9. The winner will notify the Ottawa Amateur Radio Club Inc. of his or her acceptance of the award no later than August 15.
- 10. The award will be made during the regular club meeting in the month of September.
- 11. The winner agrees to have his or her name, photographs and address published in club bulletins, trade papers and on the airwaves.

12. The winning submission will be published in the Groundwave.

SEND YOUR ENTRY TO BE RECEIVED NO LATER THAN MAY 31, 1986 TO:

The Joe Norton Trust
 Award for Amateur Radio
 The Ottawa Amateur
 Radio Club
 P.O. Box 8873
 Ottawa, Ontario
 K1G 3J2

PACKET RADIO GROUP

The Packet Radio Group will gather for a face to face meeting at the end of January for the members to meet, discuss activities and set up club projects. The date has not yet been determined at the time of writing due to conference room shortage, but will be between January 29th and February 2nd. The date will be known by the time you receive this Groundwave and if you wish to attend, please contact ~~Dave~~ Atkinson, 825-5619 evenings.

The Packet Radio Group is a committee of OARC members and prospective members. Particular emphasis of this Group will be placed on assisting those who wish to get on packet radio and to attract new members to the club.

Dick Atkinson, VE3JB0

Handwritten notes:
 to Jim 27 7:20 PM
 1-28-86 5:10 PM
 ...

VE2CRA - THE OARC REPEATER

"VE2CRA is an open repeater operating with an input frequency of 146.34 Mhz and an output frequency of 146.94 Mhz."

VE2CRA is also a 450 Mhz repeater operating on 448.3 Mhz input and 443.3 Mhz output. The 450 repeater is suffering some de-sense problems at the moment so it is running at low power in Ottawa.

Your Club's 2 meter repeater is located in one of the buildings at Camp Fortune. It's antenna is located on a small 100 ft. tower next to the 765 ft. Ryan Tower. At the top of the 100 ft. tower is a four dipole Sinclair antenna which is used for weather radio broadcasts, commercial communications and the OARC repeater.

At present the repeater transmitter is a modified Canadian Marconi DT-45 transmitter strip which gives 12.5 watts out of the duplexer.

The receiver is a Motorola Motrac with helical resonator pre-amp. The control circuitry was developed from VHF engineering kits. The audio output of the receiver is fed to the transmitter through a broadcast quality compressor. This means everyone has about the same audio level on the output so when adjusting the deviation of your transceiver make sure audio signal levels are compared on the input frequency.

By the summer the 2 meter machine should be a GE Master Exec II obtained from the Pioneer Amateur Radio Club.

The radio has been separated into transmitter and receiver and is being repackaged with new control circuitry built by Dave, VE3KMY. The present repeater will then be brought back up to spec to function as a standby repeater.

de Harrie Jones, VE3HYS

E.M.I. COMMITTEEFixing Telephone Interference

Recently I obtained several small toroids made by Siemens. These have the appearance of lifesavers and indeed may perform that function when properly used. I used mine to rid our Bell supplied Taiwan-made memory telephone of a severe case of RFIitis - if there is such a term.

The first step is to find out how to dismantle these Oriental marvels. By lifting the small celluloid window on the front or top two small screws are revealed. You'll need more than the average Philips screwdriver because the screws are recessed in plastic, to quite a depth. The two halves of the phone come apart like a clamshell and beware - the plastic can break. There is not only no shielding internally, but there is nothing to prevent RF from coming in the red and green line wires.

I now understand why we can hear a musical accompaniment from CFBO, CKOY and CHU all at once, whenever we pick up the phone. My rig which runs 100W so severely affects this phone that it's useless when I'm on

the air. The party at the other end can hear me too. And to think we paid \$60 for this. The old style 500 set is relatively unaffected - so much for the advances in technology.

One toroid was placed right on the PCB and soldered directly to each line input (i.e. L1,L2). A 0.1mfd mylar, 200vdc was placed right across the line at this point - again, right on the board.

The next job of shielding the electronics is a little more difficult and will require some ingenuity. A small quantity of aluminum foil is needed and should be cut with scissors in the shape of a mummy. (I hope this doesn't offend any one.) Perhaps Shmoo shaped is more appropriate - in any event it should be able to cover without shorting the circuitry on the board.

One or two pieces of foil in the required shape is needed as both halves of the clamshell contain circuitry. One side has the tone generator while the other has the micro and associated memory.

You will also need some thin mylar to which you will glue the foil (same shape!). You will need to identify the ground plane on the board containing the micro as a short (one inch/2.54cm) wire needs soldering to a common ground/earth point. I haven't found a good way to solder the foil so you will need to strip about 3/8" of the other end of the groundwire and tuck it under the foil which as you may see by this time is going to be pressed against each side of the clam. Remember the mylar

faces the exposed circuitry. If this precaution is not taken you may hear very dissonant Oriental music accompanied by Son et Lumiere.

I did not have time to prepare some sketches for this procedure but will endeavour to have them for the next issue if you feel more comfortable with them.

If you've had telephone susceptibility to your phone the way I have this may be your salvation. It worked for me altho' I can still hear a faint garbled voice when I'm on sideband, hardly noticeable. The RFI has been reduced I'd say 20-25 db. GOOD LUCK & 73.

Ralph Cameron, VE3BBM

P.S. - The toroids contain 10 turns of No. 20 wire spaced to fill the available space. They are good from about 1Mhz to 200 Mhz.

JACK RAVENSCROFT'S TRIAL

The trial lasted three days and the judge will render his decision hopefully before the end of February. The two lawyers involved have been asked to submit additional arguments in writing. A recording introduced by the plaintiff as evidence against Jack turned out to be the transmission of another amateur in the neighbourhood. (The plaintiff and his lawyer do not read code.)

de Doug Burrill, VE3CDC

FOR SALE

1. General coverage receiver
Drake SSR-1 Clone, 500 Khz
to 30 Mhz, continuous tune
analogue dial, AC/DC -
\$250.00.
2. General coverage receiver
Realistic DX-400, 150 Khz to
30 Mhz, direct keyboard
entry, LCD readout, AC/DC
portable - \$290.00.
3. Base station microphone
similar to Shure 444 -
\$40.00.

Call Ken, VE3MVV
Days: 996-5630 (leave
message)
Evenings: 820-2509

1. Interface for Commodore PET
2001 - RTTY, CW with
software, by Macrotronics of
California - \$50.00
2. Microlog ACT 1 dedicated
system for RTTY, CW and
AMTOR with
- Memory retention for field
work
- RS232 output (printer)
- Audio cassette
output/input for mass
storage
- All metal case - RF-proof
design - \$375.00

Call Bill, VE3KIF
Evenings: 828-9573

VOLUNTEERS WANTED - help the
CNIB

At the January 8th meeting,
Doug McArthur of the CNIB asked
for volunteers for two tasks.
First, volunteer technical help
is required to repair and
maintain electronic equipment
used by blind people, largely
the tape units used for talking
books.

Second, the CNIB would like a
volunteer(s) to teach a class
of six to eight blind people
who want to get their amateur
radio licence. If you are
interested, please contact Doug
at 563-4021 (CNIB) or 523-8269
(home). (If necessary, Dan
Holmes, VE3EBI - 746-0968 -
will relay a message to Doug.)

PACKET RADIO

Dick Atkinson, VE3JBO, is the
chairman of the new packet
radio group of the OARC. Many
amateurs regard this modality
as "the wave of the future" for
ham radio. Dick points out
that the packet repeater is the
second most used in the area.

GROUNDWAVE HELP

Ernie Brown, VE3ICP, (225-7798)
is looking for volunteers to
help with production (i.e.
collating and mailing) of the
Groundwave. Your help would be
appreciated since many hands
make light work.

GROUNDWAVE CONTRIBUTIONS

Contributions are still welcome
- keep 'em coming.



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

President	Dan Holmes VE3EBI	33 Crownhill Street Ottawa, Ont., K1J 7K5	746-0968
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	Keith Bedal VE3GFI	125 Ridgefield Crescent Nepean, Ont., K2H 6T4	828-1870 998-2234
	Mark Farey VE3DWL	26 Naismith Crescent Kanata, Ont.,	592-2522 592-2122
Packet Group	Dick Atkinson VE3JBO	20 Mancil Drive Nepean, Ont., K2J 2J5	825-5619 560-3260
Chairman	Harrie Jones VE3HYS	2-147 Arlington Avenue Ottawa, Ont., K1R 5S6	237-6427 233-6241
Repeater	David Goldsmith VE3FM	6250 Fortune Drive Orleans, Ont., K1C 2B1	824-0515 675-4671
Chairman	Ken Kendall VE3IHX	777B Springland Drive Ottawa, Ont., K1V 6L9	731-0892
Net Manager	Ralph Cameron VE3BBM	30 St. Remy Drive Nepean, Ont., K2J 1A3	825-1634 225-2850
Emergency	Peter Hafichuk VE3LBW	118 Ivy Crescent Ottawa, Ont., K1M 1X6	745-0608 993-1740
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EMI Committee	Brian Summers VE3JKZ	2231 Hillary Avenue Ottawa, Ont., K1H 7H7	523-1535 996-7885
Chairman			
Membership			
Chairman			
Technical			
Coordinator			
Capital City			
Award Manager			