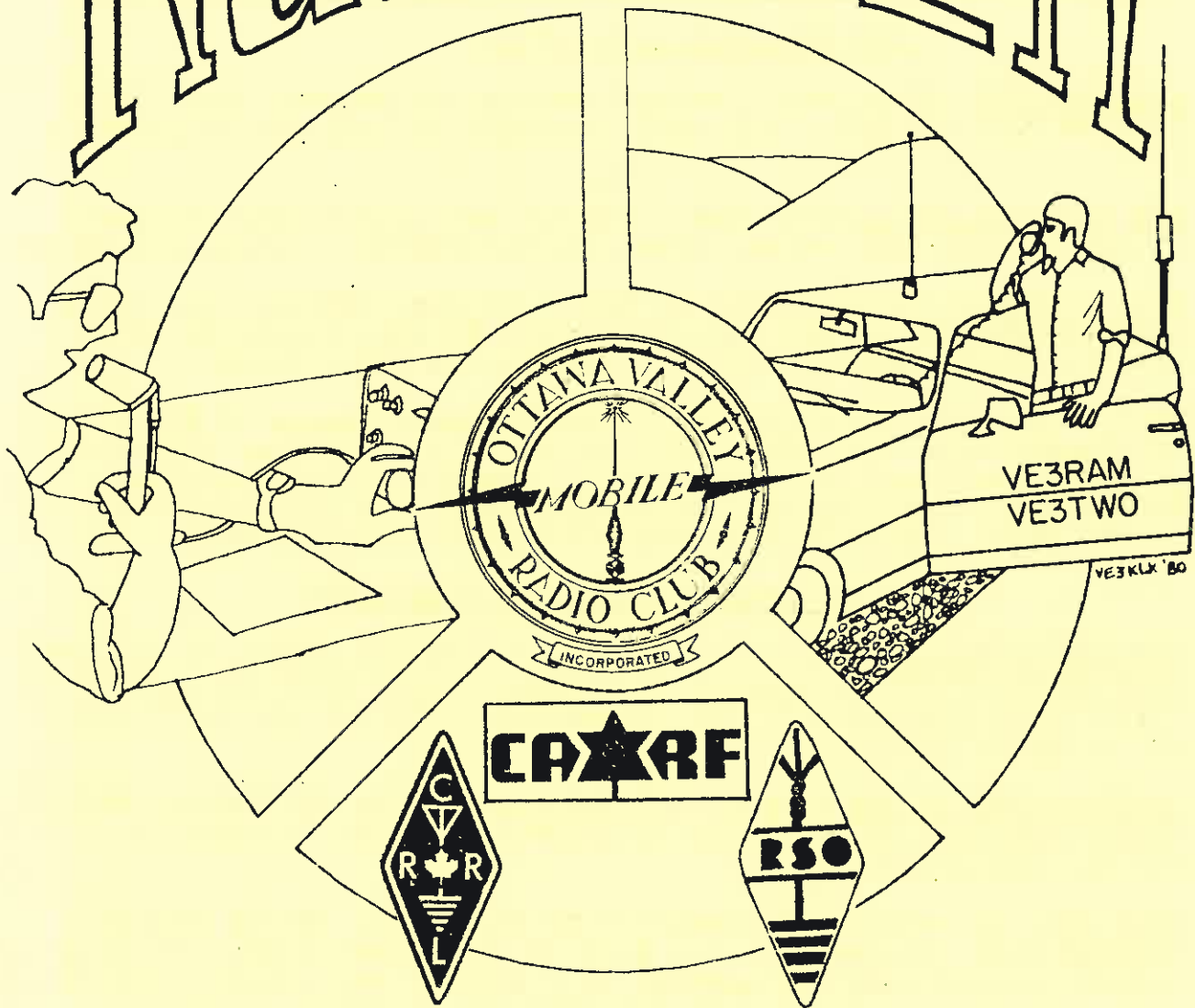


RAMBLER



MAY 19 1983

THE OTTAWA VALLEY MOBILE RADIO CLUB INCORPORATED

1982-1983 EXECUTIVE

PRESIDENT	Russ Pastuch	VE3FSN	828-9235
VICE PRESIDENT	Dave Coutts	VE3KLX	829-2537
SECRETARY	Tim Evangelatos	VE3EWE	722-1358
TREASURER	Pat Brewer	VE3KJQ	725-1528
TECH ADVISOR	Dave Harris	VE3KMV	234-7812
PUBLIC REL.	Mike Shacklock	VE3LAR	523-1571
EDITOR	Jerry Wells	VE3CDS	225-7374
PAST PRESIDENT	Ray Ferrin	VE3FN	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 VE3KLX. 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 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-LID 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 3.62 MHz, 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 VE2CRA. 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).

Vol 26, No. 5

May 1983

PREZ SEZ

It looks like spring really has arrived at last. This is fantastic weather even is the Farmer's Almanac is calling for rain into mid June.

I don't have much to say this month. The warm weather has had me outside playing with lawm mowers, fertilizer spreaders and other such neat things. Even the computer has taken a back seat to outdoor activities. This applies even to my amateur radio activities. Judging by the fact that the two metre rig has only been on once or twice in the last three weeks, the decision to discontinue the Wise Owl Net during July and August is a good one.

It may be a terrible admission, but I am beginning to look forward to the end of my term as prez. I've begun to realize the amount of work dumped on the executive, as a whole, and I am looking forward to a break. If I remember correctly, one of the ARRL rules, ethics, codes makes mention of the place amateur radio should have in your life. It's a great hobby but only one of many that I have, and I was getting a bit too involved.

Field day is fast approaching and we still don't have a coordinator. We need one if this thing is going to come off this year. Any volunteers?

That's it for this month. Enjoy the good? weather, after all, it beats snow.

Russ VE3FSN
Prez

VICE VOICE

Well I guess I will start with the traditional examination of the weather conditions since last we met. Sure am glad that the snow is gone.....I hope.

With my final exams out of the way now and the knowledge that I have my usual summer job awaiting me on May 2nd, all is right with the world, finally. I even managed to pull the ten-speed out and get it all polished up and ready to go for taking me to and from work. May, June, July and August are my favorite months because I can cycle to work without the need for taking the bus. As per usual I hope to be radio equipped between 7 AM and 7:50 AM and again from 4:30 to about 5:10 PM approximately. Naturally I will be making use of Ottawa's finest repeater, VE3TWO.

I hope you were impressed with my handling of the last club meeting. My brief taste of supreme executive power has convinced me it is time to announce my candidacy for President. I have been getting ready for this eventuality for some time, to be perfectly honest. The usual tradition in our club is for Vice-Prez to run for Prez the following year. Well who am I to break tradition. So here it goes folks! Russ' act is going to be a tough one to follow. This is not to say, of course, that you too can't also run for Prez. Sydney, VE3GVI, is the coordinator of the Nominating Committee so give him a blast if you're interested in running for any executive office.

Next topic: Code Practice. I guess any of you who use the code practice on VE3TWO have noticed some changes. First of all the text is fresh every week. No more will you have to wonder if you are really copying 20 WPM or whether it's just that you have memorized it. There are still some bugs, though. First of all I am still recording the practice on tape and then playing the tape over the air. The trouble is that the recorder seems to be bothered by RF. The alternative is to interface the code generator, an Apple 2 Plus, directly into the microphone circuit of the radio. To do this, though, I need to be able to store an hours worth of text on the computer. I am afraid that can't be done very well without a disk drive. So the plan is to purchase a disk drive in mid-May. When I have done that the code should be cleaned right up in terms of quality. Once the quality problem is settled I plan to re-structure the whole code practice session on Wednesday and Friday nights. We will probably start right at 7 PM and go through until 7:55 PM on both Wednesday and Friday night. We will no doubt start at high speed and work down to slower speed. Wednesday night will be for the slower speeds and Friday night will be for the faster speeds. Any changes will be announced on the Wise Owl and I will also mention them in my article in the Rambler. If all this goes as planned, I may be able to offer a qualifying run much like WLAW and provide certificates.

So there you go, the ultimate plans for the upcoming few months. And speaking of the next few months, don't forget about Operation Horsepeople, a cross country horse jumping event in Wendover on June 11 and 12th. I will need about 12 people for each day so please let me know if you can help. Mobile and portable stations are both required and we will be needed for about 4 or 5 hours on Saturday and about 2 or 3 hours on Sunday. The frequency will no doubt be 146.52 MHz.

That's it for now, see you at the May meeting.
 Dave, VE3KLX
 Vice-President

MORE ON THE AUCTION

I would like to acknowledge a donation of equipment to the Club for us to sell at the flea market from Bob Dormer, VE3GLQ, thanks Bob! While speaking of the auction, it sure was a busy day! I don't think I can think of a time when I was more tired. After all the proceedings were completed, there was still quite a lot of stuff left over that wasn't bought or taken away. As I had my trailer there, I took it upon myself to haul the junk away to my place. When I got home and told Ellen that I planned to dump it in the garage, she got a little concerned. "What are you going to do with it?" she asked. I answered that I planned to put a little bit out each week in the garbage. After a little "discussion" we decided that we should take the stuff to the dump right away! So off we went to the regional dump, it's about 10km south of B.C. on Moodie Drive. That's quite a ride from the east end! I believe the Club did well and perhaps now we can afford some decent auction forms! Thanks to all that helped out and those who bought stuff!

DE MIKE
 VE3LAR

MINUTES OVMRC MEETING 21 APR 1983INTRODUCTION

Vice-President Dave - VE3KLX opened the meeting at 20:04 hours and introduced: Ric - VE3NJM, Andy - VE3NBK, Guy - VE3MSK, Leo - VE3NVL, Don - VE3NVU. Thirty-two members and guests were present.

MINUTES OF MARCH MEETING:

Mike - VE3LAR moved that the minutes be accepted. Seconded by Bob - VE3KIK the motion was passed.

OLD BUSINESS:

President: Absent.

Vice President: Dave - VE3KLX reported that new code tapes are now available for the practice sessions on VE3TWO. Also "Wise Owl" certificates are available for those who earned them.

Secretary: Nil report.

Editor: Jerry VE3CDS provided the answer to the quiz published in the "Rambler", even though all the members knew what it was (i.e. an 807).

Technical Advisor: Nil report.

Public Relations: Mike - VE3LAR still requires four more volunteers for "Meters for Millions" to be held on May 7, 1983. Work has not started on the new museum station, Mike will investigate. Mike noted that the 6502 Apple computer users meeting will be held on May 10th. Mike has also been investigating the new postal regulations. If the "Rambler" was mailed in an envelope then a more favourable rate would apply, however, the saving would be used to pay for the envelopes with no net gain. Mike asked the members if they would prefer picking up the "Rambler" at the meeting instead of getting it in the mail, but the members rejected this suggestion. The current process will continue.

Treasurer: Pat - VE3KJQ reported that the club's bank balance stands at \$1878.56 and membership is 104. He will start collecting next years fees in May.

CANF: Art - VE3ES reported that Yugoslavia has signed a reciprocal operating agreement with Canada. Also the new issue of "TCA" is now off the press.

RSO: Merv - VE3CV reported on the recent meeting of the St. Lawrence Seaway Valley repeater meeting and on activities in southern and eastern Ontario regarding linking of repeaters.

NEW BUSINESS:

Activities: Bill - VE3NPG is coordinating communications for events at the Fiddler Green Stables which will be held on May 29th and in late August. Volunteers are needed.

Dave - VE3KLX is organizing the emergency communications for "Operation Horse People", a cross country jumping event to be held on June 11th and 12th. Operators are also needed for it.

Elections: Sydney - VE3GVI is the nominating committee chairman and Vance - VE3OAO will be assisting the committee.

Entertainment: Jim - VE3JPC, an ardent RTTY enthusiast, and founder of the "No-Name" RTTY net heard on VE3TWO each Wednesday night at 20:00 hours, provided the members with an introductory

talk and demonstration of RTTY. A mode that is becoming very popular due to the availability of personal computers and the ease of putting them on RTTY. Jim has a club project going to build RTTY T.U.'s. Although intended for Apple computers the boards will work well with other computers such as the Vic 20 and the C-64. Jim mentioned the new Amcor mode which can provide error free RTTY and may become popular fairly quickly.

Next Meeting: To be held on May 19, 1983 at the Museum of Science and Technology at 2000 hours.

Adjournment: Moved by Tim - VE3EWE and seconded by Bill - VE3NR, the meeting was adjourned at 21:45 hours.

Tim Evangelatos
VE3EWE
Secretary

THE BOTTOM LINE

This past month the big event was of course the club auction. From the money standpoint it was a big success. The net profit from the whole affair was \$574.55. This is quite a bit better than in the last few years. We made \$111.04 more this year than last, for example. In fact, I had to go back to 1978 to find a better year. That year we made \$736.16, so we still have a goal to surpass next time round. In looking over past auctions there are some things to note. The major part of the income from the auction is no longer the auction itself, but income from the canteen, rental of flea market and dealer tables, and the club flea market table. Perhaps we should rename the event. The OVMRC Spring Flea Market and auction, with "auction" in small letters.

With the income from the "auction", the club book balance stands at \$2487.77. The club membership stopped at 104 members for this year. We are now accepting memberships for the 1983-84 club year and you will find an application form at the back of the Rambler.

Pat Brewer
VE3KJQ

VE3JW RENOVATIONS

Well what can I say? Still no 'JW! It appears that some high profile activities in the Museum have over-taken the 'JW work. You can see that because even the Radio Astronomy display hasn't been going that fast. If things settle down a bit we should see something in time for the next meeting (maybe). When-ever things get back together, I'll be contacting the operators to get them back to work. Your patience is appreciated and I hope you all will be able to continue helping operate the station. Incidentally, the Hercules Linear has been fixed by TEN TEC and is on its way back.

DE MIKE
VE3LAR

WHY WORK RADIO TELETYPE?

Having wetted your curiosity in Part One in the last issue, here is Part 2.

"WHAT FREQUENCIES DO I USE FOR RTTY?"

HF RTTY operation has evolved to heavy operation on the 80 and 20 meter bands (CW segments) with sporadic operation on other HF bands. 80 meter RTTY stations tend to operate between 3600 and 3650 KHZ while 20 meter stations are between 14.075 and 14.100 MHZ. 170 cycle shift is used almost exclusively with mark being the higher radio frequency. 60 wpm (45.5 baud) is the most popular RTTY speed, but 100 wpm (74 baud) is gaining in popularity.

VHF RTTY operation in most areas is concentrated on 2 meter FM with 146.700 MHZ being the popular frequency. Virtually all stations are now using 170 HZ shift. As with HF RTTY, 60 wpm is most popular on VHF. Some areas now have RTTY-only repeaters on 146.10/146.70 MHZ.

"WHAT IS THIS MARK AND SPACE BUSINESS?"

The RTTY signal from the terminal is a series of pulses. The amateur BAUDOT RTTY signal has 7 possible pulses for each character typed or printed; each one transmitted one-after-another (serial). Each pulse can be either "ON" (current flow in the RTTY loop) which is called "MARK" or "OFF" (no current flow), the "SPACE" condition. To keep decoders synchronized the first pulse of a character, the START pulse, is always a SPACE (current off); the last pulse, the STOP pulse, is always a MARK (current on). The 2nd through the 6th pulses can be either MARK or SPACE, depending upon the coding required for a character. The START and all 5 data pulses are the same length; the STOP pulse may be either equal to or longer than the others. The computer ASCII code uses START and STOP pulses but has eight instead of five intermediate data pulses, thus allowing a greater number of characters to be encoded.

"WHAT IS THE DIFFERENCE BETWEEN FSK & AFSK?"

Transmitting RTTY signals via radio could be done like Morse code with on-off keying of the transmitter carrier. However, the interference received during off-times would give badly distorted printout. Rather, HF RTTY is transmitted with Frequency Shift Keying (FSK) so that the mark pulse condition corresponds to one radio frequency and the space to another. Amateur radio convention has it that the mark radio frequency is higher than space and that the separation or "shift" of the signal is standardized at 170 HZ. The FSK signal is received with the BFO turned on, giving two audio frequency tones for frequency tones for the mark and space conditions. The audio tones, are in turn, detected in the demodulator and the resulting pulses drive the display or printer. Note that changing the transmitter or receiver frequency (on purpose or through frequency drift) will change the audio output frequency to the demodulator. The HF system is therefore quite drift sensitive. Present HF equipment stability is quite adequate for FSK RTTY, but it is only recently that VHF equipment became available with similar stability. Therefore, VHF RTTY has traditionally been transmitted by first keying audio tones with the RTTY pulses and then using these tones as the audio modulation of an AM or FM VHF

transmitter. This is called Audio Frequency Shift Keying (AFSK). Current amateur convention is to make the mark audio frequency lower than the space frequency by the amount of the shift (170 HZ). Since the RTTY data is audio modulation of the carrier, frequency drift of either transmitter or receiver is a lot less critical. The audio frequency of the tones transmitted is set to be the same as those in the receive demodulator.

The required radio frequency shift keying can be done in two different ways, shift the frequency of a transmitter oscillator directly with the RTTY pulses or use a SSB transmitter with audio tones. Direct FSK keying circuits are described in most amateur journals and many of the new rigs on the market today have the FSK circuits built-in.

Generation of FSK with a SSB transmitter is as follows; if a Lower Sideband Transmitter (LSB) is driven with a 2125 HZ audio tone, the RF output of the transmitter will be at a frequency 2125 HZ BELOW the suppressed carrier frequency. A properly adjusted LSB transmitter will have NO OTHER output frequencies. If the input tone is changed to 2295 HZ (170 HZ) the RF frequency is now 2295 HZ BELOW the carrier frequency. Thus, audio tones into the LSB transmitter have produced FSK carriers out of the transmitter. Note that, because the LSB mode was used, the 2125 HZ standard mark tone for VHF AFSK has become the higher radio frequency. Thus, the same demodulator and tone keyer can be used for both VHF AFSK and HF FSK operation.

Most HF RTTY amateur radio stations use audio tones with a SSB transmitter. Although "standard" audio tones for VHF amateur operation have lone been 2125 HZ for mark and 2975 HZ for space (850 HZ shift), limited audio frequency response of HF SSB transmitters and receivers has recently given rise to a second set of "standard" tones at lower frequencies (Low Tones).

.....relax now, because there's only one more Part coming your way. By the way, credit for this information about RTTY goes to the HAL COMMUNICATIONS CORP., ILLINOIS.

Bruce VE5RC

Reprinted from the "Greensheet" Saskatoon ARC

FROM CRRL NEWS

Expansion of the U.S. phone band on 20-metres becomes effective 0001 UTC, Sunday, May 22. 14.15 - 14.175 MHz will be for Extra-class only; 14.175 - 14.225 MHz for Extra- and Advanced-class; and 14.225 - 14.35 MHz for Extra-, Advanced-, and General-class. The expansion closely follows proposals made by ARRL instead of the more extensive proposals made by FCC which would have allowed Extra-, Advanced-, and General-class to operate on 14.15 - 14.2 MHz.

That CRRL Canadian Repeater Directory is now available. It's accurate and up-to-date. For your free copy, send a self-addressed, stamped envelope to CRRL, Box 7009, Station E, London, Ontario N5Y 4J9.

A satellite communications conference sponsored by DOC, Telsat, Teleglobe Canada, and the University of Ottawa, will be held in Ottawa June 15 - 17.

RE: AMATEUR INVOLVEMENT IN DOC EXAMS

The following letter has been sent to DOC with copies to CARF and CRRL from the OVMRC.

Dear Sir:

The members and executive of the Ottawa Valley Mobile Radio Club have been studying the proposal to have amateurs assist with the conduct of amateur radio examinations. Although not all individuals agree on all points we would like to submit our comments.

The majority of our members support the proposal; those who have any doubts about it are not against the principal but are concerned with the degree of support that will be forthcoming from amateurs when "volunteers" are needed to do the work. The following comments refer to the specific points raised in your letter to CARF president, Don Slater - VE3BID, dated February 1, 1983.

(a) Suggest using advanced amateurs who have held a license for at least five years and who are regarded by the community, amateur or other, as being responsible, mature individuals.

(b) As indicated in (a) advanced amateurs who have held any Canadian amateur license for five or more years.

(c) Suggest having volunteer examiners mark the cw and multiple choice questions. The essay type questions to be marked by DOC, at least initially. In the future if the system works, to consider having volunteers mark all portions of the exam. Students not allowed to bring any material, except pens or pencils, into the examination room.

(d) Retain current scheduling, but if possible, schedule exams for evenings or weekend and at the end of amateur radio courses.

(e) May be impossible in remote areas. Suggest that if no volunteers can be found after a four month period, then the responsibility will fall back onto DOC who would follow current practices.

(f) All exams to be sealed and opened only by the students. CW tapes, if provided by DOC to be sealed and opened by the chief examiner. All material will be resealed and returned to DOC.

(g) Initially only cw and multiple choice questions would be marked by the volunteers. DOC to mark essay type responses. Later, if desirable, all portions of the exam will be marked by amateurs following specific guidelines prepared by DOC.

(h) Initially DOC to produce exams and distribute them by mail or through local offices. Later, consider feasibility of having amateurs take over this responsibility.

(i) Co-ordination by mail or phone. Inspection of examination process by DOC at any time.

(j) Not considered a problem if DOC provides exams in both official languages. Test to contain complete instructions. CW instructions could be provided at the beginning of the tape.

(k) Agree that a pilot project should be established in a limited area.

(l) DOC will save money on room rental and examiners salaries. In time if system works satisfactorily, it may be possible to take over the entire examination process with a much greater reduction in DOC's costs.

(m) Amateurs on the whole have a reputation for being responsible individuals. They are proud of their hobby and its traditions and would likely be successful in this endeavor. The proposed tasks would add a new and positive element to the hobby. It only remains to be seen how difficult it will be to get volunteers and this is a question that can only be answered through experience. The OVMRC recommends that a pilot project be conducted, and then after a review, which must involve amateurs, a decision can be made about implementing the proposal across Canada.

Yours truly,
Ottawa Valley Mobile Radio Club Inc.

LETTER TO THE EDITOR

Dear Mr. Editor,

I think amateur radio has benefitted greatly from technological changes, in CW operations as in other aspects of the art.

For instance, yesterday I nearly had a QSO with a North American station which must have been using a memory keyer. It sent out 47 consecutive CQ's.

I listened in growing admiration for such perfect code. Finally it stopped. I was about to answer with my old-fashioned keyer (without memory), but, after a 500 millisecond pause, the operator sent CQ DX K.

I was so happy. Is this a record?

73 Serge, VE3JRG

DAYTON 1983

Well I finally made it to Dayton. And it's all everyone said it is. Quite well run except for the talkin; the reason I say that is that with all the people coming into town the traffic wasn't cleared very fast. Indeed the net control often was so unfamiliar with the routes that he had to ask for help on many occasions slowing up the whole process. Sylvester, VE3LBH, and I left at about 15:30 Thursday and checked into a motel about one and a half hours north of Dayton (Lima) at 03:00 Friday. The trip back went from 08:30 to 21:30 Sunday. The commercial displays were very well done and the flea market was monstrous. Even tho' the place was huge and quite crowded, I did meet a number of locals there. The bus from Toronto that broke down last year (see the current TCA) made it down okay this year.

That makes me wonder, is there enough interest in Ottawa to charter a bus next year? I'll see if I can get some figures for the meeting. Will I go next year? Yes, I believe I will. If you'd like to know more about Dayton, just ask!

DE MIKE
VE3LAR

Do you have envelopes on file with the incoming QSL Bureau? If the answer is no, send a couple of sase's to the Ontario Trilliums, P.O. Box 157 Downsview, Ont. M3M 3A3.

FROM CARF NEWS SERVICE

DOC has finally printed a new edition of TRC-24, which gives the requirements for the Amateur exams. Unfortunately, it does NOT incorporate the changes recommended by past Amateur symposiums, individuals and clubs. These were discussed last year with the Department on a number of occasions by CARF and others and most of them were supposed to be included in this latest printing of TRC-24. It is to be effective February 1st, 1984. Its Advanced exam requirements still appear to be tough for a hobbyist. A look at the passing rate for exams written April 1981 to April 1982 show the reason changes were requested to the exams. They present a dismal picture. Out of a total of 1,000 who wrote the Advanced theory, only 506, or 50.6% passed. Some 2,241 took the Amateur class theory test but only 1,246, or 55.6% made the grade, according to a detailed result table obtained from DOC by VE3MBF, Bill Rork.

As the old saying goes, you win some, you lose some and here's some proof. The same Privy Council Office which held up proposed license increases so long that they could not be implemented this year has been sitting on proposed revisions to the Amateur regs since last May. The proposed changes which surfaced a couple of weeks ago were some of those which resulted from recommendations made to DOC by Amateurs at the 1981 CARF Symposium. Included were revisions which would lift power restrictions on 160 metres, permit repeaters on ten metres, allow European Amateurs to use all of the two metre band while operating in Canada under a reciprocal operating agreement, redefine permitted bandwidths for AM, FM, FSK and Amateur TV. DOC hopes that now these drafts which it had submitted to the Privy Council have been found, they will be approved fairly soon.

NOTICE OF MEETING

The next regular meeting of the OVMRC will be held on May 19 at 8:00 PM at the Museum of Science and Technology on St. Laurent Blvd.

Our speaker for the evening will be Bill Wilson VE3NR. Bill's talk on lightning protection for Amateurs should be of interest to all.

See you there.....

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

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Editor
Jerry Wells
VE3CDS
225-7374

Ottawa Valley Mobile Radio Club Inc. 1983-84 Membership Application

() New () Renewal

Date _____

Name _____

Call _____

Address _____

Home Phone _____

Postal Code _____

Bus. Phone _____

Spouse _____ Family Club Members _____

Member of: CARF (), ARRL/CRRL (), RAQI (). RSO ()
Other (indicate) _____

Please check applicable class of membership:	Annual Dues
() Full Member; Licenced radio amateur interested in mobile operation	\$10.00
() Family Member; Licenced dependant of a member	\$1.00
() Associate Member; Non-licenced person interested in mobile operation	\$10.00
() Associate Family Member; Non-licenced dependant of a member	\$1.00
() Rambler subscription only	<u>\$6.00</u>
TOTAL	

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