

OCTOBER 1995



GROUNDWAVE



Club Call VE3RC

Repeater VE2CRA

197574

Official Bulletin of the Ottawa Amateur Radio Club, Inc.

The Ottawa Amateur Radio Club, Inc., Box 8873, Ottawa, Ont., K1G 3J2

President	Richard Hagemeyer, VE3UNW	225-3275	953-0638
Vice-President	John Connor, VE3TG		
Secretary	Larry Woran, VE3WLN		
Treasurer	George Roach, VE3BNO	234-0885	738-2372
Past-President	Roger Swickis, VE3BZR	234-9836	228-6310
Directors	Peter Hafichuck, VE3LBW		
	Bob Paterson, VE3IDG	825-7070	941-0533
Packet Group Chair	Bob Paterson, VE3IDG	825-7070	941-0533
Repeater Chair	Harrie Jones, VE3HYS	739-9365	738-2372
Net Manager	Wayne Greenough, VE3JSQ	836-5320	724-5464
EMI Committee Chair	Ralph Cameron, VE3BBM	825-1634	225-2650
Membership Chair	Chris John, VE3FID		
Nat. Cap. Award Manager	Brian Summers, VE3JKZ	523-1535	738-6263
Publicity	Mike Pilon, VE3BUP	731-1567	
Groundwave Editor	Ed Sieb, VA3ES	738-8924	
Graphic Designer	Maria Townson, VE3KIP	828-9573	
Production Committee	Paul Campbell, VE3CEP	733-0148	
	Ted May, VE3ADZ	741-0862	
Delegated Examiners	Richard Hagemeyer, VE3UNW	225-3275	953-0638
	Mike Kelly, VE3FFK		788-2600
Coffee Guy			

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) in the Champlain Room (2nd floor of the Old Teacher's College) of the RMOC HQ complex on Lisgar St., Ottawa, at 1915 hours. Further details about each meeting is elsewhere in this publication.

THE OARC EXECUTIVE normally meets on the second Wednesday of each month at 1930 hours. Contact the President to confirm the date of the next meeting.

PACKET RADIO MEETINGS will be held at 7:30 p.m. on the last Thursday of every 2nd month, starting September 1993, at the Museum of Science and Technology. This is an OARC technical meeting open to all who have an interest in packet radio.

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.

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.

JUNIOR MEMBERSHIPS - To encourage young people to join the club and to participate in amateur radio, the club is opening a junior class of membership. Dues will be at a 50% discount but the junior member must pick up his/her copy of the Groundwave (preferably at the meeting).

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

SAFETY BELTS AND AN ENGRAVING PENCIL are available for loan to club members. 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 members. For the belts, a refundable deposit consisting of a cheque equal to the replacement value of the belts is required. Contact the President for the engraving pencil; and Paul, VE3ICV, at 820-8643 (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.

PACKET RADIO VOICE NET meets following the Capital City Net on VE2CRA at 2040 hours. This is an informal net to answer questions about packet radio, pass along operating hints and provide information for future packet operators.

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.

REPEATERS

VE2CRA	Voice	146.94/34	443.300/448.300
VE3OCR	Packet	145.01(sx) Inter city links	
VE3OCR	Packet	145.07(sx) Local Area net	for QSO and Packet BBS.
56 kbps	Packet	220.55/433.55	
VE3DX	Packet	145.11(SX)	

For further information, please contact repeater chairman.

CONTENTS

MINUTES, OARC MEETING SEPT. 1995	3
mk'S WORDS... SEP. 13/95	4
AUCTIONS, FLEAMARKETS & HAMFESTS	5
ARRL BULLETIN 90	6
RAQI BULLETIN FROM RAQI HEADQUARTERS	7
THE GROUNDWAVE	8
LETTER TO THE EDITOR	8
DEFINITIONS	8
ODDS & ENDS DEPT.	9
MAKERS OF ELECTRONIC HISTORY	9
SIMPLE OPERATOR TROUBLESHOOTING	10

MINUTES OF THE GENERAL MEETING OF THE OARC SEPTEMBER 13, 1995

The meeting was called to order by the President, Richard VE3UNW at approximately 19:50.

Richard welcomed three visitors to the meeting, Gord VE3HEX, Yoland VE3YOI and Joseph VE3JOI. Yoland and Joseph are recent graduates of the basic course.

One of the OARC members offered a free Philco 20" colour TV, tube type to anyone interested. It was suggested that in the Pennysaver a student advertises for used TVs. Mike VE3KOY, announced receiving an internet message from the Ukraine for information on packet radio system. He forwarded the information on the freenet to them. It was also announced that Bill VE3NR has been nominated to the Canadian Amateur Radio Hall of Fame. Mike VE3BUP showed his QSL "world tour" golf shirt which he had his QSL card printed on the front and several DX QSL cards on the back. Mike also indicated that he has given up his effort to promote Ottawa through amateur radio with various levels of government. VE2GSX announced after working XROY on Easter Island and receiving an e-mail offering congratulations and that they would be sending their QSL via surface mail. They also asked that interested amateurs buy a tee shirt to support the DX effort. The quarterly meeting of the Quarter

Century Wireless Association was announced and would be held on September 20, 1995. It was further noted that the 1996 QCWA convention will be in Ottawa and sponsored by the Ottawa chapter.

Richard VE3UNW announced the Joe Norton Award and invited amateur radio operators, licensed less than two years to submit their application before October 2, 1995, and that all the rules were in the September issue of The Groundwave. Mike VE3KOY volunteered to act as the coffee volunteer. Richard announced that the club is looking for a net manager for the Monday night net. Six volunteer net controllers are presently on the list. Anyone interested should contact any member of the executive listed on page two of The Groundwave. Richard also announced that unless a volunteer steps forward to head the OARC fleamarket if there is to be one. VE2CRA was said to may or may not be interfering with the Cantley repeater. Harrie VE3HYS will be looking into the matter. Dave VE3AV spoke briefly on the difficulties recently encountered between the packet working group and the St. Lawrence Repeater Council and encouraged everyone interested to attend the fall meeting of the St. Lawrence repeater Council.

In the absence of a speaker for the evening Mike VE3FFK displayed his Scout 555 by Ten-Tec. The Scout measured only 2.5" x 7.25" x 9.75" and weighed 5 lbs. Individual plug in modules allow operation from 160 to 10 meters at 5 to 50 watts output. The unit featured a noise blanker and a "Jones" variable filter - 500Hz to 2.5kHz. To accompany the Scout Mike also demonstrated a two paddle key he bought commercially for \$9.95 and a pen key which you hold in one hand while operating. Mike stated that he had worked Europe on 20 meter CW while bike mobile.

Richard closed the meeting at approximately 20:30 which was followed by a ragchew and coffee.

mk's WORDS... SEPT. 13/95

Another (school) year starts..I just had someone ask me if I had a P8connector.. isn't that like asking somebody for an R26 resistor?

Summer was fun while it lasted. At least I got in a bit of cw bike mobiling.. this time on 20 M. In addition to the usual crop of W1 and W2s, I also got to swap dits with prefixes like UT2, YO3 and GI3. The Europeans didn't seem overly surprised to hear about a bike mobile station, but the new englanders seem to get quite a kick out of it, with lots of questions like " how can you do that?!". As with QRP, there's never a problem finding something to say in a QSO with a bike mobiler. If you get tired of rubber stamp QSOs, try an operating mode that is out of the ordinary.

I recently had a break in at my place (not the QSK kind). Fortunately, they seemed to be in a big hurry once they got in, so all they got were some camera toys. Even so, it took several days, some good luck and a previous life as a packrat to put all the receipts and proof of ownership together for the insurance company. Word to the wise.. if you haven't already done so, put together a list of all those toys in your shack. Include serial numbers, receipts if available, date acquired and amount otherwise. Put the list in a "safe" place and store another copy somewhere else, just like software backups. The piece of the puzzle that saved my hide in this case was a customs green form (Y38) that you get when you take equipment across the border. It was the only document that had the serial numbers of two of the items taken. One never knows what will come in handy, or when.

On a happier note, I have ordered a W9GR DSP kit, the DSP3. A demonstration earlier in the summer of another digital signal processor ('3GKs Timewave box) put a processor up to near the top of the "gotta have" list. I had heard about the

DSP3 many months ago, but the review in Communications Quarterly finally made up my mind. Besides, it decodes DTMF and CTCSS as well, so I couldn't go wrong, right? I will bring it in to the meeting after I get it put together, as well as to homebrew night. I just hope that means two meetings, not one.

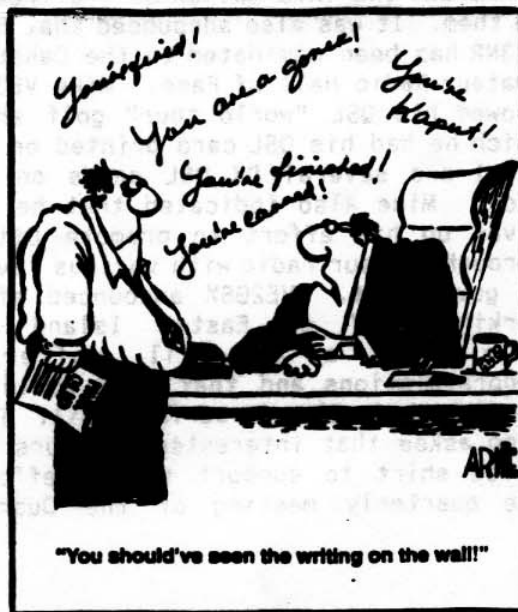
Finally, some more handy hints for homebrewers.. Capacitor codes for types labelled NNNL, like 393K: The first two digits are the significant figures, and the third is the multiplier. The letter indicates the tolerance. The capacitance, when printed this way, is always in picofarads. The tolerance code works like this:

D=+/- .5PF	E=+/- .5%
F=+/- 1%	G=+/- 2%
H=+/- 3%	J=+/- 5%
K=+/-10%	M=+/- 20%

So 393K means 39 times ten to the third picofarads, or 39000pf, or .039 Microfarads, plus or minus ten percent.

That's all for now.. keep the 'ol iron warm.

73.. mike VE3FFK



**AUCTIONS, FLEAMARKETS & HAMFESTS
AND OTHER EVENTS OF INTEREST**

OCTOBER 15, 1995

FLEA AT MIT

CAMBRIDGE MA

INFO:-NICK (617) 253-3776

OCTOBER 20, 1995

FLEA AT MIT

CAMBRIDGE MA

INFO:-NICK (617) 253-3776

OCTOBER 21, 1995

WEST ISLAND AMATEUR RADIO CLUB

West Island Auction/Flea-market
(Montreal)

Vendors: 7:00 AM, Public 8:00 AM
Admission \$3., Tables \$15.

At: Transfiguration-of-Our-Lord Parish
Church, Dudemaine & Filion Streets,
Cartierville (St-Laurent), Quebec. More
info: Jamie Morehouse VE2FN, tel:
514-484-3241, VE2FN@VE@FKB, or
morehoj@mtrmp001.allied.com Talk-in:
146.91 (-)

OCTOBER 21, 1995

GARC AT COMMUNITY CTR

GREENWOOD NS

INFO:-DEREK VE1FLY (902) 765-4660

OCTOBER 21, 1995 NOTE NEW DATE

QUINTE ARC BELLEVILLE ON

QUINTE VETERAN'S ASSOCIATION HALL ELMWOOD
DRIVE EAST OF BELLEVILLE ON

INFO:-DON VE3DQN 31 CEDAR STREET
BELLEVILLE ON K8P 3L9 (613) 968-9242

OCTOBER 21, 1995

GREENWOOD NS AMATEUR RADIO CLUB

GREENWOOD COMMUNITY CENTER

INFO:-VE1FLY@VE1DRG.#CBRK.NS.CAN.NOAM

OR DEREK SQUIRE (902) 765-4660

TALK IN 147.240 (+)

OCTOBER 21, 1995

ROGUE VALLEY AMATEUR RADIO CLUB SWAPMEET

THE MEDFORD ARMORY 1701 SOUTH PACIFIC
HIGHWAY MEDFORD OR

INFO:-WA7FAB@W7OEK BBS--OR (502) 779-0723
EVENINGS

OCTOBER 22, 1995

THE SECOND ANNUAL MONROE NC OL'FASHION
HAMFEST AND BBQ

UNION COUNTY FARMERS MARKET

MONROE NC

INFO:-RON LAWRENCE KC4YOY P.O.BOX 4016

STALLINGS NC 28106-4016

(704) 289-1166 AFTER 6 PM

OCTOBER 28, 1995

South Shore Hamfest, (Longueil)

Vendors: 6:00 AM, Public 9:00 AM

Admission \$5. Tables \$10.

At: Place Desaulniers on Taschereau
Boulevard, Longueil, Quebec (Montreal
south-shore). More info: Micheline
Simard, VE2MML, 87 Barthelmy, #2,
Longueil, Quebec, J4J 1M1. Tel: 514-442-
1869 Talk-in: 145.390 (-)

DX BULLETIN 49 FROM ARRL HEADQUARTERS

NEWINGTON CT SEPTEMBER 21, 1995

TO ALL RADIO AMATEURS

NORTH KOREA, P5. THE SEPTEMBER 23 AND 24

DXPEDITION BY MARTTI,

VR2BH, WAS POSTPONED. EARLY 1996 HAS
BEEN MENTIONED AS A
POSSIBLE MAKE UP DATE.

IRAQ, YI. YI1BGD WAS ON 18125 KHZ AROUND

1500Z, YI1RS ON 14212 KHZ

AT 1545Z, AND YI1FC WAS ON THE BRAZIL DX
NET WHICH MEETS WEEKDAYS

FROM 0900 TO 1000Z ON 14240 KHZ. QSL
YI1FC VIA HIS OLD CALL YI1AFC.

IRAN, EP. IT HAS BEEN REPORTED THAT ON

SEPTEMBER 20 AND FOR THE

FIRST TIME IN OVER 30 YEARS, AMATEUR
RADIO LICENSE EXAMS WERE

CONDUCTED. THESE WERE COMPARABLE TO A
NOVICE CLASS LICENSE. 91

APPLICATIONS ARE PENDING.

PAKISTAN, AP. SP5DIR, OPERATOR OF AP5N

AND AR5N, REPORTS THAT THE

QSL INFO IN OUR JULY BULLETIN ARLD041 WAS
INCORRECT. QSL AP5N AND

AR5N VIA ANDRZEJ MAKOWSKI, PO BOX 36,
00-976 WARSZAWA 13, POLAND.

SABLE ISLAND, CY0. PLANS HAVE BEEN FINALIZED FOR THIS MAJOR DXPEDITION. CY0TP SHOULD BE ON THE AIR FROM SEPTEMBER 30 TO OCTOBER 10 ON ALL BANDS, ALL MODES, SATELLITE, EME AND VHF/UHF. THIS SERIOUS OPERATION WILL FEATURE FOUR STATIONS, AMPLIFIERS AND YAGI ANTENNAS FROM 40 METERS UP. QSL HF CONTACTS VIA VE1CBK. SATELLITE, EME, UHF/VHF CARDS SHOULD GO VIA VE1AOE.

KUWAIT, 9K0. PREFIX HUNTERS NOTE THAT HAMAD, 9K2HN, WILL SOON BE SIGNING 9K0A. LISTEN FOR HIM IN THE CQ WW SSB CONTEST AND UPCOMING SPECIAL EVENTS. ACTIVITY WILL BE ON 20 THROUGH 10 METERS. QSL VIA 9K2HN BY THE BUREAU OR DIRECT.

ISRAEL, 4X/4Z. AMIR, 4X6TT, HAS ANNOUNCED A JOINT ISRAEL/JORDAN EXPEDITION WHICH COINCIDES WITH THE FIRST ANNIVERSARY OF THE PEACE TREATY BETWEEN THE TWO NATIONS. 4X7JY AND 4Z7JY BE ON ALL BANDS, CW, SSB AND RTTY, OCTOBER 25 TO 31. THE LOCATION WILL BE VERY CLOSE TO EIN EVRONA WHERE THE TREATY WAS SIGNED. A SIMILAR OPERATION RECENTLY TOOK PLACE IN JORDAN AS JY74X, OPERATING FROM MOUNT NEBO.

BARBADOS, 8P. SIGI, DL7U0, WILL BE ON THE AIR AS 8P9II SEPTEMBER 23 TO OCTOBER 10. THOUGH AN ALL BAND OPERATION ON CW, SSB AND RTTY, THE LOW BANDS WILL BE FAVORED. QSL VIA DL7U0.

GUADELOUPE, FG. GERARD, F6FGZ WILL SIGN FG/F6FGZ OCTOBER 2 TO 17 FROM LES SAINTES ISLANDS, IOTA NA-114. HE PREFERS 160 THROUGH 30 METER CW. QSL ONLY VIA BUREAU.

GREENLAND, OX. MAKO, JA10EM, WILL SIGN OX/JA10EM SEPTEMBER 25 TO OCTOBER 16. HE PLANS TO WORK CW ON 80, 40 AND 30 METERS. QSL VIA JA10EM.

BERMUDA, VP9. BOB, WB2YQH, PUBLISHER OF THE 599 DX REPORT, WILL SIGN WB2YQH/VP9 FROM SMITH'S PARISH OCTOBER 16 TO 22. HE WILL BE ON 80 THROUGH 10 METERS, WITH AN EMPHASIS ON CW.

ARRL BULLETIN 90

ARLB090 FROM ARRL HEADQUARTERS NEWINGTON CT OCTOBER 4, 1995 TO ALL RADIO AMATEURS

CONFAB TARGETS 40 METERS

AMATEUR RADIO SOCIETIES IN THE WESTERN HEMISPHERE HAVE CONCLUDED THEIR TRIANNUAL MEETING, WHERE IMPORTANT TOPICS CONSIDERED INCLUDED BAND PLANNING (ESPECIALLY ON 40 METERS), GROWING INTERNET USE BY AMATEURS, ELECTROMAGNETIC COMPATIBILITY OF CONSUMER DEVICES, IMPROVED COMMUNICATION BETWEEN THE INTERNATIONAL AMATEUR RADIO UNION AND ITS MEMBER SOCIETIES AND IMPLEMENTATION OF THE HEMISPHERE'S INTERNATIONAL AMATEUR RADIO PERMIT.

TWENTY-NINE NATIONAL AMATEUR RADIO ORGANIZATIONS FROM THROUGHOUT THE AMERICAS WERE REPRESENTED AT THE WEEK-LONG CONFERENCE IN NIAGARA FALLS, ONTARIO, HOSTED BY THE RADIO AMATEURS OF CANADA (RAC). CANADA ANNOUNCED AT THE MEETING THAT IT HAS AGREED TO ADHERE TO THE IARP (THE FOURTH COUNTRY TO DO SO) AND HAD ISSUED THE FIRST TWO PERMITS TO RAC PRESIDENT FARRELL HOPWOOD, VE7RD, AND IARU REGION 2 VICE PRESIDENT TOM ATKINS, VE3CDM.

DISTINGUISHED GUESTS INCLUDED ROBERT JONES, DIRECTOR OF THE RADIOCOMMUNICATION BUREAU, INTERNATIONAL TELECOMMUNICATION UNION (WHO IS VE3CTM) MICHAEL BINDER, ASSISTANT DEPUTY MINISTER, SPECTRUM INFORMATION TECHNOLOGIES AND TELECOMMUNICATIONS SECTOR, INDUSTRY CANADA ROBERTO BLOIS MONTES DE SILVA, EXECUTIVE SECRETARY, INTER-AMERICAN TELECOMMUNICATION COMMISSION (CITEL) OF

THE ORGANIZATION OF AMERICAN STATES (OAS) AND WAYNE THOMPSON, MAYOR OF NIAGARA FALLS, ONTARIO.

ADDRESSING CONTINUING PROBLEMS OF INTERFERENCE BETWEEN USERS OF DIFFERENT MODES IN THE 7000 TO 7100 KHZ RANGE, THE CONFERENCE ADOPTED A RESOLUTION CALLING FOR GREATER USE OF FREQUENCIES ABOVE 7100 KHZ FOR COMMUNICATION WITHIN REGION 2, PARTICULARLY BY DIGIMODES IN THE BAND 7100 TO 7120 KHZ. REDUCED DEPENDENCE ON FREQUENCIES BETWEEN 7050 AND 7100 KHZ BY DIGIMODE STATIONS, AND BY SSB STATIONS FOR COMMUNICATION WITHIN REGION 2, WAS URGED. THE CONFEREES ALSO AGREED TO DISCOURAGE SSB OPERATION BELOW 7050 KHZ, TO DISCOURAGE DIGIMODE OPERATION BETWEEN 7035 AND 7050 KHZ EXCEPT FOR COMMUNICATION WITH AMATEURS IN OTHER REGIONS, AND TO RENEW THEIR COMMITMENT TO THE IARU GOAL OF ACHIEVING A WORLDWIDE ALLOCATION OF AT LEAST 300 KHZ IN THE VICINITY OF 7 MHZ.

MEMBER-SOCIETIES ALSO WERE ENCOURAGED TO MAKE GREATER USE OF THE 10-MHZ BAND FOR DIGITAL COMMUNICATION, SINCE RADIOTELEPHONE IS NOT ALLOWED THERE.

THE GROUP URGED THAT MEMBER SOCIETIES OBTAIN INTERNET ACCESS AND POSSIBLY ESTABLISH THEIR OWN HOME PAGES ON THE WORLD WIDE WEB. AMATEURS WERE ENCOURAGED TO INCLUDE THEIR CALL SIGNS AS A PART OF THEIR INTERNET ADDRESSES.

REGION 2 PRESIDENT ALBERTO SHAI0, HK3DEU, HAS NOW RETIRED, AND THOMAS B. J. ATKINS, VE3CDM, WAS ELECTED TO REPLACE HIM AS PRESIDENT. REINALDO SZAMA, LU2AH, WAS ELECTED VICE PRESIDENT, AND THREE NEW DIRECTORS ALSO WERE ELECTED.

THE 1998 IARU REGION 2 CONFERENCE WILL BE HELD IN VENEZUELA, HOSTED BY THE RADIO CLUB VENEZOLANO.

AR

RAQI BULLETIN FROM RAQI HEADQUARTERS
(JEAN-PIERRE ROUSSELLE VE2AX) MONTREAL QC
SEPTEMBER 21, 1995
TO ALL RADIO AMATEURS

AMATEUR CLASS CERTIFICATES AVAILABLE

After many requests by RAQI (five fruitless tries since 1989), Industry Canada has indicated at RAQI's last meeting of September 19, in Montreal that they will make the Radio Amateur certificate classes known. Industry Canada's objective and of the Radio Amateur community, is to insure self discipline on amateur frequencies.

The following two items remain to be resolved to assure a national awareness of these classes of certificates:

- 1- Chose a means of distribution of this information that will permit rapid and regular updating.
- 2- The official announcement of this decision should be made by Industry Canada at the consulting committee meeting on Amateur Radio (CARAB) which will be held in September and RAQI President Pierre Roger VE2TQS will be attending.

The CARAB should also study the question of Methods to be used to insure the national awareness of the information in regards to the Classes and certificates.

THE GROUNDWAVE is always looking for your input! Articles are most welcome and always needed. Share your thoughts and ideas with your fellow club members. All types of material are welcome -- technical tips, commentary, reminiscences, etc. And most important, your letters and comments are always sought; this feedback allows us to know how we're doing in providing useful, interesting and (hopefully) timely info. You can send your letters and articles to the address on page 2 of THE GROUNDWAVE, or to me via packet, at VA3ES@VE3KYT.#EON.ON.CA.NOAM Ed Sieb, VA3ES, Editor, THE GROUNDWAVE.

LETTER TO THE EDITOR

Betty Bitten by the Bug

I wanted to tell you how much I enjoyed your "Commentary by VA3ES" in the September, 1995 GROUNDWAVE. Well written and thought-provoking, you have put into print form the feelings of many Amateur Radio Operators. With many forms of Communication available to Amateur Radio Operators, I think it is a magnificent "adventure" for many people. Personally, my first love of radio is Radio Telegraphy and I have met so many fine Radio Amateurs on the many CW frequencies.

I might mention at this time, that in the last few years, many are returning to their straight keys, paddles, "bugs" etc., after becoming disillusioned with SSB, and they are back to having fun again!

Certainly age is no factor... I have had conversations on CW from ten to twenty year olds to youngsters of ninety-four! By the way, Fred, KA1GEN, one of the "young kids" has a wonderful "fist", and a treat to copy him in a ragchew. (Fred is that 94 year old "youngster". ed.)

As you may guess, I love ragchewing, and I have noted that your comment about speed is certainly valid. No one cares if a person is slow or fast in his sending, and actually I have noted that some don't answer a call from one of the "speed artists", who sometimes cannot copy if you answer him/her at the same speed! I'm sure that you and others have heard this happen.

In this month's newsletter "mk's words" were enjoyed again, as they are each month.

Rather than just thinking it, I thought I had better let you know, Ed, that your article was appreciated very much. I have been an Amateur Radio Operator for seven years, and it keeps getting better and better!

I am enclosing a cheque... ..for my Membership Renewal.

....vy 73,

Sincerely,

Elizabeth A. Broome, (Betty) VE3ZBB

Betty, thank you for your kind words. We're doing what we can to make sure that THE GROUNDWAVE is useful, informative, (and occasionally thought-provoking) to the members and readers. We appreciate your feedback. Ed, VA3ES

DEFINITIONS

Beauty Contest: A Lass Round-up.

University: A place for 2,000 in classrooms and 50,000 in the football stadium.

Racket: The other man's formula for making a living without having to work for it.

de OVMRC Rambler

ODDS & ENDS DEPT.**The Origin of "73"**

by Doug Holmes, VE3CWO, (from YRARC "Splatter", June '95)

The use of "73" goes back to the 1850's, believe it or not. No one knows who actually started it, but 73 was used early on in the telegraph systems to indicate "My love to you".

By 1860, it had evolved into "accept my compliments". This remained status-quo until roughly 1908 when "best regards" began appearing as the definition of 73 in standard Telegrapher's manuals. Unfortunately, the names of the persons who made these changes are lost to history.

How to Sink a Ground Rod.

by Ralph Grover, NS2S (from Worldradio, May '95)

I recently observed the installation of a ground rod for the new N3VT repeater and found out how the pros do it. Don, N2GHV put in a lot of ground rods in his business, chucked the rod into a heavy-duty half-inch electric hammerdrill, and zipped it into the ground slick as a whistle in 30 seconds - no banging, and no mushrooming of the top of the rod.

Here is part of a letter received by the Bicycle Mobile Hams of America Newsletter.

"... My husband Richard, KC5EVR and I, KC5KWI enjoy your articles and comments. The (2-meter) radios have been great on all our bike rides, allowing us to communicate with each other, as well as other hams in the area. However, they recently became invaluable when I hit a hidden pot-hole 20 miles from home and went over the handlebars! I couldn't continue to ride because I'd fractured my hand, and couldn't use the brakes. But, we were able to reach our son Eric, KC5IDZ on 2-meters and he came to pick me up in his vehicle. Thankfully the radio

survived the spill! --- Charlotte L. Johnson, KC5KWI, Las Cruces, NM." from WORLD RADIO Magazine, September 1995

MAKERS OF ELECTRONIC HISTORY

EDWARD BRANLY

Edward Branly, inventor of the coherer, was born in Amiens, France, in 1844. The coherer, as we would define it today, is a detector of radio waves. As built by Prof. Branly, it consisted of a small glass tube, filled with metal granules or filings, and was connected in series with a low-voltage battery and a current-indicating galvanometer. Normally the resistance of the unit was so high that it permitted practically no current. But when under the influence of electromagnetic waves, it cohered and formed a network or webbed chain, with resistance low enough to permit current from the battery to actuate the galvanometer. However, after each electrical pulse it was necessary to top the tube so as to shake the granules apart. Marconi quickly put the coherer to work as a wireless detector, although Branly admitted that he had never thought of it as a useful communication instrument. He died in 1940.

Picture Courtesy Radiocraft de Peel Signal, Newsletter of the Peel Amateur Radio Club

Is It Really Broken???**SIMPLE OPERATOR TROUBLESHOOTING**

The most unwelcome event that can happen to any ham radio operator is for his or her rig to stop working. Kenwood Corporation has sent the Rambler a few suggestions you should try before resorting to the repair depot.

Kenwood has found that the vast number of failures can be attributed to misoperation of the radio, rather than equipment failure. Here are some suggested simple procedures you can do to determine whether or not something is broken, or if there might be some other cause.

STEP 1

Take a little time and read the information manual all the way through. You'd be surprised to find how many problems can be solved this way. Let's look at several examples.

SYMPTOM: "My radio cuts in and out of receive. It happens on all bands, and the transmitter is okay."

CAUSE: The Squelch control on the radio is causing the receiver audio to turn on and off, or the Priority Alert function of your radio is on.

CURE: Turn the Squelch control fully counterclockwise, or turn off the Priority Alert.

SYMPTOM: "I can't get the automatic antenna tuner to function properly."

CAUSE: Not enough power for the tuner to sense forward and reflected power, or the transceiver's antenna tuner menus are not properly configured.

CURE: Adjust the carrier control for an on-scale ALC reading in the CW mode per instructions in the operators manual. For the Menus, if your transceiver has them, be sure to check to make sure that any menu items that relate to the auto-tuner have been properly configured.

STEP 2

Is the station installed properly? Many times Kenwood receives calls about symptoms that are caused by inadequate station set-up. Let's look at a couple

of examples to illustrate this point.

SYMPTOM: "Every time I key the transceiver, the lights get brighter on the display; or I get 'bit' by the exposed metal surfaces on my microphone and radio; or my transmitted signal is distorted, etc.:"

CAUSE: The antenna is too close to the transceiver location (less than 40 feet) or poor station grounding. This is the single most frequent cause of transmitter failure or misoperation!

CURE: Move the antenna and make sure all equipment that is attached to the radio is properly grounded. This is especially critical on HF frequencies when using wire type antennas, and for apartment dwellers.

If you can't supply a good short ground, less than a 1/4 wavelength on 10 meters, use a counterpoise. (A counterpoise is a 1/4 wavelength piece of wire with one end attached to the ground lug on the radio. The other end of the wire is left free and may be tucked along the wall. It should be cut to a length that corresponds to the centre of the band(s) that are giving you trouble.)

SYMPTOM: "Every time I key the radio the lights dim, or the frequency display jumps around, or the transmit audio is distorted, or I don't get full power output."

CAUSE: Not enough voltage being supplied to the transceiver under load or RF feedback (RFI) is interfering with the operation of the power supply.

CURE: Make sure your power supply will supply enough current and voltage for the job. Measure the DC voltage at the power connector on the rig in transmit. The voltage should not drop under the load! For RFI problems, wrap the DC cable around a toroid core, or add a 0.01uf bypass capacitor between the DC line and ground.

STEP 3

If Steps 1 or 2 don't result in a cure for your symptoms, see your authorized dealer for your make of radio.

de OVMRC Rambler