

JUNE 1987

THE GROUNDWAVE



Club Call VE3RC

Repeater VE2CRA



THE GROUNDWAVE

Official Bulletin of the Ottawa Amateur Radio Club, Inc.

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THE OTTAWA AMATEUR RADIO CLUB, INC. is an association of Radio Amateurs devoted to the promotion of interest in Amateur Radio communications in the National Capital Area; and to the advancement and achievement of club members.

REGULAR MEETINGS of the OARC, Inc., are held on the first Wednesday of each month (except July and August) at the National Research Council Auditorium, 100 Sussex Drive, Ottawa, at 2000 hours. A bulletin board is available for posting notices of interest to other members about 1915 hours. Further details about each meeting is elsewhere in this publication.

THE OARC EXECUTIVE normally meets on the second Wednesday of each month in the Board Room of CFRA, 150 Isabella St., Ottawa, at 1930 hours. Contact the President to confirm the date of the next meeting.

DEADLINE FOR COPY is the second Wednesday of each month. Make yourself better known to fellow members and other amateurs, too, by giving us an article, technical or otherwise, relative to our hobby. They may get reprinted in far away places; and the family will be proud of you.

MATERIAL PUBLISHED herein does not necessarily represent the official OARC viewpoint. Items may be reprinted by Amateur Radio or other publications provided that proper credit is given to the author and to the OARC, Inc.

RADIO AMATEUR CALL BOOKS are available at many local libraries. Ask at the information desk.

SAFETY BELTS, 2-METER RIG AND AN ENGRAVING PENCIL are available for loan to club members. The 2-meter rig may be borrowed by members who are hospitalized. The engraving pencil (to mark valuables for identification in case of loss or theft) and the safety belts with pole straps are available to any member.

A \$100 refundable deposit is required for the belts. Contact the President for the 2-meter rig or the engraving pencil; and Paul, VE3ICV, at 820-6643 (West End) or Brian, VE3JKZ, at 523-1535 (East End) for the belts.

THE CAPITAL CITY NET meets every Monday at 2000 hours on the club repeater VE2CRA (146.34/.94) to pass traffic and to make announcements of interest to Amateurs in the National Capital Region.

THE SWAP NET, is a service provided and conducted by Ed Morgan, VE3GX. This feature appears on the Capital City Net, noted in the foregoing paragraph. To list items and make inquiries, call Ed Morgan at 733-1721.

POT-HOLE NET is a SSB/HF net sponsored by the Ottawa Valley Mobile Radio Club, and conducted every Sunday at 1000 hours on 3.760 MHz. All amateurs are welcome to check in. The Swap-Net is a regular feature.

POT-LID CW NET is an informal slow-speed CW net sponsored and conducted by Ed, VE3GX, and meeting every Sunday, except during July and August, at 1100 hours on 3.620 MHz, to promote interest in CW and CW procedures.

MINUTES OF THE OARC GENERAL
MEETING OF MAY 6, 1987

The meeting was convened by the President, John, VE3NVF, at 2005 hours local. As there were no visitors, there would be no free coffee.

Dave, VE2ZP, noted the minutes of the April meeting showed his call incorrectly at VE3ZP. Dwayne, VE3KMA, noted his name was incorrectly reported as 'Dave'. With these corrections, the minutes were adopted by motion from Bill, VE3UD, seconded by Henry, VE3OMU.

George, VE3NJJ, described an upcoming Scouting event. Boys will leave from the Supreme Court Building, 10:00 a.m., Sunday, May 31st, and bicycle to Britannia Park by late afternoon. Scout leaders will be at three checkpoints and are looking for amateur volunteer communications. Call George at 224-6415.

John reported Art, VE3ZS, had sent him a note indicating Dan, VE3EBI, had been elected to the CARF Board of Directors as one of the two Ontario directors.

John also reported Dick, VE3JBO, as Chairman of the packet group, is requesting \$600 for a network node controller. Dick canvassed the packet working group for \$200 at their last meeting. John brought out his son Michael's lunch box and demonstrated donating \$10 per person to the cause. A list was included for donating members to sign, and the lunch box sent around.

John invited Dayton attendees to report, then. Paul, VE3JLP, noted a flea market that took more than five hours to see and he noticed many were selling computer parts. Gord, VE3PPE, noted everyone seemed to have a handheld, a lot of former commercial HTs and 25% female ham attendance.

Craig, VE3KKU, noted there were 400 more flea market concessions, he walked his legs off and he got some headsets at 2 for \$5 only to discover later they were backwards. Dave, VE2ZP, enjoyed the DX forum, where there was an instant, 5 minute, contest. Dave also managed to spend \$1,000 over half an hour.

Dave, VE3JTZ, reported he has sent a letter to the city of Ottawa booking Britannia Park for Field Day. Dave also plans to initiate the Thursday, 8 p.m. local, Field Day Net this week. Mark, VE3OWL, emphasized the socializing and participatory nature of this Field Day. Members who would like to be involved in Field Day somehow were advised to call either Dave or Mark or check into the Thursday net.

Paul gave us the following DX tips:
 BY -- China - one Paul hasn't worked yet, is on 14.025 MHz from 0030 to 0200 UTC most days. Look for BY0AA or BY9GA a few KHz up. 9N - Nepal - look for Father Moran on 14.180 and 14.236 MHz at 0130 UTC. Also, three Japanese will operate 9N5ITV, May 16-19, on SSB 7.043, 14.198, 21.208 and 28.548 MHz or CW 7.008 and 28KHz up on the other bands. Possible RTTY and FAX too.
 9MZ - Malaysia - look for these four operators: 9MZCW/GH/PL/DF on 14.185/182/221/220 MHz at 1615/1355/1410/1415 UTC. Finally, an Ottawa University student is looking for a ham who can reach her ham boyfriend, on 40M phone, in Mexico. Anyone who can help should call Paul.

Hal, VE3QA, reminded members of the up-coming Smiths Falls flea market and of the teleconference net on VE2KPG on the 8th of May.

John then introduced our speaker, Ben Tolley, VE3MPD, of the Model Aeronautics Association of Canada.

Ben brought to the front three of his models - a glider, a 2-engine boat plane (PBYZ) and an acrobatics plane - as well as his flight box and a 4-channel control system in its original box.

While volunteers put up some posters, Ben activated the 4-channel system and passed it out to members to try out. The system is based on having a sync pulse, followed by a number of variable-width channel pulses. Each servo motor translates its position into a pulse width and compares it with the received pulse width and adjusts its position accordingly. This is called 'Digital Proportional'.

Transmitters typically generate 0.5W of RF, on 11, 6 and 4M bands. Receivers are usually single conversion. Modes employed include AM, FM and PCM. Batteries typically last 2-3 hours in a plane. Ben also had a number of slides which he showed. Canada places high in international competitions, the No. 1 is Torontonion Ivan Christianson. Ivan flies several hours a day and has been flying for the last 20 years.

Gliders can be launched by stretching out surgical rubber to form a sling shot or by electric or fueled engines. Ben's glider has a 0.049 cc engine and uses the Armstrong landing technique.

Powered planes can reach 5,000' AGL, can fly as fast as 200+ mph, can weigh as much as 50+ pounds, have wing spans as wide as 18' and cost from \$50-\$2,000.

Ben, and his fellow RC modellers, fly at a strip 9 Km south of Bell's Corners, near the Nepean dump. He welcomes visitors to come out and watch, particularly on calm days. Apparently real planes and helicopters have mistaken the field for a real airport before!

Coffee break was announced at 2148 hours and members were invited down to inspect Ben's planes.

John reconvened the meeting at 2220 hours. Another John, VE3NJ, motioned adjourning the meeting, seconded by Paul, VE3JLP. No objections - CARRIED.

JOE NORTON AWARD

Congratulations to Gord Dey, VE3PPE, on winning the Joe Norton Award. A most worthy choice by the committee.

Thanks to Bill Wilson, VE3NR, Gord MacKay, VE3JMT, and Brice Wightman, VE3EDR, who served as this year's Joe Norton Award Committee.

If anyone has suggestions about the Joe Norton Award, the Executive would like to have them, preferably in writing.

VOLUNTEER NEEDED

A Mexican girl studying at Ottawa University would appreciate it if a ham could set her up to talk with her friend in Mexico City. Her friend is an amateur. If you would like to help, please call Paul Cooper, VE3JLP, at 821-2167.

MEMBERSHIP REMINDER

To avoid the last minute rush in September, we are placing a membership application in this Groundwave. If you have friends who would like to join the Club, please pass them a copy.

WEATHER OR NOT

Throughout the year each of us listen to the radio and television weather broadcasts and are always on the lookout for bad weather conditions. These broadcasts are important to us for many reasons and to assist us in assessing the severity of impending weather, Environment Canada has established the following definitions.

SEVERE WEATHER WATCH means that severe thunderstorms, tornadoes, or hailstorms may occur from one to six hours after the watch is first given.

SEVERE WEATHER WARNING means that a severe thunderstorm and/or tornado is either occurring or is expected to occur within the hour.

A WINTER STORM WATCH means that a winter storm may occur from one to six hours or more after the watch is first given and is usually accompanied by a travellers advisory.

A WINTER STORM WARNING means that a winter storm is occurring or is expected to occur in a short period of time and is usually accompanied by a travellers advisory.

SEVERE WEATHER ALERT in summer is equivalent to any weather watch and in winter any Winter Storm Watch issued by Environment Canada.

YELLOW WEATHER ALERT in summer is equivalent to any Weather Warning and in winter any Winter Storm Warning from Environment Canada.

RED WEATHER ALERT in summer is a Tornado warning and in winter extreme Life Threatening winter storm conditions.

Thanks to Eoin MacDonald, VE3OET, for the information.

de THE BARC PRINTED CIRCUIT
The Burlington Amateur
Radio Club Inc.

CQ FIELD DAY AND ANNUAL CLUB BARBEQUE

There seems to be general agreement that last year's Field Day and Club Barbeque was an outstanding success.

The three main reasons were ... You, You and You!

The high level of participation meant that the most fun was had by the most people. The addition of the Annual Club Barbeque helped emphasize the social side of the event, as well as sustaining the contesters through the long night.

By following a similar formula (with hopefully similar weather) we intend to make this year's Field Day even more enjoyable for even more people.

Field Day itself will be held on Saturday, June 27, and Sunday, June 28, 1987, at Britannia Park in West Ottawa. We will begin setting up around 9:00 a.m. on the Saturday; the contest starts at 2:00 p.m., and runs for 24 hours.

In order to share ideas and make plans we will be holding a regular Field Day Net on VE2CRA every Thursday evening at 8:00 p.m. between now and the event.

We are looking for help in many areas; planning, preparing, setting up and operating. Even if you can't make it on the day we would be glad of your help in organizing. If you can't help on the planning side then come out on the weekend and operate (or just eat!).

Please join us if you can for the Field Day Net or contact one of the organizers, Dave Anderson (VE3J TZ) at 225-0886 or Mark Farey (VE3OWL) at 592-2522, and tell us how you can help make this year's Field Day and BBQ the best yet.

73

Dave, VE3J TZ, and Mark, VE3OWL

THE PACKET RADIO GROUP

The Packet Radio Group meets every second month on the Wednesday preceding the OARC regular meeting. To figure out which second month it is, just remember that we do not meet on Christmas. By the time you have received this bulletin, the May 27th meeting will have passed and the next meeting will be held on September 30th. Everyone is invited to talk and hear about Packet Radio. Please come and bring a friend.

The Packet Radio Group has a Working Group engaged in project work. The Packet Bulletin Board System and the network of repeaters is the result of the Working Group's efforts. At the last Working Group meeting, the status and progress of the projects was reviewed. In view of recent (and very exciting) news of networking ROM firmware, it was concluded that four Terminal Node Controllers, TNC-2 format, are needed for the linking project. The Working Group dug in and contributed generously for this purpose. The OARC general membership is asked to do the same and some of you have already done so and we thank you. We are already \$370 towards the goal of \$600 and you are asked to contribute at least \$10.

The Working Group deserves support. Not only do they use their time to build and modify equipment, they incur the car expense, cold hamburgers and tepid drinks doing things for Radio Amateurs. By the way, each member of the Working Group contributed considerably more than \$10. If you feel uncomfortable about this request, please come to the Packet Radio Meeting and see how the experimentation and service goals of the hobby are being followed. All contributions go through the OARC treasury and equipment becomes the property of the club.

The Packet Radio Group would like to recognize and thank the following for their support to date:

Dwayne	VE3FXI	Brett	VE3JLG
Peter	VE3LBW	Andy	VE3NVK
Dave	VE3KMV	Dick	VE3JBO
Barry	VE3JF	Richard	VE2CH
Keith	VE3IMT	Jim	VE3JPC
Doug	VE3OSL	Bob	VE3OSN
Harrie	VE3HYS.		

The following people contributed almost \$200 to John's lunch box for the packet group:

VE3NYF	VE3CDC	VE3CCV	VE3KEB
VE3HEW	VE3ADZ	VE3UD	VE3HMF
VE3FNG	VE3YK	VE3JGQ	VE3CV
VE3OMU	VE3JMC	Anonymous	
VE3MHX	VE3PUE	VE3GSA	VE3NPC
VE3FT	VE3LOR	VE3BAJ	VE3FFK
VE3KMV	VE2ZP	VE3KKU.	

FUJI SATELLITE LAUNCHED

The Japanese Amateur Satellite JAS-1 was successfully launched into orbit on August 12th. It began transmitting a beacon signal on 435.795 MHz. The signal contains telemetry data sent in Morse code, beginning with "Hi Hi" at a speed of about 100 characters per minute. To start with, it is expected to be available for digital operation. The following are the Fuji operating frequencies:

Mode JA uplink: 145.900 to 146.000 MHz
Mode JA downlink: 435.900 to 435.800 MHz

The Mode J Analog Transponder is now available for use. Amateurs are requested to use the minimum power necessary.

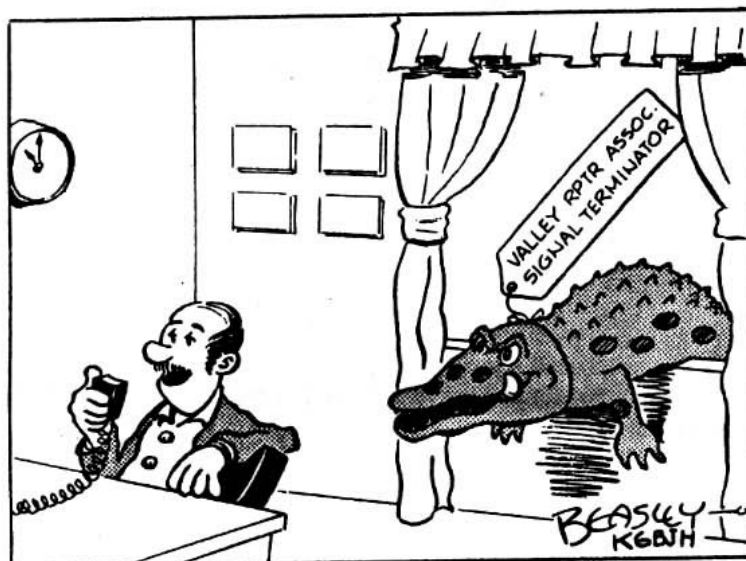
de SPLATTER
York Region Amateur Radio Club

The following list of NETS has been compiled from various sources.

<u>Net Name</u>	<u>Day</u>	<u>Time</u>	<u>Frequency</u>
Grey Bruce (slow)	Daily	1815 Local	3.645 CW
Grey Bruce	Daily	1830 and 2200 Local	3.645 CW
Eastern Canada	Daily	1945 and 2130 Local	3.652* CW
Atlantic Provinces Ontario/Quebec Slow Speed Net	Daily	1900 Local 1700, 2000 2300 Local	3.654 CW 3.666 Traffic
Ontario Southern	Daily	1900 and 2200 Local	3.667 CW
London-LARC HF Net	Sunday	1100 Local	3.750
Maritime	Daily	1800 Local	3.750
Northwest Ontario	Daily	2015 Local	3.750
Laurentian	Daily	1845 Local	3.755
ONTARS Net	Daily	0700 and 1800 Local	3.755
Compu-Net	Wed & Sat	0900 Local	(as announced on ONTARS)
Ottawa Pot Hole	Sat/Sun	1000 Local	3.760
Quebec White Cane	Daily	1700 Local	3.765
White Caners	Wed.	2000 Local	3.765
North Bay ARC	Sunday	0900 Local	3.768
Ont. Trilliums	Saturday	1600 Local	3.770
Nortown ARC (T/O)	Sunday	1030 Local	3.770
Ontario Phone	Daily	1900 Local	3.770
Quebec	Daily	1930 Local	3.775
Georgian Bay ARC	Sunday	0930 Local	3.783
Professional Loafers	Daily	1600 Local	3.787
CJ (Chicken Junction)	Daily	1830 Local	3.790
Ontario Southern	Daily	1600 Local	7.045 CW
Trans Provincial	Daily	0900 to 1800 Local	7.055
Skywide ARC (T/O)	Sunday	1000 Local	7.060
West Side ARC (T/O)	Sunday	1100 Local	7.077
40 Meter DX	Daily	0600 UTC	7.080
Commodore Users Net	Sat	1600 Local	7.228 LSB

<u>Net Name</u>	<u>Day</u>	<u>Time</u>	<u>Frequency</u>
DX Info	Daily	1200 UTC	14.098 RTTY
ARES Canada Net	Sunday	1600 Local	14.115
Trans Canada	Sat/Sun	1300 Local	14.140
CLARA	Tuesday	1400 Local	14.160
Round Table DX	Daily	1900 UTC	14.175
Snookies	Daily	1800 UTC	14.183
Family Hour	Daily	1500, 1700 2300 UTC	14.225
Caribus Conn.	Daily	1100 UTC	14.283
Intermar MM	Daily	0700 UTC	14.313
YL System	Daily	0900 and 2000 UTC	14.333
Medical Assist.	Daily	0745 UTC	14.334
DX	Daily	1000 UTC	21.157
Family Hour	Daily	2300 UTC	21.350
Medical Assist.	Daily	0745 UTC	21.334
Snookies	Daily	1800 UTC	21.335
10 Meter DX	Daily	0900 UTC	28.520

*Alternate Frequency - 7.040



WHAT DO YOU REPEATER GUYS MEAN WHEN YOU SAY, "THE ALLIGATOR'LL GETCHA?"

Ottawa Amateur Radio Club
1986/87 Year End Questionnaire

This questionnaire is designed to find-out the resources and the interests of club members. As you read through the suggested items, ask yourself whether you can offer any of these things to the club or whether you are interested in the club offering any of these things to you.

Please check one: */ am interested in...* or */ would like to offer...* and then add any specific details that apply!

/ am interested in

/ would like to offer....

1. Items of Interest to New Amateurs:

- a. Loaner HF or VHF equipment to be able to start operating ___ ___
- b. Assistance in setting up a station for the first time ___ ___
- c. Assistance in making that first QSO ___ ___
- d. Proper operating procedures for a beginner ___ ___
- e. Assistance solving start-up technical problems ___ ___

2. Personal Specialties:

- a. A visit to a workplace of technical interest to Amateurs ___ ___
 (BNR, Mitel, CBC, CFRA etc.)
- b. A visit to a superb DX station ___ ___
- c. " " " Satellite Station ___ ___
- d. " " " Antenna Farm ___ ___

3. Facilities:

- a. An equipped workshop for the repair/fabrication of ___ ___
 Amateur gear, equipped with test gear such as:
 Oscilloscope, Frequency Counter, Deviation meter,
 Spectrum Analyzer, Smoke detector...

4. Speaking or Demonstrating:

a. The name of someone doing something of interest to

Amateurs _____

b. Myself, as I am doing the following.....

5. Special Projects:

a. Assistance for the Groundwave _____

b. " " Fleamarket _____

c. " " Field Day _____

d. " " Repeater Linking _____

e. " " Packet Projects _____

f. " " Ski Marathon _____

g. " " Gatineau 55 _____

6. Speaker's Program:

The past year's speakers program is listed below. Next to each title, please indicate your rating from **1 (lousy)** to **5 (superb)**. These ratings will not be published, they will be used by the Executive in planning next year's program.

Month:	Topic:	Speaker:	Rating:
Oct.	Microwave Landing Systems	Bryan Walsh	—
Nov.	Refurbishing and Erecting a 100' Self-supporting Tower	Paul Cooper	—
Dec.	25 Years of Oscar	John Henry	—
Jan.	DX Forum	Cooper-Summers-Goodwin	—
Feb.	Search and Rescue Satellites	Ted Hayes	—
Mar.	Analog & Digital Scopes	Ralph Cameron	—
Apr.	Home Brew Night		—
May	Radio Controlled Aircraft	Ben Tolley	—
Jun			—

7. Joe Norton Award

Several members have expressed interest in improving the Joe Norton Award by better defining the **objectives** of the award. Some of the suggestions are to reward recently licensed amateurs for their diligence in:

- a. being active on the air
- b. being active in club activities
- c. being active in public service ham activities
- d. achieving stated goals in technical advancement
- e. helping others to develop an interest in Amateur Radio
- f. helping others to develop their skills in Amateur Radio

Another suggestion is to apply the funds to acquire a bank of HF equipment suitable for a first station to be loaned to new amateurs at no cost for a period of a year.

Please indicate if you would be agreeable to seeing the award changed:

YES___ NO___

Which of the suggestions do you feel are good ideas? _____

Is there a single idea that you feel is the best? Which? _____

Do you have any ideas or suggestions?

8. Personal Data:

Member's Name:.....Call.....

Phone Number: (H).....(W).....

Operating Modes: CW.....AM.....SSB.....RTTY.....AMTOR.....PACKET.....

ATV.....FAX.....Other.....

Operating Bands: 160.....80.....40.....30.....20.....15.....10.....6.....

2.....UHF.....

9. Parting Comments:

All year long I have been wanting to tell the O.A.R.C. Executive....

73's from the O.A.R.C. Executive

OTTAWA AMATEUR RADIO CLUB INC.
BOX 8873, OTTAWA, K1G 3J2
MEMBERSHIP APPLICATION
1987/88

Surname: _____ First Name: _____ Callsign(s): _____

FULL _____ Postal
Address _____ Code

Telephone: Res.: _____ Certificate: Amateur Digital
Bus.: _____ Advanced

Operating Activities

Bands: 160m 80m 40m 30m 20m 15m 10m
 6m 2m 1.25m 70cm other:

Modes: CW SSB FM FSTV SSTV RTTY Packet
 other:

Interests: HF VHF satellites
 contesting antennas
 homebrewing other:

I own a handheld or fully portable 2 metre FM transceiver
 I am a registered member of the EMO Amateur Radio Group

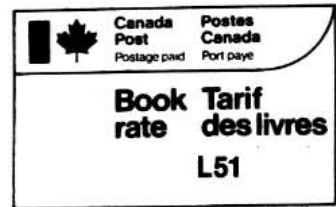
I am a member of: AMSAT CARF CRRL RAQI RSO

Yes, I would like to be part of the team.

Please contact me about:

- serving on the club executive
- assisting in the production of the Groundwave
- operating during or organizing Field Day
- speaking at a club meeting
- operating as a net controller for the Capital City FM Net
- assisting with the fall fleamarket/auction
- entering my homebrew project in the Homebrew Contest
- providing communications for the Canadian Ski Marathon
- packet communications

Activities that I would like the club to do this year:



The Ottawa Amateur Radio Club, Inc. Box 8873, Ottawa, Ont.			K1G 3J2
President	John Drajewicz VE3NVF	38 Fuller Street Ottawa, Ont., K1Y 3R8	722-1854 952-1904
Vice- President	Paul Cooper VE3JLP	R. R. 2, Metcalf, Ont., KOA 2PO	821-2167
Secretary	Gord Dey VE3PPE	49 Stable Way Kanata, Ont., K2M 1A8	592-0680 726-5219
Treasurer	George Caskey VE3NJJ	19 Argue Drive Nepean, Ont., K2E 6S2	224-6415
Past- President	Dan Holms VE3EBI	33 Crownhill Street Gloucester, Ont., K1J 7K5	746-0968
Directors	David Anderson VE3JTZ	299A Craig Henry Avenue Nepean, Ont., K2G 4E9	225-0886 592-2122
	Mark Farey VE3OWL	26 Naismith Crescent Kanata, Ont., K2L 2K8	592-2522 592-2122
	Ralph Thomas VE3GG	2180 Benjamin Ave. Ottawa, Ont., K2A 1P4	729-9252
Packet Group Chairman	Dick Atkinson VE3JBO	20 Mancil Drive Nepean, Ont., K2J 2J5	825-5619
Repeater Chairman	Harrie Jones VE3HYS	2-147 Arlington Avenue Ottawa, Ont., K1R 5S6	237-6427 233-6241
Net Manager	Bruce Lauer VE3MJV	10 Winlock Crescent Nepean, Ont., K2G 3X4	829-9471 957-1825
Emergency Coordinator	Ken Kendall VE3IHX	777B Springland Drive Ottawa, Ont., K1V 6L9	731-0892
EMI Committee Chairman	Ralph Cameron VE3BBM	30 St. Remy Drive Nepean, Ont., K2J 1A3	825-1634 225-2850
Membership Chairman	Peter Hafichuk VE3LBW	118 Ivy Crescent Ottawa, Ont., K1M 1X6	745-0608 993-1740
National Cap. Award Manager	Brian Summers VE3JKZ	2231 Hillary Avenue Ottawa, Ont., K1H 7H7	523-1535