

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 2C0

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

PRESIDENTS MESSAGE

I hope everyone had as good a month as I did, starting with the very good attendance at the Oct meeting.

Then, We moved, saw an excellent presentation from Paul KOI, a good demonstration on the auto-patch by Fred KPK, and had a tour of the Bruce Nuclear Plant.

Moving was the pits, Pauls presentation was very good on communication on the commercial side. With a great talk and slides on the way the government does things. Also, I hope to get the tour Paul "Hi". Then I messed up the auto patch for six minutes and thats embarassing. Had the Bruce tour (my first) and that for me, getting right into the reator, the meal and tour topped off an excellent month. Thanks to all.

Hope to see you all at the Nov meeting as Ted has another good night planned.

73's
Moe VE3LPT

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MEETING MINUTES OCT. 82

At 8:20 President VE3LPT Moe, called the meeting to order. One guest was present; VE3FOF Bill. VE3BIS moved the minutes of the Sept meeting correct as printed in Feedback. VE3NEG seconded. Carried

VE3DTS made a motion for the club to re-imburse VE3AEO for the name tags for members to wear at the meetings. Seconded by VE3BIS. - Carried

VE3NEG gave the club members more info and gathered more names for the BNPD tour.

VE3KPK explained the features and gave operational info on his new auto-patch set-up. This patch uses VE3OSR and is a very welcome addition to ham radio activity in the area.

VE3BIS made a motion that the club pay for a private phone installation and the subsequent monthly billings for the new auto-patch at VE3KPK's Qth. Seconded by VE3HXX. - Carried.

VE3JUO made a motion that a letter of thanks concerning the new auto-patch which is being supplied free of charge by VE3KPK, be sent to him. A copy of this letter is to be retained in the club files. VE3FOT seconded. - Carried.

Next meeting is "Old Timers Nite". VE3AUB moved the meeting adjourned. 32 members and guests were present.

Don VE3IDS

TREASURER'S REPORT

Sept. 1, 1982	Balance	\$677.30
	Expenditures	\$ 79.75
	Receipts	\$ 45.00
Oct. 1, 1982	Balance	\$642.55

Don VE3IDS

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AGENDA FOR MEETINGS

NOVEMBER: All old timer's; Please bring old equipment or bits and pieces used years ago. If possible, include a tag naming the object and how it was used. Please be prepared to talk for a few minutes about Amateur Radio of years ago either regarding equipment, some experiences or funny things that happened; or whatever suits you.

DECEMBER: Flea Market; Please bring anything you wish to sell and a folding table if possible. So gather up any surplus stuff you would like to turn into money.

After the Flea Market we will have a bull session, where each of you will have a chance to speak his mind regarding the club. So if you have a suggestion and/or if you have a beef now is the time for all good members to

73's
Ted VE3AEO

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ARTICLES FOR SALE

Triden 2, Solid State, 100W Transceiver. Covers 80, 40, 20, 15 and 10. Analog Readout No AC Power Supply. Operates on 12V DC 20 Amps. Can be used as QRP.

Radio Shack Frequency Counter 0-30 MGHZ \$ 45.00

Contact - Laverne Wyville
VE3LPD
Meaford 538-1888

HW101 Plus AC Power Supply \$400.00

Contact - Steve Sauder
Kincardine
396-7982

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N O T E

The next meeting of GBARC will be held on Thursday 18th November 1982, 8 P.M. Owen Sound Tourist Information Center, Springmount.

FROM EDITOR'S DESK:

Feedback has learned that a member had so much equipment that he found difficulty in operating same with just two hands. After evaluating various alternatives, the simplest solution was to acquire another pair of hands. So, Congratulations from GBARC members goes to Cam Thomas VE3CTQ and his new bride.

The Boy Scout Jamboree on the air went fairly successfully. We had two stations on the air at Saugeen Bluffs and numerous contacts were made for the boys to exchange information with other troops. I would like to say thanks to some of the local members for calling in and saying Hi; Bill VE3EFX, Dick VE3BIS, Jerry VE3CAC, Gerry VE3MAY and Ian VE3HXX. Other stations were made available to Scouts in Meaford, Gerry VE3MAY and Don VE3JUO, hope you had some fun. TNX to Rahn VE3MAI, Dick VE3BIS, Fred VE3KHQ for making this a worthwhile event.

Trip down to Dorchester Flea Market left us with some mixed feelings. Crowds were quite large first thing in the morning but seemed to disappear very quickly. There were numerous empty tables and a definite lack of Dealer Displays. A local enterprising group seemed to have a good variety of articles, high pressure salesmanship of Dick VE3BIS and Bill VE3NEG. Dick's relaxed position, with feet up on the table seemed to have a story behind it as announced on ONTHARS. I could not verify the injury caused by his wallet dropping on his foot so will leave it for now.

It's that time of the year when migration south starts again and not to be left out VE3BFZ Bill and VE3BIS Dick are going to accompany the crowd. Some sked times and frequencies have been set up to keep in touch and I hope to have more on this next month.

HEY FELLOWS, I am just like a Bluejay who keeps on squaking till he gets fed. FEEDback needs some seeds by Dec. 1st 82. "Who said this job is for the birds".

Andy VE3LCZ

THANK YOU

I would like to take this opportunity to say Thank You to the organizers of the BNPD tour. Even though Andy could not be with us, Terry VE3LPK and I had a very enjoyable and informative evening. I would also like to comment on the delicious meal which stood up to all expectations and left us thoroughly stuffed. Once again Thank You and I hope there will be more of these kind of excursions.

Marlene Kalnins

OPERATION OF THE AUTO PATCH

Learning to use the Auto Patch commands and modes will seem a little involved at first. But soon you will use it as naturally as driving your car.

THE COMMANDS: ABCDE will refer to your private access code, while 00221 will refer to the factory installed access code. To make a call, you will need a line connect. Send 00221 (ABCDE). Should you misdial your number, send the connect code again. No need to send the disconnect (off) command first. When through, it will automatically "time out" (causing a disconnect) after six minutes. (Time out disconnect may be changed to three minutes by connecting the board strap from the "6" position to the "3" position at a location on the circuits U31 and U10, labelled "Timer". If delivered into commercial service, the timer will be strapped to three minutes.) Prior to "time out" disconnect, cw ID will warn four separate times that "time out" is imminent. You send the timer reset code again to gain another timer period. Send 002 (ABC) to reset. You can send the reset code as often as you like. The reset code serves also for answering incoming calls if Ringback mode is selected. Ringback will be covered later on.

TO MAKE A CALL: Send the connect code 00221. Auto Patch will respond with your station call sign in cw, followed by a dialtone. CW ID and the dialtone may overlap somewhat if your call sign is lengthy. After two seconds the dialtone will disappear. Auto Patch has gone into the receiving mode to pass your dialing instructions on-to the phone line. There are two ways to dial your number:

- 1) If the long distance restrict switch is in the Long Distance position there are no dialing restrictions. After the dialtone goes off, start your dialing within 3 seconds. Dial the complete number in one go.
- 2) If you want long Distance Dialing Restrict, place the switch in the restrict position. Now calls beginning with 0 or 1 cannot be made. When in the long Distance Restrict mode, the dialing procedure is a little different. After the dial tone drops, dial only the first digit of the number you wish to call. Now listen for a tone prompt which gives you clearance to complete the dialing of remaining digits. Be sure the prompt tone is completed before you finish your dialing.

When your party answers be sure to explain to them that you must take turns talking. Often, "first timers" do not understand this and confusion results. When you are finished, wait for your party to hang up before disconnecting, otherwise it will generate much audio on the phone line. Private Patch "thinks" this is your party speaking and comes on the air for about half second. If you are sending a command when this occurs, Private Patch may miss some of your digits and will not respond to your command. Therefore, it is best to wait for your party to hang up before transmitting commands.

ACTIVITY TIMER: Suppose the number you had called was busy. Private Patch would think the busy signal was speech and transmit continuously. Control would be lost. But Private Patch activity timer logic assures positive control. If the Auto patch transmits continuously for two seconds (this seldom happens in the course of a conversation) the

Auto Patch con't.....

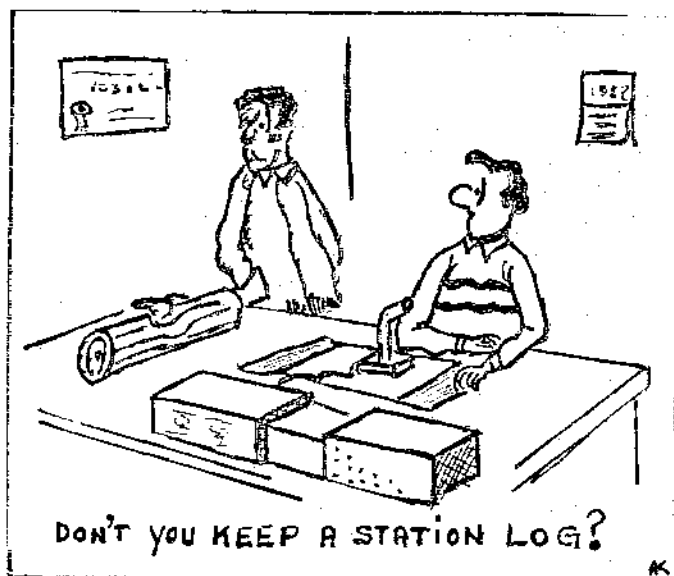
activity timer causes three second interrupt "window". Quickly, during this three second window, you send control commands. Connect 00221 to redial, or disconnect 0022 if finished. If the long distance restrict happens to be in the restrict position, a "short-cut" disconnect code is available. Merely send 1 or a 0, this will cause disconnect just as if attempting to dial long distance. This only works during activity windows, and only if the switch is in the restrict position.

TO USE THROUGH REPEATERS: Set the transmit and receive frequency on your autopatch transceiver just as though you were going to talk through the selected repeater. Set your mobile or hand held likewise. Set the squelch control on the auto patch transceiver fully tight. (Be sure you have selected a repeater which has at least 1-3 second hang up time. The more hang up time the better). Operation through repeater proceeds identical to simplex. However, occasionally CW ID originating in the repeater may cause temporary directionality for the autopatch, for the duration of the CW ID. Perhaps five second every three minutes or so. Not really a problem.

As usual, when operating through repeaters, squelch tails are different than when operating simplex. In the simplex, when the auto patch stops transmitting, the squelch you hear closing is your own. But to the repeater, the squelch you hear is at the repeater. You do not hear your own squelch close until the repeater drops out. The point is, you cannot control Private Patch unless it is listening. Private Patch is listening immediately after any squelch tail even through the repeater is still transmitting. Suppose you dial a number, and there is no answer. You wish to make another call or disconnect. Private Patch will transmit during each ring and for half a second afterward. After you hear the squelch tail but before the next ring, send command (connect or disconnect) you desire. Private Patch will respond to your commands.

NOTE: Well fellows I hope you will have fun. I would recommend that you have the Telephone numbers for the Police, Ambulance and Fire Department in your car, in case you have an Emergency.

73's
Fred VE3KPK



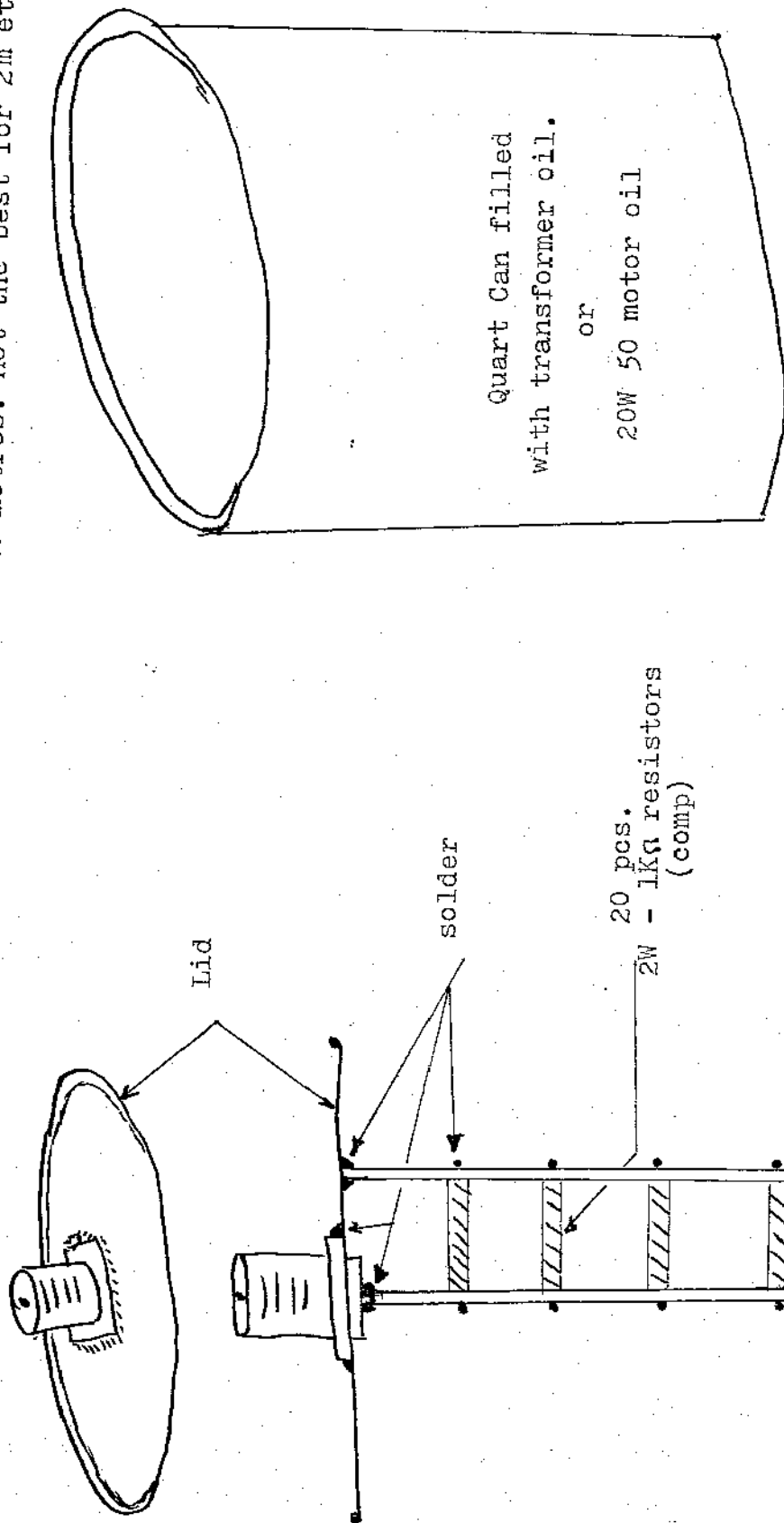
NOT SO BRIEF NOTE ON NI-CADS

(Sources: Gould article: QST Mar.82; CQ May 81)

1. The voltage of a nicad cell is nominally 1.2.V. (or 1.25 V. depending on the literature you read and the degree of "overcharge".
2. Nicad cells supply power at practically a constant voltage until they are discharged. When their voltage drops to 1.0V per cell while in use, they should be removed from service and recharged. Further attempted use results in "deep discharge" which carries with it the risk of voltage reversal in one or more of the cells.
3. The capacity of nicads is given in Ampere-hours, or for our purposes in Milliampere-hours, (Mah). A 450 Mah battery could be expected to deliver 45 Ma for 10 hours or 30 Ma for 15 hours etc. Such loads would not be ideal, and indeed BOTH light and heavier loads should be used in the discharge. Our hand-helds draw up to 225 or more MAH so we could expect to draw this current for only 2 hours. But such is not the case. The very heavy load of 225 Ma leads to inefficiencies within the cell, (power dissipated as heat, etc.) and we would get perhaps 1½ hours from the battery.
4. Nicads vary in many ways: size and capacity; open, vented, pressure vented or sealed permissible charging rates etc.
5. One should know the capacity and the permissible charging rate of his battery. The following types of charges and terms are in use:
 - (a) Standard Charge: charge at 10% to 15% of the Mah rate for 14 hours.
 - (b) Quick Charge: charge at about 30% of the Mah rate for 3½ to 5 hours.
 - (c) Rapid Charge: This is only for certain batteries and there must be devices to turn off the charger when the battery is charged. These are usually heat sensing devices which turn off the charger when the battery overheats as it does during "overcharge". The rate typically is 1½ times the Mah for about 1½ hours.
6. You have to put more Mah into a battery than it will give you back due to inefficiencies in the battery and to ensure that the weakest cell is fully charged. Generally speaking you "overcharge" until you have put in from 1½ to 3 times the battery Mah capacity.
7. Batteries for hand-helds usually have from 6 to 9 cells. Nicads are NOT connected in parallel for greater capacity.
8. Individual cells which have been manufactured equal, develop individual characteristics as they are discharged and charged repeatedly. There is little to be gained by trying to "match" cells, as they become different during their lifetime of 300 to 1000 discharge and charge cycles.
9. Nicads should be put on charge only after they fail to operate the equipment, or when their voltage under load has dropped to 1.0 volt. Then they should be FULLY charged, -no half charging.
10. NEVER SHORT CIRCUIT A NICAD BATTERY. IT MAY OVERHEAT AND EXPLODE.
11. NEVER SOLDER TO THE TERMINALS OF A NICAD BATTERY. IT MAY DEVELOP ENOUGH PRESSURE TO EXPLODE. Use clamps or sliding contacts instead.

CHEAP--40 WATT DRY--200WATT OIL FILLED DUMMY LOAD

works 1 - 1 match from 160 - 10 metres. not the best for 2m etres.



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Did you work Saint Paul's Island, VELSPI, on July 9 - 13? Over 10,000 amateurs did. Operators VELAI, ASJ, CER, FH, KIWJ, and WIGNC and XX logged 258 contacts on 160, 681 on 75-80, 1612 on 40, 120 on 30, 5625 on 20, 2454 on 15, 1099 on 10, 440 on 6, and 122 on 2. This included 20 RTTY contacts and 53 contacts through the Soviet RS satellites, for a total of 12,411 contacts in all.

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US PHONE BAND EXPANSION "WESTLINK REPORT" 30 JULY 1982

<u>BAND</u>	<u>EXTRA & ABOVE</u>	<u>ADVANCED & ABOVE</u>	<u>GENERAL & ABOVE</u>
80/75	3.750- 3.775	3.775- 3.850	3.850- 4.000
40	No Change Prop	No Change Prop	No Change Prop
20	14.150-14.175	14.175-14.225	14.225-14.350
15	21.200-21.225	21.225-21.300	21.300-21.450
10	28.300-29.70*	28.300-29.70*	28.300-29.70*

* No novice or Technician Privileges Between 28.300-28.500 MHZ

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GEORGIAN BAY AMATEUR RADIO CLUB 1983 MEMBERSHIP FORM

Name: _____ Call: _____

Address: _____ Postal Code: _____

Telephone: _____ Phone Patch: yes ___ no ___

Please fill out the above form even if you have already paid your 1983 dues. Membership for GBARC is \$10.00 per year; \$5.00 per year for seniors. Forms and dues can be mailed to the sec/treas. at Box 44, Hepworth, Ont. NOH 1P0, or can be brought to the meeting.

P.S: Late dues (past Dec. 31) or new memberships are \$12.00.