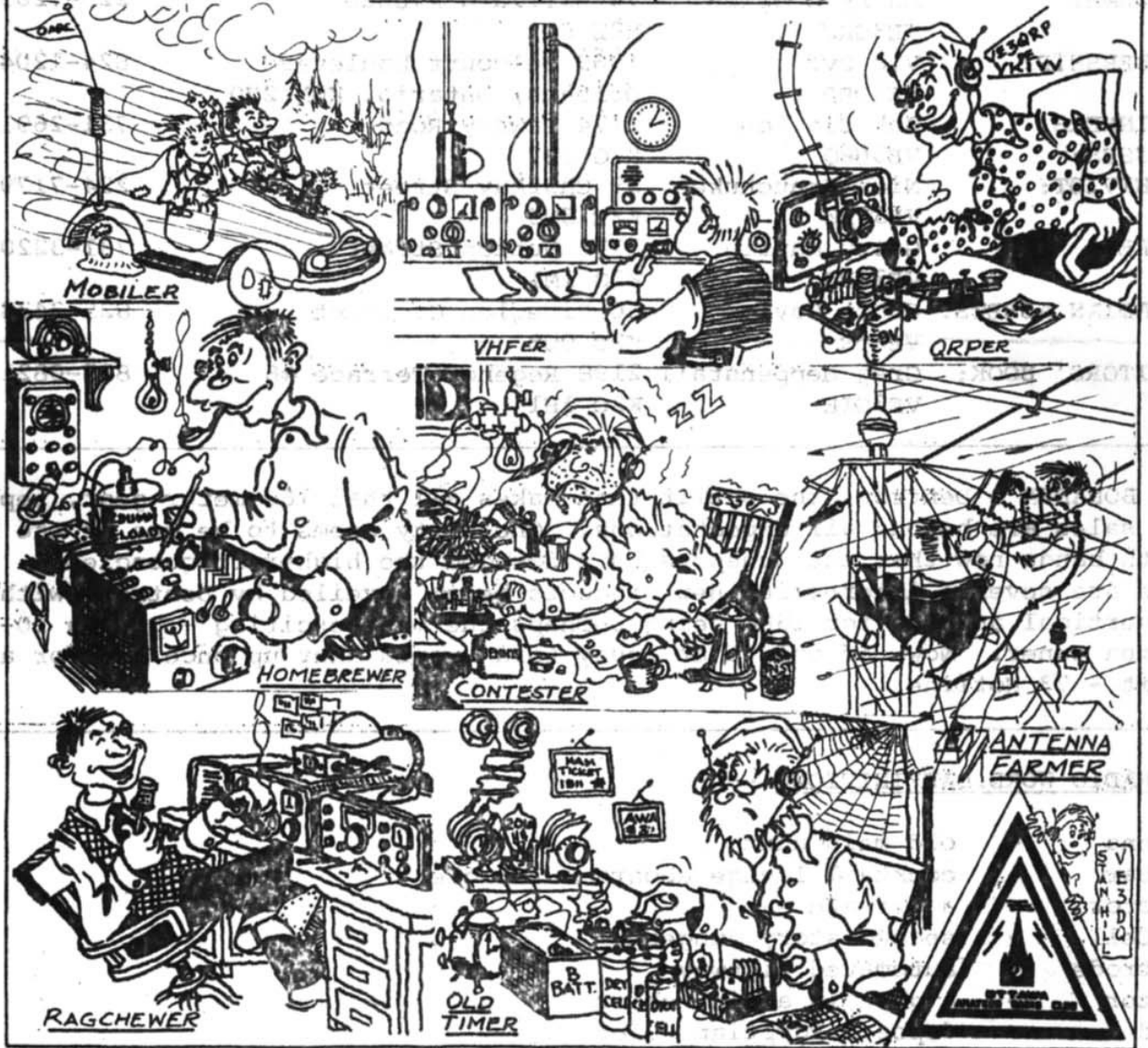




# THE GROUNDWAVE

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



1975 RSO CONVENTION - SKYLINE HOTEL, OTTAWA - OCT. 3 & 4, 1975

THE OTTAWA AMATEUR RADIO CLUB, P.O. Box 8873, OTTAWA, ONTARIO. GW JAN/75

|                  |                  |                           |          |
|------------------|------------------|---------------------------|----------|
| GROUNDWAVE       | George Roach     | 104 Strathcona Avenue     | 234-0885 |
| EDITOR (temp.)   | VE3BNO           | K1S 1X6                   |          |
| ASST. EDITOR:    | John Ellis       | 2984 Hyde Street          | 731-4995 |
|                  | VE3HAT           | K1V 8H9                   |          |
| ASSOC. EDITOR:   | John Ellingham   | 1225 Southwood Drive      | 828-3577 |
|                  | VE3GUW           | K2C 3C2                   |          |
| TECH. EDITOR:    | Ken Scrivens     | 202 Second Avenue         | 237-0524 |
|                  | VE3LJ            | K1S 2H7                   |          |
| GROUNDWAVE       | Cy Chapman       | 2244 Kipling Street       | 731-6172 |
| PUBLISHERS:      | VE3CVK           | K1H 6T5                   |          |
|                  | Ian Hamilton     | 128 Osgoode Street        | 232-9110 |
|                  | VE3AMK           | K1N 6S4                   |          |
| PROGRAM:         | Larry O'Brien    | 72 Hilliard Avenue        | 225-7209 |
|                  | VE3GRJ           | K2E 6G1                   |          |
| MEMBERSHIP:      | Vic Cyr          | 1969 Belcourt Boulevard   | 824-1204 |
|                  | VE3DEP           | Orleans, Ontario. KOA 2V0 |          |
| BEGINNERS'       | Bob Clayton      | 1174 Tawney Road          | 731-2691 |
| CLASSES:         | VE3HBQ           | K1G 1B7                   |          |
| ARCHIVIST:       | Nick Krauchuke   | 39 Charkay Street         | 224-7179 |
|                  | VE3FFW           | K2E 5N5                   |          |
| COFFEE:          | Gerry Martin     | 1771 Hutton Street        | 731-3220 |
|                  | VE3CNJ           | K1G 1M1                   |          |
| CANADIAN ASSETS: | Croft Taylor     | 60 Pineglen Crescent      | 825-3434 |
|                  | VE3OR            | K2G 0G8                   |          |
| VISITORS' BOOK:  | Greg Heppenstall | 2198 Regency Terrace #6   | 825-0821 |
|                  | VE3GIH           | K2C 1H1                   |          |

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160m BONANZA - Dentron, the outfit that makes all that 160 meter gear, reports that sales are beyond all expectations. One-sixty seems to be one of the big growth bands now that the sunspots have damaged the higher frequencies. There are several interesting new products being unveiled by Dentron, with the vertical antenna for 160m being perhaps the most exciting - plus a 10-160m antenna tuner. Now, if only that lousy Loran would shut up once and for all! Credit - 73 Hotline

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HAM RADIO WORD DAFFINITIONS --

|           |   |                                    |
|-----------|---|------------------------------------|
| Antenna   | - | old maid aunt                      |
| Bus Bar   | - | cocktail lounge aboard a vehicle   |
| Detector  | - | a private eye                      |
| Dry Cell  | - | second story dungeon               |
| Electrode | - | automated highway                  |
| Excitor   | - | a girl in a mini-skirt             |
| Farad     | - | deposed Egyptian ruler             |
| Germanium | - | pretty flower, usually pink or red |
| Kilovolt  | - | dangerous volt wanted by police    |

## MINUTES OF MEETING

The regular monthly meeting of the Ottawa Amateur Radio Club was held in the Auditorium of the National Research Council on Wednesday the 4th of December, 1974. The meeting was called to order by the President at 2010 hours.

The first item of business was the introduction of visitors. Among the visitors were Ernest and Linda Meyer, Ed-ex-VE4LG, VE6LG and presently VE3QF, Don Forrester, Ken Wilson, VE2DNU, VE2DNX, VE3EXA and VE3DDK. A warm welcome was extended to these visitors.

The minutes of the last meeting were drawn to the attention of the membership and it was moved by VE3DY and seconded by VE3UD that these minutes be adopted as printed in the GW. CARRIED.

Then followed the reports of committees.

The membership committee (VE3DEP) reported a paid up membership of 95-100. He reminded those present that unless membership was renewed shortly, their names would be dropped from the circulation list of the Ground Wave.

The nomination committee was represented by VE3DY. Gord read out the present nominees for next year's leadership and reminded that the closing date for further nominations was December 17th, 1974.

The RSO convention committee report was presented by George Roach VE3BNO in the form of a slide presentation of the last convention held in the Ambitious City.

Old business was the next item on the agenda and the President stated the cost to the Club for expenses incurred at the dinner held last month amounted to \$70.00. Plaques that were unable to be presented at the dinner were then presented. The recipients were VE3FFW, VE3DQ and VE3AMK. The membership expressed their approval of the dinner and consented to repeat performances of the same type.

VE3RX, the AARL EC for the area outlined preliminary plans for communications requirements for the Ski Marathon to be held during the weekend of February 21, 1975.

Ron Belville, RSO delegate for Ottawa, requested the floor to outline some thoughts he had received in respect to the rethinking of the licencing system for amateurs. He moved the "The OARC set up a committee to look into the desirability of a novice-type licence". Motion seconded by VE3GWY.

Following a short discussion on the motion, it was moved by VE3CDC that the motion be amended by the following "That the committee be appointed by the executive of the Club and that they not be appointed until the next meeting."

Amendment seconded by VE3CNJ. CARRIED.

Ron then read two items he had received from a committee set up in Montreal with the purpose of organizing amateur telecommunications during the forthcoming Olympic Games. This organization to be known as "Radio Amateurs Serving Olympics - RASO." The call sign assigned by the Department of Communications for this organization will be CZ20.

The membership will be kept informed of future activities and requirements for their participation.

The Ground Wave committee report was presented by VE3BNO who emphasized that he was merely the temporary Editor pending the appearance of a volunteer. He solicited the co-operation of the membership in finding someone who would assume this important task.

The President announced the appointment of VE3DIH and VE3DNJ as auditors for the Club's books for the past year.

He then announced the resignation of Jerry VE3CNJ as our "coffee maker". He pointed out that Jerry had faithfully carried out this chore cheerfully (each meeting of the general membership and also of the executive) but felt that the time had come to step down. Here again, there is a need for a volunteer to take over the job being vacated by Jerry.

VE3CDC reported for CARF. He offered amendments to the last published repeater list and also announced that the CARF Handbook would be available in January.

This being the end of the business period, the President conducted a "fun game" by dividing the membership into two teams who presented "puzzlers" to the other team (the Us's and the They's). It was a most enjoyable change from the regular evening talks.

The meeting closed at 2205 hours upon a motion by VE3CRX which was seconded by VE3FFW.

Your "temporary" Editor and the Executive of the O.A.R.C. take this opportunity to wish you all the best of the coming year. May 1975 be everything you wish it to be. Of course, you're going to have to help a little...and speaking of help, one of your president's first jobs is to find an Editor for the Ground Wave. Come on fellows...don't you think you should put back into this hobby some of what you get out of it... Ed.

**FINANCIAL STATEMENT - NOVEMBER 30, 1973 to NOVEMBER 30, 1974**

STATEMENT OF ACCOUNTS

PREAMBLE - The following Statement represents the financial transactions of the O.A.R.C. for the fiscal year 1974. Since certain items such as Regular Membership include some paid for the current year and some for the next year, the figure shown in this Statement does not reflect the actual membership for 1974. The Publishing Account ran over the budget but was covered by a supplementary vote. The Auction Account only shows an expense for the 1973 auction: the profit for the 1974 auction, \$29.00 was not received from the auction committee for deposit before November 30, 1974. The figure for the O.A.R.C. banquet November 15, 1974, shows a credit of \$210.00; when all the expenses and receipts are included there will be an actual deficit of \$78.05.

| <u>BALANCE SHEET - SUMMARY</u> |  | <u>November 30, 1973</u> | <u>November 30, 1974</u> |
|--------------------------------|--|--------------------------|--------------------------|
| Net Cash Equity                |  | \$2,225.96               | \$1,644.53               |
| Equipment                      |  | 634.16                   | 1,039.16                 |
|                                |  | <u>\$2,860.12</u>        | <u>\$2,683.69</u>        |

Decrease in Assets -- \$176.43

CURRENT CASH ASSETS

|                        |  |                   |                   |
|------------------------|--|-------------------|-------------------|
| Bank Statement         |  | \$1,617.93        |                   |
| Deposit #6 (Nov 28/74) |  | 18.50             |                   |
| Petty Cash --          |  | 29.01             |                   |
|                        |  | <u>\$1,665.44</u> | <u>\$1,665.44</u> |

CURRENT CASH LIABILITIES

|                     |  |              |          |
|---------------------|--|--------------|----------|
| Cheques Outstanding |  | \$ 1.80      |          |
|                     |  | <u>19.11</u> |          |
|                     |  | \$ 20.91     | \$ 20.91 |

NET CASH EQUITY . . . . . \$1,644.53

EQUIPMENT

| <u>Item</u>        | <u>Date Purchased</u> | <u>Amount</u> |
|--------------------|-----------------------|---------------|
| ???                | ???                   | \$ 48.41      |
| Typewriter         | October 17, 1969      | 113.50        |
| Duplicator         | December 2, 1969      | 400.00        |
| 420 Mhz Rig        | April 15, 1970        | 45.00         |
| Electric Stapler   | November 12, 1972     | 25.00         |
| Gasoline Generator | December 26, 1973     | 230.00        |
| Addressing Machine | May 1, 1974           | <u>175.00</u> |

TOTAL . . . . . \$1,039.15

**STATEMENT OF ACCOUNTS**

| <u>Description</u>         | <u>Number</u> | <u>Debit</u>       | <u>Credit</u>        |
|----------------------------|---------------|--------------------|----------------------|
| Petty Cash                 | B-100         | \$ 33.00           | \$ --                |
| Executive                  | C-101         | 198.18<br>(400.00) | ---                  |
| Regular Membership         | D-102         | --<br>(100.00)     | 787.11<br>(1,225.00) |
| Assoc. Membership          | E-103         | --<br>(25.00)      | 107.00<br>(250.00)   |
| Publishing                 | F-104         | 707.33<br>(850.00) | --                   |
| Repeater                   | G-105         | 186.72<br>(300.00) | --                   |
| Capital Equipment          | H-106         | 405.00<br>(600.00) | --                   |
| Items Purchased for Resale | I-107         | --<br>(300.00)     | --                   |
| Auction                    | J-108         | 11.90              | --<br>(125.00)       |
| Field Day                  | K-109         | 35.50<br>(50.00)   | --                   |
| Picnic                     | L-110         | 16.25<br>(50.00)   | --<br>(50.00)        |
| R.S.O.                     | M-111         | 19.11<br>(200.00)  | --                   |
| A.M.S.A.T.                 | Mc-112        | 100.00<br>(100.00) | --                   |
| O.A.R.C. Banquet           | N-113         | --                 | 210.25               |
| Bank Charge                |               | 0.34               | --                   |
| <b>TOTALS.</b>             |               | <b>\$ 1,713.33</b> | <b>\$ 1,104.36</b>   |

Debits over Credits - \$ 608.97

BANK RECONCILLIATION

|   |               |
|---|---------------|
| Cash Balance November 30, 1973.....     | \$2,224.49    |
| Deficit for 1974.....                   | <u>608.97</u> |
| Cash Balance November 30, 1974. . . . . | \$1,615.52    |

See "Reconcilliation for Petty Cash" account below  
Budget Allowance

RECONCILLIATION PETTY CASH ACCOUNT

| <u>Item</u>                                 | <u>Debit</u>    | <u>Credit</u>   |
|---|-----------------|-----------------|
| Balance from 1973                           | \$ --           | \$ 1.47         |
| Withdrawal from Bank Account<br>Cheque #318 | ---             | 37.00           |
| Postage & Typing<br>December 21, 1973       | 29.00           | --              |
| Stationery                                  | 5.46            | --              |
| Withdrawal from Bank Account<br>Cheque #11  | --              | 25.00           |
| <b>TOTALS.</b>                              | <b>\$ 34.46</b> | <b>\$ 63.47</b> |
| Balance remaining in Petty Cash Account     | \$ 63.47        |                 |
|   | <u>34.46</u>    |                 |
| <b>TOTAL.</b>                               | <b>\$ 29.01</b> |                 |

MICHAEL R. HUGHSON,  
VE3DVH  
Treasurer, O.A.R.C.

AREC NOTES

On Sunday, November 10, ten AREC members provided radio communications for an Ottawa University student car rally. 113 cars entered the 70 mile 6-hr (supposedly!) event, which got under way at 8:30 a.m. and finished at 7 p.m. Amateurs provided a communications link from 10 checkpoints and a roving minibus to rally headquarters, enabling the organizers to straighten out the nearly unbelievable problems that arose. For instance, in Gatineau, a checkpoint reported that there was a parade blocking the rally route. A rally official was sent out from HQ to talk to the local gendarmes, and the route was reopened.

Participants were VE3DNW, and VE3's HLU, GRJ, BR, GSA, UD, CJD, GPR, GYZ and CRX.

## CANADIAN SKI MARATHON

Once again, the O.A.R.C. has been asked to provide communications for the Marathon. Dates are February 21, 22, 23, 1975. Planning is under way, and by the time you read this, radio path testing should be complete. The route is basically the same as last year - Lachute to Montebello on Saturday, and Montebello to Hull on Sunday. This year some of the VE2RM group may assist in the eastern portion of the trail. Start planning now! On the Saturday (and the Friday evening) we will likely be using VE2RM for administrative traffic, with direct channels (most likely 146.52 MHz) for the data traffic from 3 or 4 of the checkpoints. We are also looking into the possibility of taking a portable repeater (on .34/.94) down to the Hawkesbury area. In the Sunday part we will use VE2CRA for admin traffic and direct channels for data. Hopefully we will be able to use solid-state gear only this time, and avoid the hernia problems of last year. We will need about 30 to 35 hams to assist this year, and we want to get volunteers as early as possible. We have been promised better accommodations this year but we have to speak up early. Volunteer now! Contact Larry O'Brien VE3GRJ or Larry Bradley VE3CRX soon. Start building portable antennas and supports...most locations need something better than a roof-mounted 1/4 wave.

Larry Bradley VE3CRX  
Emergency Coordinator

The next meeting of the O.A.R.C. will take place on Wednesday, January 8, 1975. For those of you who may be confused by the meeting being on the second Wednesday of January instead of the first, well, who would have been over the previous night's festivities? So after a week to recover - come to the January meeting prepared to elect a new slate of officers for this very critical year when we are all involved in the staging of the 1975 RSO Convention. Also, you 1974 members of the Club get to draw on a 2 metre receiver, just bring your 1974 O.A.R.C. membership card and toss it in the hat, make sure it has your name on it. Our 1974 President's second last official function will be to draw the winning card, and he gets to put his card in too, 'cause if he wins he deserves the prize after the last year's work. Nominees for the 1975 election are:-

President: Ron Bellville, VE3AUM  
Vice-President: Larry Bradley, VE3CRX  
Bill Nottingham, VE3ARZ  
Secretary: Tim Evangelatos, VE3EWE  
Treasurer: Cy Chapman, VE3CVK  
Ken Robinson, VE3G1R  
Directors: Larry O'Brien, VE3GRJ )  
Mike Hughson, VE3DVH )  
Bud Punchard, VE3UD )  
George Roach, VE3BNO ) 3 to be elected  
Gerry Reasbeck, VE3GUX )  
Lyle Ward, VE3CEZ )  
John Henry, VE2DNM )  
Nominating Committee: Gord Grant, VE3DY - Larry O'Brien, VE3GRJ - Ralph Hindle,  
VE2BMH - Dave Parks, VE3GSA - Nick Krauchuke, VE3FFW.

PROGRESSIVE LICENCING FOR VHF/UHF - by Earl Andrews VE3CJ

As I write this the FCC has just recently released the long expected licensing proposals for the Amateur Radio Service of the United States. Docket #20282 proposes a number of sweeping changes including the introduction of two grades of VHF licence requiring no code. Apparently the Americans are taking a lesson from Japan which already has a similar no-code VHF licensing policy. Amateur Radio in Japan is strong in numbers with about 400,000 licensed hams, 80% of which hold this no-code VHF type licence. They are well represented by youth with the average age being 22.

I strongly advise the organizations which represent Canada's hams to get busy and develop some sort of future plans to develop our VHF/UHF and 10 metre bands. These bands represent a lot of frequency spectrum, which could use a lot more activity and represents a good way to involve more young people in our hobby.

Our ten metre band is 1700 khz wide and for the most part remains virtually unused. There is no reason why we can't use it and many hams have equipment capable of operating 10 metres yet the band remains silent. Even during peak occupancy periods, when there is a good sporadic E opening only 200 khz even approach crowding. What we need is incentive in the form of a licensing policy which would supply the operators to use this band. We might not miss ten metres too much if we did lose it BUT if the Citizens' Band users obtain additional frequencies in this band then Amateur Radio could be in real trouble. Propagation on ten metres differs from that of its other HF counterparts. Sporadic E, meteor scatter, back scatter, auroras, etc, make 10 metre operation unsuitable for conventional HF type operating, thus this band often remains ignored.

The 220 mhz band could also use a lot more activity but I cannot see why we could justify using 220 when we already have plenty of room on 2 metres. Why should a person go out and spend more money on gear for 220 when he can do the same thing on 2? At our current rate of Amateur growth under our present licensing policy we will never really need to expand into the 220 mhz band or any other VHF or UHF band. And don't forget we still have the 6 metre band which also offers plenty of room for expansion. What we need is a good plan to develop these frequencies and more licensed persons. I know from personal experience from talking with CB'ers and from my work with The Boy Scouts of Canada that there are plenty of interested young people who would make good hams and it certainly would be to everyone's benefit if we got them involved in our hobby.

Here are my suggestions for a VHF licensing policy. There are many other variations that would be just as good or perhaps better.

Advanced VHF - Requirements -- Electronic theory, government rules and regulations, knowledge of propagation, antenna systems, public service, correct operating procedures, emergency preparedness, and various other requirements with emphasis to the VHF bands. The code requirement would be 5 wpm. Privileges -- CW in the Novice bands, a large portion of the 10 metre band perhaps from 28,700 to 29,700, and all privileges above 50 mhz.

Intermediate VHF - Requirements -- No code, all other requirements would be similar to those of the Advanced VHF licence. Privileges -- A3 on ten metres from 29,000 to 29,700, and all privileges in the 220 mhz band and those higher in frequency.

Communicator - Requirements -- No code, Elementary Electronic Theory, knowledge of rules and regulations and correct operating procedure. Privileges, a segment of the 220 mhz band with the use of FM only, and no repeaters. I believe that such a licencing scheme is necessary in order to make better use of our higher frequency bands and to make the Amateur population more representative to the general population in proportion to age and sex. The Communicator Class Licence represents the most radical change I propose. It seems to me that this class of licence is a good idea because those people who might otherwise have gone into GRS would be given the opportunity to enter a communications hobby where the users have received some education with regard to using their equipment properly and obeying rules and regulations. As well they might become interested in other areas of the hobby through associations with other amateurs and they might upgrade themselves. This whole situation is quite complex especially when you consider all the myths surrounding ham radio and how heavily indoctrinated the amateurs are. That is why I have suggested the major organizations representing amateur radio set up study groups and take a good hard look at what's going on. It is imperative that we develop some sort of policies regarding this issue if we are to determine the role and destiny of this hobby. At first these changes will rub a lot of people the wrong way but that won't stop them from occurring. It's only a matter of time. I need not argue about this. I am right and I will be proved right.

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At the December meeting of the Ottawa Mobile Radio Club the following executive were elected for the 1975 year - President: Danny Danielson, VE3EMO, Vice-President: Sydney Moorcroft VE3GVI, Treasurer: Ian McMillan VE3FKC, Secretary: Ron North VE3HDO, Technical Advisor: Tom Hayes VE3ABC.

Courtesy of Ed, VE3GX -- Rambler Editor

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#### AMSAT-OSCAR-7 LAUNCH SUCCESSFUL

Three satellites were launched by a single NASA rocket from Vandenberg Air Force Base, California on November 15. One of the piggy-back satellites was AMSAT-Oscar-7 (AMSAT-Oscar 7 in orbit) a communications spacecraft designed for experimental use by the world's amateur radio community. A U.S. non-profit organization, the Radio Amateur Satellite Corporation (AMSAT), subsystems for OSCAR 7 have been provided by four countries - Australia, Canada, West Germany, and the U.S. This will be the third OSCAR launched by NASA. The last OSCAR, AMSAT-OSCAR 6, launched in October 1972, (piggy-back on an earlier ITOS launch) is still in operation after two years, and has been used by some 2400 radio amateurs in 87 countries. OSCAR satellites are the only type designed for free access internationally. Two of the AMSAT command stations are located in Canada, Washington, D.C. Los Angeles, California, Newington, Connecticut, one in Ottawa, and one in La Macaza, P.Q. AMSAT-OSCAR 7's onboard systems include two communications transponders (one with a downlink frequency of 29.5 MHz and the other with a downlink frequency of 145.95 MHz) and, two radio beacon experiments (435.1 MHz and 2304.1 MHz), as well as redundant command, telemetry, and power system components. The expected lifetime of the satellite is three years.

Credit - THE CANADIAN AMATEUR.

THE PRESIDENT'S MESSAGE (short and sweet)

Since this will be the last time I will be writing as President of the O.A.R.C., I would like to take the opportunity to consider only one item. No, it isn't reflections of '74 but consideration of what's in store for 1975. Our Club is host for the 1975 RSO Convention. It's a large undertaking which could be handled in one of two ways. Either several members of the Club can push, shove and kick people and organizations until the Convention is over and yes, we will have a...well it will be and that's that. Or we can all (and I mean "all") commit ourselves to doing our best. What can I do? Well let me tell you no matter what your skills or background, there is some job big or small suitable for you. For example it could be mail registration, prize procuring, program arranging, advertising, two metre talk-in, banquet organization, etc. As you can see there are all sorts of jobs to be handled and I am asking each of you to commit yourself to a certain number of hours that you can spend on the RSO Convention, and then tell the new President what you think you can do. Then we can have a Convention hosted by members of the O.A.R.C. I personally hope the new executive which you elect on January 8th will receive the same co-operation and assistance that I did during 1974. And so to all of you, a sincere thanks for an enjoyable and rewarding year.

Larry O'Brien, VE3GRJ

MURPHY'S LAW: If something can go wrong, - it will!

The Ordering principle: The supplies for yesterday's experiment **MUST** be ordered no later than tomorrow morning.

Korner's five thumb postulate: Experience varies directly with the equipment ruined.

The transcription square law: The number of errors made is equal to the sum of the "squares" employed.

Chishom's law of human interaction: Anytime that things appear to be going better, you have overlooked something.

Gumperson's law: The probability of a given event occurring is inversely proportional to its desirability.

Theory of philosophic engineering: In any calculation, any error which may creep in - will.

Skinner's constant: That quantity which, when multiplied by, divided by, added to, or subtracted from the answer you get, gives you the answer you should have gotten.

The spare parts principle: The accessibility, during the recovery of small parts which have fallen off the workbench, varies directly with the size of the part, and inversely with its importance to the completion of the work that is underway.

Credit - SARC NEWS.