

# FEEDBACK

Monthly Publication

of

The Georgian Bay  
Amateur Radio Club



---

The Georgian Bay Amateur Radio Club (GBARC) was instituted in October, 1973, at a meeting of amateurs living in the area. That nucleus consisted of VE3BIS Dick; VE3CRV Jim; VE3DTS Jack and VE3EFX Bill.

Since then the Club has grown to approximately 50 resident and non-resident members.

Regular meetings are held monthly except July and August, on the third Thursday. Currently they are held in the Tourist Information Center at Highway #21 and #70, 6 kms west of Owen Sound.

A repeater, for use by all licensed amateurs, is located near Woodford, 15 kms east of Owen Sound. The call is VE3OSR and frequencies are 146.34 in and 146.94 out. Coverage is roughly from Collingwood to Southampton and from the Bruce Peninsula to Durham.

A GBARC Net is held every Sunday at 9:30 a.m. on 3.783 mhz. Any amateur is invited to check in on phone or cw.

---

**PAST PRESIDENTS OF THE CLUB**

ARE:

VE3CRV Jim	1973-74-75
VE3BIS Dick	1975-76
VE3DXO Dave	1976-77
VE3HIP Ian	1977-78
VE3HXX Ian	1978-79
VE3IDS Don	1979-80
VE3FOT Harvey	1980-81
VE3LPD Laverne	1981-82

**OFFICERS FOR 1982-83 ARE:**

President:	VE3LPT Moe
Vice President:	VE3NEG Bill
Sec. Treas.	VE3IDS Don
Editor:	VE3LCZ Andy
Tech. Director:	VE3LZX Don

Feedback correspondence should be sent to the Editor - Andy Kalnins  
Box 1177  
Port Elgin, Ont.  
NOH 2CO

Yearly dues for Full Membership are \$12.00, reduced to \$10.00 if paid before Dec. 31st.

Club crests, designed by and available from VE3WF Fred at \$2.00 each.

More complete information on dues, membership, club activities, etc, may be obtained by contacting the Secretary-Treasurer:

Don Richards  
Box 44  
Hepworth, Ont.,  
NOH1PO

MEETING MINUTES FEB. 83

Meeting convened at 8 pm with President Moe VE3LPT in chair.  
 Two guests were present VE3HIR Tess & VE3EFX Bill.  
 Twenty Four members were present.  
 Moved by Bill VE3NEG that minutes be adopted as read.  
 Moved by Ted VE3AEO and 2nd by VE3JUO Don that club buy call book for club use. - Motion passed.  
 Rob VE3AQT mentioned that an all Canadian Call Book is now available for \$10.95. Anyone interested in obtaining one should get in touch with Rob.  
 Bill VE3NEG brought up the subject of Field Day and was appointed manager by acclamation.  
 After some discussion regarding change of frequencies for VE3OSR it was moved by VE3NEG Bill, 2nd by VE3JUO Don that the matter be post-poned for 6 months.  
 VE3MAE then introduced the guest speaker Bill VE3EFX who gave an interesting talk on traffic handling.

Jack VE3DTS

.....

AGENDA FOR MEETINGS

- MARCH: - Speaker Harvey VE3FOT "Solar System and Amateur Radio".
- APRIL: - Possible Visit to "Owen Sound Cable TV".

.....

ADDITIONS TO MEMBERSHIP LIST

Dave Watt	610 Albert St.	Port Elgin	NOH 2C0	832-6495
-----------	----------------	------------	---------	----------

.....

NOTE

Next Meeting Thursday 17<sup>th</sup> March 1983. 8pm, Owen Sound Tourist Information Center, Springmount.

DEADLINE for April Submissions 04 April 1983.

.....

FOR SALE

- |   |          |
|---|----------|
| Realistic DX160 General Coverage Receiver<br>Broadcast Thru 30 MHZ, Solid State, 110 VAC or 12 VDC<br>Operation.                          | \$100.00 |
| RF Modulator Suitable for use with TRS 80 Model 1 Level II<br>Computer. Lets you use a black and white TV as monitor on<br>channel 3 or 4 | \$ 15.00 |

Contact - Jeff VE3KPT  
Chesley

FROM EDITORS DESK:

A new All Canada Callbook is now available for \$10.95 plus tax, plus \$2.00 for shipping and handling if bought individually. Discount available for orders of 10 or more copies from Clubs. Send to Pen Publishing, P.O. Box 4386, Station D, Hamilton, Ont., L8V 4L8. Rob VE3AQT is getting orders for GBARC, so if you want one contact him or bring your cash to next meeting.

To commemorate world communications year, DOC will permit Canadian Amateurs to use the following special prefixes between May 17 and July 17, 1983. Newfoundland and Labrador CI 1 and CI 2, Yukon Territory CK 1 and Remainder of Canada CY 1 to CY 7.

DOC has asked CRRL and CARF to prepare submissions on the question of using Amateur volunteers to administer Canadian Amateur Radio Examinations. Deadline for the CRRL and CARF submission is March 31, to be followed by a meeting in Ottawa on April 19. CRRL has formed a committee to prepare a submission and your input would be most helpful. Please send comments on this important matter to CRRL, Box 7009 Station E, London, Ont., N5Y 4J9.

Looks like last set of DOC Exams were successful for some of our members. I understand that congratulations are in order for VE3KPT Jeff, VE3IXR Murray and VE3IXU Dave. Well done and hope to hear you on the net soon.

Rahn, VE3MAI still in Hospital, looking very good and hope to hear him from Port Elgin very shortly.

Field Day is June 25/26 and Bill VE3NEG requires some assistance. If anyone has ideas, equipment, Ant, Generators, Expertise, Co-ax, Time, please feel free to offer and I am sure Bill won't refuse. Lets get together and make this a real successful effort.

Suggested repeater frequency is 147.30 + 600 and decision to move was deferred for 6 month's. In the meantime, every one should have a listen on various combinations during the next few months and see if we can come up with a clear one for this area which would make the move worthwhile.

A new repeater for the Wiarton area seems to be coming along quite well. Paul VE3KOI, informs me that VE3ERX will initially run at 30 watts output from a GE Procline and receive on a strip from DT 77 Marconi. Repeater will have touch tone functions, Smart I.D. (identifies "VE3ERX" at reduced volume when being used and when no-one using repeater it will ID "VE3ERX, Wiarton" at higher volume level), Talking clock and hi/lo squelch. Logic is approx 3/4 complete and should be in test mode from Paul's Qth very shortly. More next month.

Flea Market - Burlington Community Center, New St., 7th March 1983, 7pm. Admission \$2.00 each. Tables \$1.00. Talk in on VE3RSB 147.81/.21.

73's  
VE3LCZ

## THE BUTTERNUT

I recently erected a new verticle antenna - the "Butternut."

As you know, there are verticles and then there are verticles!! I have bought about 4 or 5 of the commercial types and at present have two Mosleys both working rather well. This pair were placed on the side lawn last year, and worked as a phased array with just so-so results. I think maybe I goofed on the phasing. HI!

Verticles have been made of all sorts of things - copper or aluminum rods - large army whips - pop cans soldered together (when they were made of steel), and then all kinds of wire and even T.V. rotor 4 strand cable.

The Butternut antenna appears to work the best of all - even well on 80 meters. It is easy to load although tuning is very sharp. It gets me into Miamisburg, Ohio better than other verticles, an inverted L, an all band trap or a G5RV. As you know, no antenna is perfect for every location, but I'm really pleased with this one.

So that I can run from the CW to the phone portion of the band, I use an antenna tuner and lots of grounds.

Since verticles above ground seem to work best for me, the base was placed about 10 ft off the ground.

I tied everything available into the ground system including 4 radials for each band, three ground rods, all eaves troughs, aluminum siding, all metal trim on the house and garage the water line from the street, and all piping of our hot water heating system. Maybe next week I'll tie into this system - my wifes kitchen pots no less!

Have a care!  
Ted VE3AEO

.....

### DX REPORT

An informal roundtable group has assembled daily at 1700Z on 21335KHZ. Appearances of 5X, 3X, 7Q7, TL8, ZD7, ZD8 and ZD9 have been noted.

Easter Island	- CE0ERY Hector, 0330Z on 20 meter SSB, QSL via WB6WOD
St. Vincent	- J87LTA
Antigua	- V2AXA
Central African Republic	- TL8DC Wednesdays 1500Z around 28600 KHZ
Uganda	- 5X5FS - Terry QSL via EI9G
Kenya	- 5Z4NN - Nana, 80 to 10 mtrs QSL via JI1VLV
Madagascar	- 5R8AL, Alain - 1730Z around 21330 KHZ
FB8	- FB8ZQ, Alain - 20 mtr CW 0100 - 0145Z
St. Peter/St. Paul	- March 5 Plus 5 or 6 days
Bear Island	- JW5AA Jerry 15 mtr SSB QSL via LA4YM
Trinidad	- PY1EFM/PYO - 14220 past several days
Antartica	- DPOAA The Federal German South Polar Station in March.

MAINTENANCE OF TRANSISTORS  
CONCLUSION

TRANSISTOR AND CRYSTAL DIODE CHECKER

Information on the theory and construction of an "in circuit" transistor and diode checker is presented in the following paragraphs.

The checker, see figure 1-5, is basically a Hartley audio oscillator circuit in which the transistor or crystal diode under test becomes an integral part of the circuit. The strength of the oscillations measured by the meter provides a relative measure of the transistors quality. Transformer T1 is used in a Hartley oscillator circuit and as a step down transformer. One half of the primary of T1 serves as the transistors collector lead while the other half is used for audio feedback. Capacitor C1 tunes T1's primary. Feedback from collector to base passes through capacitor C2, which blocks DC, CR1, CR2, CR3 and CR4 form a bridge circuit which rectifies the audio voltage to produce DC for the meter, as well as to give a constant load for the transistor. R3 is used to calibrate meter M1 for full scale deflection, with a transistor known to be good used as a reference. It serves as a thermometer protecting the transistor under test as well as being the short indicator. Potentiometer R1 sets the base current or bias of the transistor. Resistor R2 maintains a minimum resistance in the base circuit.

When used as a diode checker, the emitter lead is connected to the diode anode. With switch S1 placed in the PNP position current flows from the battery's negative terminal through switch S1's contacts, through one half of the T1's primary, the transistor, and through the diode lighting lamp L1. When the switch S1 is placed in the NPN position current should not flow as the diode will be reversely biased.

The following method should be used when checking transistors.

- (a) Connect the electrodes of a good transistor to the clips of the diode checker. Rotate R1 to its maximum CW direction (Maximum resistance).
- (b) Throw S1 to PNP or NPN, depending on type of transistor under test. No harm is done to the transistor if S1 is wrongly set.
- (c) M1 should now show a reading. Adjust R3 for full scale deflection.
- (d) Connect the electrodes of the transistor to be tested to the checker test clips as for calibration steps (a) to (c).
- (f) The reading obtained on M1 indicates the transistor's quality. If less than 75% of full scale deflection, the transistor has excessive leakage. If M1 reading exceeds full scale deflection and the Short indicator lights, the transistor is serviceable but should not be used in critical circuits.
- (g) If the Short Indicator Lights on all positions of R1 the Transistor is shorted.
- (h) If the meter M1 does not deflect on any position of R1, the transistor is open.

The following method should be used when checking crystal diodes.

- (a) Connect the emitter lead to the diode's cathode and the collector lead to the diode's anode.
- (b) Place S1 in the PNP position-the short indicator should light.
- (c) Place S1 in the NPN position-the short indicator bulb should not light.
- (d) Step (b) and (c) show a diode to be serviceable.
- (e) If steps (b) and (c) do not apply, the diode is unserviceable.

Figure 1-4 is a schematic diagram of the checker.

The following components are required for construction of the checker.  
B1-Battery 6 volts #1403 or equiv. C1-Capacitor, 200 volt, 0.2 ufd  
C2-Capacitor, 200 volt, 0.05 ufd. R1-Potentiometer, 10,000 ohms.  
R2-Resistor, 180 ohms, ½ watt. R3-Potentiometer, 250K ohms.

.....con't

Continued - Checker Component List

CR1-Diode 1N34. CR2-Diode 1N34. CR3-Diode 1N34. CR4-Diode 1N34.  
S1-Switch DPDT. S2-Switch SPST. T1-Transformer pulse. M1-Meter, 0-1 ma  
DC 2". L1-Lamp #328 6 volt, 0.2 amp. Misc. Hardware,- knob, grommets,  
alligator clips, 4" x 4" x 3" utility box.

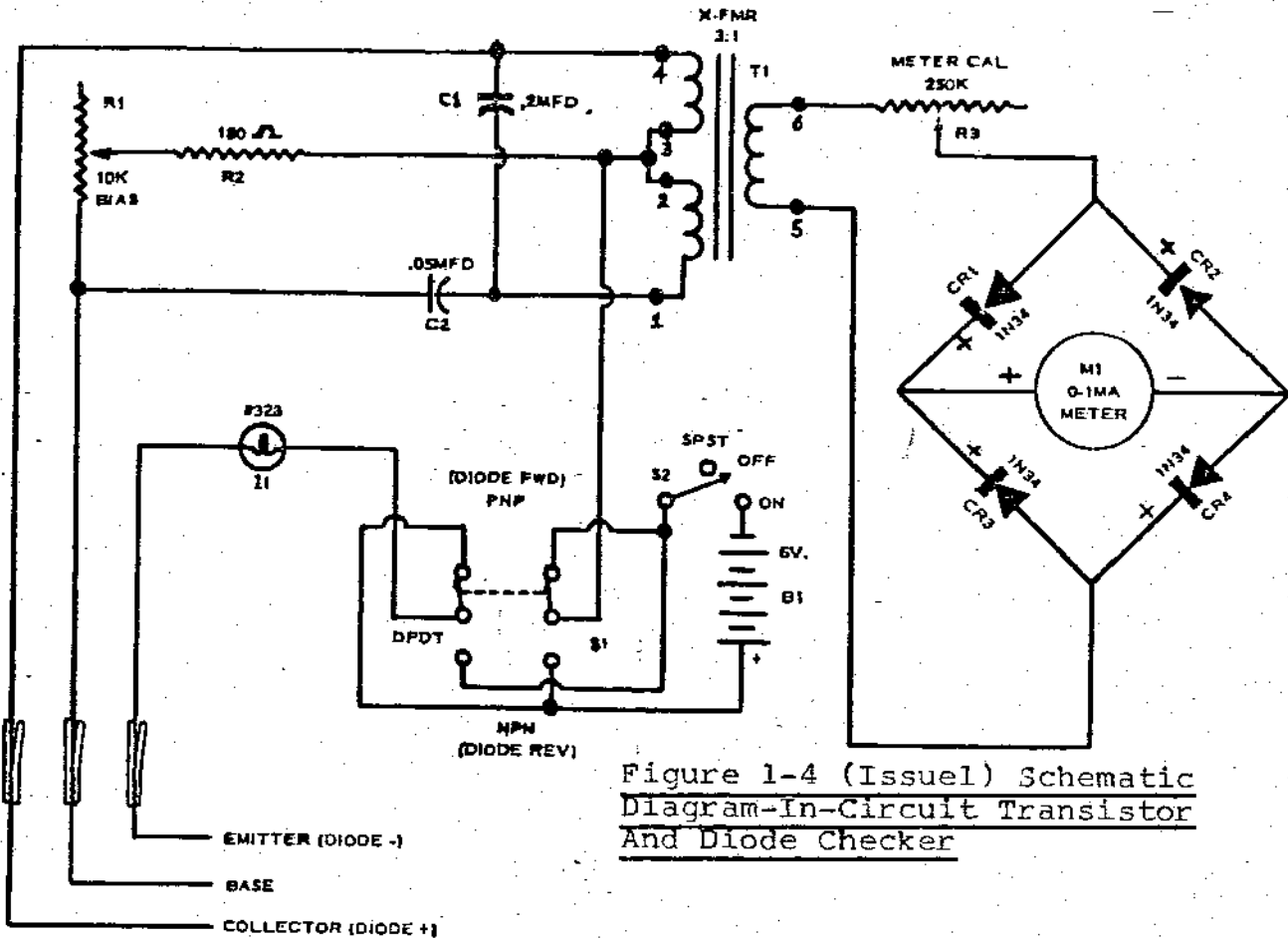


Figure 1-4 (Issue 1) Schematic Diagram-In-Circuit Transistor And Diode Checker

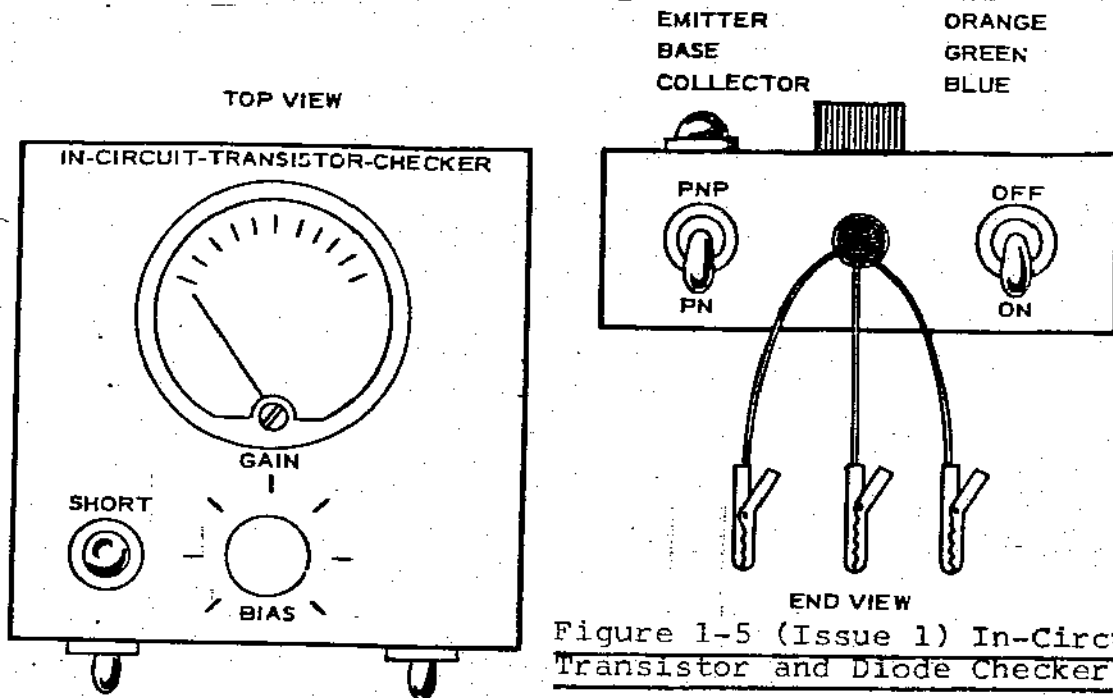


Figure 1-5 (Issue 1) In-Circuit Transistor and Diode Checker

Submitted by Bill VE3NEG

The following article is from the February issue of QST and outlines the method of becoming a CRRL affiliated club and the advantages of this affiliation. The GBARC Club was affiliated at one time and got considerable benefits. If 50 members were CRRL members the club could realize \$100 annually in rebates.

# Club Corner

Conducted By Sally O'Dell,\* KB10

## THE AFFILIATION PROCESS: WHY AND HOW

*It shall be the policy of the League to affiliate with itself, organized, non-commercial Amateur Radio groups or societies of kindred aims and purposes with a view of forming a homogeneous organization for unity of action in matters affecting amateur welfare.*

Currently, close to 1800 clubs in the U.S. and Canada are affiliated with the ARRL. It may be that your club has met the necessary requirements and has been approved for affiliation. Perhaps affiliation has been considered, but your group is not quite sure of the process. Or, you may not even be aware that your organization is affiliated with the ARRL.

### Why Affiliate?

Most clubs, before deciding to seek League affiliation, will discuss the topic at length. If a survey were conducted to find the reasons a club should choose to affiliate, we could expect to receive a wide variety of interesting answers. We would probably find unity to be the common denominator, however. Just as individuals unite for a common cause, organizations also seek to combine their efforts for a common goal. Perhaps you are already aware of this and are wondering what's involved in becoming an affiliated club and what the cost will be. Well, the process is fairly simple and straightforward, and can be completed with a little effort. The cost to the club? Absolutely zero. In fact, active affiliation usually puts money back in the treasury, as affiliated clubs retain \$2 for each membership sent to ARRL Hq. by a club officer.

### How to Affiliate

So, you've decided that affiliation sounds interesting, but are not quite sure how to begin. To start with, all the material needed to apply can be obtained from the Club and Training Department at Headquarters simply by asking for a club kit. The packet contains all necessary information, instructions and guidelines needed to get the job done. Essentially, all that's required is a copy of the club constitution and bylaws, plus membership information. Assuming that your club has a constitution, send two copies with the application. If your group lacks such formalities, the ARRL Club Kit contains a sample that can be adopted (although you might want to modify it to fit your club needs). The membership information, in most cases, can be found in club records. One important requirement to remember is that 51% of all voting members must be ARRL members.

Three categories of affiliation exist within the club system. They are: *Category 1* — Local Amateur Radio clubs (this is the most common class); *Category 2* — Regional or national organized Amateur Radio groups; *Category 3* — Local school or youth group Amateur Radio clubs (in this class, only the sponsor or the trustee need be a League member). After the application is received at league headquarters (and sent

to the club branch), the staff sorts through the material, checking to see that everything has been completed properly. Has the group applied for the correct category? Are 51% of the voting club members ARRL members? Has the club been affiliated before? Club members are often quite surprised to learn that their club was affiliated before, but for a variety of reasons (foremost among them that the organization never corresponded with Headquarters or even responded to queries) they were placed in the inactive files. When this happens, the club has only to file an annual report form to be reactivated. Once affiliated, always affiliated.

Assuming that everything has gone smoothly and your ARRL director has no objection, the application will be presented to the Executive Committee (EC) of the ARRL Board of Directors for formal approval. Because the EC meets at least four times a year, the waiting period for approval is usually short.

### Life After Affiliation?

After your club has received its charter of affiliation, what next? Does the club pat itself on the back, then sit down and forget the commitment? We hope not. With a little effort, affiliation will be the beginning of a strong, well-organized club that can be enjoyed by its members. Keep in mind that, as an ARRL affiliated club, you should receive periodic correspondence. *Radio Club News (RCN)* for example, is published quarterly and is mailed to all affiliated clubs. If you haven't seen a copy lately, ask your club officers to pass it around to the membership. Better yet, have them read aloud the articles of interest at club meetings. Are you aware of the benefits your affiliated club is eligible for, and do you make use of them? Is your organization interested in recruiting new members? Affiliated clubs can receive lists of ARRL full members in the club's area of coverage once each year for (noncommercial) membership solicitation purposes. This is one of several benefits offered by the ARRL to its affiliated clubs.

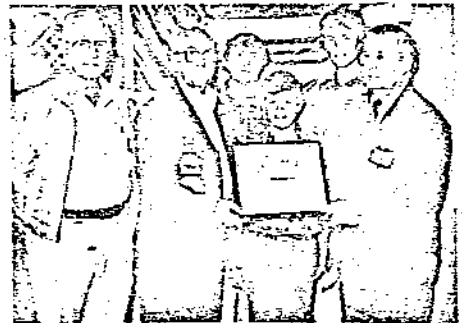
Recently, the League adopted a new category for affiliated clubs that want to establish a strong local presence for Amateur Radio: the Special Service Club (see Dec. 1982 QST for details). The extra category has opened up new directions for affiliated clubs. The SSC will be far more involved within both the amateur fraternity and the local community, and will work more closely with the League than clubs typically have in the past.

Whether your club membership is five or 50, League affiliation can help motivate your club to achieve its full potential. Become aware of how the ARRL and clubs can work together, particularly in the new field organization structure, and talk about it at your next meeting. If your club is not affiliated, ask why. It should be the central topic of your next meeting. Discuss it, and join the 1800 clubs already affiliated that, in many ways, are the League. — Ed Raso, WA2FTC, Club Program Assistant Manager, ARRL reminiscences of this and other early ham radio events

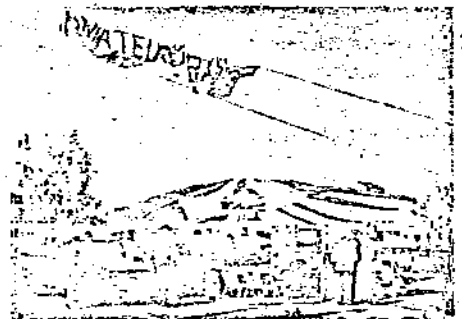
### Film Library Additions

A new audio cassette (T-12) is now available from the ARRL Film Library. Harry Dreyer, K4NAR, whose ham career spans more than 60 years, was on the air during the sinking of the S. S. Titanic. His

are recorded here in his own free-flowing but lucid style. The tape is 40 minutes long. To order the tape or to obtain further library information, write to Karl Townsend, ARRL Film Librarian, 225 Main St., Newington, CT 06111.



The 4-H Radio Operators Club, K2UQK, had a charter party recently at the 4-H center in Rosenhayn, New Jersey. Hugh Turnbull, W3ABC, Atlantic Division Director, and Ted Wood, N2CER, Section Traffic Manager, spoke to a group of hams from other local Amateur Radio clubs and members from other 4-H clubs. Left to right are N2CER, W2MAS, KA2PBZ, Horace Crane, KA2MSX and W3ABC.



As a tribute to Amateur Radio, and to celebrate 25 years of amateurs' service to the community, the Victor Valley (California) ARC was pleased to accept a proclamation signed by Victorville Mayor Jean DeBlasis declaring the week of October 17-24 as Amateur Radio Week. During the week, the club prepared a public demonstration of the art of ham radio and set up a display in a local shopping center.

\*Articles of Association and By-Laws, p. 13. For a copy, send an s.a.s.e. to Club and Training, ARRL, 225 Main St., Newington, CT 06111.

\*Club Program Manager, ARRL



**Here It Comes Again!**

THE  
ANNUAL

SOUTHERN ONTARIO REPEATER TEAM

**AMATEUR RADIO**



**FLEA MARKET**

SUNDAY, MAY 15, 1983  
MEDWAY HIGH SCHOOL

(Medway Rd. - Just West of Hwy. 4)

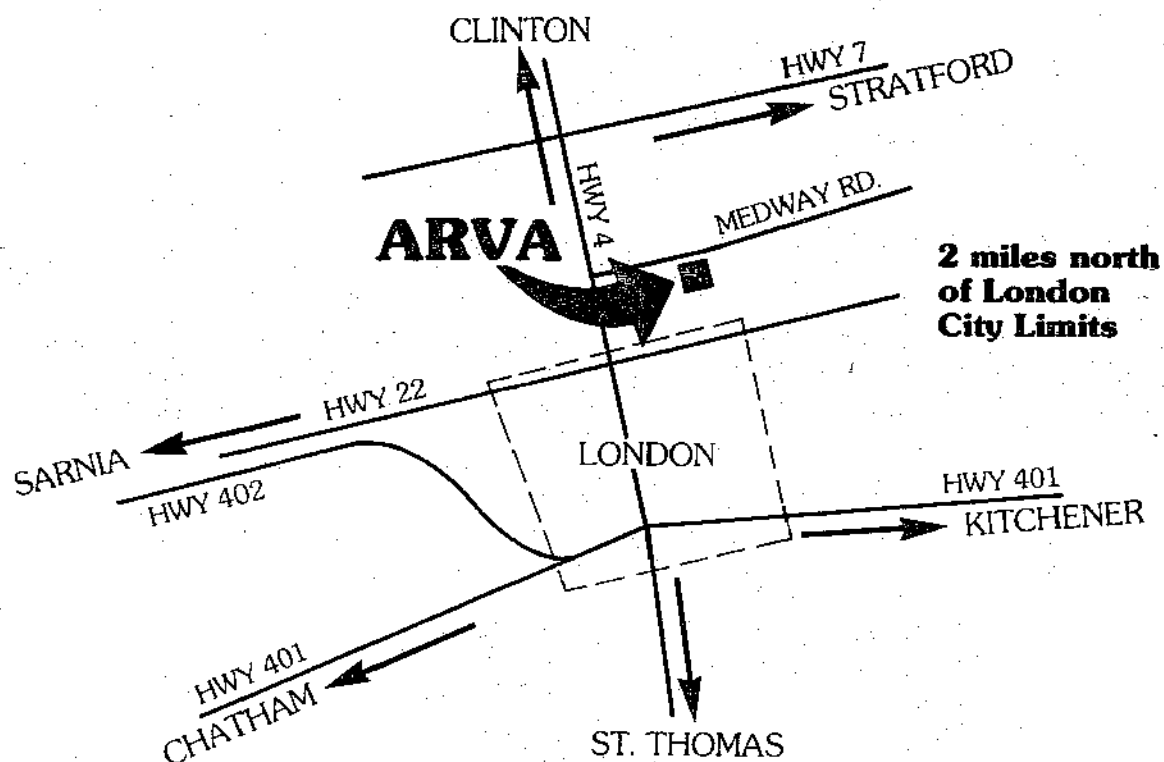
**ARVA, ONT.**

(See Map On Reverse Side)

HOURS - 9:00 a.m. - 2:00 p.m.

ADMISSION - \$2.00 per person

# All Roads Lead To The Annual Sort Flea Market



## **SELLERS:**

Indoor or Outdoor Permits .....: \$1.00

Indoor Tables .....: \$2.00 Each

Table reservations, in advance, accepted now

Write **SORT, INC. P.O. BOX 73, HYDE PARK, ONT. N0M 1Z0**

or Call **VE3GYQ DAVE TOTH (519) 473-1643**

Sellers are also required to purchase admission ticket

Doors open for sellers only at 8 a.m.

## **PRIZES**

### **DOOR PRIZES DRAWN EVERY 20 MINUTES**

(included in your Admission Price)

**50/50 DRAW AT 2 p.m.**

TICKETS \$1.00 each or 6/\$5.00

## NET CONTROL OPERATIONS

Following is the schedule of Net Controllers for the period April through July for the Georgian Bay Amateur Radio Club Net. Please note your position and that the April listing is slightly different from the one printed in the January Feedback.

You may have observed that a total of 18 members are involved. To my knowledge those are the ones that meet these conditions:-

- a) members of the G.B.A.R. Club,
- b) check in to the Net fairly regularly,
- c) have Advanced Licences.

If I have missed anyone that should take part in controlling please let me know. Remember, it is not necessary to meet a fourth requirement:-

- d) be a professional, experienced controller!

SUNDAY DATES	NET CONTROLLER	ALTERNATE CONTROLLER	SECOND ALTERNATE
Apr. 3	CRV Jim	BSF Verne	
10	BSF Verne	FFN Walter	
17	FFN Walter	AQT Rob	
24	AQT Rob	LPD Laverne	
May 1	LPD Laverne	DXO Dave	
8	DXO Dave	BIS Dick	
15	BIS Dick	LPT Moe	
22	LPT Moe	LCZ Andy	
29	LCZ Andy	BFV Jim	
Jun. 5	BFV Jim	DTS Jack	
12	DTS Jack	AEO Ted	
19	AEO Ted	IDS Don	
26	IDS Don	FOT Harv	
Jul. 3	FOT Harv	HXX Ian	
10	HXX Ian	LPG Mal	
17	LPG Mal	AUB Jack	
24	AUB Jack	JUO Don	
31	JUO Don		

Thanks to all who are participating. You're doing a superb job.

DXO Dave N.M.