

The Hamilton Amateur

MEETING MARCH 16, 1994
NASH AUDITORIUM, CHEDOKE HOSPITAL
8.00 PM

SPEAKER: RON WHEELER, INDUSTRY & SCIENCE CANADA
TOPIC: TRC 86 DRAFT. CRITERIA FOR RESOLUTION
OF IMMUNITY COMPLAINTS INVOLVING
FUNDAMENTAL EMISSIONS OF
RADIOCOMMUNICATIONS TRANSMITTERS.

EXECUTIVE 93-94

PRESIDENT	David Bruton	VE3DWJ	383-9808
PAST PRESIDENT	Ev Englert	VE3OQX	385-0879
VICE PRESIDENT	Bill Court	VE#WVC	572-3755
VICE PRESIDENT	Bob Tenty	VE3TOK	385-4817
SECRETARY	Lorraine MacPherson	VA3NZ	389-7653
TREASURER	Joe Urbanski	VE3OCD	388-8383
MEMBERSHIP	Don Gray	VE3DGG	528-4326

HARC COMMITTEE CHAIRPERSONS

HISTORICAL:	VA3GO	George Olenick	383-7338
BULLETIN EDITOR:	VE3SON	Jim Walsh	689-6839
EDUCATION:	VE3EKY	Bernie Granby	527-7175
HEALTH AND WELFARE:	SWL	Ellen Reinke	522-8909
PROGRAMS:			
HOSPITAL CO-ORD:	VE3OGQ	Mary Urbanski	388-8383
SWAP NET CONTROL:	VE3JWJ	John Johnston	578-4275
REPEATER:	VE3OCY	Don Graziano	
EMERGENCY CO-ORD:	VE3EIK	Pat Brennan	561-5413
VE3DC Licencee:	VE3FHQ	Glen Gibson	385-2786
VE3NCF Licencee:	VE3MWH	Mark Gibson	389-4308
VE3RCB Licencee:	VE3EIK	Pat Brennan	561-6513
DELEGATED EXAMINERS:			
	VE3EKY	Bernie Granby	527-7175
	VA3NZ	Lorraine Macpherson	389-7653
FIELD DAY CO-ORD:			OPEN
FLEAMARKET 94:			OPEN
PROPERTY:	VE3AHQ	Mike Panopolous	544-6796
PUBLIC LIASONS:	VE3PFT	Paul Coppin	627-5672
AWARDS & CONTESTS:	VE3AHQ	Mike Panopolous	544-6796
TECHNICAL:	VA3SP	Mike Spenuk	523-8242

Hamilton Amateur Radio Club
General Meeting

The Hamilton Amateur Radio Club met at Nash Auditorium February 16th, 1994. The meeting was opened by the President Dave Bruton, VE3DWJ at 8:15p.m. Slight delay was due to members getting their parking tickets.

The speaker for the meeting Peter Shilton VE3VD was introduced by Bob VE3TOK. Peter is involved with Moon bounce and spoke of the expedition to Algonquin Park Observatory to use the 150 foot Parabolic dish antenna. He gave an very good presentation explaining the mechanics of the antenna, frequency range, ionospheric bending of moon bounce signals and types of equipment used. The study of moon bounce was started in the 1940's by the U.S. army. It is easier than ever to obtain equipment because of the readily available and inexpensive parts.

VE3ONT has been operating with the University of York giving educational talks to engineering and science students. Antennas are everything in small signal work and CW is used for most contests. Transverters are used on 10 meter radios to tune the wanted band.

Slides completed the presentation, showing the Algonquin station, dish and phases of restoration and deterioration.

While the slides were getting ready the announcement were made. Rick VE3OZY reported that the 160 metre contest netted better results than last year and VE3DC has been awarded 1st place. John VE3DVV would like to know if anyone else is interested in the modem project.

The speaker was thanked by Aire VA3ART and presented with a token of our appreciation. Coffee was at 9:30P.M.

After the break Dave asked if the minutes of the last meeting as written in the bulletin would be accepted.

Motion to accept Bill VE3WVC seconded Jim VE3XCR, membership vote and passed the motion. Treasures report read by the treasure Joe VE3OCD, motion to accept Aire VA3ART, seconded by Ward VE3FJQ, accepted by the membership.

Paul VE3PFT needs more people to help with Around the Bay Race which is to be held 27 March, 1994, this will be an all day commitment. The race is the 100th Anniversary Event and a special event station is planned. Industry Science (DOC) is contemplating a special call sign for this event. The code classes are progressing and some of Paul's students have passed the code exam. If anyone has an old hand key they can part with Paul needs them for practice sending at the classes. Bill VE3WVC is conducting code practice sessions at 8 p.m. Thursday nights on VE3NCF for 45 minutes to 1 hour, 5wpm 15 wpm and back to 5wpm. Help is need for the Fleamarket. Please call VE3WVC Bill if you can help. Bill needs 4 to 5 hours of your time plus the day of the event.

OLD BUSINESS

Nothing reported.

THE PRESIDENT MESSAGE FOR MARCH

I thank all amateurs who will be providing communications for the One Hundredth running of the Around the Bay Race. This event this year will be drawing many more runners this year. March 27, Sunday is the big day.

As you are aware, the Fleamarket is going to be in the fall this year. Opening for volunteers is essential for the success of this fund raising event. The club uses the funds to keep the membership dues low, pay operating costs, and maintenance fees. Please donate your some time to help out. Helpers are required NOW to plan, print flyers, registration forms, deliver and generally help out where required. Call Bill VE3WVC @ 572-3755.

This month's Speaker from Industry Canada will enlighten us on the TRC-86 Draft. Enclosed in this month's bulletin is a draft copy for you to read. I am looking forward to a large turnout. Please be on time so that many questions can be asked and answered. Remember about the \$2.00 parking agreement. See you on March 16.

TRC - 86

Criteria For Resolution of Immunity Complaints Involving Fundamental Emissions of Radiocommunications Transmitters. (Draft)

All Canadian radio amateurs should be aware of the significance of this document. While not yet policy, this document sets the course for the relationship between radio users (us) and all of the myriad and esoteric electrotechnojunk that is inundating us daily. What the policy says, is that if your RF emitter, whatever it is, sends out RF with enough punch that my electro-baule don't work, even if I paid \$1.98 US, you gotta cut it out!

Seriously, immunity standards are coming whether we like it not, and its up to us to defend our position. The battle lines have been drawn. The Canadian E & E Manufacturers Association has said that they see no benefit in dialogue, and for them thats OK, because THERE IS NOTHING IN THIS POLICY THAT REQUIRES MANUFACTURERS TO DESIGN ELECTRICAL GOODS TO RESIST THE RF. Please read the attached circular, and send your comments to Director General, Engineering Programs Branch, Industry Canada.

Paul Coppin VE3PFT.

Electrical contrivances have superceded steam,
The old time sailing vessel is nothing but a dream,
We have wireless telegraphy to cross our foreign seas,
And we have played player pianos but we have never touched the keys.
The stomach ache of old is appendicitis now,
And we have tasted creamy butter that has never seen a cow,
Progression is our motto; modern times are here to stay,
But thank God we get our babies in the same old fashioned way.

UPCOMING CLUB EVENTS

VE3NCF REPEATER SCHEDULE FOR MARCH

MONDAYS 8 PM Packet Radio Net with Mike VA3SP

TUESDAYS 7:30 PM NCF Check-in Net with Stan VE3GFE

TUESDAYS 8:00 PM The Swap Shop with John VE3JWJ

THURSDAYS 8:00 PM Code Night with Bill VE3WVC

SUNDAY 10:00 AM MARCH 27. AROUND THE BAY RACE****

WEDNESDAY 9:00 PM MARCH 30 IPARN Trans-Canada Net with Paul VE3PFT

****Special Note: The 100th Year, Around The Bay Race. The VE3NCF Repeater will be committed to the race from 10 AM to 4:00 PM. Please use VE3DRW as your alternate local repeater during the race event.

Around the Bay Race and the Red Shield Campaigns:

If you have participated in these events in the past, and wish to again, or wish to take the opportunity anew, we still can use volunteers! Please call!

Paul Coppin VE3PFT @ 627-5672

WHY CODE?

Conversations with new amateurs frequently centre around the role that Morse Code plays in modern amateur radio. It is seen as redundant, obsolete, or as was recently observed by one new amateur "...CW is anachronistic and in the same league as spark gap, vacuum tubes, and AM". The view is unfortunate, because that amateur, for all the wisdom of his 60 years, has missed the point about amateur radio. Amateur radio is about communication, not about computers, not codes, not phased-locked loops, not repeaters. All of those are merely the present hardware of communication. Morse, and code remains the most fundamental expression of that communication. Morse code is not anachronistic; it is the basic building block of amateur radio communication for all interests. A computer with an unlocked PLL cannot communicate and isn't even a good boat anchor (not heavy enough), but its operator can use its power supply to arc out a message, or toggle a light bulb, and establish communication. Those who attended the session on EME (and other modes such as meteor scatter) should see the irony - very modern concepts dependent upon a very fundamental, and "anachronistic" skill. Amateur radio is about the passing of the products of human thought from one sentient individual to another. Morse code is the most fundamental means by which we do it. Get your code, and open a very big door!

Paul Coppin, VE3PFT

YES, there still is room for the spring code class- call me.

- 2 VE3TNW, TONY, (905)526-6154
 - AEA AT-300 TUNER 300 WATTS TWIN NEEDLE SWR/PWR COAX, BALANCE WIRE \$125.00
 - PRO2005 400CH. SCANNER CELLULAR ENHANCED MINT BOXED \$350.00
 - HAMMOND GREY 19" RACK, 6 FT HIGH, ON DOLLEYS, LOCKING DOORS 1000 NEW \$200.
 - 2-DOT MATRIX PRINTERS 9 PIN GOOD CONDITION..IBM COMPATIBLE \$40.00 ea.
- 3 VE3NYX, RENZO, (905)521-1064
 - HEATHKIT MEMORY KEYSER MODEL SA-5010 WITH MANUAL ..\$75.00
 - MFJ CW FILTER MODEL CWF-2 EXTERNAL \$15.00
 - MFM 20 MEG HARDDRIVE ST-225.. \$50.00
- 4 VE3PFT, PAUL, (905)627-5672
 - TRS-80 MODEL 1 COMPUTER, 2 DRIVES, MON, EXPANSION INTF. \$150.00
 - ARCHER VIDEO PROCESSOR AND ENHANCER \$45.00 ea.
 - RS PRO 16A SCANNER \$75.00
 - TANDY COLOR COMPUTER \$15.00
- 4 VE3JOZ, JOE, (905)318-6259
 KNWD TH26AT, 2MTR H.H., TONE BOARDS, EXTRA BATT. BC11 RAPID CHARGER.\$500.00
- 2 VE3JVJ, MARK, (905)574-4370
 - RS PRO 2021 200 CHNL SCANNER, EXT ANT \$200.00
 - PROAM DUAL BAND MAGMOUNT ANT. 1/4WV 2MTR. 5/8WV \$50.00
- 2 VE3MXL, MALCOLM, (905)574-7153
 IBM PC JUNIOR, 128K, COLOR MON. MANUAL, 5 1/4 FLOPPY 2.0DOS [best offer]
- 3 SWL, PETER, (905)333-9412
 - DVP312 12VOLT 3 AMP PWR/SPLY \$30.00
 - MFJ-2BX CW FILTER 8 POLE \$20.00
 - OPTOLECTRIC H.H. FREQ COUNTER \$150.00
 - HAM PRESELECTOR SX-59 0-30MHZ \$65.00
 - YAESU FRG 7000 GEN.COVRG. DIGITAL RECVR. \$300.00
- 3 VE3WWR, JOHN (905)385-7694
 AEA ISOLOOP 10-20-30 MTR ANTENA MINT SHAPE \$300.00 or Trade for hf gear.
- 3 VE3WTE, WHITEY (905)547-0515
 - SHURE BOOM MIKE \$40.00
 - UNIDEN MOBILE 16 CHANNEL SCANNER, ANTENNA ,CAR+HOME PWR SUPPLY \$125.00
 - UNIDEN 200XLT 200 CHANNEL PROGRAMBLE, INCL CELLULAR..BRAND NEW \$175.00
- 1 VE3NYG, RUDY, (905)662-6163
 - YAESU FT 301D TRANSCVR. HF RIG 6 PIECES \$750.00
 - MFJ 1 KW DUMMY LOAD \$50.00

- 2 VE3VTG, ENZO, (416)656-2289 or wkends (905)850-2784
600HZ FILTER FT902DM ,, BENCHER OR VIBPLEX PADDLES..
MFJ TNC..1278..
- 2 VE3PFT, PAUL,(905)627-5672
 - DONATION OF OLD STRAIGHT KEYS WANTED FOR H.A.R.C CW CLASSES
 - EXTENDER BOARD FOR HEATHKIT SB104 OR SB104A WANTED
- 4 VE3TJY, MIKE, (519)893-8747
2MTR OR DUAL BAND MOBILE WANTED MAX \$500.00
- 4 VE6SRC, STU, (403)227-5792
HF TRANSCVR WANTED FOR STARTER PACKAGE , APROX \$400.00 MARK
- 2 VE3VJA, DALE (905)828-1352
 - QST,73,HAM RADIO, HANDBOOKS OR RELATED LITERATURE WANTED
 - SOCKETS FOR 4CX1000 AND 4-1000
 - AT3 TRANSMITTER
- 2 VE3SE, JOE (905)680-1211
 - QRP RIG WANTED SIMILAR TO ARK 80 OR 40 LOW AMP DRAW ON RECIEVE.
HAS TO BE SMALLER THAN ARGONAUT [[NO HW7 PLEASE]]
 - TRANSMIT \ RECEIVE COILED TELEGRAPH RAIL STRAIGHT KEY WANTED..
- 2 VE3TNW, TONY (905)526-6154
 - QRP PHONE RIG SIMILAR TO FT 7 OR ARGONAUT.

TECHNICAL NETS The Scarborough Amateur Radio Club bulletin mentions three Sunday nets which may be of interest. On 14.317 MHz starting at 17:00z there is an Icom Users Net with AB4OH (Canadian sign VE3DCY), providing detailed technical support, followed at 19:00z by a Yaesu net and then at 20:00z by a Kenwood net.

NiMH NEW BATTERY TECHNOLOGY Be on the watch for NiMH which is the new battery technology which is expected to offer several advantages over NiCd. Because of greater energy density battery power will be lighter and require less space. NiMH will have a slower discharge rate than NiCd. Other features include rapid charging, endurance of more than 500 charge/discharge cycles, and sealed construction. NiMH batteries are expected to be expensive at first, and more finicky than other batteries, with their custom charging profiles handled best by special battery-charger ICs. They also work over a narrower temperature range. The NiMH cell uses a nickel oxide positive electrode, like NiCd cells. The negative electrode is a new rare-earth metal hydrogen-absorbing alloy, which absorbs and desorbs hydrogen gas.

RELEASE DATE: _____

Telecommunications Regulation Circular

CRITERIA FOR RESOLUTION OF IMMUNITY COMPLAINTS INVOLVING FUNDAMENTAL EMISSIONS OF RADIOCOMMUNICATIONS TRANSMITTERS

NOTE: This is a draft version of TRC-86 and future changes can be anticipated before it is finally released as a departmental policy document.

Engineering Programs Branch

Canada

INTRODUCTION

The Radiocommunication Act provides enabling powers to the Minister beyond those previously applicable under the Radio Act. Specifically, Section 5(1)(l) states "....the Minister may...make determinations as to the existence of harmful interference and issue orders to persons in possession or control of radio apparatus, interference-causing equipment or radio-sensitive equipment that the Minister determines to be responsible for the harmful interference to cease or modify the operation of the apparatus or equipment until such time as it can be operated without causing or being affected by harmful interference".

These powers permit the Minister to make determinations regarding immunity-related interference complaints involving both Radio Apparatus and Radio-Sensitive Equipment (RSE) and to resolve them. This circular will specify the technical criteria upon which such decisions will be based.

BACKGROUND

The communication needs of Canada have seen a rapid increase in the last twenty years and as a result, the number of licensed radio stations has increased significantly. Because of this growth, the density of radio signals has notably increased, especially in urban areas. Moreover, the rapid introduction of personal portable radio transmitters has added a new dimension to the traditional pattern of electromagnetic fields. Where the fields of sufficient magnitude to cause concern were once characterized as being confined to relatively well defined, large areas surrounding high powered, fixed transmitters, that environment is now augmented by the fields from low power transmitters which are also strong enough to cause responses from RSE. While these fields are both spatially small and fleeting, they have become much more numerous and are scattered throughout the urban areas where sensitive electronic equipment may be found.

During the same period, the electrical/electronic devices available in the market have also seen an explosive growth in their adoption and use by Canadians. Operated in an electromagnetic environment without any significant field strength levels, these devices function effectively in a variety of applications ranging from simple diversion to the monitoring and control of life-sustaining systems. However, when these devices are exposed to the electromagnetic signals in the vicinity of radio transmitters, they may malfunction.

255' radio interference
1.83 v/m

1.83 v/m level
Ant. Std. for RSE
3.46 v/m for N.S.E. Radio Sens. Equip

Each of these technological developments is patently in the public interest, but when the systems involved share a common environment, and adequate preventive measures are not taken, a potential for incompatible operation occurs. When such cases of incompatibility arise, there is a need for some measure against which to judge the cause of the problem.

There are two opposing perspectives on the nature of the immunity problem. To the owner of a piece of electronic equipment, whether radio or non-radio, it often appears that the problem only arises when a radio transmitter is turned on and, consequently, prohibiting such a transmission is the logical solution to the problem. On the other side is the opinion that any electronic device that is not the intended receiver for a radio transmission has no place responding to that transmission, and obviously should have been designed and built so as not to interact with such extraneous components of the "normal" environment. Any effective resolution must be based upon a compromise between these two positions.

INTERFERENCE CRITERION

As a start, it must be recognized that there are two classes of electronic equipment to be dealt with under the Radiocommunication Act. The first is RSE as defined in the Act: *"radio-sensitive equipment means any device, machinery or equipment, other than radio apparatus, the use or functioning of which is or can be adversely affected by radiocommunication emissions"*. The second arises because the above definition excludes Radio Apparatus. Radio Apparatus can also suffer from a lack of immunity to radio signals outside of the band it is intended to receive. For signals in or near the passband of a radio receiver, interference problems are not viewed as an immunity issue, but rather as characteristics of the radio receiver's selectivity and sensitivity. As such they are treated as subject to any radio apparatus regulations and standards that may be applicable and problems resolved through frequency assignment processes. A special sub-class of equipment, of questionable status, is conventional home entertainment audio and video devices. Although they fall under the definition of RSE, they are almost invariably found in association with, or more commonly, plugged into, broadcast sound and television receivers. They have traditionally been treated as if they were radio apparatus, and for the purposes of this document will continue to be so.

For the application of criteria for the determination of cause, two categories of electronic equipment will be considered. One will consist of equipment for the reception of broadcast sound and television signals and associated equipment such as audio and video recorders and playback devices, amplifiers and the like. The other will incorporate all other non-radio electronic equipment. These categories

will be referred to as broadcast receivers and associated equipment and Radio-Sensitive Equipment (RSE), respectively.

The criterion selected for the determination of cause is based upon the principle of minimum overall impact for the users of both radio transmitters and electronic equipment. The method used to do this was to arrive at a limiting value of field strength which balanced the existing characteristics of the electromagnetic environment against reasonably attainable immunity characteristics of electronic equipment. A variety of sources were referenced in arriving at the values chosen, including the results of immunity and environmental measurements, and the immunity standards currently in force in other countries or in the international arena.

The Minister's determination of cause will be based upon the following values of field strength, measured in accordance with accepted engineering practice, at the site of the equipment being affected by harmful interference:

- a) for broadcast receivers and associated equipment -- 1.83 V/m (125 dB μ V/m)
- b) for all Radio-Sensitive Equipment -- 3.16 V/m (130 dB μ V/m).

If the applicable value is exceeded, it will be deemed to be interference to the affected equipment. If the field strength is less than the applicable value, the affected equipment's lack of immunity will be judged the cause of the problem. The criteria for incidents involving the transmissions of AM, FM or TV transmitters are subject to the approaches incorporated in the Broadcast Regulations and Procedures.

Issued under the authority of
Industry and Science Canada

S.N. Ahmed
Director General
Engineering Programs Branch

Autodials Feb 14, 1994

14 VE3SBP Steve	51 VE3BPK Ross	87 VE3HNG Al
15 VE3YAG Richard	52 VE3FHQ Glenn	88 VE3TNW Tony
16 VE3AAH Gord	53 VE3OZY Rick	90 VE3YEO Bill
17 VE3OQX EV	54 VE3DWJ Dave	91 VE3SMF Stewart
18 VE3CFI Michael	55 VE3FMG Mike	92 VE3BQB Bob
20 VE3HPD Vic	56 VE3HTC Dave	98 VE3JOZ Joe
21 VE3JCJ Jerry	57 VE3EGL Ken	
	58 VE3HLI Jerry	99 VE3RME Ram
22 VE3EIK Pat	59 VE3EHJ Dave	100 VE3RHX Harry
23 VE3WVC Bill	60 VE3WOW Wally	101 VE3WAG Jack
24 VE3OIZ Bill	62 VE3ALQ Doug	102 VE3IGF Bob
25 VE3OCD Joe	63 VE3JIO Jim	103 VE3NYX Renzo
26 VE3TJB Ted	65 VE3TOW Don	104 VE3SDY Lou
29 VE3MIL Norm	66 VE3IBP Brian	105 VE3ATJ Lynda
30 VE3AOO Bernie	67 VE3QEE Marty	106 VE3TTO Garry
31 VE3EGT Les	68 VE3VNG Neil	107 VE3DHY David
32 VE3RXY Millen	69 VA3GO George	108 VE3OZH Leonard
33 VE3MWH Mark	70 VE3FIK John	110 VE3FYQ Ward
35 VE3AZS Art	72 VE3XCR Jim	111 VE3NCM Ken
36 VE3JUR Dave	73 VE3GCP Fred	112 VE3HKQ Doug
37 VE3CKH Jean	74 VE3JSJ Gord	113 VE3GKP Harv
38 VE3OAK Carlton	75 VE3OCY Don	114 VE3PBU Paul
39 VE3EKY Bernie	76 VE3LWD Wayne	116 VE3KTV Spiro
40 VE3JAI Emsley	77 VE3JTR Jack	117 VE3PRM Don
41 VE3GFE Stan	78 VA3SP Mike	120 VE3EVI John
42 KD4LMM Leo	80 VE3VMO Vic	121 VE3CNZ Frank
44 VE3SCH Konrad	81 VE3OIW Max	125 VE3ZKO Norm
45 VE3BK Norm	82 VE3SON Jim	130 VE3ROJ Russ
46 VE3JVJ Mark	83 VE3OZE Wade	146 VE3EBT Dave
47 VE3AEI Andy	85 VE3PUI Kurt	147 VE3MWG Rolly
48 VA3ART Art	86 VE3DPC Frank	173 VE3DVV John
49 VE3FEZ Peter		175 GKI Charles

Your uncle has a job at last. The first time in 45 years. We are rich now, \$17.25 every Thursday. So we sent it to Sears Roebuck for one of those new fangled bathrooms like you people have up north. It came and we had it set up, you should see it. It is real purty. On one side of the room is a long white thing like the pigs drink out of only you can get in and take a bath all over at once. Over on the other side of the room hanging on the wall is a little white gadget called a sink. This is for light washing like hands and feet. They also sent us a roll of writing paper only it is cheap and rips easily. But in the corner they really got something. It is thing you can put your foot in and scrub until it is clean and then pull a chain for fresh water for the other foot. Two lids come on the durn thing and we aint got no use for them so Ma is using one as a bread board and the other framed your grandfathers picture.

Your cousin.

Lil Abner

- 4 VE3MWD, SERAFINO (905)662-4526
 - RS-HTX-100 10 METER RIG \$150.00

- 3 VE3NCK, BILL, (905)312-0428
 - YAESU FT-101ZD HF RIG, WITH WARC BANDS, MANUAL, MIC, \$475.00

- 1 VE3JIS JACK (905)648-6443
 - PRO 2021 PROGRAMABLE 2600 FRQS 200CHANNEL, EX ANT ADAPTR. \$215.00
 - PRO 43 200 CHANNEL HYPER SCAN H.H. SCANNER \$350.00
 - YAESU FT-101E \$395.00
 - U100 ROTOR \$55
 - CHANNEL MASTER ROTOR \$55
 - D104 DESK MIC \$45
 - COBRA 148 SSB 26.5 28. \$195

WANTS

- 1 VE3PKY, CHRIS (905)547-3169
 - MANUAL OR SCHEM. HW101 WANTED

- 1 VE3MXL, MALCOM, (905)547-7153
 - MIC FOR KNWD TR8400 WANTED

- 1 VE3CRB, JOHN (416)244-1292
 - HD ANTENNA SWITCH 4 OR 5 POSITION WANTED

- 1 VA3WE, PAUL (905)526-8119
 - 2 MTR HH WANTED ICOM 2AT approx \$200. wanted
 - 2 MTR 4 OR 6 ELEMENT BEAM HOMEMADE OR MANUFACTURED WANTED
 - WIDE BAND 2 MTR AMPLIFIER WANTED

- 1 VE3VTG, ENZO, (416)656-2289
 - CGA COLOR IBM CLONE MONITOR WANTED

- 1 SWL, GERALD, (905)575-7442
 - YAESU FR-101 TRANSMITTER WANTED
 - YAESU FR-101 6 METER CONVERTER WANTED
 - YAESU FR-101 2 METER CONVERTER WANTED
 - YAESU FR-101 FM DETECTOR WANTED

- 1 VE3JUA, SEIB, (905)637-6266
 - 73 MAGAZINES AS FOLLOWS WANTED.. FEB89, MARCH71, MAY71, JAN72, APRIL/7

- 1 SWL, BILL, (905)580-3321
 - PRO-2004 SCANNER, PRO-30 SCANNER WANTED..

- 1 VE3VNG, NEIL, (905)383-6986
 - HEATHKIT 101 SB104 OR SIMILAR HF RIG WANTED
 - BENCHER PADDLES WANTED

1

HAMILTON AMATEUR RADIO CLUB SWAPSHOP LISTINGS

TUESDAY NIGHT 8:00EST VE3NCF 146.760 -600

FOR INFO CALL VE3JWJ, JOHN (905)578-4275

THERE IS A MACHINE ON LINE SO IF I DONT ANSWER LEAVE YOUR LIST

If items are SOLD or FOUND please let me know so I can delete off list

Mar 1

FOR SALE

- 1 VE3MWO, RON, (905)664-4297
RS.PRO 2022 DESK TOP SCANNER, 200 CH. 30-960 \$235.00

- 1 VE3DUF, BOB, (905)637-0800
AZDEN 7PCS 7000H 2MTR MOBILE, 20 MEM. 10-50 WATTS, TT MIC LIKENEW
\$375.00

- 1 VE3ITC, JOHN, (905)525-6427
HW-101 TRANSCVR, MIC, MANUAL \$125.00

- 1 MIKE, (905)332-6365
 - MONO VIDEO PRINTER CARD \$25.00
 - IDE HD CONTROLLER CARD \$25.00
 - ATIO CARD SER/PARALEL PORTS \$25.00

- 1 SWL, PETER (905)388-7706
CRA OSCILLOSCOPE 25CYCLE

- 1 VE3BLE, BLAKE, (905)529-4415
 - CW STRAIGHT KEY \$20.00

- 1 VE3CRB, JOHN (416)244-1292
CODESTAR READER, CW/RTTY/ETC \$200.00

- 1 VE3JUA, SIEB, (905)637-6266
RS KEYBOARDS-2, EXPANSION INTERFACE, 2-PWR/SPLYS, 1 B+W MONITOR
\$15.00

- 1 VE3VNG, NEIL, (905)383-6986
 - 6 AMP PWR SUPPLY \$75.00
 - GEN RADIO CAPACITANCE TESTER \$50.00
 - PROM PROGRAMMER \$100.00
 - WHEAT STONE BRIDGE \$25.00
 - GALV ANOMETER \$10.00

- 2 VE3PKY, CHRIS, (905)547-3169
 - HW32 SSB 20-MTR PWR/SWR MIC \$65.00
 - RS-HTX-100 10MTR MOBILE HF TRANSCVR SSB/CW MANUAL, 6AMP HD/PWR/SPLY
\$200.00

- 2 VE3KYD, FRED, (905)632-2044
DELHI DTX 48 FT TOWER MINUS BASE SECTION \$150.00

3 March 1994

At the last executive meeting a proposal to amend Article 11 of the constitution was received. After lengthy discussion, it was decided to publish it in the club bulletin. Discussion and comments, from the membership, at the next General meeting on March 16, 1994 at Nash Auditorium at 8 p.m.

Article 11.
Officers of the Club

The Board of Directors shall, at its first meeting after election in each year, select from among the six elected members an Executive, consisting of a President, first Vice-President, second Vice-President, Treasurer, Secretary, and Membership Secretary, and the ex-officio member shall automatically take the office known as Past President. The employment of all officers shall be settled from time-to-time by the Board. The President may only succeed himself once. The President and Vice-President must have held an Executive position in the Club for at least one term.

The proposal that would be added to Article 11 is as follows:

To be eligible for the positions of President and 1st Vice-President, the candidate must hold at least the highest certification level, and the remaining Directors hold at least an Amateur certificate with Basic Qualification, or equivalent.

Area

Apt # 704
FLEAMARKETS

403^E → 410 N

Brampton Peel Amateur Radio Club Saturday March 19, 1994
Amateur Radio-Computer-Electronics Fleamarket to be held at Century Gardens Recreational Complex, northwest corner of Rutherford and Vodden, in the Hwys 401/410 area. Open 8.00 am to 1.00 pm, admission \$5.00. For info: Peter Taylor 905 453 6096.

340 VAD DEN

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EqN of #7

Ontario DX Association Saturday March 26, 1994
SWL Spring Fleamarket in Trinity Presbyterian Church Hall, 2737 Bayview Ave. Willowdale, on the east side of Bayview just south of Hwy 401. Open 9.00 am to noon. For info John Grimley 416 444 4771.

VE3 MOT 147.180

Durham Region Amateur Radio and Computer Fest Saturday April 9, 1994 to be held at the Metro East Convention Center, Brock Road and Hwy 401, Pickering.

147.015 Oakville Wallace Rd Mar. 26th

Some humor from the Kingston RAC Bulletin.
Virus is a Latin word used by doctors meaning your guess is as good as mine.

Sign outside a church: Private parking, church business only. Sinners will be towed away.

Oct 8 Hamilton

New Business

Bernie VE3EKY has received confirmation from the Hamilton Public Library and can now deliver the study guides being donated by the club.

Dave reports the due to health reasons Fiore VE3OQC has resigned from his position of vice president. Bill VE3WVC is taking over this position. Pat Brennan has agreed to take on the emergency Coordinators position. Paul Webb VE3LTD reports the Canwarn position has been filled.

Motion to closed the meeting by Fred VE3GCP seconded Joe VE3OCD. Meeting closed at 10p.m.

Dave Bruton, VE3DWJ
President

Lorraine MacPherson, VA3NZ
Secretary

Parking passes are available from the secretary before the meeting and at the break for \$2.00. Please try to have the correct change.

CONTEST ON

Commonwealth(RSGB)	1200Z 13 March	80-10m	5ptQSZ
	1200Z 14 March	CW	w/commonwealth countries

RAC HQ STATION in RSGB CW Commonwealth Contest

During the RSGB Commonwealth contest, RAC HQ will be on the air. VE3VCA will be operated by Paddy Nicholls VE3DZZ/VA3PN. VE3VCA will count as a separate call area and will be good for some extra points to everyone, including those in Ontario.

This will be the first time a Canadian HQ station has taken part in the "BERU".

VHF,UHF Microwave Bandplanning.

The RAC VHF, UHF Advisory Committee is forming a cross-Canada ad hoc committee to review and update the interim RAC bandplans for 50 through 2400 MHZ.

Rac's VUAC Chairman Dana Shtun VE3DSS, is looking for volunteer from each RAC section to participate in discussion and formulation of a new national bandplan.

The committee would like input from all users including SSB, moonbunce, CW, packet, FM repeater, FM simplex, ATV (repeater and simplex), and those experimenting with or planning systems using new technologies (digital modes, ACSSB, etc).

Your urgent attention to this matter is requested by the committee as they hope to get discussions underway by mid-march. Committee work will be carried out via correspondence, E-mail and packet radio. Committee progress reports will be issued regularly via packet radio, mail and in The Canadian Amateur magazine.

The committee asks that you send your name, callsign, address and phone number to: Dana Shtun VE3DSS, Chairman RAC VUAC, 500 Willard Avenue, Toronto, Ontario, M6S 3R6.

THE HAMILTON AMATEUR RADIO CLUB

P.O. BOX 91215, Effort Square Postal Outlet, Hamilton, Ont. L8N 4G4

Club Meetings: Meetings are held the third Wednesday of each month except July and August at the Nash Auditorium, Chedoke Hospital. Time 8.00 pm. Non members and friends are welcome, coffee and donuts on the house.

Executive meetings: The Board of Directors meets at 7.30 pm on the fourth Wednesday of each month except July and August in the Radio Room, Red Cross Building, 400 King St. E. Members are encouraged to attend.

Club station: The HARC maintains an emergency radio room in the Red Cross building, 400 King St. E.

Membership: Membership costs \$25.00 per club year, 1 September to 31 August. Additional family members {no bulletin} are 1.00 per year.

Education & license testing: Amateur radio license are conducted. License testing through the club is performed on the second Tuesday by appointment. Contact the appropriate person listed on the front cover. Just testee and testor to be present at the time of testing.

Repeater: VE3NCF 146.760 MHz {input -600}, located on the Hamilton escarpment is available for use by all amateurs. Special features {mail box, link info} are privileges of membership. Part of the VE3RPT link system. Contact the executive for codes.

Field Day: The HARC operates a multi station site during the Field Day. Contact the coordinator on the front page for information.

Swap Net: A swap net is held on VE3NCF every Tuesday night at 8.00 pm except during the summer. The buy and sell listings are also available on the club packet BBS VE3DC operated by VE3JSJ on 145.590 or via modem 575-4745.

Fleamarket: A fleamarket is held during September each year, usually at the Ancaster Fairground. Date will be announced in future bulletins.

Bulletin: The Hamilton Amateur, the official news bulletin of the Club is published ten times a year and sent to all members {families share a bulletin}.

Crests: Anyone wanting a Club Crest or a Club Certificate see membership chairperson listed on the front cover.