

NORTH SHORE AMATEUR RADIO CLUB

N.S.A.R.C. EXECUTIVE FOR 1994

FEB/94

**FEBRUARY
"SPARKS"**

President	Robert A. O'Toole	VE3VKM	905-576-4264
Vice President	Casey Coley	VE3NGT	905-623-0264
Treasurer	Laird Solomon	VE3LKS	905-434-7339
Secretary	George Day	VE3UEH	905-432-1368
Program Dir.	Peter Johns	VE3WWZ	905-723-9049

CLUB COORDINATORS

A.R.E.S. Coordinator	Margaret Jeffery	VE3BNN	905-725-1238
Special Events Coordinator	Ralph Day	VE3CRK	905-576-8738
Bulletin Editor	Victor Doty	VE3LNX	905-983-5831
Bulletin Publisher	Glen Goslin	VE3LIZ	905-725-1545
Club Historian	Mike Sherba	VE3DKW	905-723-7674
2 Meter Net Control	Roy Miller	VE3AAF	905-852-5447
Registrar	Keith Wyard-Scott	VE3GDF	905-723-5758
Get Well Cards	Ann Jones	VE3KWI	705-324-0638
Nonquon Canoe Races	Glen Goslin	VE3LIZ	905-725-1545
Field Day	Tom Rogers	VE3BTR	905-640-5549
Instruction Coordinator	John Nicholls	VE3SII	905-683-2495
Auditor	Rick Gibson	VE3ASH	905-434-2886
Lists and Labels	Paul Dale	VE3LHZ	905-434-6741
Jamboree On The Air	Tom Rogers	VE3BTR	905-640-5549
Club Inventory	Len Nixon	VE3SVD	905-985-7120
Ride For The Handicapped	Ralph Day	VE3CRK	905-576-8738

Meetings are normally on the 2nd Monday of the month at 19:30 SHARP at the Arts & Resources Center in Oshawa on Queen Street.

The Thu. night net convenes at 19:30 hr's, & CW practice at 20:30 to 21:30 hr's.

The Agenda for February is going to be a talk on "SWL DXing" and VE3FQ Steve Canney from the DX Ontario Group will be giving the talk so be sure and attend the next meeting.

North Shore Amateur
Radio Club Inc.
P.O. Box 171, Oshawa
Ontario L1H 7L1



Silent Key

Well by now everyone has heard that Colin Bell VE3CEU has passed on and will be greatly missed. Colin was involved in the N.S.A.R.C. for many years, but not always in a high profile position, Colin spent a lot of time working in the background, doing a lot of these jobs that no one thinks about, but would surely miss if there wasn't some one there doing these jobs. (Editor)

Trivia Answer

The answer to last months question is Ross A. Hull. Ross Hull saw the potential of the then-uncharted world above 50 MHz probably better than any other man of his time. The excellence of his equipment designs and enthusiasm fired the imagination of a whole new generation of radio amateurs. He was also an associate editor of QST from 1931-1938.

Baxter's Law

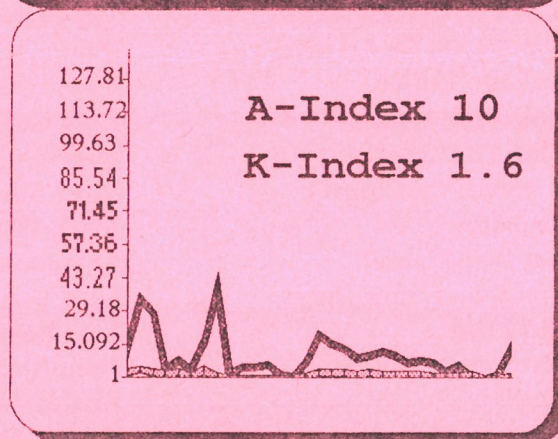
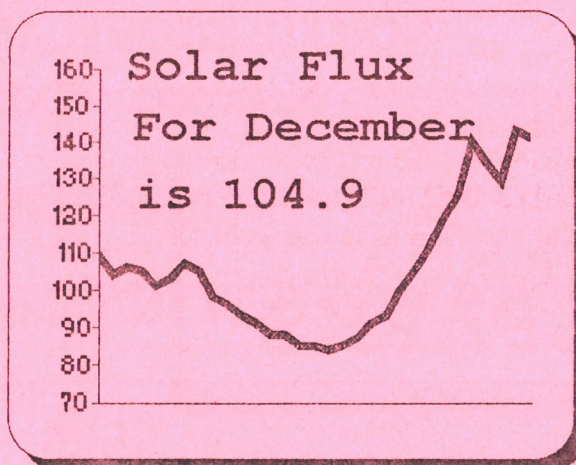
In a free market good money always drives bad money out of circulation. (Editor)

Trivia Question

If you require a Zener diode of a slightly higher voltage than what you have at hand, how can this be accomplished with components that you will probably have at hand in the junk box? (Editor)

Bargain Basement Clean Out

On February 12 1994 there will be a sale of items from the estate of Colin Bell VE3CEU. This will take place at 74 Gladstone Ave. in Oshawa, from 10AM sharp until 2PM sharp. There will be a selection of older test equipment and miscellaneous items. No reasonable offer will be refused as all items must be disposed of. Please come to the side door entrance. All sales cash and carry. Hope to see you there, (Editor).



Well for all you DX'ers out there you should have noticed some very large improvements in band conditions in the last couple of weeks before Christmas. With the Solar Flux climbing above 100 for a change and the A-Index staying below 10 a good portion of the time things were really hopping there for a few days. If you missed out on it, well it is going to be a few years yet before the next sun spot peak, 2002 I believe, mind you band conditions are going to slowly improve in the meantime but the increase is going to be slow. (Editor)

Fire Fighters

There was a very big fire in a rural area and several different fire departments were called in to help. In this area was a very small town with a very small fire department which consisted of about six firemen and one very old fire truck. As a joke someone said that the small fire department should be called in to respond, by

mistake they were called in to help. All the other fire departments arrived at the scene and were getting ready to fight the fire, when here came the small department. They passed the area where the rest of the fire departments had parked their vehicles and proceeded to drive into the field that was on fire. They stopped almost in the fire, got out of the fire truck and proceeded to put out the fire. The man that owned the field was so pleased with these six firemen and their bravery that he gave them a \$1000.00 reward. When asked what they were going to do with the money the Fire Chief replied, "We are going to get those brakes fixed." (Editor / via packet)

RAC

There is an application form included in this bulletin for anyone who may wish to support AMATEUR RADIO IN CANADA, we need ALL the support we can get in the next up and coming WARC convention. A lot of the newer hams may not realise the importance of having support of the ham population at these conferences, but the rest of the world is also at these conferences and they are all looking for more spectrum, especially on the HF bands.

MINUTES

The meeting was called to order at 19:35 by new president Robert O'Toole, VE3VKM. The new secretary, George Day, VE3UEH was introduced. No minutes of the last meeting were available as it was the Christmas social evening. Treasurer Laird, VE3LKS reported a balance of \$5869.18 in the bank but \$1000 was dedicated to the flea market and EMO had \$72.47 dedicated. Laird also provided a printout of the 80m band swap-shop. The members were notified of the passing away of Colin Bell, VE3CEU and that a replacement for his position of Get Well Card Co-ordinator was needed. Anne Jones, VE3KWI volunteered to take the position.

EMO Margaret, VE3BNN, informed the meeting that an emergency exercise was planned for the morning of Fri. Feb. 11th. and asked for volunteers. Margaret also gave a demonstration of message handling and handed out copies of message handling forms.

REPEATER Richard, VE3RJB, informed the members of the progress in relocating the repeater to a new site. A breakdown of expenses and work involved in the choice between Purple Woods Conservation Area and the Orange Lodge at Purple Hill was given with help from Eric, VE3HMG. A decision will be made at the next executive meeting and will be announced at next months General Meeting.

FLEA MARKET Tom, VE3BTR, spoke on behalf of Len, VE3SVD, about this years flea market on April 9th. Volunteers were requested for security and talk-in as well as set-up on Friday at 5pm. and teardown on Saturday evening.

NEW BUSINESS Winston, VE3WFS, suggested encouraging the students in the ham classes to take a greater interest in the club activities and for licensed hams to take a greater interest in the classes. He suggested introducing a graduation night for the newly licensed hams. Casey, VE3NGT, apologized for problems encountered on VE3USH packet repeater. He will sort them out shortly. He also informed the meeting of his intention to introduce a new BBS and DX Cluster to USH. A request was made to Robert, VE3VKM, for volunteers to help teach code and theory to Mr. L. Rabin, an almost blind SWL who attended the meeting. Victor, VE3LNX, will use the news letter to look for help.

VE3SVM, Jim Sr., needs two more volunteers to handle the code practice on Thursday evenings for one hour.

After the break Fred, VE3TIG, gave an illustrated demonstration of RTTY, AMTOR and BAUDOT. 38 people attended the meeting. (VE3UEH)

***** Windchill Table *****

Temperature (Degrees C)

Wind Velocity (KMH)	10	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45	-50
8	9	4	-2	-7	-12	-17	-23	-28	-33	-38	-46	-49	-54
16	5	-1	-8	-14	-20	-26	-32	-38	-45	-51	-57	-63	-69
32	0	-7	-14	-21	-28	-35	-42	-50	-57	-64	-71	-78	-85
48	-2	-10	-17	-25	-33	-40	-48	-56	-63	-71	-78	-86	-94
64	-3	-11	-19	-27	-35	-43	-51	-59	-67	-75	-82	-90	-98
80	-4	-12	-20	-28	-36	-44	-52	-60	-68	-76	-84	-92	-100

***** Windchill Table *****
Temperature (Degrees F)

Wind Velocity (MPH)	50	41	32	23	14	5	-4	-13	-22	-21	-40	-49	-58
5	48	39	28	19	10	1	-9	-18	-27	-36	-51	-56	-65
10	41	30	18	7	-4	-15	-26	-36	-49	-60	-71	-81	-92
20	32	19	7	-6	-18	-31	-44	-58	-71	-83	-96	-108	-121
30	28	14	1	-13	-27	-40	-54	-69	-81	-96	-108	-123	-137
40	27	12	-2	-17	-31	-45	-60	-74	-89	-103	-116	-130	-144
50	25	10	-4	-18	-33	-47	-62	-76	-90	-105	-119	-134	-148

CABLE LOSSES AT 100' USING COAX

	RG-58/U	RG-59/U	RG-8/U	RG-11/U	RG-8A/U	RG-213U	9913
<u>50MHZ</u>	3.0 db	2.3 db	1.5 db	1.55 db	1.22 db	1.75 db	.9 db
<u>150MHZ</u>	6.0 db	4.2 db	2.5 db	2.8 db	2.0 db	3.2 db	1.7db
<u>220MHZ</u>	7.0 db	5.0 db	3.5 db	3.7 db	2.75 db	4.0 db	1.8db
<u>450MHZ</u>	15.0 db	8.0 db	5.0 db	5.0 db	3.9 db	6.0 db	2.75db
<u>1 GHZ</u>	30+ db	8.5 db	9.5 db	9.5 db	5.5 db	9.0 db	4.5db

Wanted low current audio choke, 8MA, 200 to 500 henrys
call VE3FRM Ed 905-985-3790

Wanted DG5 digital readout or equivalent for Kenwood TS530
call VE3VKI Alt 905-725-0340

For Sale Dentron CM-1 amplifier interface asking \$40.00 or trade
call VE3LNX Victor 905-983-5831

For Sale Finals for FT101E's 6JS6C's, new, asking \$60.00 a pair
call VE3LNX Victor 905-983-5831

For Sale Stark VTVM model VMK-3A, asking \$20.00
call VE3MBO Wilf 905-263-2373

For Sale Heath 1420 VLF receive converter, manual, asking \$35.00
call VE3LNX Victor 905-983-5831

For Sale 4CX250B tubes, new asking \$40.00 each or for 4 \$135.00
call VE3LNX Victor 905-983-5831

For Sale 11 element 220 mhz beam by Cushcraft, asking \$30.00
call VE3LNX Victor 905-983-5831

For Sale Mariner 3000 digital radio direction finder, 12 operation, asking \$85.00
call VE3LNX Victor 905-983-5831

For Sale Bull horn with jack for external power jack, asking \$35.00
call VE3LNX Victor 905-983-5831

For Sale Sierra VLF receiver 1 kc to 350 kc, asking \$145.00
call VE3LNX Victor 905-983-5831

For Sale 40 ft. heavy duty mast pipe, you pick up, asking \$50.00
call VE3CNO Gary 905-576-1654

For Sale CSI auto patch, comes with full documentation, asking \$400.00
call VE3CNO Gary 905-576-1654

For Sale Low pass filter for HF bands asking \$30.00
call VE3LNX Victor 905-983-5831

For Sale Ham II rotor and control box and manual, asking \$300.00
call VE3LNX Victor 905-983-5831

For Free One model 28 teletype, remote printer, no keyboard
call VE3FRM Ed 905-985-3790

For Sale Icom IC-735 HF transceiver, very clean, **SOLD**
call VE3LNX Victor A George 905-725-1659

For Sale 2C39's, 3CX100's, 7289's tubes for sale, asking \$5.00 each
call VE3LNX Victor 905-983-5831

For Sale Hustler HF mobile antennas system 10-80 meters & mount \$160.00
call VE3LNX Victor 905-983-5831

For Sale Delhi 48' or 56' or 64' free standing tower, negotiable depending height.
call VE3LNX Victor 905-983-5831

For Sale Kenwood PS30 power supply asking \$170.00
call VE3LNX Victor 905-983-5831

For Sale Ten Tec Tritan IV 10-80 meter transceiver, asking \$450.00
call VE3LNX Victor 905-983-5831

DURHAM REGION AMATEUR RADIO EMERGENCY ORGANIZATION

QRV

UPDATES & NEWS

#2

UPDATES There will be a Social Service exercise on February 11th. Details are not yet known except that the Father John Monsignor High School in Oshawa will be used and presumably the Bond Street offices as well. We have been asked to set up stations and assist them with their message passing. Three S.S. meetings have been planned prior to the exercise. We will keep you posted.

A meeting with Municipal representatives has been held and antennae will be placed on the various buildings that have been designated as emergency headquarters over the next few months. One is already up on the Pickering Municipal building.

After checking the gas stations in the area and also the business in Toronto that installs tanks to the gas stations, they tell us that there is no station in the Region to their knowledge that can manually pump gas. This means that in an emergency gas will not be available by normal means. Keep your tank full!

Any amateur that takes part in an emergency - either an exercise, meeting etc. is covered by W.C.B. We have a letter on file.

NEWS An item I read the other week in a World Radio Search and Rescue column referred to amateur equipment and emergency service. Any Agency that calls out amateur radio operators for assistance and they respond, assumes that the equipment they are using is compatible with the emergency at hand. It appears fire

departments have equipment that is certified as intrinsically safe - meaning there are no open switches or contacts that could generate sparks and could ignite explosive materials such as natural gas, propane, gasoline fumes, etc. We are not the only ones that concern Search and Rescue. The media and people with cellular phones and pagers are also high on the list. Very few consumer electronics are certified for hazardous areas. Agencies that are at 'the scene' don't want to worry about volunteers who unknowingly wander into an area that could trigger a fire or explosion. Remember - you are a valuable resource - don't become a victim.

In the August 1993 QST an article appeared about a standard 12-volt connector. The Boston A.R.C. adopted the Molex 1545 series two-pin connector as its standard low-current, 13.8 volt connector. The idea of adopting this was to make it easier to share equipment during emergencies and at public service events. This connector (recommended by the ARRL Field Organization) is a polarized connector rated at 12 amps and can be used on mobile rigs as well as hand-helds, etc. In the States it is Radio Shack part #274-222 but is not available from them here - may be from Molex direct. The Canadian Amateur in 1992 proposed that in Canada we adopt the Radio Shack 2-pin cord connector #274-8001. It appears to be able to handle currents of even a 100 watt radio, is available across Canada and is not too expensive. We would like your comments, please.

Margaret VE3BNN Randy VE3JPU

PROJECT Now that Christmas and New Year celebrations are over, I expect many of you would like a project to carry you through the cold winter months. When we had our exercise last year we had intermod problems and had to use a filter. Well, one such filter or cavity you can easily build was written up in Ham Radio, May 1981. Here it is:

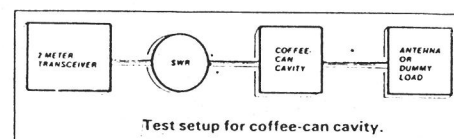
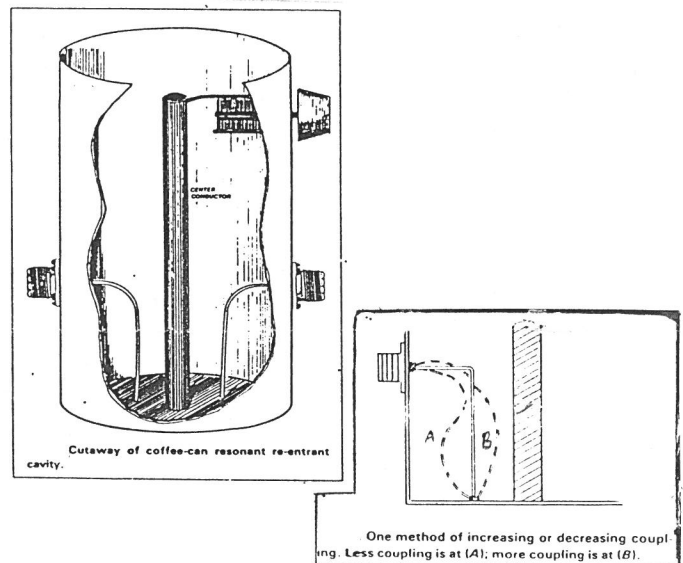
For readers who wish to acquire a working acquaintance with re-entrant cavities, I strongly suggest the building of a simple, basic cavity. All that's required is a coffee can and a few parts usually found in the average junk box. Parts required are a 1- or 2-pound coffee can, a 50-pf variable air dielectric capacitor with a knob shaft, two coaxial cable sockets, a centre conductor made of copper or brass tubing anywhere from 1/4 to 1 inch OD and a short length of No.12 (2.1mm) copper wire for the pickup loops.

Construction: Using the drawing as a guide, make an opening in the centre of the bottom of the can to provide a tight fit to the centre conductor and solder securely in place. Mount the variable capacitor close to the top of the can. Solder the stator to the centre conductor using as short a lead as possible. Make certain the rotor wiper is clean. Ground it directly to the inside of the can. Mount the two sockets diametrically opposite each other about 3 inches above the base. Solder pickup loops as shown.

Checkout: Insert the re-entrant cavity into the transmission line as shown. Select a weak signal in the 2-meter band and tune the variable capacitor for maximum response; don't be surprised at the very sharp tuning. On low-power transmit, readjust the capacitor slightly for the lowest SWR reading. Without

disturbing the cavity tuning, change the transmit frequency about 1 MHz up, then down, and observe the change in SWR. This will give you a good idea of the selectivity of this re-entrant cavity. If you use a dummy-load and wattmeter instead of an antenna to make this test, you can correlate the SWR change with power-output change.

Try bending the pickup loops with long-nose pliers so that they extend closer to the centre conductor. Your measurements should show a bandwidth increase, as evidenced by less change in SWR and power output as you repeat the first test. Then try bending the loops toward the housing; you should then notice a narrowing of the bandwidth. By experimenting with this simple re-entrant cavity you should become familiar with its capabilities and also find it a useful piece of equipment in your 2-meter work. (W.Tucker, W4FXE) ENJOY!



Margaret VE3BNN Randy VE3JPU

A Word About RAC...

RAC, the RADIO AMATEURS OF CANADA INC., is the national organization for radio amateurs licensed by the federal Department of Communications.

RAC is organized for the promotion of Amateur Radio communications and experimentation, for the establishment of Amateur Radio networks capable of providing communications in the event of disasters and other emergencies, and for the representation of Canadian radio amateurs, nationally to the Department of Communications and other government agencies, and internationally as Canadian member-society of IARU, the International Amateur Radio Union.

RAC is incorporated as a non share capital corporation under the Canada Corporations Act. RAC is governed by a seven-person Board of Directors elected on a regional basis by the RAC membership.

Although the only essential qualification for RAC membership is a genuine interest in Amateur Radio, full voting membership is granted only to licensed Canadian radio amateurs. Membership in RAC includes a subscription to THE CANADIAN AMATEUR radio magazine as one of the membership services.

Membership enquiries and general correspondence should be directed to:
RAC Administrative Office, P.O. Box 356, Kingston, Ontario, K7L 4W2,
Telephone (613) 545-9100.

RADIO AMATEURS OF CANADA INC.
Administrative Office
P.O. Box 356, Kingston, Ont. K7L 4W2

Membership Application: () New () Renewal

Name: _____

Address: _____

City: _____ Prov: _____ Postal Code: _____

Call Sign: _____

VISA/MASTER CARD No: _____

Expiry Date: _____

Please make cheques payable to RAC. All payments in Canadian funds. Payment must accompany application form.

Membership Fees

Families may subscribe to RAC by paying the basic fee of \$28.00 per year, plus \$15.00 for each additional person who wishes to use the services of the organization. (One copy of the magazine per family membership.) Please include the extra names and call signs with the application.

Membership

1 year individual membership @ \$28.00

each additional family member:

_____ @ \$15.00

_____ @ \$15.00

_____ @ \$15.00

TOTAL
