



THE GROUNDWAVE

THE OFFICIAL BULLETIN OF THE OTTAWA AMATEUR RADIO CLUB INC.
P.O. BOX 8873 OTTAWA, ONT. K1G3J2



AMSAT

Club Call VE3RC



Repeater VE2CRA



: -- THE GROUNDWAVE -- OFFICIAL BULLETIN OF THE OTTAWA AMATEUR RADIO CLUB INC. --:			
: Editor	Murray Strome	30 Brisbane Rd., Ottawa	226-5764:
	VE3JSO	Ontario, K2E 5X2	995-1210:
: Ass't Editors	Brice Wightman	505 St. Laurent Blvd., Ajt. 2204	745-1192:
	VE3EDR	Ottawa, Ont., K1K 3X4	
	Bob Palmer	7 Hatton Place, Nepean	224-2131:
	VE3AAK	Ontario K2G 3E1	731-3111:
: Publishers	Ian Hamilton	215 Lees Ave., Ottawa	232-9110
	VE3AMK	Ontario K1N 8P1	
	Ray Charbonneau	3007 Rankin St., Ottawa	731-4981:
	VE3JRX	Ontario, K1V 8L2	
	Bill Nottingham	17 Cedarbank Ave., Nepean	828-8282:
	VE3ARZ	Ontario, K2H 7Y1	

THE OTTAWA AMATEUR RADIO CLUB INC.

is an association of Radio Amateurs devoted to the promotion of interest in Amateur Radio communications in the Ottawa regional area and to the advancement of the technical competence and achievement of Club members.

THE CAPITAL CITY NET meets every Monday evening at 2000 hours on the Club repeater, VE2CRA (146.34/146.94), to pass traffic and make announcements of interest to Amateurs in the Ottawa regional area.

THE SWAP NET, a service of the Ottawa Valley Mobile Radio Club Inc., and conducted by Ed Morgan, VE3GX, is repeated on the Capital City Net. To list items or make enquiries, call Ed at 733-1721.

AN ENGRAVING PENCIL is available to OARC members to mark their valuables for positive identification in case of loss or theft. For further information contact Penny Robinson, VE3ERO, at 225-1276.

RADIO AMATEUR CALL BOOKS are available for use at the Orleans, downtown and other city libraries. Enquire at the information desks for further details.

HOSPITAL VISITATIONS to any Amateur confined to the Civic Hospital will be made by Maureen Neill, VE3FZY. If you know of any Amateur confined there who would appreciate a visit, call Maureen at 725-4748 (233-9941 after 5:30)

SEE YOUR NAME IN PRINT!!! -- in National and Interantional publications. Write an article to be published in THE GROUNDWAVE and then watch it travel! Many local articles have been reprinted in Club bulletins. all across North America.

DOMINION STORE CASH REGISTER TAPES

are being collected by the OARC so save up your tapes (and your neighbour's and friends as well) and contact members of the Executive for further details.

MATERIAL PUBLISHED HEREIN does not necessarily represent the official OARC viewpoint. Items may be reprinted by Amateur Radio or similar publications provided that proper credit is given.

DEADLINE FOR COPY for regular issues is second Wednesday each month for articles of length and the third Wednesday for short paragraphs and announcements.

THE REGULAR MEETINGS of the Ottawa Amateur Radio Club Inc. are held on the first Wednesday of every month except July and August. Meetings are held in National Research Council Auditorium, 100 Sussex Drive, Ottawa at 2000 hours. See details of the next regular meetings elsewhere in this issue.

THE OARC EXECUTIVE meets normally on the second Wednesday following regular Club meetings in the Board Room of CFRA 150 Isabella St., Ottawa at 2000 hours. Contact the current Executive for Confirmation of the next meeting date.

RENEW YOUR ARRL AND CARF MEMBERSHIP through the OARC and save M.O. fees, postage, etc. The Club also benefits. Contact Brian Barsalou, VE3IBX, at 829-7340, for further details or remittance forms.

MINUTES OF THE OTTAWAAMATEUR RADIO CLUB, INC.

May 6th, 1981

The meeting was called to order by Brian VE3JKZ, President, at 2000 hours with about 65 members and guests present. Brian welcomed the following visitors: George Berthiaume, VE1AYE Kurt, Ray Paquin, and VE3GZE Bill.

The following corrections were made to the April meeting minutes as published in the Groundwave: The date should have read April 1st, not March 4th; and the reference to "Paul VE3JKZ" should have been "Brian VE3JKZ".

Subject to the above corrections, Merv VE3CV moved that the minutes be adopted as printed; the motion was carried.

It was announced that an EMI Clinic would be held on Saturday, April 9th at the CJOH Garage at Merivale and Clyde. All members were invited to bring their rigs so that they could be tested for harmonic and spurious emissions.

Also, the booth at the recent Multiple Sclerosis Convention was a resounding success. For further details, refer to the May issue of the GROUNDWAVE.

It was announced that there would be a meeting of Station Captains for the upcoming Field Day (June 27-28) at the home of VE3MPJ on May 12th.

Ideas for the design of the National Capital Region Award are being solicited. The two entries to date were shown to the members present and it was announced that the June Club Meeting will be the deadline for entries. Please bring your entry to the meeting, or send them to Brian VE3JKZ or Paul VE3ICV.

The Hidden transmitter hunt will be held on Sunday May 10th at 1400 hours at the output frequency of VE2CRA. Coordination is by VE3MSM.

Brian VE3JKZ reminded members of the "Buddy System" for new or aspiring hams. We now have 14 "buddies" and wish to have more. Brian also invited those who want buddies to let us know. Laird Gordon is coordinating this project.

Bill VE3BDO presented an interim report on behalf of the committee established to study providing a news service for amateurs similar to the Westlink Service. The problems with such an organization are very large, and in addition, it has been difficult to find suitable meeting times for the committee. Thus, there will not be a significant progress report until September.

Ken VE3IHX, with the help of Harry VE3HYS and Bill VE3IDC are trying to arrange a display at the Central Canadian Exhibition this summer, using the CNE and PNE as precedents. Initially, the Ex asked us to pay for a booth, but we are hoping to have this payment request rescinded. The PNE and CNE will have stations operating at the same time, and we hope to be able to establish links with them.

The Amateur Radio Emergency Unit work is progressing. Those who have registered, offering their services, will soon receive identification cards. The Unit will not be affiliated with specific local, national or international organizations in order to avoid "political problems". Only card-carrying operators will be allowed into secured zones in the event of an emergency.

Bill VE3NR asked for the help of an amateur to act as liaison between CARF and the Boy Scout organization. He estimated that not more than a total of five hours per year--from the home--would be required.

Brian reported that we now have 252 individual members, plus about 40 "free" subscriptions of the GROUNDWAVE.

Brian announced that 37 attended the Spring dinner and dance, and that

THE DEFICIT WAS ONLY \$1.08 instead of the \$60.00 projected. With regard to other possible Club activities, Brian reminded members of the National Capital Region Award, the plans to have a display at the Ex and he also suggested a car rally--not necessarily associated with amateur radio. With regard to the latter, he now has information on the "rules of the game" from the Kitchener-Waterloo Club where this activity is very popular. He also has the name and telephone number of someone in Ottawa (not a ham) who has organized many rallies. He suggested that anyone interested in organizing a rally for the Club should contact him.

The raffle of a 5/8 two metre mobile antenna was won by Bob VE3MPB.

The guest speaker of the evening was Larry Kaiser VE3QB who gave a most informative talk and demonstration of his experiments in coherent CW on the new 10 MHz band.

The meeting was adjourned at 2150 on a motion by Murray VE3JSO seconded by Fred VE3IO.

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PRESIDENT'S COLUMN

Prior to a recent name change, our hobby used to be known as "the Amateur Experimental Service". One must wonder, in this age of factory built gear and hard-to-get parts if the word "experimental" has any meaning anymore. Recent events have convinced me otherwise.

I am pleasantly surprised to be meeting large numbers of amateurs who are constantly experimenting. What with home-built rigs, antennas, slow scan TV, RTTY, OSCAR and more recently, computers, the list seems almost endless. There is more opportunity for experimenting now than ever before, it seems.

The U.K. amateurs in particular seem to do a lot of work on antennas, probably because of their miniscule sized lots and general prohibitions

concerning towers. Does this sound familiar? It seems to me that this is a wide-open field for experimental activities on both sides of the Atlantic.

Experimenting also means the investigation of natural phenomena, and using that knowledge to your best advantage. A business trip to the U.K. last year left me dumbfounded after a visit to G3AAE. John is high up on the DXCC Honour Roll with 358 countries confirmed, and he also holds a 5 band DXCC. The antenna system consists of a three element tribander at 30 feet and a ground mounted trap vertical with four radials for 40/80. It is evident that a good knowledge of propagation gained through experience and experiment was needed to achieve his results. And of course, he must be a good operator as well.

Anyone who operates CW on the HF bands is aware that many amateurs in Eastern Bloc countries are using home-built rigs. The signals, in many cases, are an absolute disgrace! I cannot argue the point that it is just as easy to produce a T9 note as it is a T3. The fact of the matter is that at least these amateurs are building, and they are experimenting. Presumably, the "State" ensures that components are available. I wonder if our political leaders are aware of this vast pool of skilled operator/technicians that is being developed, or if amateur radio is considered a sport rather than a hobby.

Parts not available here, you say? Nonsense! Perhaps we should run a Club contest for the best rig assembled using only the parts from a junked television set.

Other experimental activities, in Europe and Australia in particular, concern ducting and other long distance propagation effects in the VHF UHF and microwave regions. Look through recent issues of QST to see some of the outstanding distances that have been achieved. --cont'd p. 5

10 GHZ MOBILE

Members of the West Island (Montreal) ARC VHF/UHF Activity Group have conducted a mobile-mobile QSO on 10 GHz. So far as is known, this is the first instance of amateur 10 GHz mobile communication in Canada and perhaps in North America.

The contact took place February 7 1981, 2039-2057Z with Don VE2DWG the operator in one car, Dave VE2FMF and Chris VE2FRJ in the other car. Solid contact was maintained at distances approaching a mile in spite of the fact that the antennas were positioned at a low level inside the cars, with intervening traffic and other obstructions being frequent. Those signal dropouts occurring were mainly caused by large obstructions such as metal signs, earth bulges between the two cars and major changes in direction (VE2DWG's antenna was positioned in the rear window with no means of orientation). A unique feature of the contact was the presence of clearly audible Doppler shift tones (in the neighborhood of one KHz), two in number caused by the motion of each car relative to the ground; passing vehicles were also noted to produce a Doppler tone. A taping of the contact played at the meeting demonstrated the level of the tones relative to speech modulation.

Equipment used consisted of Microwave Associates 15 mW Gunnplexer transceivers with 17 dbi gain horn antennas and 30 MHz IF receivers. Transmission was full duplex, that is, continuous in both directions. This has a definite advantage for 10 GHz operation since when tuning the units one can tell instantly by the quieting that the other signal has been acquired without acknowledgment by the other operator and communication can begin at once.

Will 10 GHz replace two metres as a mobile band? Not soon, but the level of two-metre activity will force the use of higher bands in time. de WIARC Bulletin

MEXICO SI, CANADA NO

Every Wednesday at 2300Z, I contact Luis XE1LCH at 28.466 MHz while he drives to his office in downtown Mexico City. Well, you say, nothing very exciting in that. But I didn't tell you that my good friend Luis is transmitting back to me from his two metre rig in his car.

That's correct. Luis is on 146.7 146.79 back to his QTH on two metres then into a Kenwood TS820S and back to me in London on 28.466 MHz. Not legal, you say. Perhaps not in Canada but, as I pointed out to Luis, permission would be doubtful and even Canadian jails for ham radio regulations law-breakers are unpleasant.

I have had the pleasure of talking to other hams on two metres in Mexico City as they drive around the city. It would be interesting to experiment with this in Canada but, as I pointed out to Luis, permission would be doubtful and even Canadian jails for ham radio regulations law-breakers are unpleasant.

Luis will be visiting my QTH in July this year. I hope many London hams will have the opportunity of meeting him while he is in the London area.

de VE3EBV LARC
CENTRAL ONTARIO HAMFEST

The Central Ontario Amateur Radio Fleamarket and Computer Fest will be sponsored by the Guelph Amateur Radio Club at the Centennial Arena in Guelph, Saturday, June 13, 1981. Talkin on 52/32 simplex, 37/97 VE3KSR, 96/36 VE3ZMG. North on Highway 6 off Highway 401. For further information, contact Dennis Gore VE3DGA (519)836-6226 or Andy Janosik VE3GDY (519)824-3227.

ONTARIO HAMFEST

The Seventh Annual Ontario Hamfest will be held at the Milton Fairgrounds, July 10, 11 and 12. For more information, contact Ontario Hamfest, Box 836, Burlington Ont L7R 3Y7

LET'S QSY TO OUR FREQUENCY

Not many years ago, a couple of two-metre FM operators could QSY from the repeaters to a secret frequency for a private chat without the risk of being discovered or of causing unintentional interference to other communications.

Not so today. But statements such as this are being heard more and more frequently.

The popularity of the synthesized rig has made it easier than ever to operate just about anywhere on the two-metre band and even outside it. My observations have shown that many of those seeking a bit of relief from the busy repeaters may be unaware that they may be causing interference to others.

Over the years, DOW have pretty well left the amateurs to administer their own affairs within the limitations of the Radio Act with respect to CW/Phone sub-bands, mode of modulation, bandwidth and the like. Nowhere has this self-administering policy been more evident than in the FM repeater portions of the VHF and UHF bands.

Repeater and simplex frequency allocations are organized according to a plan devised over the years by the ARRL. Administration of this plan is handled at the local level by Repeater Councils. In this area, (approximately 150-mile radius of Niagara Falls), the Western New York and Southern Ontario Repeater Council has done a marvelous job of coordinating the operation of approximately 120 two-metre repeaters and numerous others on the six-metre, 220-, and 450-MHz bands.

Anyway back to the problem. The other evening, two stations made contact on RPT and made arrangements to QSY. No specific frequency was mentioned; they obviously had a secret pre-arranged simplex channel. I programmed my scanner to search and found them at 145.65 MHz. While searching, I also found another QSO at 145.98 MHz. Now, there is nothing illegal about

either of these two cases. F3 modulation is permitted by DOC on both the frequencies mentioned. But one of them is in a sub-band suggested for packet transmission and the other in a segment reserved for OSCAR.

So I wonder were the amateurs aware of the interference they may have caused to other services? I'd like to suggest that every amateur should in fact be obligated to make himself aware of the other activities which share our slice of the spectrum and be sure that his operating habits do not cause undue interference to others.

The band plan for two metres is as follows:

144.0-144.5 No FM (weak signal, SSB, CW, etc.)
 144.5-144.9 Repeaters (inputs only)
 144.9-145.1 Simplex (non-channelized any frequency)
 145.1-145.5 Repeaters (outputs only)
 145.5-145.8 Packet only
 145.8-146.0 Satellite work
 146.0-148.0 The familiar FM sub-band Simplex work should be restricted to

144.9-145.1, 146.445-146.595 and 147.405-147.585 and should stick to recognized channels above 146 MHz.

de VE3PQ, Toronto FM Commx Soc.

THE RF CONNECTION

I bet you didn't know that BNC stands for Bayonette Neill-Concelman Paul Neill and Carl Concelman, both engineers at Bell Labs, invented this famous connector.

Paul, incidentally, also invented the Type N connector and Carl the lesser known Type C, used mostly in aircraft avionics. There's also a HN (high-voltage Type N), an SC (screw C) and a threaded version of the ubiquitous BNC called TNC.

de St. Paul Groundwave

/Hughes El Segundo ARC

THE OTTAWA AMATEUR RADIO CLUB, Inc.
 P.O. Box 8873
 OTTAWA, Ontario, Canada
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: THE OTTAWA AMATEUR RADIO CLUB INC.	BOX 8873,	OTTAWA, Ont.	Canada K1G 3J2 :
: President	Brian Summers	2231 Hillary Ave., OTTAWA	523-1535 :
:	VE3JKZ	Ontario K1H 7H7	993-2931 :
: V/President	Bill Nottingham	17 Cedarbank Avenue, NEPEAN	828-8282 :
:	VE3ARZ	Ontario K2H 7Y1	:
: Secretary	Ray Charbonneau	3007 Rankin Street, OTTAWA	731-4981 :
:	VE3JRX	Ontario K1V 8L2	993-2482 :
: Treasurer	Lloyd Reed	696 Sherbourne Road, OTTAWA	722-5431 :
:	VE3AYE	Ontario K2A 3H5	:
: Directors	Joe Courtemanche	23 Lyon Street, GATINEAU	568-6642 :
:	VE2DZT	Quebec J8T 1L6	829-9100 ext. 330 :
:	George Schuthe	235 Daniel Avenue, OTTAWA	728-8828 :
:	VE3DMC	Ontario K1Y 0C7	:
:	John Gilbert	714 Highland Avenue, OTTAWA	729-2282 :
:	VE3CXL	Ontario K2A 2K7	995-2128 :
: P/President	Paul Coverdale	16 Longwood Avenue, NEPEAN	820-6643 :
:	VE3ICV	Ontario K2H 6G2	592-3020 :
: Repeater	George Roach	104 Strathcona Avenue, OTTAWA	234-0885 :
: Chairman	VE3BNO	Ontario K1S 1X6	233-6241 :
: Custodian &	Gerry Martin	1771 Hutton Avenue, OTTAWA	731-3220 :
: Archivist	VE3CNJ	Ontario K1G 1M1	:
: Net Mgr. &	Ken Kendall	777B Springland Drive, OTTAWA	731-0892 :
: Emrg Coord	VE3IHX	Ontario K1V 6L9	:
: EMI Cmttee	Fred Green	118 Riverdale Avenue, OTTAWA	232-5920 :
: Chairman	VE3IO	Ontario K1S 1R2	596-9359 :
: Membership	Jack Garrett	3011 Rankin Street, OTTAWA	521-6528 :
: Chairman	VE3HJI	Ontario K1V 8L2	993-9740 :