

HARC AUTODIAL & MAILBOX

10	AMB	RICHARD	60	WOW	WALLY
11	ZP	ED	61	BR	FRANK
12	PXY	JULIUS	62	IUD	JACK
13	KW	JOHN	65	TOW	TOM
14	OZG	HUGH	67	DOU	PETER
15	HQ	LOUG	69	BLG	GEORGE
16	AH	GORD	70	PDK	JOHN
17	QX	EV	72	YGT	BOB
18	RPS	RICK	73	GCP	FRED
19	DKJ	KEITH	74	JSJ	GORDON
20	HPD	VIC	75	OCY	DON
21	JGJ	JERRY	76	LWD	WAYNE
22	AMW	SERAFINO	77	JTR	JACK
23	AMW	RON	78	JTG	MIKE
24	OIZ	BILL	81	OIW	MAX
25	UCD	JOE	82	SON	JIM
26	TJB	TED	83	OZE	WADE
27	WVJ	BILL	84	ITA	LARRY
28	OIN	KEN	85	PUI	KURT
29	BIM	RALPH	86	DPC	FRANK
31	EGT	LES	90	CITY	JOHN
32	FWH	MARK	91	SMP	STUART
33	RXB	RAVE	93	DQU	ALEX
34	JUR	JOHN	96	DNB	RON
37	MPB	MARLENE	97	LMS	GRANT
38	EKY	BERNEY	99	ITS	MIKE
39	ARX	BILL	101	WAG	JACK
40	GPE	STAN	103	EHL	ED
41	KPT	TOM	108	OZH	LEONARD
42	NYC	PAUL	111	NCM	KEN
43	SCH	KONRAD	113	EHL	ED
44	BK	NORM	114	MNC	KEN
45	DSP	GLENN	116	KTV	SPIRO
46	PEZ	PETER	137	JWS	JOHN
49	OGG	PIORI	141	ATW	ROGER
50	AMW	ROBERT	147	MWG	ROLLY
52	PHQ	GLENN	175	GKI	CHARLES
53	OZY	RICK			
54	TED	MIKE			
55	FMG	DAVE			
56	HQC	KEN			
57	EGK	JERRY			
58	HLI				

# The Hamilton Amateur

December 1990  
(Established 1932)

**Social Evening  
and Dinner  
The Plainsman  
Restaurant**

Come and enjoy an evening  
socializing with other hams and  
their spouses at the club's annual  
Christmas dinner/social  
Meeting: 12 December 1990  
1830 hrs

Hwy #5 & Milgrove Rd

HARC EXECUTIVE FOR SEPTEMBER 1990:

PRESIDENT:	VE3SON	Jim Walsh	689-6839
PAST PRESIDENT:	VE3JTG	Mike Spenuk	529-1603
VICE PRESIDENT:	VE3DKJ	Cliff Johnson	547-5801
VICE PRESIDENT ADMIN:	VE3JUL	Cliff Toohar	628-4131
SECRETARY:	VE3SMF	Stuart Fedak	692-5182
TREASURER:	VE3VFR	Norm Sanger	547-1960
MEMBERSHIP:	VE3MWO	Ron Hallias	

HARC COMMITTEE CHAIRPERSONS FOR 1990:

AWARDS & CONTESTS:	VE3AAH	Gordon Barber	383-9161
HISTORIAN:	VE3BLG	George Olenick	383-7338
PROPERTY:	VE3ANB	Richard Leah	
BULLETIN EDITOR:	VE3SON	Jim Walsh	689-6839
EDUCATION:	VE3NYC	Bernie Granby	527-7175
EMERGENCY COORD:	VE3NYC	Paul Hazen	984-4345
FIELD DAY COORDINATOR:	VE3JUL	Cliff Toohar	547-5801
FLEA MARKET:	VE3NYC	Paul Hazen	984-4345
HEALTH & WELFARE:	VE3GFE	Stan Boliburnh	528-4002
PROGRAMS:	VE3DKJ	Keith Johnson	529-1603
PUBLIC LIASON:	VE3GCP	Fred Robinson	575-5197
HOSPITALITY COORD:	SWL	Gerrard Crawshaw	385-2789
CHRISTMAS DINNER PLAN:	VE3OOG	Flori Manga	578-1789
SWAP NET CONTROL:	VE3DKJ	Keith Johnson	529-1603
REPEATER:	VE3OCY	Don Graziano	560-1960
TECHNICAL:	VE3HQ	Don Graziano	560-1960
VE3DC LICENCEE:	VE3HQ	Glen Gibson	385-2786
VE3NCF LICENCEE:	VE3OCY	Don Graziano	560-1960
VE3RCB LICENCEE:	VE3NYC	Paul Hazen	984-4345
LICENCE TESTING:			

Rick Danby  
6 Clinton St  
Hamilton, ONTARIO  
L8L 3J8

(M1990)  
VE3OZY 53

The Swap Shop: Wanted - 1

To list items:

VE3NCF (146,76) Tuesdays 8 pm,  
OR Call Keith (VE3DKJ) 529-1603 or Ralph (VE3BYM) 388-6146,  
OR leave message on the VE3DC Packet BBS (145.590 MHz).

- VE3CRB JOHN, 416 244 1292 DOWNS-VIEW
- o COLLINS ACCESSORIES, FILTERS (MECHANICAL, CW, AM, SSB) FOR 75S3B TRANSMITTER AND 32S1 RECEIVER
- o HALF DECENT YAESU OR ICOM SS XCEIVER will trade for my 8" MOTOR DRIVEN TELESCOPE, WITH TRIPPOD WORTH \$1800
- VE3BJE RICK, 519 426 7365 SIMCOE
- o 2 METER AMP 150W
- VE3ABH JOE, 416 835 5665 PT COLBORNE
- o COLLINS 75S3C RECEIVER
- VE3TJB TED, 578 9266
- o MC46 MOBILE MIKE W TTP, FOR USE WITH 7950 KENWOOD 2m
- VE3FJC WALTER, 416 263 2338 OR 147.120 OSH
- o MANUAL FOR HEATH PM2 MOBILE TUNING METER TO PHOTOCOPY AND RETURN
- VE3MWH MARK, 389 4308
- o RECEIVER/TUNER MODULE FOR ASTRO SR250, ANYTHING BUT 30-100MHZ
- ZS6XP, good in book
- o SHOP MANUAL FOR ICOM 701, WILL PAY ALL PRINTING AND MAILING COSTS, WRITE FIRST
- VE3EKY BERNIE, 527 7175
- o ROTOR CODE AR22R
- VE3TNW TONY, 526 6154
- o INFORMATION, INSTRUCTIONS FOR PRO2005 SCANNER MODS
- VE3JGJ JERRY, 544 7770
- o FBA10 BATTERY PACK (6x AA) FOR FT470
- VE3WWJ BILL, 544 6563
- o P.S. FOR ATARI 800XL, OR WIERD 6-PIN PLUG AND SPECS
- o INEXPENSIVE 12" B+W TV TO USE AS MONITOR
- VE3TUL CLIFF, 547 5801
- o UP TO DATE SCANNER BOOK
- THOMPSON, 575 8600
- o COLOUR MONITOR, PRINTER-COCO 3 COMPATIBLE, \$REASONABLE
- BART, 574 9004
- o PARALLEL PRINTER CARD FOR PC COMPATIBLE
- VE3SMF STUART, 628 4131
- o QUAD OP AMP LM3900
- VE3UNI JOHN, 389 6331
- o 17 TO 20 450 OHM LADDER LINE
- VE3JGJ JERRY, 544 7770
- o SCHEMATIC AND PARTS LIST FOR 50W 2M MOBILE AMP

Notes from HARC - 1

The December Meeting Of the HARC

The December meeting of the Hamilton Amateur Radio Club will, as in past years, be a social gathering including a meal and an opportunity to have members' spouses join us. It's an opportunity for us to show that we can communicate with non-hams and without an electromagnetic assist.

This year, we will meet at the Plainsman on Highway #5 and Milgrove Road on 12 December at 18:30. The price, including taxes and gratuity, is \$17.65 for their 4-course buffet (with over 100 items from which to choose).

In order that we can plan space requirements, please call a member of the executive committee to indicate your attendance.

To get to the Plainsman Restaurant:

Via Hwy 403 - take Hwy #6 north to Clapison Corners and turn left (west) on Hwy #5. Continue west for about 1.5 miles (thats a guess) and look for the restaurant on the right at Milgrove Rd.

Via Dundas - take Sydenham Rd up the escarpment to Hwy #5 and turn right (east) followed by an immediate left turn (a couple of 100 yards) into the parking lot.

See you there!

The Hamilton Amateur

Advertising Rates - 1990

Issue	Year
1/4 Page	\$15.00 \$75.00
1/2 Page	\$20.00 \$100.00
Full Page	\$25.00 \$150.00

Sizes are based on an 8.5 x 11 inch page reduced to 4.25 x 5.5 inches (approx). Arrangements can be made to produce your artwork or you can provide camera-ready copy. Note that there will be extra charges if you provide the paper (Originals are photo-reduced and printed as part of the Bulletin).

- JIM, 519 583 0833 PT DOVER**
- o RADIO SHACK 4CH HANDHELD XTAL SCANNER WITH HAMILTON REPEATER, BRANTFORD REPEATER, 2 AIR FREQS, MANUAL, 6MO OLD \$75neg
  - o REGENCY 8CH ACIDC AIRCRAFT SCANNER, NO MANUAL \$150
  - o RADIO SHACK "AUTO PORT" 4CH MOBILE SCANNER, GUELPH REPEATER, HAMILTON FIRE, 2 MARINE FREQS \$75

- VE3PKY CHRIS, 547 3169 OR DAYS: 848 7582**
- o HW8 QRP RIG, MATCHING P.S., HEADPHONES, PARTIAL MANUAL, BUILT IN ELECTRONIC KEYS, HOMEBREW PADDLE, EXC COND \$125
  - o HW202 2M RIG, 13 SETS XTALS, MICODER, NEW ELEMENT, MANUALS \$75 OR TRADE FOR ROCK-BOUND HANDY
  - o HALLICRAFTERS S.W. RECEIVER SW500, FAIR CONDITION, BFO NOT WORKING, NO MANUAL \$25

- BART, 574 9004**
- o AT MOTHERBOARD 286 CPU, 1 Mb RAM INSTALLED, AT OR XT CASE USE TO UP-GRADE ANY XT TO AT, WITH MANUAL \$200
  - o 10 CHANNEL XTAL SCANNER, 3 LOCAL XTALS \$30

- VE3FBK EARL, 519 426 5424**
- o IC3200A 2M/440 XCEIVER WITH HM14 w/d MIKE \$500

- VE3JTA LARRY, 549 7393**
- o HEATHKIT PACKAGE:
  - SB303 SS RECEIVER
  - SB401 TRANSMITTER both aligned by Heathkit
  - MICROPHONE
  - SB600 SPEAKER
  - SB610 MONITOR SCOPE
  - SB620 SCANALYZER
  - SB630 STATION CONSOLE-patch, swr, clock
  - SB500 2m TRANSVERTER
  - MANUALS, CABLES \$900neg

- VE3MMH BOB, 385 4246**
- o 2 ELEMENT MINI-BEAM 20, 15, 10, 6 METERS, WITH MANUAL, 1:1 BALLUN, AS-IS SOME PARTS NEED REPLACEMENT \$50

- VE3EGT LES, 547 2717**
- o MFJ NOISE BRIDGE, MODEL202 \$50

- VE3FBX JOHN, 634 0921**
- o MINI QUAD ANTENNA 20, 15, 10, 6 1200W PEP \$50

## 206 INTERNATIONAL REPLY COUPONS

### 206.1 DEFINITION

International reply coupons are a form of prepayment of postage. A coupon can be exchanged at post offices in all countries for postage stamps representing the minimum postage necessary to prepay an unregistered surface letter.

### 206.2 RATE

International Reply Coupons cost \$1.05 each.

### 206.3 AIR MAIL

In most countries, two coupons are required to cover the minimum postage payable on an unregistered air mail letter. Three coupons are required for an unregistered air mail letter from:

Algeria Bahamas Burma Djibouti Ethiopia Fiji Gabon Indonesia Israel Italy Jordan Kenya Lesotho Malaysia Malta Mauritania Nigeria Pakistan Papua New Guinea Tanzania Thailand Yugoslavia

Four coupons are required for an unregistered air mail letter from:  
Nicaragua Seychelles Singapore Suriname Turks and Caicos Islands

### 206.4 EXCHANGE OF COUPONS IN CANADA

Coupons purchased in any country including Canada may be exchanged in any post office in Canada for \$0.78 in Canadian postage for each coupon. Up to 100 coupons may be exchanged at any one time. For quantities in excess of 100 coupons, a time convenient to both, the customer and the postal agent, should be decided upon to complete the transaction.

de VE3DKJ

Notes from HARC - 4

Empty Boxes by Bill Fisher, W2OC  
(From "CQ Magazine" Dec 90)

If you go down to my basement, you will stare in amazement,  
At the collection of boxes you'll see.  
From ceiling to floor, empty cartons galore,  
Every size, every shape there can be.

There's one from a Kenwood that works really well,  
And one from a Yaesu that I'm trying to sell  
There's a printer, a disk drive, a monitor too,  
And of course a computer (the one they called Big Blue).

There's a microwave oven, and a wireless phone,  
And yes, another computer (but this one's a clone).  
Three power supplies, one electronic key,  
Two VCR's and a color TV.

There are many more boxes, the list doesn't end,  
And I'd better stop now, not to bore you my friend.  
But they're piling up higher and higher each day.  
And to walk in my basement, well there just is no way.

Since these boxes are empty, I can hear you all shout,  
Why keep them around? Why not throw them all out?  
Well here is the fear that I live with each day,  
That compels me to keep on collecting this way.

What if something should fail and be sent back for repair,  
What would I do if the right box isn't there?  
I never could handle the pain and the stress,  
Of not being able to ship U.P.S.

But I now have the answer to this worrisome plight,  
And it came from my spouse, as she told me last night.  
"The solution is easy and plain as can be,  
Get rid of those boxes, it's those cartons or me".

The Swap Shop: For Sale - I

To list items:

VE3NCF (146.76) Tuesdays 8 pm,  
OR Call Keith (VE3DKJ) 529-1603 or Ralph (VE3BYM) 388-6146,  
OR leave message on the VE3DC Packet BBS (145.590 MHz).

VE3CIY JOHN, 628 4814

o 40' TOWER, NEW PAINT \$40 WITH STAINLESS STEEL GUYS \$60

VE3NYX RENZO, 521 1064

o CW BUG \$20

VE3ANW ROBERT, 574 3554

o HEATHKIT XTAL CONTROLLED HANDIE, 5 XTALS, 1.5 W, NEW NICADS, CHARGER, MANUALS \$100neg

BILL, 389 7847 or 574 3202

o REALISTIC NAVAHO 40ch AM MOBILE/BASE CB RECEIVER, WITH 5/8 MAG MOUNT, PORTABLE ANTENNA, MIKE \$75

VE3UDX RAY, 416 688 0130

o LEADER LBO-310A SCOPE, SINGLE TRACE, LA-31 HAM ADAPTOR WITH MANUAL \$140neg

o KENWOOD HC-10 WORLD CLOCK WITH MANUAL \$115

o KLM 11el 6M BEAM, WITH BALUN \$150

o AZDEN 2M RIG PCS2000 25/5W, MOBILE BRACKET, MANUAL \$220or offer

VE3DJG MIKE, 416 751 0438

o BEARCAT 55XLT HANDHELD SCANNER, 10 BAND, 10ch, BRAND NEW IN BOX \$125

o TWO ROTORS WITH CONTROLS, LIGHT DUTY TV TYPE \$35ea

VE3MWD SERAFINO 662 4526

o NC-15 QUICK DESK CHARGER \$130

o PC COMBO SOFTWARE, COMMUNICATIONS PACKAGE FOR KAM INTERFACE RITTY, AMTOR, WEFAX \$25

o KENWOOD TS680 HF WITH 6M \$1000

o HEATHKIT VTVM WITH RF PROBE, NEW FACE, NEW TUBES, XCELLENT CONDITION \$25

VE3DSP GLEN, 385 8478

o YAESU FT727R DUAL BAND HANDHELD \$325neg

VE3DOU PETER, 333 0714

o FT101E XCEIVER, FV101B VFO, YO100 SCOPE, MATCHING PHONE PATCH DESK MIKE, ALL MANUALS \$1000

o MICRO DOT CW TERMINAL, MANUAL \$300

I'VE GOT THE IRC BLUES

I went into the corner post office/stationery store the other day to exchange ten I.R.C.'s (International Reply Coupons) for stamps. The clerk looked them (and me) over very carefully. One of the coupons was dated 1981, with a U.S. originating post office rubber stamp, and a selling price of 42 cents. The clerk announced that, since it was from the U.S., I was only entitled to a 45 cent stamp, and then only if I paid the "extra" 3 cent difference from the selling price. A phone call to the Canada Post Customer Service, by her, satisfied her that this is how to deal with that particular I.R.C., and told me that I had better cash in any old coupons as there was a ten year expiry date. I took 18 39 cent stamps for the remaining nine coupons, and left.

Having plenty of other more profitable ways to spend my time that day, rather than going after a few cents, of course I decided to pursue the matter.

At first, the customer representative at the 1-800-265-3416 Canada Post customer information number seemed unclear as to the rules governing I.R.C.'s, and promised to have her supervisor call me back. The supervisor didn't call, but the original contact person did, and after many questions and much discussion, I determined that:

- a) there is no expiry date for I.R.C.'s
- b) regardless of country of origin, they are redeemable for 78 cents postage. Source: Canada Postal Guide Part II, ver. 07-90 section 106.3, or 206.4.

Armed with this information, and a promise from Yvonne of Canada Post to back me up, I returned to the corner store cum post office. This time, the clerk told me it wasn't worth arguing over, and gave me a 78 cent stamp.

Now, if I can only find a regulation governing Postal Employee Attitudes.

INTERNATIONAL REPLY COUPONS:

Since not many of us have stamps for rare DX countries, and yet want to make it easier for that DX op to send us his prized QSL card by making sure his postage is paid, many hams send IRC's. These coupons are redeemable for stamps in the DX op's home country, and thus our problem of buying stamps for a foreign country is solved. Many rare DX'ers and DX managers receive thousands of IRC's, and are willing to sell them at a discount - I think 50 cents is the cheapest I've seen. They cost over a dollar at the Post Office. Keep an eye out at hamfests, or ask an avid DX'er where to get them. Friendly Post Offices will redeem them in stamp denominations of your choice - I have exchanged one IRC for 78 one cent stamps and five IRC's for 78 five cent stamps in the past. It may be valuable to reproduce the exact definitions in the Canadian Postal Guide Part II here. Every Post Office and Substation has a copy of this guide, so there is no excuse for them not to know how to deal with them.

NICK, 696 8020 TORONTO  
IBM COMPATIBLE 286 AT, 640K RAM, MATH COPROCESSOR, 32MB HD, 1.2MB FLOPPY, COLOR MONITOR, PRINTER, 1200 BAUD INT MODEM, MICROSOFT MOUSE, SOME MANUALS \$1450 NEG

VE3DKJ KEITH, 529 1603  
O ABOUT 20 "AHOY" AND 20 "COMPUTE" MAGAZINES- COMMODORE ORIENTED \$FREE

FROM THE PRESIDENT

AT THE OCTOBER MEETING, FRANK GUE VE3LFC GAVE AN EXCELLENT TALK ON EMERGENCY PREPAREDNESS AS RELATED TO THE AMATEUR RESPONSIBILITY TO PROVIDE A PUBLIC SERVICE. AS AN EXAMPLE HE SHOWED THE EMERGENCY KIT AND THE "FATCH ANYTHING TO ANYTHING" BOX THAT HE HAD MADE. THE LATTER IS AN UPDATE TO THE WIRING DIAGRAM IN THE MAY 1989 BULLETIN.

EMERGENCY PREPAREDNESS WAS DISCUSSED AT THE FOLLOWING EXECUTIVE MEETING. MORE OF THAT LATER.

WELCOME TO RECENT NEW MEMBERS:

- BILL WATSON VE3WJW
  - LAVE BRUTON VE3LBN
  - RON HAWKES & RUTH VE3LNB
  - WARD GILSON VE3PFC
  - PETER WALTON VE3PEZ
  - RANDOLPH ERINGHAM VE3RAX
  - GREG WOOD VE3WAG
  - RICHARD GILLESPIE VE3RPS
- CONGRATULATIONS TO NEW AMATEURS  
INA HOLLAND VE3KIC  
JERRY JOHNSON VE3JGJ

*Handwritten notes:*  
W. J. Robinson  
x  
R. W. W.  
H. J. H.  
M. J. J.  
S. J. J.  
N. J. J.



Fred J. Robinson  
Associate Broker



Royal LePage Real Estate Services Ltd.

VE3GCP

25 YEARS CONTINUOUS SERVICE TO H.A.R.C.  
18 YEARS AS A HAMILTON & AREA REALTOR  
PHONE: OFFICE 387-2424, RES. 575-5197

## THE HAMILTON AMATEUR RADIO CLUB

BOX 253 Hamilton Ontario Canada L8N 3C8.

### CLUB MEETINGS:

8:00pm on the 3rd Wednesday of each month except for July & August (special arrangements are often made for the December meeting as well), in the Nash Auditorium, Chedoke Hospital. Non-members & friends are welcome - coffee and donuts on the house!

### EXECUTIVE:

Meets at 1930 on the fourth Wednesday of the month, except June & July, in the Radio Room, Red Cross, 400 King Street East.

### STATION:

An emergency radio station is maintained in the RED CROSS, HAMILTON BRANCH (400 King East).

### MEMBERSHIP:

\$25.00 per year with a common renewal date of September 1. Included is a subscription to the club bulletin. Additional Family Memberships (no bulletin) \$1.

### EDUCATION:

Informal meetings may be held in the Radio Room, Red Cross Building 400 King St East to help those who want to take their Amateur Licencing tests. Call Bernie, VE3EKY, for more information.

### REPEATER:

VE3NCF, Located on the Hamilton escarpment it is available for use by any amateur. Input: 146.16 Mhz. Output: 146.76 MHz. Part of the VE3RPT Link system. Contact a member of the Club Executive for information concerning Emergency use, Autopatch, Mail-boxes, Links etc.

### FIELD-DAY:

HARC operates a multi-station site during Field-Day. Contact chairman Cliff Toohar for information. His number can be found on the front page.

### SWAP-NET:

Every Tuesday at 8.00 pm on VE3NCF (146.76/16) except during July & August. Contact Keith, VE3DKJ if you have items to buy or sell. Swap Shop listings are also available on the club's packet bulletin board station VE3DC operated by VE3JSJ on 145.590 FM.

### FLEA-MARKET:

Held during September each year at the Ancaster Fair Grounds. Note that the flea market has both indoor and outdoor sales facilities. Call to reserve tables/power.

### BULLETIN:

"The Hamilton Amateur", the official news bulletin of the club, is published 10 times a year and sent to all full club members (family members share a bulletin) during the first 2 weeks of the month (except July and August).

## FROM THE BULLETIN BOARDS - I

### HR BULLETIN 36 (PACKET CRLE036) FROM CRRL, LONDON, ONTARIO, 1990 DECEMBER 2, TO ALL RADIO AMATEURS

#### Item 1:

Two weeks ago, we reported that an amateur in western Canada was the latest to experience problems with DOC's new Client Procedures Circular, CPC-2-0-03, Municipal Consultation on Non-Broadcasting Antennas and Antenna Supporting Structures. Over two years ago, the amateur erected a tower, but his neighbours continued to complain. Early in October, local DOC officials informed the amateur that he would have to make peace with his neighbours by December 17, or local DOC officials would invoke the terms of the CPC and render a decision about the tower, a decision that might not be favourable to the amateur. CRRL was certain that the CPC was never intended to be applied to pre-existing towers, and intervened in the case by contacting DOC Ottawa. Latest word is that an understanding has now been reached, and that the amateur will be able to keep his tower, no conditions attached.

#### Item 2:

Several short items from all over: South of the border, a Court of Appeals in Washington, DC, is hearing arguments from ARRL as to why the 1988 FCC decision to reallocate 220-222 MHz to the Land Mobile Service should be overturned. New Zealand amateurs have been granted access to a new experimental band at 160-190 kHz. However, amateurs are allowed only 5 watts ERP, and they must operate on a shared non-interference basis with other users of the band. Listen for Royal Omani Radio Society station A43SR/MM aboard the yacht Fulk A-Salamah as it retraces the Silk Road maritime route from Venice, Italy, to Osaka, Japan. A special award is available for working this station on two different bands or using two different modes. Congratulations to Dave Blaschke, W5UN, who recently worked VS6B1 to complete the world's first moonbounce 2-metre DXCC. AR

### COMING EVENTS TO ACCOMPANY 1990 BULLETIN 36:

ARRL Straight Key Night  
ARRL January VHF Sweepstakes  
NPARC (St. Catharines) Big Event

December 31-January 1  
January 19-20  
February 2

73, DE VE3GRO @ VE3GYQ, CRRL, BOX 7009, STATION E, LONDON, ON N5Y 4J9