

JAN 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,  
DECEMBER 4, 1985

With approximately 60 members in attendance, the meeting was called to order by the President at 2003 hrs. On a motion from Lloyd, VE3AYE, seconded by Chris, VE3PAE, the minutes of the November meeting were adopted. In his opening remarks the President reminded the members that the January meeting will be held one week later than customary, on January 8, 1986.

Chris, VE3PAE, reported that he had volunteered to help start a radio club at the Ecole Intermediaire Leo D. Cote in Orleans and that he had met with an enthusiastic reception when he gave a presentation to about 300 students at the school. As a result, a new club has been founded and equipment donated. The club call is VE3PFN.

Dave, VE3FM, is involved in organizing a Santa Claus talk-in for any interested hams on Christmas Eve from 4:00 to 7:00 p.m. on VE2CRA. The idea is that hams can visit their neighbouring children and let them talk to the Jolly Old Elf on 2 meters. It will also help to publicize amateur radio in your neighbourhood.

Ralph, VE3BBM, chairman of the EMI Committee, reported that he had two new committee members; Paul, VE3ICV, and John, VE3MJU. Ralph has obtained a supply of small ferrite toroids for rfi suppression and can obtain a larger size, but with a long delivery time. The DOC have performed tests in the Jack Ravenscroft case and

issued a report. This concluded that the problem was quite conventional and can be cleared up by standard methods. Jack commented that the DOC had been very efficient and objective in their studies. The JRSD Fund currently stands at over \$16,000.

The President reminded the members that volunteers will soon be needed to help with the Canadian Ski Marathon over the weekend of February 7 to 9, 1986. The organiser is not yet defined.

Doug Griffiths, VE3KKV, gave a very comprehensive presentation on Contesting. He began by emphasizing that many technical advances have resulted from the sport. He talked of the different philosophies involved and made recommendations on towers, antennas, feedlines and rigs. He went on to discuss some of the operating techniques and the importance of good preparation and knowledge of propagation. His selection of excellent slides included shots of his victorious Canadian recordbreaking team, and views of some of the awesome antenna arrays necessary for the serious competitor. He even warned of the perils of 'drinking and driving' during a contest.

Door prizes were gleefully won by Frank, VE3FT, Vic Archer and John, VE3MTY.

Lloyd, VE3AYE, followed up on the presentation last month on radio DF by proposing a club project to build a simple and inexpensive 2 meter DF circuit to attach to any handie-talkie.

It will have uses in searches, treasure hunts, rfi location and navigation. Several levels of participation are possible for members. A list was circulated for members to sign up for the project.

Art Stark, VE3ZS, gave an overview of the changes in the structure of the Amateur service which are being proposed by the DOC. He emphasized the importance of rational and constructive thinking on the subject and urged individuals to make submissions to the DOC before the May 15, 1986, deadline. Because of printing delays the proposal paper will not be available until the end of the month, but hams can leave their name with the DOC now for a copy. It is hoped to have a discussion of the proposal on the agenda for the January meeting.

The meeting was adjourned at 2230 hrs.

Mark Farey - VE3OWL

The Canada Gazette Part I  
November 16, 1985

Notice No. TRS-021-85

The Department of Communications has prepared a paper outlining proposed changes affecting the Amateur Radio Service. The paper, entitled "Discussion Paper on a Possible Restructuring of the Amateur Radio Service in Canada", is the result of submissions from the public. If implemented, regulations, policies and

procedures would be updated in the light of today's technology and operating environment.

The Department is asking for comments from the general public, especially from persons who are interested in becoming radio amateurs. Any comments should be submitted within 180 days of the publication of this notice to ensure consideration. A copy of the paper can be obtained from any regional or district office of the Department or by writing to the Director General, Radio Regulatory Branch, Department of Communications, Journal Tower North, 300 Slater Street, Ottawa, Ontario K1A 0C8 (Attention: DOS-PR).

de Canada Gazette

IT'S HERE AT LAST!---

THE LONG-AWAITED REVIEW OF THE  
AMATEUR SERVICE!

The above bare bones notice in the Canada Gazette heralds a new approach to the hobby which is in tune with the fast pace of technological advances in radio communication. The paper should be available by the middle of December from DOC offices. It proposes three new certificates to replace the present ones;

1.---A NO-CODE CERTIFICATE permitting the operation of a station equipped with a commercial transmitter made specifically for the Amateur bands but may only be operated above 30 megs. All modes could be used but with a 250 watt D.C. input limit to the antenna. This would be the

type "A" certificate. Holders would be "limited to operating stations under their physical control but not repeaters or remote base stations".

2.---The holder of the "A" certificate could graduate to operating below 30 megs by passing a morse test at 12 wpm. This is the proposed "B" certificate. Other privileges and restrictions would be the same as "A".

3.---The "C" certificate would permit further up-grading to allow operation of any station or to be licensee of a repeater or any "non-standard station". The maximum power lid would be raised to 1000 watts D.C. input to the antenna.

---The exams would be made simpler with multiple choice questions taken from question banks made up by Amateur organizations. The theory exam for "A" would be on the installation and operation of modern stations, basic electronic theory, safety, antennas, propagation and regs. For "B" there would only be the 12 wpm morse test but for the "C" grade the theory test would be of a level "somewhere between the present Amateur and the Advanced Amateur certificates". "C" certificate holders would also need 12 wpm code. Any or all of the exam components could be written at the same sitting.

---Present Advanced and Amateur ticket holders would be granted privileges of all three tickets. Digital Operator certificate holders would get the privileges of "A" and "C" tickets but not the "B" HF

privileges below 30 MHz.

DOC has made it known that due to staff cutbacks that it wishes the Amateurs to take on more responsibility for the administration of the Amateur Service such as code exams and preparation of question banks. Special call prefixes cost time and money to DOC and they would like to phase them out. There is even some question of their legality as the call sign on your license is the one which you are authorized to use.

The DOC is also asking for opinions on a fourth option which is not outlined in any way...a 5 wpm "novice" certificate.

The deregulation of phone bands is not included in the paper but will likely form the subject of a future Gazette notice asking for comment.

This is only a summary of the DOC proposals so before forming any opinion on them it would be wise to read the excellent preamble to the proposals and study the full details of the three certificates. It should be noted that the paper and its ideas are addressed not only to Amateurs but to those interested in becoming one. The proposed certificates are the first concrete moves toward making an effort to increase the numbers of Amateurs; --something which we will need to bargain with at the next WARC.

Departmental officials, a number of whom are Amateurs, put a tremendous amount of work into this paper and are to be congratulated on its content.

While similar moves are afoot in the U.S. to promote a simpler license it may get quicker action there than can be had in Canada due to the bureaucratic barricade which exists here in the form of the Privy Council Office approval on amendments. Optimism goes out the window when its track record on the last amendments are considered...three years from start to finish. Hopefully the procedure can be streamlined by the time some decisions are reached on the proposals.

de Doug Burrill, VE3CDC,  
and kind permission of  
Dee Bee Publications Inc.

Excerpts from DOC Discussion  
Paper

5. PROPOSALS FOR RESTRUCTURING  
THE AMATEUR SERVICE

Based on the foregoing, DOC wishes to respond to the comments of both existing and potential amateurs. In so doing, any proposal that the department might implement must:

- 1) conform with the provisions of the regulations made under the International Telecommunication Convention;
- 2) not increase demands on departmental resources and, if possible, reduce these from the present level;
- 3) provide maximum benefit to an optimum number of

qualified applicants, thereby encouraging radio-communication skills; and

- 4) wherever possible, institute a general policy of deregulation that retains or enhances the role of amateur organizations.

With a view to meeting present and future requirements and in light of the foregoing, the Department offers for comment a proposal to restructure its examination requirements by eliminating endorsements and the current certificates. In lieu thereof, a structure consisting of three certificates is proposed:

- 1) Certificate "A" - certifying an individual to operate a basic modern amateur station (privileges accorded above 30 MHz only);
- 2) Certificate "B" - certifying an individual (who also holds Certificate(s) "A", or "A" and "C") to operate below 30 MHz (Morse code test);
- 3) Certificate "C" - certifying an individual (who also holds Certificate(s) "A", or "A" and "B") to construct and operate any station or to be the licensee of a repeater or other non-standard station.

5.1 DETAILED PROPOSALS

The examination to certify a candidate for the operation of a basic, modern amateur station (Certificate "A") would consist of:

- 1) installation and operation

- of modern amateur stations; including proper interpretation of meter readings such as Automatic Limiter Circuit (ALC) and Standing Wave Ratio (SWR) and the adjustments necessary to prevent interference; proper grounding techniques; and correct installation practices from transceiver to antenna, including auxiliary devices such as low-pass filters and antenna tuners;
- 2) basic electronic theory, safety practices when working with simple circuits; tracing and correcting interference problems such as audio rectification and receiver front-end overload;
- 3) antenna and propagation theory, including types of antennas, feedlines and characteristics of propagation phenomena; and
- 4) international and domestic regulations applicable to the amateur service.

It is estimated that approximately 40 hours of instruction would be required to obtain the basic knowledge necessary to pass this examination. Successful candidates would be issued Amateur Certificate "A" and would have the following privileges and restrictions:

- 1) the transmitter portion of the station, from the microphone or keying input of the transmitter to the final output, would have to be commercially built and marketed specifically for use on the amateur frequencies. All other compo-

- nents of the station, such as the receiver, filters, antennas, computer interfaces, etc., could be home-built;
- 2) no emissions would be permitted below 30 MHz, but all would be permitted above 30 MHz;
- 3) stations would be limited to a maximum power input of 250 watts d.c.; and
- 4) licensees would be limited to operating stations under their physical control, but not repeaters or remote base stations.

The examination to certify a candidate for operation in the spectrum below 30 MHz (Certificate "B") would consist of a Morse code examination at a speed of 12 words per minute.

Successful candidates would receive Amateur Certificate "B" and, providing they held Certificate "A", would operate under the same conditions as those granted by that certificate, except that they would be allowed all types of emission on any amateur band.

The examination to certify a candidate to construct and operate any station or to be the licensee of a repeater or other non-standard station (Certificate "C") would consist of:

- 1) advanced electronic theory, to augment that required for Amateur Certificate "A", with a degree of difficulty somewhere between the present Amateur and Advanced Amateur Certificates.

This would accommodate the many amateurs who are more technically oriented and wish to construct their own stations. Successful candidates would be given Amateur Certificate "C" and, provided they held Certificate(s) "A", or "A" and "B", would be permitted to:

- 1) construct their entire stations;
- 2) sponsor and operate repeaters and remote base stations; and
- 3) operate their stations with a maximum of 1000 watts d.c. input.

## 5.2 IMPLEMENTATION

Candidates writing examinations under the above-proposed structure would be allowed to write any or all of them at one sitting. However, the minimum qualification for a station licence would be Amateur Certificate "A".

Existing amateurs holding either an Amateur Radio Operator's Certificate or Amateur Radio Operator's Advanced Certificate would be deemed by regulation to have all the privileges of the three proposed certificates, and those holding the Amateur Digital Radio Operator's Certificate would be deemed to have all the privileges for Amateur Certificates "A" and "C".

## 6. PUBLIC COMMENTS

Given the nature of these proposed changes, DCC wishes to

obtain input from all interested parties. In framing comments on this discussion paper, the following list of questions may be helpful. However, comments need not be restricted to these points.

- 1) Are there other significant factors that may affect this proposed structure? If so,
  - a) How could the proposed structure be improved? or
  - b) What are your suggestions for a new structure? Please give a detailed description.
- 2) If you are an aspiring amateur, would this new structure encourage you to become an amateur? Why?
- 3) If you are currently an amateur radio operator, would the proposed structure better reflect your normal operations and the equipment used in your station?
- 4) What would be the effects upon amateur radio in the future if this structure were implemented?
- 5) Would this proposed structure accommodate special-interest groups or should the department consider the retention and extension of certificates like the Amateur Digital Radio Operator's Certificate?
- 6) Would amateur radio in Canada benefit from the introduction of a novice certificate?
- 7) If you feel positive about question 6, how could a novice certificate be

accommodated within the proposed structure?

The department invites comments from all those interested in amateur radio. Persons wishing to comment may do so in writing before May 15, 1985, to "the address given in the Canada Gazette notice".

de DOC

NOTICE OF CHANGE FOR THE JANUARY 1986 MEETING

Please note that the January 1986 meeting of the OARC will be held on January 8, 1986, the second Wednesday of the month. NRC Auditorium, 100 Sussex Drive, 8:00 p.m.

VE3JW OPERATING SCHEDULE

Museum hours are from 9 AM to 5 PM

Morning 10 AM - 1 PM  
Afternoon 1 PM - 4 PM

1986

Jan 4 Sat. AM  
5 Sun. AM  
PM Don VE3ATJ and Richard VE3OAR  
11 Sat. AM Alan VE3LNH and George VE3QWW  
PM Leo VE3NVL and Jerry VE3CDS  
12 Sun. AM Dan VE3EBI and John VE3NJ  
PM Mark VE3QWL and Dave VE3JTZ  
18 Sat.  
19 Sun. AM Ric VE3NJM and Gord VE3OSM  
PM Bob VE3JDB and Vance VE3QAO

Anyone wishing to operate VE3JW may contact George Dew, VE3QWW, at 237-1290.

DIRECTION FINDING PROJECT

A direction finding accessory for use with 2m rigs has been proposed as an OARC project. The type of circuit involved is described by WA2ANU in two QST articles (July 81 and May 82). The circuits are cheap, effective, easy to make, and easy to use with unmodified Hand Helds or even FM receivers. No receiver shielding or S meter is required. Possible applications include tracking lost persons (as suggested by Barry Bremner at the November meeting); "Fox Hunts"; locating CW, AM, FM, CATV, or noise interference sources; and navigation. We need to know if there is sufficient interest and if prototypes can be produced for use in a club project.

Volunteers to help with locating parts at bargain prices, volunteers to help with preparing and testing PCB prototypes, and project participants interested in building subsequent units for their own use should all contact Lloyd Reed, VE3AYE, at 722-5431.

SKI MARATHON

Letter to OTTAWA AMATEUR RADIO CLUB INC.

Dear Club Members:

Once again the time to plan for and arrange the 1986 Canadian Ski Marathon has arrived. In the past the OARC has provided invaluable service to the CSM and we would ask if once again your services could be made available for the event.

The 1986 marathon will be run on the weekend of February 8th and 9th. Some of the operators will be required on the evening of the 7th and throughout the weekend. We are hoping to put an operator in more of the vehicles this year and will be running mini buses that will need operators as well.

We look forward to working with you once again and thank you in advance for your help.

Yours sincerely,

Arline Ewert VE3KMR  
Operations Director  
Canadian Ski Marathon

CONTRIBUTIONS

Contributions to the Groundwave are welcome - news, technical articles, items for sale, etc.

THE RTTY/AMTOR WORLD

This regular feature under the by-line of Bill Snyder, W0LHS in WORLDRADIO, a lively and informative monthly tabloid for the ham community, usually contains some sample 'Eavesdropping'.

...."This mode keeps your mind active, even if you don't understand it." ...."The nicest thing about poor propagation is there is no woodpecker." ...."When you are over 50 the only ads you pay attention to are for hemorrhoids, hair loss, wrinkles or constipation." ...."Been trying to figure out how to encode these signals so eavesdroppers can't decode them." ...."Do you want the texas brag tape or the real one?" ...."My wife works asky most of the time." ...."Rig runs like a sewing machine - would rather have it run like a transceiver." ...."We have no crime here except the ski crowd on the weekend." ...."Your signal was covered up by an RY factory." ...."Please QSL Delaware is just as rare as North Dakota!" ...."It is supposed to read: Vegetation recycled through a hereford bull." ...."When I rotate the beam I lose the RTTY in the computer." ...."I transmit high tomes on this Robot." ...."This is only a hobby, I'm not trying to see how much work I can create." ...."I've got those low-flux-DX blues!"

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Merry



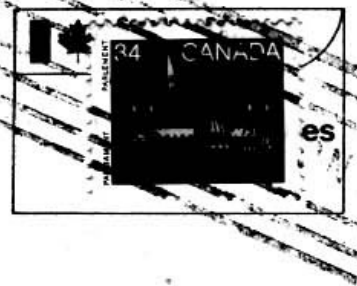
Christmas

and

Happy

New Year





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

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