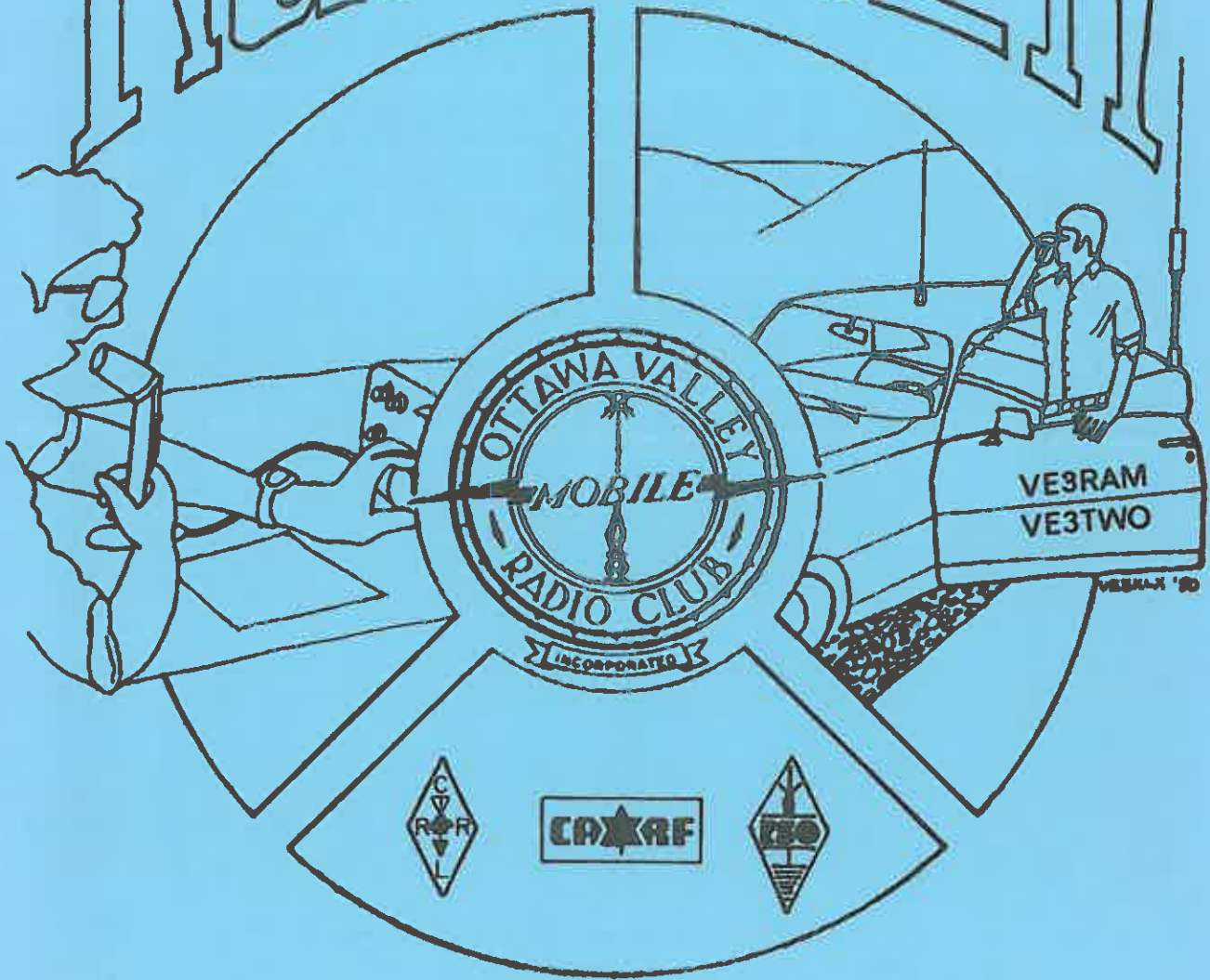


RAMBLER



FEB
FEV

1982

THE OTTAWA VALLEY MOBILE RADIO CLUB INCORPORATED

1981-1982 EXECUTIVE

PRESIDENT	Russ Pastuch	VE3FSM	828-9235
VICE PRESIDENT	Tom Hayes	VE3ABC	822-2811
SECRETARY	Bob Daye	VE3MPB	224-1432
TREASURER	Phil Robinson	VE3CUR	829-7995
TECH ADVISOR	Dave Coutts	VE3KIX	829-2537
PUBLIC REL.	Bucky Merkley	VE3JRR	733-3429
EDITOR	Jerry Wells	VE3CDS	692-3274
PAST PRESIDENT	Ray Perrin	VE3PN	225-8132

CLUB SPONSORED ACTIVITIES

POT-HOLE NET - OVMRC Net - Every Saturday and Sunday, 10:00 local time on 3.76 MHz SSB. All radio amateurs are welcome to participate.

THE WISE OWL NET - OVMRC Net - Ragchew net each Friday evening at 20:00 local time on the club repeater VE3TWO - 147.90/147.30 MHz.

CODE PRACTICE - Transmitted on VE3TWO by Dave VE3KIX. Wed. @ 19:10 20 wpm, @ 19:25 7,10 & 13 wpm. Fri. @ 19:10 25 wpm, @ 19:25 13,15 & 18 wpm. Both sessions end about 19:55; all times local.

VE3JW - Amateur Radio Station of the National Museum of Science and Technology. The OVMRC helps maintain the station, schedules operations and in cooperation with other Ottawa area Amateurs, provides operators for the station as part of an Amateur Radio public relations display. VE3JW operates on all HF bands, both CW and phone. Slow scan Amateur TV is also demonstrated.

LOCAL AMATEUR RADIO NET ACTIVITIES

POT-HOLE CW NET - Sponsored and conducted by Ed, VE3GX. An informal slow speed CW net meeting every Sunday (except July and August) at 11:00 local time on 3.62MHz, to promote interest and proficiency in CW and CW procedures.

CAPITAL CITY FM NET - Sponsored and operated by the Ottawa Amateur Radio Club Inc. every Monday at 20:00 local time on repeater VE2ORA 146.34/146.94

SWAP NET - Sponsored and conducted by Ed, VE3GX. Every Sunday (except July and August) as a part of the POT-HOLE NET and every Monday (except July and August) as a part of the Capital City FM Net. Ed may be contacted at 733-1721 for listings and queries.

- ALL CONTRIBUTIONS TO THIS BULLETIN GLADLY ACCEPTED -

Membership in the OVMRC is open to all those interested in Amateur Radio. Regular Club Meetings are held on the third Thursday of each month (except July and August) at 20:00 local time unless otherwise posted. Meetings normally take place in the auditorium of the National Museum of Science and Technology on St. Laurent Blvd. (south of the Queensway)

THE PREZ SEZ

Well, we're now into February and the worst of the winter season is upon us. The only hint of approaching spring is the lengthening of the daylight hours.

A bright spot in the bleak landscape is the wine and cheese party reported in the last Rambler. Bring a bottle of your favourite vino and come celebrate the club's twenty-fifth anniversary. The date is 27 February at 1900 hours at the QTH of your prez. If you're planning on attending, please let me know before 20 February.

It now looks official, the OVMRC is running an amateur course this fall. A number of people volunteered to assist at the last meeting and I am most pleased. More volunteers are still required, so how about it? Now we can start working on course layout, location, time, etc.

The club project, a digital anemometer, is also a go. Just over half a dozen indicated a desire to build one. There is still time to indicate your desire at the February general meeting, so either come out or call your TA, Dave VE3KLX and let him know that you are interested.

At the monthly general meetings, the period between club business and coffee is reserved for entertainment. The executive has been brain storming in an attempt to ascertain what would make good amusement but we are beginning to come up dry. So, what would you like to see or better yet, do you know of someone willing to speak to us. Let a member of the executive know and I'm certain the membership will appreciate your work.

That's about it for this month so I'll close and continue reading my travel brochures.

Russ VE3FSN

////////////////////////////////////

NEXT MEETING

The Date: Feb.18 at the auditorium of The museum of Science and Technology. Our Program will include a presentation by the Ottawa Police Dept. on Home security. We Had hoped to make this presentation to you last month but ran into scheduling problems. See you all at the meeting.

////////////////////////////////////

MATERIAL PUBLISHED IN THE RAMBLER DOES NOT NECESSARILY REFLECT CLUB POLICY OR VIEWPOINT. ANY ITEMS MAY BE REPRINTED BY AMATEUR RADIO OR SIMILAR PUBLICATIONS WITH THE PROVISIO THAT CREDIT BE GIVEN TO AUTHOR AND SOURCE.

PUBLISHED AND DISTRIBUTED BY
The Ottawa Valley Mobile Radio Club Inc.,
p.o. Box 5530, Stn. F,
OTTAWA, ONTARIO
CANADA
K2C 3M1

Editor
Jerry Wells
VE3CDS

MINUTES OVMRC MEETING 21 JAN 1982INTRODUCTION

The Jan meeting of the OVMRC was held at the Museum of Science and Technology and was opened at 2000 hours by Pres Russ VE3FSN who welcomed the following guests: Pete Murphy VE3VCF; Tom Mathews; Larry Eggs.

OLD BUSINESS

Minutes of DCC meeting - After a caution by Ray VE3FN that the 10 MHz band was not yet authorized for use in Canada it was moved by Bucky VE3JRR seconded by Bob VE3KLK that the minutes be adopted as published in the "Rambler".

... motion carried

EXECUTIVE REPORTS

Past Pres - Nil; Pres - Nil; Sec - Nil.

Treasurer Phil announced the following new members: Bob Dewens VE3NJI and Les Johnston. Phil announced that 17 Apr is the date of the auction and the Canterbury High School has been booked. Russ encouraged all members to assist in soliciting donations to the club for sale at the auction as one of our sources of funding for the club.

Tech Advisor. Dave VE3KLX reminded the members that code practice sessions were being broadcast on VE3TWO and the schedule was published in the Rambler or available from him. Dave also said that plans were being made for a code proficiency qualifying run. This will consist of computer generated code sessions with a wise owl qualifying run certificate. Dave also stated that to commemorate the 2nd anniversary of the wise owl net on Jan 22 a "Wise Owl Certificate" class "A" will be awarded to any amateur checking in to the net for 10 consecutive weeks or a class "B" certificate for 5 check-ins over the 10 week period.

Dave VE3KLX stated that the continuing growth of interest in the "Wise Owl" net is evident in the check-in statistics that show an increase from 30+ in 1980 to 501 in 1981. Dave also advised that it is not necessary to let the carrier of the repeater drop to reset the timer but simply to release your press-to-talk switch. He also asked for repeater users to develop the habit of allowing a pause between transmissions to allow for emergency traffic etc.

Dave advised that anyone with gear to donate for the auction could arrange for storage thru him or Jerry VE3CDS.

Dave VE3KLX also said that Frank Collins VE3MSC is interested in providing free antenna consultation service to anyone wishing to take advantage of it.

Dave VE3KLX advised that the anemometer displayed at a previous meeting will be a club project if sufficient interest is shown.

Public Relations. Bucky VE3JRR said that he has a continuing requirement for operators for VE3JW. He also stated that the museum is having a childrens program for the March break for which operators, especially members who are retired are needed.

Editor Jerry VE3CDS said that following Postal Rate increases many clubs will/are discontinuing exchanging club newsletters.

NEW BUSINESS

CRRL - Ray VE3FN reviewed proposed changes in amateur regulations for repeater operation on 10 meters; slow scan TV on HF; 6 MHz Bandwidth for TV; reciprocal operation on 2 meters and lifting of power restrictions on 160 meters. Ray requested input from local amateur with suggestions for improvements as the meetings between the amateur representatives and the Doc can best reflect the desires of the fraternity with such input.

10 MHz Art VE3ZS advised that Australian and New Zealand amateurs are using 10 MHz.

Pres Russ VE3FSN stated that volunteers for assistance in running the auction will be sought at the next meeting.

Pres Russ said that we will run an amateur radio course at the science museum starting in Sep 82 running for 20 weeks for 20 to 25 students at \$50.00 each.

Pres Russ advised that 1982 is the 25th anniversary of the OVMRC and a Wine and Cheese Party at his home on 27 Feb 1900 hours will kick off celebrations for members and their guests who are asked to assist in bringing along a bottle of wine.

Change in Dues - It was moved by Merv VE3CV seconded by Don VE3ATJ that the dues/increase as published in the Jan issue of the "Rambler" be adopted. Carried.

Merv advised that a 160 meter Ottawa Net was now operating Tues evening 2100 hours at 1.817.

ENTERTAINMENT

After a brief discussion on the use of VE3JW and the availability of public relation material a recording of the recent EMO exercise was presented.

ADJOURNMENT

On a motion by Dave VE3KLX seconded by Mike VE3KMV the meeting adjourned. Next meeting - The next regular club meeting will be held 18 Feb 82.

Bob Daye VE3MPB
Secretary



SPURIOUS EMISSIONS FROM THE T.A.

Well I've reached the half-way mark of my tenure without even a single attempt to impeach me. Everyone must be immensely satisfied or else you are feeding me enough rope to hang myself. Just kidding, the "January Blahs" leading into the "February Blues" have definitely set in.

Now that I'm rolling I'll put in another request for donations for the club auction. If you have any clutter to move which you would like to donate to the club give me a call at 829-2537 and I will find a storage location, possibly even provide a pick up service.

Frank Collins, VE3MSC is interested in volunteering expertise and guidance to those of you who have encountered problems deciding on a particular type of antenna or who need help and consultation on the construction of one. If you have any queries regarding antennas, give Frank VE3MSC a call at 733-8134 or on VE3TWO.

One final note. For those of you who encounter difficulties at VE3JW I would urge you to make a notation on the blank side

of the log pages with a star or two beside it along with the date, operator and a description of the problem (complete with frequency mode etc). If you wish, you can contact me, Bucky or Teddy Paull VE3AEH. Living in Nepean, without ready access to effecient means of transportation it is difficult for me to check out problems immediately. Have faith, a notation in the log or possibly a note in a conspicuous place will assist in a speedier correction.

The club project, an anemometer, is still "Go for launch" If you are interested give me a buzz... then call me

73 de Dave VE3ALX T.A.
 IN twon

////////////////////////////////////

PREVAILING WINDS

Most beam antenna advertising contains some indication of a wind survival factor. This factor may be met, possibly increased, or undesirably reduced by the manner in which the antenna is allowed to resist the wind pressure. Obviously, the least area of resistance should be presented to the full force of the wind. To achieve this one must consider the actual resistive areas of the boom and the elements.

An antenna in which the total area of the elements exceeds that of the boom should be aimed at 90 degrees to the flow of wind pressure. Conversely, if the boom happens to have an exceptionally large cross section and thus exceeds the total resistive area of the elements, the antenna should be aimed into or away from the wind.

All very interesting, but just what is the real direction of the prevailing winds in the Ottawa area? Well, it may be of interest to Ottawa amateurs to learn that a very comprehensive survey has been taken by EMO and Weather officials, the conclusions of which are given below.

Over one calendar year, the winds in the Ottawa area blew:

27.58%	of the time from the	NW
18.45%	" " " " "	W
18.26%	" " " " "	SW
11.60%	" " " " "	E
7.21%	" " " " "	NE
5.11%	" " " " "	SE
4.66%	" " " " "	S
4.38%	" " " " "	N

From the above it will be seen that winds with a

westerly component	total	64.29%
northerly	"	39.17%
southerly	"	28.03%
easterly	"	23.92%

Amateurs in the Ottawa area therefore should present the lowest resistive area of their antennas towards the west in order to reduce wind pressure on antennas and supporting structures.

W.R. Campbell, VE3ALK

TECHNICAL SHORT COURSEVoice Communication - bit-by-bit

Most amateurs are well acquainted with the standard methods of voice modulation: single-sideband, amplitude modulation and frequency modulation. These are all in common use and have been around for many years. They all share the characteristics of being easy to generate and easy to receive.

In recent years, a new form of modulation scheme has appeared: digital modulation. It is relatively difficult to generate and receive, not that cheap and occupies more bandwidth than the other conventional forms of modulation.

Why Digital?

You may well wonder why use digital modulation in view of its cost, bandwidth and difficulty of generation/reception. This form of modulation has one important characteristic that the conventional forms do not have; immunity from interference and stray noise.

In the conventional modulation techniques, noise bursts and interference play havoc with the signal. Noise blankers and clippers certainly help, but they can not completely clean up the signal.

Even in carefully designed systems, such as FM repeaters, you notice that the input and output audio are not quite the same. A small amount of hum, a hint of noise and a slightly different frequency response curve in the receiver and transmitter audio, and the repeater is not "transparent", as you expect.

In a digital system, the voice modulation is represented by a string of digital ones and zeros. The receiver now only has to recognize whether the signal is above a threshold or below it. In addition, this decision occurs at carefully times locations in the bit stream, noise pulses occurring outside this sampling time are simply ignored. This combination of discrete levels and timing allows the system to recover even weak signals and ignore all the other extraneous garbage.

How's it done?

Broadly speaking, there are two methods of converting the voice signal into a digital format:

- a. Voice waveform digitization
- b. Vocoder methods

Voice waveform digitization - the voice signal is sampled periodically and these samples are converted into a digital code, where the code represents the amplitude of the sample. At the receiving end the code is converted back into a signal closely approximating the original voice signal.

A number of methods currently exist to digitize the incoming voice signal. These fall into two broad categories:

- i) The voice signal is sampled and these samples are converted into digital form. The code states the level of the sample in a straightforward manner.
- ii) The voice signal is sampled and only the difference between successive samples is converted into a digital form. This allows for fewer bits to be transmitted, as the difference between successive samples is much less than the total amplitude variation characterizing the voice waveform.

Vocoder methods - no attempt is made to preserve the original speech waveform.

The vocoder method attempts to analyze the incoming speech signal and compute parameters that describe a simplified model

of the speech production mechanism. This analysis involves determining the resonant structure of the vocal tract, estimating the pitch and deciding whether the speech segment is caused by the vibration of the vocal cords. It is these features which are transmitted in a digital form. At the receiving end these features are reassembled and an output signal is synthesized.

Preference of digitization techniques

The various digitization techniques tend to trade bandwidth against voice quality. Conventional encoding of the sampled waveform can result in a data rate in excess of 50 Kbit/sec. While the resulting voice is almost indistinguishable from the original, it is at the expense of bandwidth. Use of the more refined techniques, especially vocoder methods, can yield intelligible speech at data rates of only 600 bits/sec. The speech has an artificial sound to it but this is more than compensated for by the low data rates involved.

What next?

The application of these techniques to amateur radio has been strictly of an experimental nature and in most cases, of the conventional encoding technique. Advances in integrated circuits are bringing many of these techniques down in price. A major advocate of bandwidth reduction techniques is the telephone company and if they start buying chips, they are going to fly off the assembly line in the millions.

The bands below 30 MHz are becoming increasingly more congested. Use of some of the vocoder techniques could allow transmission of voice in under a 500 Hz bandwidth. In a single instant, the bands have become 5 times wider.

The digital age is upon us and the effect on amateur radio will be much the same as that when SSB challenged AM and where is AM now?

Russ VE3FSN

////////////////////////////////////

EDITORIAL COMMENT

Well, Here we are in the middle of the ice and snow that we had hoped we might escape like we did last year. No such luck, it seems that all our efforts during the past few days has been devoted to snow clearing. I am sure that spring is in sight... isn't it? Funny how we all talk about the weather but we can do very little about it. Anyway, the article by Bob VE3KLL in this issue of the Rambler will give you some idea of the prevailing winds in the Ottawa area. For those of you with big beams, antennas, that is, will find Bob's article interesting.

On another note, as this is our 25th anniversary it may prove interesting if some of the original members of the Club could jot down some of the early history as they remember it. I remember when the Club was formed by the local mobile enthusiasts. I think you had to be mobile to be a full member in the early days. You could always tell a ham mobile by the rear mounted loaded whip antenna. There were some peculiar looking antennas on cars in the early days of the Club.

I look forward to receiving a few comments on our history, anyone contributing will receive credit in the Rambler.

Jerry
VE3CDS

DEPARTMENT OF COMMUNICATIONS RADIO ACT

Notice No. DGTR-026-81. Proposed Amendments to the General Radio Regulations, Part II (Amateur Service).

The Department intends to amend Part II of the General Radio Regulations governing the Amateur Service in accordance with the attached proposal. The amendments were developed as a result of discussions with amateur associations, clubs and representations received from individual amateurs.

The proposed amendments would:

- (a) permit repeater operation in the 29 MHz band;
- (b) permit slow-scan TV in the HF bands;
- (c) permit 6 MHz bandwidth for television; and
- (d) permit foreign amateurs operating in Canada on the basis of reciprocity to use the 144-148 MHz band.

In addition:

(a) emissions are designated in accordance with the new requirements of the International Frequency Registration Board (I.F.R.B.); and

(b) some of the power restrictions presently applicable to stations operating in the 1.8 to 2.0 MHz band are removed because of the phasing out of all but three Loran "A" stations.

Anyone wishing to respond to this notice should address their comments to the Director, Operations Branch, Telecommunication Regulatory Service, Department of Communications, 300 Slater Street, Ottawa, Ontario K1A 0C8. All replies should be postmarked not later than 90 days after the date of publication of this notice.

Dated at Ottawa, this 26th day of December, 1981.

John deMERCADO

Director General

Telecommunication Regulatory Service

PROPOSED AMENDMENTS TO THE GENERAL RADIO REGULATIONS PART II

1. Subsections 43(1), (2) and (3) of the General Radio Regulations, Part II, are revoked and the following substituted therefor:

"43. (1) No person shall operate an amateur mobile station on any frequency in the band 1.9 to 2.0 MHz.

(2) Any person operating an amateur station using frequencies in the band 1.9 to 2.0 MHz at a permanent location in the area set out in an item of Schedule X shall comply with the frequency and transmitter power for day and night operation set out in that item."

2. Paragraphs 47(a) to 47(r) of the said Regulations are revoked and the following substituted therefor:

"(a) "NON" means an emission that is unkeyed or unmodulated;

(b) "A1A" means telegraphy by the on-off keying of an unmodulated carrier;

(c) "A2A" means telegraphy by the on-off keying of an amplitude modulating audio frequency signal or by the on-off keying of the amplitude modulated carrier;

(d) "A3E" means telephony by amplitude modulation;

(e) "A3C" means facsimile by amplitude modulation of a carrier, either directly or by a frequency modulated sub-carrier and includes slow scan television;

(f) "C3F" means television by amplitude modulation;

(g) "F1A" means telegraphy by frequency shift keying where one of two unmodulated carriers is being emitted at any instant;

(h) "F2A" means telegraphy by the on-off keying of a frequency modulating audio frequency or by the on-off keying of a frequency

modulated emission;

- (i) "F3E" means telephony by frequency modulation;
- (j) "F3C" means facsimile by direct frequency modulation of the carrier and includes slow scan television;
- (k) "F3F" means television by frequency modulation;
- (l) "P0N" means a pulsed emission without any modulation intended to carry information (e.g. radar);
- (m) "K1A" means telegraphy by the on-off keying of a pulsed carrier without the use of a modulating audio frequency;
- (n) "K2A" means telegraphy by the on-off keying of a modulating audio frequency or audio frequencies or by the on-off keying of a modulated pulsed carrier;
- (o) "K3E" means telephony by pulse modulation;
- (p) "K3C" means facsimile by pulse modulation;
- (q) "K3F" means television by pulse modulation; and
- (r) "XXX" means any type of pulse modulation not described in paragraphs (l) to (q)."

3. That portion of the French version of section 48 immediately preceding paragraph (a) thereof is revoked and the following substituted therefor;

"48. Est habilite a faire fonction d'operateur d'une station d'amateur quiconque possede"

4. The said Regulations are amended by adding thereto immediately after section 48 thereof, the following heading and section:

"Exemption from Licensing

48.1 A foreign amateur is exempt from the requirement to hold a Canadian radio licence while temporarily operating his amateur station in Canada

(a) if he is a citizen of a country that grants a reciprocal exemption from licensing to Canadians in respect of their amateur radio stations, and

(b) if he is qualified pursuant to paragraph 48 (c) or (d) and is authorized pursuant to section 50 to operate an amateur station in Canada."

5. Section 50 of the General Radio Regulations, Part II, is revoked and the following substituted therefor:

"50. (1) A foreign amateur who is qualified pursuant to paragraph 48(c) may operate his station or a station licensed by the Minister while temporarily in Canada.

(2) A foreign amateur who is qualified pursuant to paragraph 48(d) may operate his station or a station licensed by the Minister while temporarily in Canada if the Minister authorizes him, in writing, to operate the radio station.

(3) The foreign amateurs mentioned in subsections (1) and (2) shall use while temporarily in Canada the radio frequencies and types of emission authorized under the licences issued by the governments of the countries of which they are citizens, if those frequencies and types of emission are authorized by these Regulations.

(4) Without limiting the generality of subsection (3), the said foreign amateurs may also use frequencies in the range 144 to 148 MHz with corresponding types of emission as shown in Schedule LX.

(5) The foreign amateurs mentioned in subsections (1) and (2) shall, in identifying their transmissions, use the call signs assigned to them in their station licences."

6. Paragraph 57(b) of the said Regulations is revoked and the following substituted therefor:

"(b) permit a person who is qualified pursuant to section 48 to operate his station using only such frequencies and emissions as the licensee is qualified to use or, if the person is not as qualified as the licensee, using only such frequencies and emissions as the person is qualified to use."

7. All that portion of subsection 58(1) of the said Regulations preceding paragraph (a) thereof is revoked and the following substituted therefor:

"58. (1) Subject to subsection 50(5), the operator of an amateur station shall transmit the call sign assigned to that station"

8. Paragraph 59(1)(b) of the said Regulations is revoked and the following substituted therefor:

"(b) his station is not used to retransmit types A3E or F3E emissions on frequencies below 28 MHz if such emissions are received from a station that is not authorized to use such emissions on frequencies below 28 MHz."

9. Section 64.2 of the said Regulations is revoked and the following sections and sub-headings are substituted therefor:

"Frequency and Power Measurement

64.2 The licensee of an amateur station shall ensure that his radio station is equipped with a reliable means

- (a) of determining the operating radio frequency;
- (b) of preventing or indicating overmodulation in the case of a radiotelephone transmitter; and
- (c) of measuring the direct current power input to the anode or collector circuit of the final stage where such power input exceeds four hundred watts.

Occupied Bandwidth

- 64.3 The licensee of an amateur station shall ensure
- (a) that the amplitude modulation of his transmitter does not exceed one hundred per cent or that the occupied bandwidth of his signal does not exceed
 - (i) 6 kHz where A2A, A3E or A3C is authorized; and
 - (ii) 6 MHz where C3F is authorized;
 - (b) that when using type F1A emission (frequency shift keying) the occupied bandwidth of his emission does not exceed 900 hertz;
 - (c) that the frequency modulated signal does not occupy, except where packet transmissions are used, a bandwidth in excess of
 - (i) 6 kHz where type F2A, F3C or F3E emission is authorized on any frequency below 52 MHz,
 - (ii) 15 kHz where type F2A, F3C or F3E emission is authorized in the frequency bands 52 to 54 MHz, 144.1 to 148 MHz, 220 to 225 MHz and 430 to 450 MHz, and
 - (iii) 6 MHz where F3F is authorized; or
 - (d) that the pulse modulation signal does not occupy a bandwidth in excess of
 - (i) 15 kHz in the frequency band 145.5 to 145.8 MHz, and
 - (ii) 30 kHz in the frequency band 434 to 434.5 MHz.

Frequency Stability

64.4 The licensee of an amateur station shall ensure that the frequency stability of his transmitter in the frequency bands below 220 MHz is comparable to that which is obtainable using crystal control.

Carrier Restrictions

64.5 The licensee of an amateur station shall ensure that
 (a) the carrier is suppressed during periods of reception when the transmitter is operating on frequencies below 51 MHz except for the frequency band 29.50 to 29.70 MHz; and
 (b) an unmodulated carrier is not emitted on frequencies below 51 MHz except during brief tests and adjustments that shall be terminated by the transmission of his assigned call sign.

10 Section 64.3 to 64.5 of the said regulations are renumbered as sections 64.6 to 64.8 respectively.

11. Schedules IV, V, VI, VIII, IX, and X of the said Regulations are revoked and the following substituted therefor:

SCHEDULE IV (ss 52 and 56)			
item	column 1 lower freq. limit	column II higher freq. limit	column III types of emission
1	144.000 MHz	144.100 MHz	A1A
2	144.100 "	145.500 "	NON, A1A, A2A, A3E, A3C, F1A F2A, F3E, F3C
3	145.500 "	145.800 "	NON, A1A, A2A, A3E, A3C, F1A F2A, F3E, F3C, P0N, K1A
4	145.800 "	148.000 "	NON, A1A, A2A, A3E, A3C, F1A F2A, F3E, F3C
5	220.000 "	221.000 "	NON, A1A, A2A, A3E, A3C, F1A F2A, F3E, F3C
6	223.000 "	225.000 "	NON, A1A, A2A, A3E, A3C, F1A F2A, F3E, F3C
7	430.000 "	433.000 "	NON, A1A, A2A, A3E, A3C, F1A F2A, F3E, F3C
8	434.000 "	434.500 "	NON, A1A, A2A, A3E, A3C, F1A F2A, F3E, F3C, P0N, K1A, K2A, K3E
9	434.500 "	450.000 "	NON, A1A, A2A, A3E, A3C, C3F F1A, F2A, F3E, F3C, F3F
10	902.000 "	928.000 "	A3E, F3E
11	1 215.000 MHz	1 300.000 MHz	NON, A1A, A2A, A3E, A3C, C3F F1A, F2A, F3E, F3C, F3F, P0N K1A, K2A, K3E, K3C, K3F, XXX
12	2 300.000 "	2 450.000 "	NON, A1A, A2A, A3E, A3C, C3F F1A, F2A, F3E, F3C, F3F, P0N K1A, K2A, K3E, K3C, K3F, XXX
13	3 300.000 "	3 500.000 "	NON, A1A, A2A, A3E, A3C, C3F F1A, F2A, F3E, F3C, F3F, P0N K1A, K2A, K3E, K3C, K3F, XXX
14	5 650.000 "	5 925.000 "	NON, A1A, A2A, A3E, A3C, C3F F1A, F2A, F3E, F3C, F3F, P0N K1A, K2A, K3E, K3C, K3F, XXX
15	10 000.000 "	10 500.000 "	NON, A1A, A2A, A3E, A3C, C3F F1A, F2A, F3E, F3C, F3F, P0N K1A, K2A, K3E, K3C, K3F, XXX
16	24 010.000 "	24 250.000 "	NON, A1A, A2A, A3E, A3C, C3F F1A, F2A, F3E, F3C, F3F, P0N K1A, K2A, K3E, K3C, K3F, XXX

SCHEDULE V
(ss.53(1))

Item	column 1 Lower Freq. Limit	column 11 Higher Freq. Limit	column 111 Type of Emission
1	1.800 MHz	2.000 MHz	A1A
2	3.500 "	4.000 "	A1A
3	7.000 "	7.300 "	A1A
4	14.000 "	14.350 "	A1A
5	21.000 "	21.450 "	A1A
6	28.000 "	29.700 "	A1A
7	50.000 "	50.050 "	A1A
8	50.050 "	51.000 "	A1A, A2A, A3E, F1A, F2A, F3E
9	51.000 "	54.000 "	NON, A1A, A2A, A3E, A3C, F1A, F2A, F3E, F3C
10	144.000 "	144.100 "	A1A
11	144.100 "	148.000 "	NON, A1A, A2A, A3E, A3C, F1A, F2A, F3E, F3C
12	220.000 "	221.000 "	NON, A1A, A2A, A3E, A3C, F1A, F2A, F3E, F3C
13	223.000 "	225.000 "	NON, A1A, A2A, A3E, A3C, F1A, F2A, F3E, F3C
14	430.000 "	433.000 "	NON, A1A, A2A, A3E, F1A, F2A, F3E, F3C
15	434.000 "	450.000 "	NON, A1A, A2A, A3E, A3C, F1A, F2A, F3E, F3C
16	902.000 "	928.000 "	A3E, F3E
17	1 215.000 MHz	1 300.000 MHz	NON, A1A, A2A, A3E, A3C, F1A, F2A, F3E, F3C
18	2 300.000 "	2 450.000 "	NON, A1A, A2A, A3E, A3C, F1A, F2A, F3E, F3C
19	3 300.000 "	3 500.000 "	NON, A1A, A2A, A3E, A3C, F1A, F2A, F3E, F3C
20	5 550.000 "	5 925.000 "	NON, A1A, A2A, A3E, A3C, F1A, F2A, F3E, F3C
21	10 000.000 "	10 500.000 "	NON, A1A, A2A, A3E, A3C, F1A, F2A, F3E, F3C
22	24 010.000 "	24 250.000 "	NON, A1A, A2A, A3E, A3C, F1A, F2A, F3E, F3C

SCHEDULE VI (ss 53(2))

Item	column 1 Lower Freq. Limit	column 11 Higher Freq. Limit	column 111 Type of Emission
1	1.800 MHz	2.000 MHz	A3E
2	3.500 "	3.725 "	F1A
3	7.000 "	7.050 "	F1A
4	7.100 "	7.150 "	F1A
5	14.000 "	14.100 "	F1A
6	21.000 "	21.100 "	F1A
7	28.000 "	28.100 "	F1A
8	28.100 "	29.700 "	A3E, F3E

I SCHEDULE IX (ss 54, 55 and 56)			
Item	Column I Lower Freq. Limit	Column II Higher Freq. Limit	Column III Type of Emission
1	1.800 MHz	2.000 MHz	A1A, A3E, F3E
2	3.500 "	3.725 "	A1A, F1A,
3	3.725 "	4.000 "	A1A, A3E, A3C, F3E, F3C
4	7.000 "	7.050 "	A1A, F1A
5	7.050 "	7.100 "	A1A, A3E, A3C, F3E, F3C
6	7.100 "	7.150 "	A1A, F1A
7	7.150 "	7.300 "	A1A, A3E, A3C, F3E, F3C
8	14.000 "	14.100 "	A1A, F1A,
9	14.100 "	14.350 "	A1A, A3E, A3C, F3E, F3C
10	21.000 "	21.100 "	A1A, F1A
11	21.100 "	21.450 "	A1A, A3E, A3C, F3E, F3C
12	28.000 "	28.100 "	A1A, F1A
13	28.100 "	29.700 "	A1A, A3E, A3C, F3E, F3C
14	50.000 "	50.050 "	A1A
15	50.050 "	51.000 "	A1A, A2A, A3E, A3C, F1A, F2A, F3E, F3C
16	51.000 "	54.000 "	NON, A1A, A2A, A3E, A3C, F1A, F2A, F3E, F3C
17	144.000 "	144.100 "	A1A
18	144.100 "	146.000 "	NON, A1A, A2A, A3E, A3C, F1A, F2A, F3E, F3C
19	220.000 "	221.000 "	NON, A1A, A2A, A3E, A3C, F1A, F2A, F3E, F3C
20	223.000 "	225.000 "	NON, A1A, A2A, A3E, A3C, F1A, F2A, F3E, F3C
21	430.000 "	433.000 "	NON, A1A, A2A, A3E, A3C, F1A, F2A, F3E, F3C
22	434.000 "	450.000 "	NON, A1A, A2A, A3E, A3C, C3F, F1A, F2A, F3E, F3C, F3F
23	902.000 "	928.000 "	A3E, F3E
24	1 215.000 MHz	1 300.000 MHz	NON, A1A, A2A, A3E, A3C, C3F, F1A, F2A, F3E, F3C, F3F
25	2 300.000 "	2 450.000 "	NON, A1A, A2A, A3E, A3C, C3F, F1A, F2A, F3E, F3C, F3F
26	3 300.000 "	3 500.000 "	NON, A1A, A2A, A3E, A3C, C3F, F1A, F2A, F3E, F3C, F3F
27	5 650.000 "	5 925.000 "	NON, A1A, A2A, A3E, A3C, C3F, F1A, F2A, F3E, F3C, F3F
28	10 000.000 "	10 500.000 "	NON, A1A, A2A, A3E, A3C, C3F, F1A, F2A, F3E, F3C, F3F
29	24 010.000 "	24 250.000 "	NON, A1A, A2A, A3E, A3C, C3F, F1A, F2A, F3E, F3C, F3F

SCHEDULE VIII (ss 53(3))			
Item	Column I Lower Freq Limit	Column II Higher Freq Limit	Column III Type of emission
1	434.000 MHz	450.000 MHz	C3F, F3F
2	1 215.000 "	1 300.000 "	C3F, F3F
3	2 300.000 "	2 450.000 "	C3F, F3F
4	3 300.000 "	3 500.000 "	C3F, F3F
5	5 650.000 "	5 925.000 "	C3F, F3F
6	10 000.000 "	10 500.000 "	C3F, F3F
7	24 010.000 "	24 250.000 "	C3F, F3F

SCHEDULE X
(See Sec.43)

Authorized frequency bands (MHz) and transmitter power in watts for day (dj) and night (n) operation.

	1.900 to 1.925	1.925 to 1.975	1.975 to 2.000
British Columbia	1000 dj 200 n	1000dj 200 n	1000dj 200n
Alberta	1000 dj 200 n	1000 dj 200 n	1000 dj 200 n
Saskatchewan	1000 dj 200 n	500 dj 100 n	500 dj 100 n
Manitoba	500 dj 100 n	250 dj 50 n	500 dj 100 n
Ontario	250 dj 50 n	125 dj 25 n	250dj 50 n
North of 50 Deg. N Lat	50 n	25 n	50 n
Ontario	125 dj 25 n	0	125 dj 25 n
South of 50 Deg. N Lat	25 n		
Province of Quebec	0	0	0
North of 52 Deg. N Lat			
Province of Quebec	0	0	0
South of 52 Deg. N Lat			
New Brunswick	0	0	0
Nova Scotia	0	0	0
Prince Edward Island	0	0	0
Newfoundland	0	0	0
Newfoundland (Labrador)	0	0	0
Yukon Territory	1000 dj 200 n	500 dj 100 n	1000 dj 200 n
District of Mackenzie	1000 dj 200 n	500 dj 100 n	1000dj 200 n
District of Keewatin	500 dj 100 n	250 dj 50 n	500 dj 100 n
District of Franklin	0	0	0

The preceding proposed changes to the General Radio Regulations Part 11 (Amateur Service) is provided for the use of the members of the Ottawa Valley Mobile Radio Club Inc. and other interested amateurs. The text and schedules have been carefully checked for accuracy against the publication in The Canada Gazette on the 9th of January 1982.

Original copies may be obtained from The Queen's Printer, Ottawa.

Any Club member who wishes a copy in the French language may contact the editor of the Rambler.

Jerry, VE3CDS

STANDARD POSTAL ABBREVIATIONS

The old familiar three or four character abbreviations of provinces and states have gone the way of the gallon and the ounce. to be replaced by punctuation free two character abbreviations. Here is the definitive list courtesy of the London Amateur Radio Club.

Alberta	AB	Maine	ME	Oklahoma	OK
Alabama	AL	Manitoba	MB	Ontario	ON
Alaska	AK	Maryland	MD	Oregon	OR
Arizona	AZ	Massachusetts	MA	Pennsylvania	PA
Arkansas	AR	Michigan	MI	Prince Edward Is.	PE
British Columbia	BC	Minnesota	MN	Puerto Rico	PR
California	CA	Mississippi	MS	Quebec	PQ
Colorado	CO	Missouri	MO	Rhode Island	RI
Connecticut	CT	Montana	MT	Saskatchewan	SK
Delaware	DE	Nebraska	NE	South Carolina	SC
Dist of Columbia	DC	Nevada	NV	South Dakota	SD
Florida	FL	New Brunswick	NB	Tennessee	TN
Georgia	GA	New Hampshire	NH	Texas	TX
Guam	GU	New Jersey	NJ	Utah	UT
Hawaii	HI	New Mexico	NM	Vermont	VT
Idaho	ID	New York	NY	Virginia	VA
Illinois	IL	Newfoundland	NF	Virgin Islands	VI
Indiana	IN	North Carolina	NC	Washington	WA
Iowa	IA	North Dakota	ND	West Virginia	WV
Kansas	KS	N.W. Terr.	NT	Wisconsin	WI
Kentucky	KY	Nova Scotia	NS	Wyoming	WY
Louisiana	LA	Ohio	OH	Yukon	YT

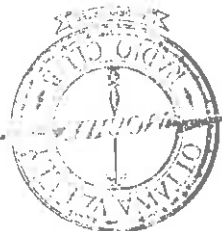
James Hamilton, VE3GJY
2038 Arch St.
OTTAWA, Ontario.
K1G 2H1



FIRST CLASS MAIL

P.O. BOX 5530
STA. "F"
K2C 3M1

OTTAWA, ONTARIO



AMATEUR RADIO