

HAMILTON AMATEUR RADIO CLUB INC. P.O. BOX 253 HAMILTON, ONTARIO L8N 3C8

# THE HAMILTON AMATEUR





RICK DANBY 6 CLINTON ST HAMILTON, ONT

## THE HAMILTON AMATEUR RADIO CLUB INC.

Established 1932

P.O. Box 253, Hamilton, Ontario, Canada. L8N 3C8

#### 1986 OFFICERS & DIRECTORS

PRESIDENT PAST PRESIDENT 1st VICE-PRESIDENT 2nd VICE-PRESIDENT SECRETARY TREASURER MEMBERSHIP	:	Glenn Gibson Fred Spring Boris Auguste Robert Wilson Everet Englert Gordon Barber Michael Spenuk	VE3FHQ VE3ITQ VE3ITY VE3CIB VE3OQX VE3AAH VE3JTQ	385-2786 627-3375 388-6200 383-2054 578-2458 383-9161 389-1760
	COMMIT	TTEE CHAIRMEN & ASSO	OCT AMES	
	COMMI	ITEE CHAIRMEN & ASS	JOINIES	
AWARDS & CONTESTS CLUB HISTORIAN CLUB PROPERTY EDITOR EDUCATION EMERGENCY SERVICES HEALTH & WELFARE PROGRAMS PUBLIC SERVICE PUBLICITY		Norman Smith Ed Charlesworth Bill McCaslin Philip King  Jack Heywood Stan Bolibruch Boris Auguste Fiore Manga	VE3BK VE3ZF VE3ARX VE3OII VE3JTR VE3GFE VE3ITY VE3OQG	385-5661 634-5190 634-5190 545-9232 689-4406 528-4002 388-6200 560-6329
REFRESHMENTS REPEATER SWAP NET CONTROL TECHNICAL VE3DC LICENCEE VE3NCF LICENCEE VE3RCB LICENCEE		Glenn Simpson Ralph Tufts Mark Gibson Glenn Gibson Ed Charlesworth John Kassay	VE3DSP VE3BYM VE3MWH VE3FHQ VE3ZF VE3FDK	385-8478 388-6146 389-4308 385-2786 634-2520 385-0422

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

Membership fees are \$20.00 per annum with a common renewal date of January 1st. Included is a subscription to the club bulletin. Family memberships are available at \$1.00 for each additional person.

VE3NCF Repeater is owned and operated by The Hamilton Amateur Radio Club. It is located on the Hamilton escarpment and is available for use by any amateur within range. Input is 146.160 MHz Output is 146.760 MHz

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

#### NOVEMBER 1986 MEETING THE HAMILTON AMATEUR RADIO CLUB

DATE: Wednesday, November 19, 1986

TIME: 8 o'elock P.M.

PLACE: Nash Auditorium, Chedoke Hospital

SPEAKER: S. Ribee, District Manager

TOPIC: Department of Communications

#### THE PRESIDENT'S MESSAGE

We had a good turnout for our October meeting to hear Paul Fleck speak on cellular radio-telephone. Good show, Paul! Hope you soon have the amateur exams behind you.

The 440 mHz VE3RPT link crystal and the power supply built by Don OCY are now on hand for installation on VE3NCF. We appreciate Don's building job and materials to help improve operations.

A big thank-you to VE3NKW John and the Committee for the fine job on the flea market, also to all who helped in the operation on the big day to make it a success. We have reserved Merrit Hall for 1987 again as we received several compliments on the good parking, etc. Congratulations to Pete. VE3FEZ who won the major surprise, a hand held.

VE3ZF Ed will be our liason with Chedoke Hospital and will help maintain our presence and continued use of the Nash Auditorium.

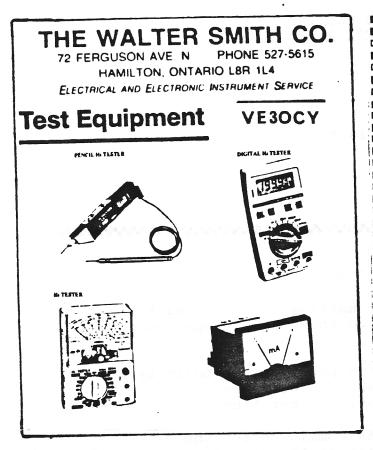
The version 3 software for our RC 850 controller is now installed. We will have its full use when we also obtain an IC to enlarge our mail box and autodial capabilities.

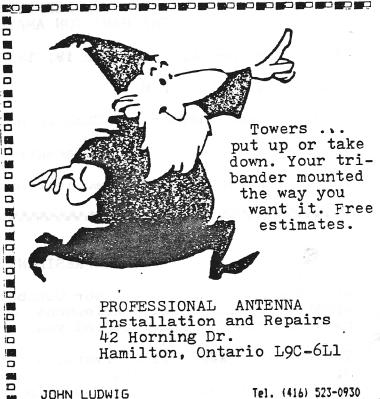
Check 14.121 mHz at 11:45 UTC for the Maritime Net from Mississauga.

Hope to see a good turnout to hear Mr. S. Ribee, District Manager of the D.O.C. speaking at our November General Meeting. Get your questions ready! At this meeting we elect our new executive for 1987. Don OCY is our election chairman.

New mailbox/autodial numbers: 74 JSJ Gord 76 LWD Wayne

73's Glenn, VE3FHQ





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LIFE, AUTO, FIRE, & HAM RIGS,

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Call Gerry at VE3 HL1,

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593 Brant St. Burlington Ont. Get those projects off to a good start, build them on a B-C-D Electronics Printed Circuit board foundation. We manufacture boards from the ARRL Handbook, ETI magazine, also Radio Electronics, Elektor, etc magazines. Send for free list. No quantity too small, no set-up charges like the big guys. Try us you'll be pleasantly surprised.

All boards are GlO Epoxy fibreglass coated with liquid flux. We also manufacture to your specs and schematics.

Noise Bridge ......\$2.00
Mosfet Dipmeter ....... 1.40
FET Voltmeter ....... 1.50
Operating Impedance Bridge 2.00

# **B-C-D ELECTRONICS**

P.O. BOX 6326 STA. F. HAMILTON, ONTARIO L9C 6L9

MANY THANK TO BORIS VESITY
FOR GETTING THE ADS

#### NEWS & EVENTS

The Ontario Division CNIB Amateur Radio Program is requesting your club's support in promoting Amateur Radio for the blind. They are looking for volunteers to render assistance to new, sightless amateurs to get his or her station on the air. In response to the Ontario Division's request, the HARC has written to the Hamilton CNIB office asking them to forward a list of those people who may be interested. Your executive will decide what action to take when they hear back from them.

\*\*\*\*

GO TO SIR JOHN A THE OR THURS AFTER DEC. 2 Bob Sinclair VE3DFS will be the instructor on the Amateur Radio course for the Board of Education starting in January. Help is needed to spread the word as the class will be dependent upon a minimum of 12 students. If enough people are enrolled, the class will be held at John A. McDonald highschool on Tuesday evenings. Candidates should apply to the Board of Education at 527-5092.

Julius VE3FYY has been monitoring 14.275 mHz following the El Salvidor disaster. Julius can be reached at 945-3244 (Grimsby) Any others? The person to contact in Hamilton for traffic is Jose at 523-7356.

#### \*\*\*\*

The appeal hearing date for the Jack Ravenscroft case should be announced any day now. A verdict should be reached sometime next summer. The importance a case such as this one and the ramifications for all licensed transmitter owners may well cause a considerable delay to final judgement. Both lawyers will have a day and a half to argue their case before 3 Appeal Court judges in Osgoode Hall in Toronto.

Current total donations to the JRSD Fund approximate \$55,000. and have come from almost 1300 separate donors. Response to an editorial in QST and numerous volunteer efforts at flea markets and commercial raffles have resulted in donations and letters from all across the U.S.A., Australia, Finland, Sweden, Holland and the U.K.

-CARF News Service

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#### FROM CRRL NEWS:

Here are the top ten Canadian scores in this years Field Day, courtesy of ARRL:

	points				points
1	VE3NAR Nortown ARC 13720	6	VE7SAR	Surrey ARC	5300
2	VE3SPC S. Pickering ARC 7694	7	VE2CBS	Sorel-Tracy ARG	5050
3	VE3LON London ARC 6108	8	VE7CVA	Cowichan ARC	4722
4	VE3XD Colgan-BramleaARC 5830	8	VE1ND	Fredricton ARC	3904
5	VE3VM Niagara Pen. ARC 5634	10	VE6NQ	N Alberta ARC	3720
		10	VE3RC	Ottawa ARC	3720

FROM CRRL NEWS (cont.)
CRRL has become concerned about a new radionavigation system operating from the west end of Lake Ontario on or about 432 MHz. The frequency assignment appears to be legal. Amateurs use the 430-450 MHz band on a secondary basis. However, the assignment appears to have been made wiyhout due regard for potential interference. The wideband nature of the system's signals threatens weak-signal terrestial and EME communications near 432 MHz and satellite communications near 435 MHz. Also, amateur signals could inadvertently interfere with the system, creating possible danger for

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ships that rely on it. CRRL is persuing the matter closely.

Here's a challenge. Try working robot station IY4M on 28.196 MHz CW. When the beacon stops, send your call twice. If the robot hears you, you'll be rewarded with a signal report and greetings in English or one of several other languages.

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CRRL and CARF will jointly sponsor the National Amateur Radio Symposium to be held in Saskatoon next year in conjunction with the 1987 Saskatchewan Hamfest.

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The FCC has proposed that all transmitters in the United States, including amateur transmitters, be fitted with automatic identifiers that will send encoded callsigns whenever the transmitters are keyed. The Senate Judiciary Committee has approved an Electronic Communications Privacy Act that will make it illegal to monitor cellular radio, carphones, pagers and certain other radio signals.

\*\*\*\*

Jim DeZorzi VE3ZK, is organizing a cross-Canada packet radio network to assist with the distribution of the CRRL bulletins. If you'd like to be part of this network, contact Jim by packet radio, VE3ZK via VE3GYQ or write to him at 1047 Prince George Road, London Ontario N6H 4E2.

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In case you missed the change, the Honourable Flora McDonald is now Minister of Communications, replacing the Honourable Marcel Masse.

# COME ON OUT TO VOTE H.A.R.C. ELECTION '86

#### MEMBERSHIP CHAIRMAN'S REPORT

As of 1st October 1986 the H.A.R.C. consists of 112 members. A warm welcome to the following new members:

VE3ACA Jerry Hoblak VE3BKQ Ed Mohammed
VE3JTC Hal Niles VE3MVO Cecil Hayward
VE3POP Jim Walsh VE3PRM Don Dawson
VE3SJL Nick Spanjevic SWL Shane Watson

Finally, a late apology to our Secretary, Ev VE30QX. Our computer decided not to include Ev in the membership list.

73 & gl, Mike, VE3JTQ.

#### AWARDS & CONTESTS CHAIRMAN'S REPORT

Home brew night brought out two interesting entries. Bill VE30IZ and Ken VE30IN both submitted adjustable and regulated power supplies that show remarkable resourcefulness in scrounging for parts at flea markets and elsewhere. It was difficult to make a decision on the winner as both items were very well thought out. The slight edge went to Bill VE30IZ. Many thanks to both of you for demonstrating that the ham ingenuity is still around.

Thank you to the three judges who came forth willingly. These were Ralph VE3BYM, Don VE3OCY and Fiori VE3OQG.

Two other items were shown but were not entered in the contest. One was a CW paddle made from plastic and relay contacts and built using only a drill and a file and it worked well. This was shown by VE3FTD. The second item was a holder and charger for a hand held transceiver made from an electric shaver charger and used some springs from a ball point pen, a few adjustments with some resistors and it was ready to go. This was made up by Don VE3OCY, Thanks for bringing these in Don.

Don't forget your Art Ferguson Trophy nomination. The award will be presented at the November meeting. The nomination form from last month's bulletin must be in to the executive no later than November 19, 1986

73 Norm VE3BK

# CURRENTLY ASSIGNED MAILBOXES

00:ALL OPERATORS	20:VE3ITY	Boris	40:VE3ARX	Bill	60:VE3ITJ	Aranus
01:reserved	21:VE3JUC	Tom	41:VE3GFE	Stan	61:VESJTQ	Mike
02:reserved	22:VE3BOY	John	42:VE3FDM	Pete	62:VE3IUD	Jack
03:reserved	23:VE3FMS	Jack	43: VE3NYC	Paul	63:VE3JTC	Hal
04:reserved	24:VE30IZ	Bill	44:VE3NKZ	Ted	64:VE3DVV	John
05:reserved	25:VE30CD	Joe	45:VE3BK	Norm	65:VE3CYC	John
06:reserved	26:VE3OCW	Ted	46:VE3DSP	Glenn	66: VE3HNG	Al
07:reserved	27:		47:VE3FHB	Ken	67:VE3DOU	Peter
08:reserved	28:VE30IN	Ken	48:VE3FMT	Jim	68:VE3SJL	Nick
09:reserved	29:VE3BYM	Ralph	49:VE3FEZ	Pete	69:VE3BLG	George
10:	30:VE30CQ	Bob	50: VE30QG	Fiori	70:VE3FDK	John
11:VE3ZF _ Ed	31:VE3EGT	Les	51: VE3OCT	Doug	71:VE3FBU	Jim
12:VE3ITQ Fred	32: VE3NCN	Bert	52:VE3FHQ	Glenn	72:VE3MMH	Bob
13:VE3NKW John	33:VE3MWH	Mark	53:VE3OZY	Rick	73:VE3GCP	Fred
14:VE3OZG Hugh	34:VE3ANW	Robert	54:VE3PLI	Paul	74:VE3JSJ	Gord
15:VE3CNF John	35:VE3JUR	Dave	55:VE3FMG	Mike	75: <b>VE</b> 30CY	Don
16: VE3AAH Gordon	36:VE30II	Philip	56:VE3HTC	Dave	76:VE3LWD	Wayne
17:VE3OQX Ev	37:VE3RW	John	57:VE3EGL	Ken	77:VE3JTR	Jack
18:	38:		58:VE3HLI	Gerry	78:reserve	∍d
19:VE3EHL Ed	39:VE3EKY	Bernie	59:VE3IM	Tom	79:reserve	∍d

Here's a clip-and-save chart that will save you tota of time while helping you to put up a variety of antennas.

# An Antenna Length Chart

BY GEORGE I. WAGNER\*, K5KG

In the past few years I have had several opportunities to operate from a number of DX locations. In doing so, I have learned the importance of taking along the proper collection of tools, connectors, gadgets, and reference information to be able to make a quick repair or string up a needed antenna in an unfamiliar shack. Conversely, I have also learned the agony of lugging too much along, only to find it completely unnecessary and unused at the end of the trip.

The antenna length chart, which is the subject of this article, arose out of the need to have a convenient and ready reference, other than a weighty handbook, for measuring antenna lengths. This results from a number of experiences in trying to find a calculator, or a paper and pencil (typical) in the dark and late at night), inevitable debates over what constants to use in the calculations, and finally the need to convert from feet to meters when only a meter tape was available, or vice versa. On two separate occasions I have discovered 160 meter dipoles of totally wrong lengths, and on an expedition to OJØ in 1982, OHØRJ and I spent many hours calculating, cutting, and erecting 40 and 15 meter delta loops. This chart would have been a valuable asset in those circumstances.

This chart was developed after a brief reference to the various antenna handbooks in the shack, and a quick refresher on the current amateur frequencies, especially in the new 12, 15, and 30 meter WARC bands. The formulas used in the calculations, shown at the bottom of the chart, are based upon standard assumptions for wire antennas supported by end insulators.

The chart was developed using Visicalc (a registered trademark of VisiCorp), an electronic "spreadsheet" program on an Apple II + computer. However, any spreadsheet program on a personal computer could have been used to do the job.

	========	=======	n :::::::::::	NTENNA LENGTH	CHAK! BY KOKE			
REQUENCY		AVELENGTH	- FEET				- METERS	
(MHZ)	1/4	1/2	1/2+5%	FULL	1/4	1/2	1/2+5%	FUL
1.8	129.87	259.75	272.73	519.49	39.58	79.17	<b>83.</b> 12	158.3
1.825	128.09	256.19	269.00	512.38	. 39.04	78.68	81.99	156.1
1.85	126.36	252.73	265.36	505.45	38.51	77.63	80.88	154.4
1.9	123.64	246.08	258.38	492.15	37.56	75.00	78.75	150.6
3.5	66.79	133.58	140.26	267.17	29.36	46.71	42.75	81.4
3.6	64.94	129.87	136.37	259.75	19.79	39.58	41.56	79.1
3.7	63.18	126.36	132.68	252.73	19.26	38.51	46.44	77.0
3.8	61.52	123.64	129.19	246.08	18.75	37.56	39.38	77.9 75.9
3.9	59.94	119.88	125.88	239.77	18.27	36.54	38.37	73.0
4	58.44	116.89	122.73	233.77	17.81	35.63	37.41	71.2
7	33.40	66.79	70.13	133.58	19.18	26.36	21.37	46.7
7.05	33.16	66.32	69.63	132.64	10.11	26.21	21.22	
7.1	32.93	65.85	69.14	131.70	16.64	20.07	21.67	48.1
7.2		64.94	68.18	129.87	9.96			
7.3	32.02	64.65	67.25	128.09	9.76	19.79	26.78	39.5
10	23.38	46.75	49.89	93.51		19.52	25.56	39.
10.5	22.26	44.53	46.75	89.56	7.13	14.25	14.96	28.5
14	16.70	33.49	10.7		6.79	13.57	14.25	27.1
14.1	16.78	33.16	35.67	66.79	5.89	16.18	18.69	20.3
14.2		32.93	34.82	66.32	5.95	16.11	19.61	26.2
14.35	16.29	32.58	34.57	65.85	5.#2	10.64	18.54	26.6
18	12.99	25.97	27.27	65.16	4.97	9.93	16.43	19.8
18.5	12.64	25.27	26.54	51.95	3.96		8.31	15.8
21	11.13	22.26	23.38	50.55	3.85			
21.1	11.13	22.26		44.53	3.39	6.79	7.12	13.5
21.25	11.00	22.16	23.27	44.32	3.38	6.75	7.69	13.5
21.25	10.90	21.80	23.10	44.00	3.35	6.71	7.64	13.4
24.89	9.39		22.89	43.59	3.32	6.64	6.98	13.2
24.93	7.37 9.38	18.78	19.72	37.57	2.86	5.73	6.91	11.4
24.99		18.75	19.69	37.51	2.86	5.72	6.99	11.43
29.77	9.35	18.71	19.64	37.42	2.85	5.76	5.99	11.4
28.5	8.35	16.70	17.53	33.40	2.54	5.69	5.34	18.18
	8.26	16.41	17.23	32.81	2.50	5.00	5.25	10.6
9	8.96	16.12	16.93	32.24	2.46	4.91	5.16	9.83

(300 \* .95 \* .5 \* 3.281M/FT)/FREQ(MHZ)

Clip and save this chart for your records.

NOTE: 1/2 NAVELENGTH + 5% IS USED FOR INVERTED VEE ANTENNAS

467.54/FREQ (MHZ)

\*P.O. Box 4312, Houston, TX 77001

### KEEPING UP WITH THE GIRLS TNX BACK 1534ES CQ Q5T



"FOR THE TENTH TIME, YOU TUNE FOR A DIP!"



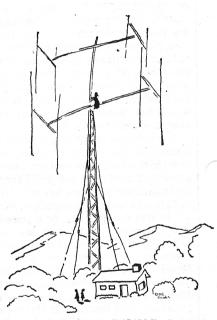


"And, Fred, you'll never guess who's finally got the bug and is working on some big secret project."



"Would you QRT, dear? It's time for my Paris sched with Raoul."

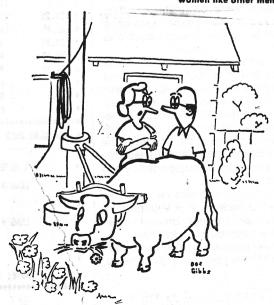
10



"Sometimes I almost wished he drank or chased women like other men."



"Well, Fred, I can't remember when I've had a more enjoyable QSO."



"Your rotator is eating my hyacinths again."

# PartI THE HEMILTON AMATEUR REDIO CLUB SWAP SHOP with Ralph VE3BYM

VE3FDK-	John- 385-0422. Hamilton.	
	Yaesu FT208R with charger & case-	325.00
VE3GFE_	Stan- 528-4002- Hamilton.	75,00
	Multi 7 2 Meter xcvr.	TOO 00
SWL-	Mrs. Wilson 385-427I. Hamilton	100.00
	KW 2000B with operating manual Don- 519-742-0103 Kitchener.	350.00
AD000H-	Trope our many with many ( )	
VE3WHB-	IC226 syn. xcvr. with manual. (as is) Bill-527-89II. Hamilton.	75.00
VED O O O O	SX-I90 receiver	I60.00
A #3000-	Bob- 68I-0400. Burlington.	
VES TOS	FRIOI Digital revr. with 2 meter band.	400.00
AROOT 4-	Mike- 389-1760 Hamilton.	
VESTOL-	MIRIGE BIO8 2M. All mode, Amp. 80 out; (builtiin preamp. Terry- 648-3II6. Burlington.	235.00
. 20 1 % 2 -	Control B/ widen monitor TOO OO SECTO	T.50.00
	Contrak B/w video monitor- IOO.OO, SB6IO monitor scope DIAWA CN63O swr/pwr. meter I4O to 450 mhz.	I50.00
	INFO-TECH N500 per teleture on unit isombound &	I30.00
VESITJ-	INFO-TECH N500 asr teletype cw unit keyboard & man. Arunas- 388-8658 HamiltonHewitt Packard pulse gen.	500.00
	TERMINET Model 1200 with RS:32 interface & man.	45.00
VE3BGH-	Len- 416-734-654I Welland.	160.00
20 8 20	RS232 switch RS26-I499 & manual	TOE OO
VE3ISZ-	Fred- 827-6824. Oakville.	125.00
	ASR teletype built in mode	50.00
VE3NKW-	John- 416-563-5046. Beamsville.	00.00
	FT50I with pwr. supply and manual.	525.00
	PANASONIC rovr. Model 4900, all band, all mode	500.00
VESMAH-	Tom- 549-653-9315. Cambridge.	
	ISOPOLE AEAI44 2meter vertical antenna	75.00
Mooning	HMIO2 swr/watt meter 200-2000.	30.00
AERCHM-	Paul- 519-579-3057 Cambridge.	
	Irma hoard- IBM terminal elimnator Model 3278-9	600.00
	KW Easymatch tuner \$50.00, SSB filter	25.00
VESNOO	PARTS- SB40I &402. and LMO	50.00
V 123 N 00 -	Len- 416-499-7431. Toronto. KENWOOD TS930s with AM filter & mike	
	KENWOOD PC-IA phone patch	800.00
	AUTEK memory keyer(IOOmem)-\$75.00- Trap Dipole 80-IO.	75.00
	TRYLON 72' selfsupport tower	50.00
VE3INH-	John- 4I6-62I-7433. Etobicoe	800.00
	YAESU CAT980 xcvr with MDI-scan. desk mike, FIF232C,	
	interface unit,980 gen. cover., I.8-30mhz. kit.	
	Model FRB-I relay boxCost 4000.00 All for - 25	500-00
VE4BBN/3	8- Bill- 639-9528. Burlington.	00.00
	YAESU 207R with dc/ac adaptor & converter.	50.00
VESETD-	Glenn-692-3809. Binbrook.	
	MODEL IO high gain pwr. ant 40 ch. am cb rig	00.00
AF3LMX-	John- 416-820-2308. Mississaura.	
•	Philip 3240 Oscilloscope.	50.00
WELL OUT	TECHTRONIC 453 50 mhz. Dual trace.	50.00
	Don- 560-1960. Hamilton.	
	HEATHKIT IBIOI with IBIO2 to cover to 1751mg.3/scaler.I	25.00

#### THE HAUILTON AMATEUR RADIO CLUB SWAP SHOP with Ralph VE3BYM

VE3FMS- Jack- 545-4860- Hamilton. A wide selection of vacum tubes, selling from \$ 1.00 to \$4.00 8BM11,9002,6B07A,12AT7,9003,12BE6,6CL6,12BA6,12BF6,956,0B2,50C5,9006,

,VT 23 2, 24, OC3, 1G3GT, 1B3GT, VT118, 5U4G, 6V6,6AX4,6K7G2A6,5Y4,VR100. 6V7,1B3GT,35L6,50L6,0C#,0C3,35Z5,41,6SN7G, 3A3C,44,5Z3, 53,

,6K7,6AK7,6AG7,6H6,12A6,6C5. 6AC7, OZ4, 12A6, 12SK7, 6F6, 6J7, 5Z4,6K7,6A8,6F5,12SA7,6F5,12SA7,6SK7,6C5, 6N7,6K7,80,6SF5,

6X5,6BQ6,35L6,1626,2576,832,5U4G,6DQ6,5u4,6AX4,6K6,12SN7,6SN7,2C43, 35Z5, 25L6, 1629, 6W4, 12DQ6, 25W4, 6K6, 12SN&, 6J66, 5V4G, VT118, 25BQ6, 12BA6, ..6W6. 12Ax4,12V6,

129N7,956,6AB7,6W4,12B06,5Z4,12SQ7,6SN7,6V6,35L6,12AX4,80,VR105,2A3, 6SQ7,6K6,6X5,6BQ6,5V4,5Y4,5Z3,6Q7,6F7,VR150,6SF5,E1148,6SA7,25BQ¢,E1148 ,6R8,6X4,6CM7,6aL5,12AX7,6AT8,12AT8,2D21,50B5,12BH7,6Av6, 6T8,6ER5. ,12AT7,6BC5,6BZ7,12AX8,6360,12AX7,12BA7,12AD6,6BN6,12X4, 6CB6,6CL6,3BZ6,6HS8,12AU7A,6AK5,6X8,6T6,6AS5,6AG5,6AU8,6S4,3S4,5763,2E26. E1148, 25L6, 6H6, 6AL5, 6AV6, 1R5, 1U4, 3CB6, 6BQ7A,

RK39,47,866A,1625,807,6G6,VR150,24.2C44,878A,815,2E26,E1148,83,2A3, 66, VR105, 25A6G, 1629, 1625.

6146A,6146,814.5763,5U4GB,820B,829B,5u4GB,

#### W A N T S

VE3WHB- Bill- 527-89II. Hamilton .- Manual for the Kenwood 22004.

VE3FTD- Glenn- 692-3809. Binbrook. - Cpy. of manual Model CM-I capacity me

VE3IUD- Jack - 607-0816. Dundas - Commondore 64 modem & manual.

VESAC4- Jerry- 549-3666. Hamilton .- Manual for BW5100 xmtr. VE3ISZ- Fred - 827-6824. Orkville.- Chip #74HI02.

VE3IVJ- Ron - 623-1449. Cambridge - TV xmtr. &

VESNEJ- Terry- 745-2883. Kitchner .- 6 meter amp. I2 V. take IOWatts in. VESIUD- Jack- 627-0816. Dundas - Mike plug for the HW I2.

de VE3BYM Ralph

#### VOTE

#### VOTE

#### VOTE

Election night is November 19 and Don VE3OCY is looking for candidates. Enter your name or the names of others with Don on or before the meeting. He can be reached at 560-1960 or call his assistant, John VE3CNF at 692-3805.

VOTE

VOTE

VOTE