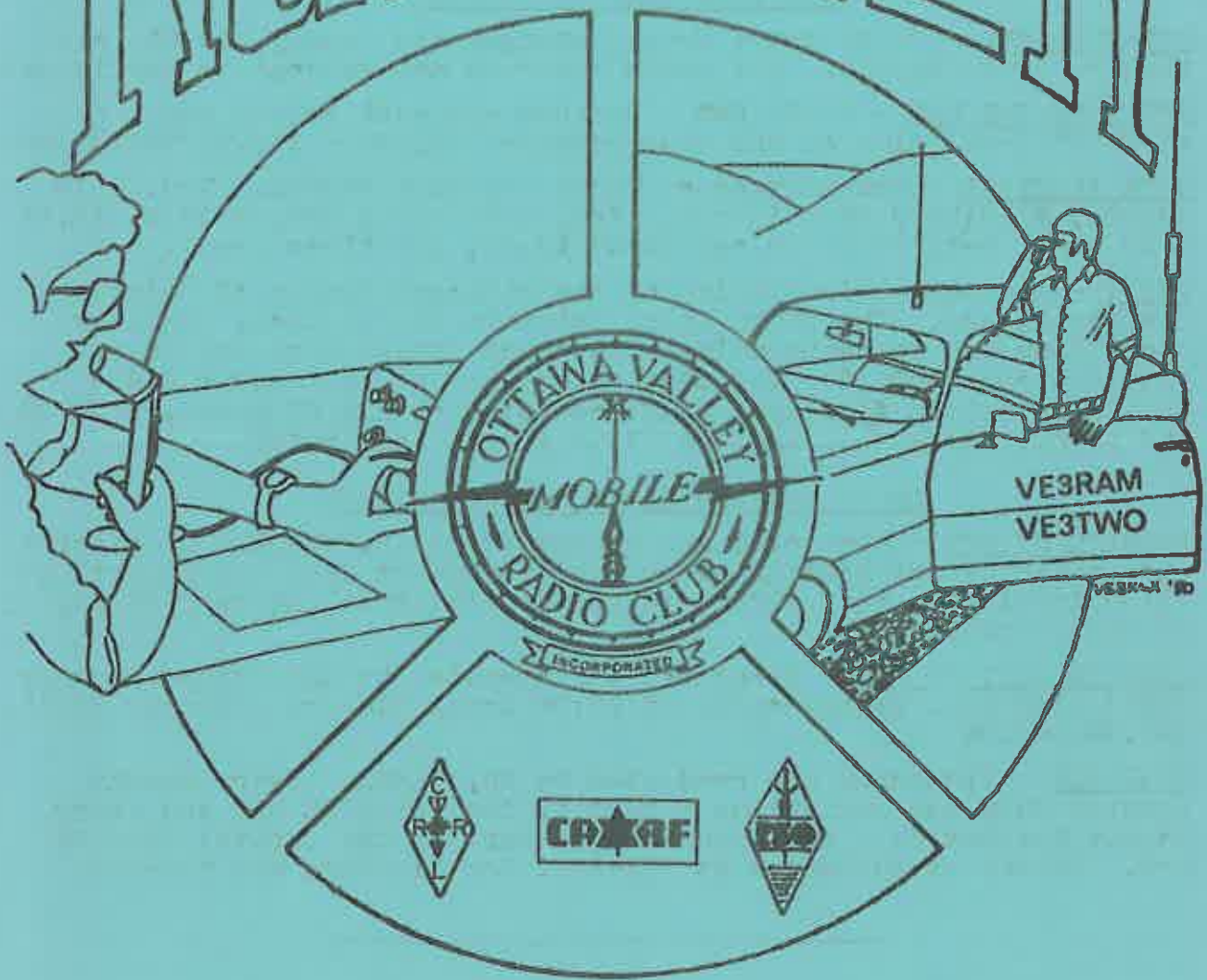


RÄMBLER



JAN 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	VE3CVR	829-7995
TECH ADVISOR	Dave Coutts	VE3KLX	829-2537
PUBLIC REL.	Bucky Merkley	VE3JRR	733-3429
EDITOR	Jerry Wells	VE3GDS	692-3274
PAST PRESIDENT	Ray Ferrin	VE3FM	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 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-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 3.62MHz, 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 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)

THE PREZ SEZ

First, I would like to wish you all the best in 1982 and hope that Santa brought the toy you were hoping for. I'm certain that there are a fair number of new rigs in the area and I expect to see an increase in people checking into the Wise Owl Net.

1982 is an important year for the Ottawa Valley Mobile Radio Club, this year our club is twenty five years old. The executive has planned a number of special events for this occasion and it is hoped that as many of you as possible can attend. Details will be announced as they occur.

Speaking of presents, the postal increase hinted at last fall has come to pass and it was as bad as expected. You will note that your copy of the Rambler bears a thirty cent stamp. This is the lowest rate that we are going to be able to distribute the Rambler at. When you consider that the increase of thirteen cents times 100 copies a month times five more issues this club year, the club coffers have to be topped by another sixty-five dollars. Whether the club can absorb this additional cost will be determined by the executive, but one thing is certain, there will have to be a dues increase for next year. It has been estimated that a year's set of Ramblers cost \$8.50 prior to postal increase, notice that this is not even covered by the present dues. The additional \$1.30 for postage and you should be prepared for dues of \$10.00 in 82/83, be warned.

At last meeting, there appeared to be a fair interest in running an amateur radio course. OK gang, I now need some volunteers to assist. The more we have, at least six to eight, the lighter the workload. Every person will be assigned a task for the duration of the course ie preparing notes, slides, making papers, etc. I estimate a course of twenty weeks duration starting in September, so although we need volunteers, realize that this is a major commitment. If we can get this started now we have sufficient time to prepare.

It looks like another club project is in the offing. At the December meeting, Merv CV, displayed an electronic anemometer which attracted considerable interest. Further details on this can be found elsewhere in the Rambler.

Well, that's about it for this month, see you at the January 21st meeting.

Prez, Russ VE3FSN

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OTTAWA, ONTARIO, K2C 3M1
CANADA

Editor
Jerry Wells
VE3CDS
225-7374

SPECIAL NOTICE

In accordance with article 6 and 7 of the Ottawa Valley mobile Radio Club Incorporated constitution issue 7, 01 Jan. 1981, the notice is hereby given of a motion to amend bylaw 3 to read:
 " 3. DUES: Dues for members and associate members shall be \$10.00 per annum. Family membership shall be \$11.00. DX members dues shall be \$5.00 per annum. Those persons joining after 1st February may be granted membership for \$5.00 at the discretion of the executive. Life members pay no dues. Persons who are not club members, and for whom membership would be impractical may subscribe to the club publication "RAMBLER" on payment of \$6.00 per annum (for ten issues)."

This motion will be presented at the Jan. 82 club meeting and is a result of postal rate increases.

Bob Daye, VE3MPB
 Secretary

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MINUTES OVMRC MEETING 20 DEC.1981INTRODUCTION

The Dec. meeting of the OVMRC was held at the Museum of Science and Technology and was opened at 2000 hrs. by president Russ VE3FSN who welcomed Bob Hewens VE3NJI recently licensed and a new club member.

OLD BUSINESS

Minutes of Nov. meeting - after noting corrections to call signs of Ray VE3FN and Dave VE3KLX it was moved by Bob VE3KIK seconded by Rene VE3JKR that the minutes as published in the Rambler be adopted --- Carried.

COMMITTEE REPORTS

President - Nil report.

Vice President - Tom VE3ABC advised that he declined to involve the club in the "Snow Do" organized by a group called "The Happy Rideau Club". Tom stated that insufficient time and resources were available to organize the event. Tom also advised that "snoworama" would be the same type of activity as in previous years and we will monitor developments.

Secretary - Nil Report

Treasurer - Not present

Technical Advisor - Not present

Public Relations - Not present

Editor - Not present

Past President - Nil report

REPORTS AND NEW BUSINESS

CARF report - Mike VE3LAR said that the only club discount on membership was 10% on new member applications and NIL for renewals or life membership. Mike also advised he has CARF membership application forms. Mike stated that he had "Dup" sheets and submission forms for the Canada Contest 27 Dec. 81.

Ray VE3FN introduced his guest Bill VE3FGW from Toronto.

Ray VE3FN reported on CRRL/ARRL activities and advised that he attended a meeting of the Canadian Radio Technical Planning Board the previous week. He said that at the meeting he learned that the department is looking at specification for UHF tuners (television) to reject signals above the top end of the UHF TV band. Ray reported that the previous Saturday DOC finalized the domestic table of frequency allocation after reviewing the results of WARC 79. Highlights are as follows: The new 10 MHz band is in effect Jan. 82 when regulations are due to be changed reflecting the new frequencies. 18 and 24 MHz bands will be available later after transfer of facilities currently using those bands; in the 160 meter band 1800-1850 KHz will be amateur exclusive in Canada, and 1850 to 2000 will be shared with radio navigation and hopefully by 1983 LORAN will no longer utilize frequencies in this band.

Mike VE3LAR asked if Rambler coverage was adequate re QSLing via RSO. Merv VE3CV said it was but should be included again in about three months from now.

Russ presented a copy of "Amateur Radio Profile Magazine" published quarterly by the Amateur Radio Profile Co.

Pres. Russ encouraged the members to get involved in getting a club project going as soon as possible.

Pres. Russ opened a discussion on a possible skating party. There appeared not to be enough interest to plan such an event.

Pres. Russ announced that the executive had decided to attempt to conduct an Amateur Radio Course in the fall of 82 and anyone interested in assisting should contact him. Space and facilities are available at the museum of Science and Technology.

Stan VE3GYP asked about Club action planned re postal rate increases in Jan. 82.

Pres. Russ stated that 3rd class mail may be too slow for such notices as meeting minutes and proposed constitution changes. He said that we will use first class mail until further investigation is carried out.

Merv VE3CV said he would like club members to volunteer for net controller on Sat. and/or Sun. morning for the Pot Hole net on 3760. Members wishing to gain experience in this area are urged to contact Merv. Merv also advised of the Black Sheep net on 3777.5 MHz interfering with net operations. Ray VE3FN said the CRRL has taken action. Merv also stated that the "snow bird" net on 21265 was being interfered with but the best "on air" practice is to ignore the offences, respect the rights of others and rely on amateur discipline rather than government action.

Merv VE3CV displayed and discussed his home brew anamometer which was of considerable interest and a potential club project (see Merv ETI Magazine Dec. 78).

Dave VE3KMV discussed his emergency encoding and decoding device based on four digit touch tone operation.

The guest speaker was not available and a movie entitled BLEVE (Boiling Liquid Expanding Vapor Explosion) was shown and was of considerable interest.

The meeting adjourned on a motion by Ray VE3FN, seconded by Doug VE3CIW.

R.E. Daye VE3MPB
Secretary

SPURIOUS EMISSIONS FROM THE T.A.

Greetings to all. The new year will be here about the time the Rambler hits the street. December went fairly well even though I was forced to miss the December meeting.

Some plans are in the works to have a code proficiency qualifying run on repeater VE3TWO. I have begun artwork on the certificate and I will keep you posted as to exactly when the big event will happen.

On the January 22, 1982, edition of the Wise Owl Net I will provide an opportunity for more of you happy souls to become a "wise-owler". For those who check in to the net ten times consecutively from January 22, a handsome net certificate will be earned. This of course means checking in to ten nets on ten consecutive net nights. March 26 will be the last net night to be eligible. As was done last year there will be two classes: Class A is for those who check in ten consecutive times and Class B is for those who check in at least five times not necessarily consecutively over the eligible period.

And now, the wise owl net official statistics.

January 23 - December 26, 1980, 2035 minutes 33.9 hrs. 304 check ins

January 2 - December 25, 1981, 2548 minutes 42.5 hrs. 501 check ins.

Remember that I am still open to suggestions or complaints. If you wish to exchange ideas let me know. You can write to me in care of the club.

All the best for a happy and prosperous 1982 (as prosperous as possible that is).

73 de Dave, VE3KLX T.A./NM TWON



WINE AND CHEESE PARTY

To start the twenty-fifth year of the club off on the right foot, the club is hosting a wine and cheese party. The party will be held on Feb. 27 at 1900 Hrs. at the QTH of your president, Russ VE3FSN. A quantity of wine will be provided, however, a bottle of your own will allow the party to continue further into the wee hours.

Contact your president, Russ, at 826-9235 if you and your XYL/YL plan to attend. Please let me know before Feb 20

Prez. Russ



OVARC MEETING JAN 21

At this, our first meeting of the new year we are going to have a presentation by the crime prevention branch of The Ottawa Police Department.

Most of us have a fair investment in amateur gear and protection against theft is of prime importance.

Our Police Department is more than willing to help us make our homes safer and more difficult for intruders to enter. Come out and be enlightened....

AMATEUR RADIO COURSE

No matter how long you have been licenced or exactly how you learned the required knowledge to pass the exam, I'm sure that everyone can think of at least one person that was a key figure in helping you get that licence. At one time or another you have also felt that you should assist some other aspiring person get his or her licence. After all, someone found the time to help you and you should pass this helping-hand along. There now appears to be a way that you can help others in this way.

The OVMRC is tentatively planning to run an amateur radio course beginning this September. It is anticipated that the course would run 20 weeks with a maximum enrolment of twenty or so people.

What is required now is a number of people willing to volunteer their time to this project. This is not the type of thing that can be done with two or three keen bodies. If eight or ten volunteers can be found, it is expected that the work load would be light. Each volunteer would be assigned a task such as preparing notes, marking papers, preparing slides, etc. With this number of people and the large amount of time until September, it can be done.

Now don't get the idea that I know exactly how to organize, prepare and teach a course, but I do remember the prodding that Ed 3GX gave me and I feel I should help someone else get his licence.

So, if you're willing to help, please contact a member of the executive. Don't worry about having done this type of thing before, we're all going to learn together.

With enough volunteers, this will fly and if the volunteers aren't there, well that won't happen, will it.

Prez Russ VE3FSN

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CLUB PROJECT

As a town owner, I have had several restless nights listening to my tower creaking in the wind and wondering if I was about to have a new sculpture appear in my yard. Often the noise generated gives the impression that there are hurricane force winds about when in actual facts, they are quite light. The proposed club project, a digital anemometer, will tell you the wind speed outdoors. Now you can record at exactly what wind speed trash cans fall over and shingles leave your roof. Also when the XYL tells you to go fly a kite, you can point at the display and indicate in a loud, clear voice that the weather is not suitable.

The anemometer should cost less than \$50 and consist of all parts, PC board, etc. except for the wind sensor itself. The sensor consists of easily obtainable items and can be built easily in an evening.

If you're interested, let Dave VE3KLX our technical adviser, know before the February meeting. The more interested parties the cheaper components get. Let's all get behind this club project.

The following article is reprinted from the FLEEDLINE the Niagara Peninsula Radio Club Inc. monthly bulletin..... an excerpt from the opening pages of a book by William Orr W6SAI.

THE STORY OF THE CUBICAL QUAD ANTENNA

The cubical quad is an unusual antenna, and it has a unique and interesting history. The development and growth of the ordinary amateur antenna follows a rather stereotyped story. The theory of the antenna usually makes its first bow in some technical publication. Next, the antenna is used and tested by some radio engineer who is also an ardent amateur. Soon, by word-of-mouth, the story of the antenna spreads and eventually it is publicized in some amateur journal. During the growth and development of the antenna, the story is embellished with tales of fantastic gain, unbelievable front-to-back ratio, and other magical attributes possessed by this antenna which no other antenna can lay claim to. Over a period of years after the hue and cry has dimmed abit, the antenna either falls into limbo and is forgotten, or it takes its rightful place in the great group of popular amateur equipment. Meanwhile, some other new development has probably surpassed the antenna in the interest of the amateur.

An exception to this story is the cubical quad antenna. Springing fullgrown, as it were, into popularity with no formal engineering ancestry, the quad has been hailed simultaneously as the greatest antenna development of the age, and damned as the greatest hoax of the century. Naturally, the truth lies somewhere between these two violent extremes.

In the year 1939 a group of radio engineers from the United States travelled to the South American republic of Ecuador to install and maintain the Missionary Radio Station HCJB, at Quito, high in the Andes mountains. Designed to operate in the 25 meter shortwave broadcast band with a carrier power of 10,000 modulated watts, the mission of HCJB was to transmit the Gospel to the northern hemisphere, and to tell of the missionary work in the wilds of Ecuador. To insure the best possible reception of HCJB in the United States a gigantic four element parasitic beam was designed, built, and erected with great effort and centered upon the heartland of North America.

The enthusiasm of the engineers that greeted the first transmission of Radio HCJB was dampened after a few days of operation of the station when it became apparent that the four element beam was slowly being destroyed by an unusual combination of circumstances that were not under the control of the worried staff of the station. It was true that the big beam imparted a real 'punch' to the signal of HCJB and that listener reports in the path of the beam were high in praise of the signal from Quito. This result had been expected. Totally unexpected, however, was the effect of operating the high-Q beam antenna in the thin evening air of Quito. Situated at 10,000 feet altitude in the Andes, the beam antenna reacted in a strange way to the mountain atmosphere. Gigantic corona discharges sprang full-blown from the tips of the driven element and directors, standing out in mid-air and burning with a wicked hiss and crackle. The heavy industrial aluminum tubing used for the elements of the doomed beam glowed with the heat of the arc and turned incandescent at the tips. Large molten chunks of aluminum dropped to the ground as the inexorable fire slowly consumed the antenna.

The corona discharge was so loud and so intense that they could be seen and heard singing and burning a quarter-mile away from the station. The music and programs of HCJB could be clearly heard through the quiet night air of the city as the RF energy gave fuel to the crowns of fire clinging to the tips of the antenna elements. The joyful tones of studio music were transformed into a dirge of doom for the station unless an immediate solution to the problem could be found.

It fell to the lot of Clarence C. Moore W9LZX, one of the engineers of HCJB to tackle this problem. It was obvious to him that the easily ionized air at the two mile elevation of Quito could not withstand the high voltage potentials developed at the tips of the beam elements. The awe-inspiring (to the natives) corona discharges would probably disappear if it were possible to operate HCJB at a sea level location. This, however, was impossible. The die was cast, and HCJB was permanently settled in Quito.

What to do? Moore attacked the problem with his usual energy. He achieved a partial solution by placing six inch diameter copper balls obtained from sewage flush tanks on the tips of each element. An immediate reduction in corona trouble was noted, but the copper orbs detuned the beam, and still permitted a nasty corona to spring forth on the element tips in damp weather. Clearly the solution to the problem lay in some new, different approach to the antenna installation. The whole future of HCJB and the evangelistic effort seemed to hinge upon the solution of the antenna problem. The station could not be moved, and the use of a high-gain beam antenna to battle the interference in the crowded 25 meter international shortwave broadcast band was mandatory. It was distressingly apparent to Moore that the crux of the matter was at hand.

In the words of W9LZX, the idea of the quad antenna slowly unfolded to him, almost as a divine inspiration. "We took about one hundred pounds of engineering reference books with us on our short vacation to Posoraja, Ecuador, during the summer of 1942, determined that with the help of God we could solve our problem. There on the floor of our bamboo cottage we spread open all the reference books we had brought with us and worked for hours on basic antenna design. Our prayers must have been answered, for gradually as we worked the vision of a quad shaped antenna gradually grew from the idea of a pulled-open folded dipole. We returned to Quito, afire with the new concept of a loop antenna having no ends to the elements, and combining relatively high transmitting impedance and high gain."

A quad antenna with reflector was hastily built and erected at HCJB in the place of the charred four element beam. Warily, the crew of tired builders watched the new antenna through the long operating hours of the station. The vigil continued during the evening hours as the jungle exhaled its moisture collected during the hot daylight hours. The tension of the onlookers grew as a film of dew collected on the antenna wires and structure, but not once did the new quad antenna flash over or break into a deadly corona flame, even with the full modulated power of the missionary station applied to the wires. The problem of corona discharge seemed to be solved for all time.

The new quad antenna distinguished itself in a short time with the listeners of HCJB. Reports flooded into the station, attesting

to the efficiency of the simple antenna and the strength of its signal. In his spare time, Moore built a second quad antenna, this one to be used in the 20 meter band at his ham station HCLJC, in Quito.

At a later date, after Moore had returned to the United States, he applied for a patent covering the new antenna. The fact that the quad-type antenna radiated perpendicular to the plane of the loop was deemed by the Patent Office to be of sufficient importance to permit the issuance of a patent to Clarence C. Moore covering the so-called Cubical Quad Antenna.

Other shortwave broadcasting stations in the Central American area soon heard of this new, high-gain, corona-proof antenna, and Moore built several quads on order, including a large rotating giant for 49 meter shortwave broadcast work at station TGNA in Guatemala City, Guatemala. This antenna is still being used with success at an altitude of 5,000 ft.

The outstanding signal of HCLJC in the 20 meter amateur band quickly flooded Moore with inquiries about his new antenna. Soon, quad antennas were being used by amateurs on both the 10 and 20 meter band, and the amazing success story of the quad came into being.

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