

THE HAMILTON AMATEUR

February 1988

(Established 1932)

**BOX 253, Hamilton,
Ontario, Canada L8N 3C8.**

The Hamilton Amateur Radio Club meets at 8:00pm on the 3rd Wednesday of each month except for July & August. The location is the Nash Auditorium, in the Chedoke Hospital grounds, Hamilton. Non-members & friends are welcome.

Membership fees are \$20.00 per year with a common renewal date of January 1. Included is a subscription to the club bulletin. Additional Family Memberships (no bulletin) are \$1 for each person.

The VE3NCF Repeater is owned and operated by the Hamilton Amateur Radio Club. Located on the Hamilton escarpment it is available for use by any amateur.

Input: 146.16Mhz. **Output:** 146.76 MHz.

The Swap Net is held on VE3NCF every Tuesday at 8.00 pm except during July & August.

PRESIDENT	:	Everett Englert	VE3OQX	578-2458
PAST PRESIDENT	:	Gordon Barber	VE3AAH	383-9161
1st VICE-PRESIDENT	:	Dave Rypma	VE3HTC	689-3014
2nd VICE-PRESIDENT	:	Jim Walsh	VE3SON	689-6839
SECRETARY	:	Wayne Staat	VE3LWD	561-2253
TREASURER	:	Paul Hazen	VE3NYC	664-5247
MEMBERSHIP	:	Gordon E. Murray	VE3JSJ	575-3647
AWARDS & CONTESTS	:	Bernie Granby	VE3EKY	527-7175
CLUB HISTORIAN	:	George Olenick	VE3BLG	383-7338
CLUB PROPERTY	:	Bill McCaslin	VE3ARX	634-5190
BULLETIN EDITOR	:	Jim Walsh	VE3SON	689-6839
.. assisted by	:	Gordon E Murray	VE3JSJ	575-3647
EDUCATION	:	Glen Gibson	VE3FHQ	385-2786
EMERGENCY SERVICES	:	Gordon E Murray	VE3JSJ	575-3647
FLEA MARKET	:	Paul Hazen	VE3NYC	664-5247
HEALTH & WELFARE	:	Stan Bolibruch	VE3GFE	528-4002
PROGRAMS	:	Paul Hazen	VE3NYC	664-5247
PUBLIC SERVICE	:	Fred Robinson	VE3GCP	575-5197
PUBLICITY	:	Fred Robinson	VE3GCP	575-5197
REFRESHMENTS	:			
REPEATER	:	Glenn Simpson	VE3DSP	385-8478
SWAP NET CONTROL	:	Ralph Tufts	VE3BYM	388-6146
TECHNICAL	:	Mark Gibson	VE3MWH	389-4308
TECHNICAL	:	Paul Fleck	VE3HTF	
VE3DC LICENCEE	:	Glenn Gibson	VE3FHQ	385-2786
VE3NCF LICENCEE	:	Glenn Simpson	VE3DSP	385-8478
VE3RCB LICENCEE	:	John Kassay	VE3FDK	385-0422

February 1988 Meeting

THE HAMILTON AMATEUR RADIO CLUB

Date: February 17, 1988
Time: 8 O'Clock P.M.
Place: Nash Auditorium, Chedoke Hospital
Topic: Paul, VE3NYC, has promised an interesting surprise.

////////////////

THE PRESIDENT'S MESSAGE

The January meeting was well attended with increased interest in the club evident by the many new members and visitors. The membership and directors join in saying "Welcome" to all and may your association with the Hamilton Amateur Radio Club be long and enjoyable.

The programs throughout the coming year will as near as possible be directed to encourage as many as possible to attend the meetings. If you have any suggestions please drop a note to Paul VE3NYC, Amateur radio and technical topics pertinent to amateur radio preferred.

The Auditor's Report submitted at the January meeting was prepared by Bernie Granby VE3EKY. We thank you Bernie for a fine job in preparing the audit. Credit also to Bob Wilson VE3CIB for an excellent bookkeeping job.

Increased activity in club in the past years show no sign of slowing down in the year to come. Two new filters have been bought for the repeater VE3NCF and Mike Spenuk VE3JTQ is hard at work removing the RF "hash" from the repeater. We thank you Mike for the many hours and your technical expertise in making our repeater one of the best.

Increased association with youth groups, education for new amateurs and upgrading to advanced status, field day, the flea market, and emergency communications show increased activity in the year to come.

A vote of thanks to our Membership Director Gord Murray VE3JSJ for preparing the membership lists.

73's Ev. VE3OQX

Welcome to the following new members: VE3HMB Harvey McIntyre, VE3KTC Ralph Ronza, VE3MST Tony Bolkland, VE3NCS Mike Flatt, VE3PNQ Garry McCallum, VE3PSQ Charles Gordon, VE3BLT George Pierce, VE3NYX Renzo Conz, VE3OQG Bob Matheson, VE3MWG Roland Norton, VE3OQZ Al Thachuk, VE3DKJ Keith Johnson, VE3 MIL N. Millwood, and the following SWL's John Stonehill, Bob Mewman, Carl Froman. Apologies to Konrad Schmoll VE3SCH for having his call wrong in the last news letter.
Late flash add Kenneth Mangaroo VE3NCM.

History of the Club VHF Repeater

The idea of the club repeater was first suggested in the late sixties. Through the efforts of two members, the necessary equipment was obtained. Putting a repeater on the air in those early days of repeaters was not without its problems: What frequency should be used? Where would it be located? Through the auspices of the technical committee of the Toronto FM Society the repeater was assigned to 146.16/.76 MHz by the newly formed Southern Ontario and Western New York Repeater Council.

The Red Cross Building in downtown Hamilton was selected as the original home of the repeater as it was the club meeting place. The formal announcement that the station was on the air was made through a demonstration at the September 1969 club meeting. Within a month VE3DRW--the original callsign of the H.A.R.C. repeater--had an operating autopatch (one of the first in Canada). The repeater was composed of a General Electric Progress line transmitter and receiver and a Sinclair Hybrid-ring duplexer. This transmitter remained in service for over the first 10 years of VE3DRW's operation.

In the fall of 1970, the repeater was moved to its present location on top of the escarpment at Hamilton. The autopatch fell victim to the move but this was inevitable as the D.O.C. had issued interim guidelines preventing autopatch operation in connection with repeaters.

The originally assigned frequency of 16/76 was found to interfere with simplex operation in Toronto and Buffalo. Two powerful voices at the repeater council were successful in swaying a majority vote to move VE3DRW's output to 79. Although this was a backward step in the repeater's development the club conformed with the vote and in July of 1971 the output moved to 79 giving VE3DRW a non-standard pair. Eventually sanity returned to the council and VE3DRW returned to 16/76 in September 1974. In 1976, the wideband receiver was removed and a narrowband receiver installed.

On June 30, 1981, the callsign of the repeater changed to VE3NCF which it continues to use today. In December of 1981 the old tube gear was replaced with a fully solid-state Spectrum Communications SCR 1000. The following year a bandpass filter was installed in the receiver line--greater spectrum usage and increasing site noise was creating difficulties. In 1983, the necessary equipment was installed so that the repeater could function without commercial power.

During the summer of 1985, an intelligent controller was installed, allowing remote control, telemetry capabilities and making VE3NCF more readily expandable in the future. In November of 1986, VE3NCF joined the IFM link network creating the ability to communicate throughout much of Ontario using low power handheld transceivers.

Currently, the repeater transmitter is running 26 watts into a hybrid-ring duplexer which has a measured insertion loss of 1.7 dB, through feedline (additional 1 dB loss) to a 3 dBd omnidirectional antenna at 260 feet above ground level (810 AMSL).

Update:

Projects completed over the past year include revamping the AC power system by providing a fused line into the equipment. A remote controlled relay was installed on the AC power line to enable remote testing of the emergency back-up power system. The relay has been installed so that the mains are normally connected: fail-on mode. Incidentally, the repeater runs off the backup supply during the ARES net (Tuesday 730 - 800 pm).

Additionally, during a power failure at the repeater site, backup power is automatically engaged and the controller changes the courtesy tone to "Emergency Power". If you hear this courtesy tone, unless otherwise instructed, you should assume a power failure and restrict your transmissions accordingly.

Additional telemetry capabilities have been recently added and will be available for the curious by March. Included: Quieting level meter readback, relative exciter and final power output, exciter and final PA collector current, autopatch counter.

A software glitch has prevented use of autodial banks 1 and 2 (locations 100 - 249). This problem will hopefully be resolved shortly.

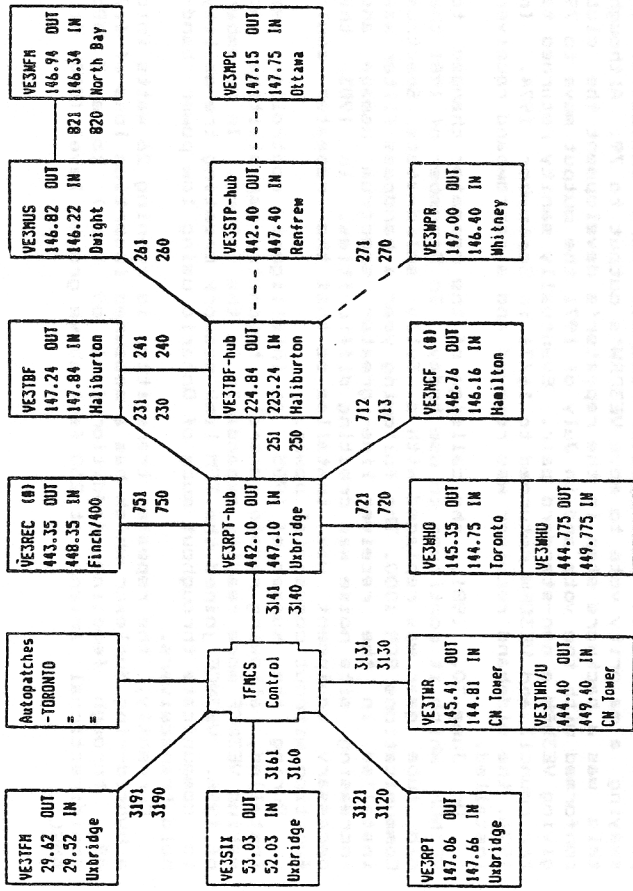
Improvements to the receiver have been made during the last week of January increasing the selectivity of the receiver. I writing this during the same time frame so I can't comment on the improvements now. I hope the receiver is working better.

Enclosed is the new link map. Note the link into North Bay and the future link into Ottawa which should be operational sometime this year. Please note that as the IFMCS link network is using 820/821 for its North Bay link, we will change our Mailbox prefix from B to 80 as of 0000 EST on 1 March 1988.

Timer settings for the repeater: repeater timeout 4 minutes (long compared to most systems). Patch timeout is 5 minutes, but don't talk or listen longer than 60 seconds at a time because the activity timer will terminate the patch. If you're waiting or on hold, when you hear a warble tone, key your mic and you'll have another 60 seconds.

Remember that the link is not available Tuesdays between 730 and 930 pm, and Sundays between 800 and 1000 pm. The link will automatically close after 4 minutes of inactivity on the 2 meter receiver. Don't worry about the noise you hear when activating the link. Due to equipment failure, the substitute equipment that was placed into service operates full duplex and the analog audio switches in the controller have some leakage which causes the feedback. This problem will be fixed shortly.

The Big project under development during the past two years is Ardex. This major hardware/software undertaking will, among other things, provide some of the services that the link users have been waiting for. Next month I will present an overview of its operation and in subsequent months describe the details of the system.



USER INFORMATION CODES

3012	Tell Time 24hr clock
3013	Tell Date month,day
3014	Links Connected Here
3015	Exterior Temperature
3016	Shack Temperature (C)

ESTABLISHING AND CLEARING A LINK

1. Make sure the frequency is clear and announce your intention.
 2. Dial the destination link code. The on code usually ends with the digit 1. Add repeaters to the link as needed, identifying on each new repeater as added. Links to repeaters outside of the IFMCS micro-system must be made through VE3RPT hub.
 3. For repeaters listed with (8) (VE3MCF and VE3REC) a 8 must precede all codes after linking.
- Eq. To link from VE3RTH to VE3TBF dial 3191. To add VE3JX to a 3-way link, dial 3161. To clear VE3TBF from the link group, dial 3190. To clear yourself (VE3RTH) from then link, dial 3130.

EMERGENCY AUTOPATCH CODES (Region-A)

911	Metro Police (Toronto)
912	Metro Police (Toronto)
913	O P P (Downsview)
914	Peel Regional Police (Brampton)
915	York Regional Police (Scarley)
916	Durham Regional Police (Whitby)

EMERGENCY AUTOPATCH CODES (Region-B)

921	Reserved regional 911 () (Whitby)
923	O P P (Whitby)
926	Durham Regional Police (Oshawa)

Excerpts from CRRRL Bulletins 1 - 4 1988.

Most Canadian amateurs have received a mailing from the Canadian Call Directory which is, at present, sponsored by CRRRL. The names and addresses did not come from DOC but from an outside source and were made available only on the condition that they would not be copied, and go only to the company hired to prepare the mailing and not to the Canadian Amateur Call Directory or the CRRRL. CRRRL feels that it is important to produce an accurate Canadian Amateur Call Directory. Without such a directory, the accuracy of listings of Canadian amateurs in all callbooks will soon deteriorate. Complete your Directory Information Card and send it to the Canadian Amateur Call Directory, Box 56, ARVA, ON NOM 1C0.

CRRRL officials are scheduled to meet with DOC on February 20, to work on Restructuring the Amateur Service. There is a great deal of speculation that DOC may favour a four-tier licensing system with a no-code VHF-UHF entry-level licence and relaxed code and technical requirements throughout. Some 20 months ago CRRRL and CARF proposed a three-tier system with a no-code VHF-UHF Basic licence; a 7 w.p.m. Code Endorsement would add CW privileges on HF bands and phone privileges on 10 metres; and a full-privileged Advanced licence with 12 w.p.m. code and more difficult technical requirements.

The appeal in the Jack Ravenscroft case has been partially successful. The original judgement was to be judged on its legal merits alone. At the moment, no written record of the judgement is available. However, the following points are believed to be correct: 1) The injunction banning Jack from transmitting is lifted and Jack may return to the air. 2) However, Jack must, within 90 days, arrange for modifications to his neighbour's equipment, modifications that will suppress interference resulting from his transmissions. "to a standard approved by DOC". Failing this, upon application to a district court judge, the injunction is reinstated. 3) If Jack's neighbour refuses to allow such modifications, the injunction is lifted permanently. 4) The award to Jack's neighbour is increased from \$2500 to \$5000. This bulletin was prepared only hours after the judgement was handed down. It is probably dangerous to speculate on what this judgement means for the Canadian Amateur Radio community. However, the judgement seems to imply that: a) Solving an Amateur Radio interference problem is a responsibility that must be shared by both the radio amateur and those experiencing interference. The amateur must be prepared to arrange for modifications to susceptible equipment, modifications that will suppress the interference. Those experiencing the interference must be prepared to accept these modifications. If they do not, the amateur may continue operating. b) DOC cannot avoid becoming involved in these matters, even if the interference is to non-radio equipment.

THE ORDER OF MERIT

1. The "Order of Merit" shall be awarded according to the following rules.
2. The "Order of Merit" is awarded by the Hamilton Amateur Radio Club, hereafter called "The Club", in recognition of distinguished service, in the realm of Amateur Radio.
3. An award committee consisting of not less than three, nor more than five past presidents of the club, who are members in good standing, shall be appointed by the executive committee of the club. Appointments shall be for a period of three years and, reappointments are permitted. Such committee to appoint their own chairman.
4. Persons eligible to be nominated for this award shall satisfy rules 5 and 6.
5. The person shall be a member or past member of the club.
6. The person shall have performed a service to amateur radio that:
 - a. - is not that normally expected for any appointment, or elected position, or office; or...
 - b. - has prompted, and has resulted in greater interest and enjoyment from amateur radio for the members of the club, or any allied organization, which is worthy of recognition by the club.
7. Any club member may nominate a person (in writing) for this award, provided that the nomination:
 - a. States the service performed by the nominated person that warrants the nomination; and...
 - b. Is signed by three current club members.
8. The nominations shall be forwarded to the award committee.
9. A nomination shall be deemed acceptable for the award provided that not more than one member of the award committee abstains from voting, or casts a negative vote. The decision of the committee shall be final.
10. Awards will not be awarded on an annual or fixed time basis, but according to the frequency that such truly distinguished services are performed, or brought to the attention of the club.
11. Persons awarded the "Order of Merit" shall have their name and call sign engraved upon the "Order of Merit" plaque.
12. The award committee shall prepare and keep on record the citation for each award.

ORDER OF MERIT NOMINATION FORM

We would like to make presentations for the "Order of Merit" award at the March meeting. If you have someone in mind for this award, please complete this nomination form, and mail it to the club: P.O. Box 253, Hamilton, Ontario L8N 3C8, by the end of February so the judges may make their decision and have the award engraved in time for the March meeting.

To: AWARDS COMMITTEE. DATE _____

I Nominate _____ VE _____

Service Performed: _____

Signed _____ Sponsor _____

Co-Sponsor 1 _____ 2 _____

Dates to remember:
TODAY, Renew your membership if you have no done so, please.

- Feb 17 Lead line for entries to Order of the Gavel CW Operating Award.
- Feb 20 Skywide ARC Flea Market, Weston.
- Mar 5 Peel ARC Flea Market, Brampton.
- April 5 Durham Region Flea Market, Ajax.
- June 25 & 26 Field Day, Paul VE3HTF is still looking for volunteers.
- Oct 25 HARC Flea Market.

Fiore Electric

FIRE ALARM AND INTERCOM
SALES - SERVICE & INSTALLATIONS

24 HOUR SERVICE

93 Country Club Drive
Hamilton, Ontario L8K 5W4

Phone: 560-1312



THE SWAP SHOP



SWAP NET CONTROL: RALPH TUFTS VE3BYM
TUESDAYS AT 8:00 PM LOCAL TIME (EXCEPT JULY & AUGUST)
ON VE3NCF 146.160/146.760 MHZ

- VE3DUF- Bob 637-6427 Burlington. Kenwood TH2IAT 2m c/w spkr mike HMC-I Touchtone and spare bat. case, man. \$75.00
- VE3BBB- Paul I-5I9-648-243I Kitchener. TR3 with match spkr./p.s. 200.00
VIC 20 with games neg. 8.00
- VE3NCN- Bert 627-0573 West Flamborough. Data set. 20.00
- VE3OCQ- Bob 544-5661 Ask for Paul after 6:30 p.m. Hamilton.
Commodore 64 with dual disk drive, nec amber monitor, bus card for additional language, telephone modem, dot matrix printer 160 cps, 2 deluxe joysticks, several manuals. \$2000.00 in software included. \$4000. value for 1500.00
- VE3INH- John I-4I6-62I-7433 Etobicoke.
Yaesu FT880 CAT with gen. coverage kit, FRB-IMan. 1800.00
- VE3DJG- Mike 75I-0438 88 Column printer for VIC 20 or 64. 100.00

W A N T E D . . . W A N T E D W A N T E D

- VE3EXR- SYD 545-0539 Hamilton. SXI90 rcvr
- VE3BBB- Paul I-5I9-648-243I. Kitchener. SPI20 for TSI20 xcvr.
- VE3NXV- Jerry 623-4494 Cambridge. Noise bridge.
- VE3GGY- Herb 892-2304 Fonthill. Model 645 Ten Tec keyer.
- VE3NCD- Harold I-4I6-685-6924. Charger Model NC7 or NC8 for 208R.
- VE3PUI- Kirk 389-8246. Hamilton. VIC 20.
- VE3HDA- Tony I-5I9-62I-5236. DG5 Digital Freq. counter.

de Ralph VE3BYM.

Durabeam Antennas & Towers
5 Thorpe Street, Dundas, Ont.
L9HIK2 Phone 416-628-0822

2 & 6 meter beams, superior quality, built by hams for hams.

- 3 element 2 meter beam \$25.00
- 5 element 2 meter beam \$32.00
- 10 element 2 meter beam \$65.00
- 300 ohm feed
- Gamma match extra
- 5 element 6 meter beam with 300 ohm feed \$55.00
- with 75 ohm feed \$69.00
- wide space available upon request

Towers, crank up, self supporting, middle section I6 gauge,
10 feet section, 2½ inch step \$40.00
Top section CDR plate welded, thrust bearing plate welded \$69.00

Ask us about our top quality FM and TV antennas at factory prices.
Call Ray, Jim VE3FBU or Martin VE3HYL at 416-628-0822.



LIFE, AUTO, FIRE, & HAM RIGS,
ANTENNAS AND TOWERS

Call Gerry at VE3 HLI,
632-5296 or 528-7888

593 Brant St.
Burlington Ont.