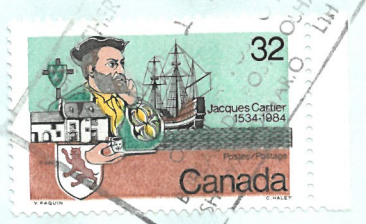
nsarc Inc.
P.O. Box 171
Oshawa, Ont.
L1H 7L1



To

VE3CRK
DAY RALPH
454 HOLCAN AVE.
OSHAWA
ONT. L1G 5X6

MAY
1984

NORTH SHORE AMATEUR RADIO CLUB Inc. NEWSLETTER

Oshawa, Ontario, Canada

May 1984

OFFICERS AND EXECUTIVE

President	Bill Sutton	VE3MLW	623-2846
Secretary	(To be elected)		
Treasurer	Mac McFarlane	VE3XI	723-8484
Director	Joe White	VE3IHS	623-4069
Director	Bill Fortune	VE3NTI	986-5656
Registrar	Keith Wyard-Scott	VE3GDF	723-5758
Get-well cards	Ted Brant	VE3ADD	668-3561
Editor	Charlie Bissett	VE3IBO	668-7481
Editor	Neil McAlister	VE3KSP	668-4161

CLUB STATION VE3NSR

CLUB REPEATER ..... VE3OSH 147.72 in

147.12 out

CLUB NETS

2-meter net each and every Thursday at 19:30 local time, on the club repeater, VE3OSH. Net control is Roy, VE3AAF.

10-meter net every Sunday at 13:00 local time for CW; around 13:30 for SSB. 28.200 MHz plus or minus beacon.

THE NEXT MEETING

Club meetings are always held at the same place and time, the second Tuesday of every month.

The next regular meeting will be on **Tuesday, May 8th** at O'Neill Collegiate in Oshawa, in the cafeteria at 20:00 local time. (8 PM). After the usual business, VE3KSP will give an illustrated talk about his recent experiences in VS6-land (Hong Kong) and BY-land (The Peoples' Republic of China). Anyone interested is welcome to attend.

THE NSARC / SPARC ANNUAL FLEA MARKET

Bigger and better than ever before in its new location at Pickering High School, the annual flea market was a great success, thanks to the efforts of many members from both clubs. All 120 tables were sold out to vendors -- most of them in advance. 1,016 people paid the $2 admission at the door -- an increase in attendance of about 10 percent over last year. Congratulations to everyone concerned with organization, setting-up tables, security, food, publicity, and cleaning-up afterwards.

JUNK BOX

Speaking of flea markets etc., all of us have various bits and pieces lying around the shack, but some of us are real pack-rats. Charlie VE3IBO, qualifies as a a member of this species! To start the ball rolling for our new column, he has "a few" of his own listings. For anything below, call VE3IBO on OSH or landline (unless otherwise noted).

Wants to find ...

1 "The Giant Book of Electronic Projects" Tab. no. 1367, by the Editors of 73 Magazine. VE3IBO would like to borrow it.

2 Information on following probes for RCA WO-91B oscilloscope:
WG-300B direct/low capacitance probe and cable
WG-302A RF-IF-VF signal-tracing probe 500 kHz & 250 MHz
WG-354A capacitance-type voltage divider probe for up to 500 volts. -- VE3IBO

3 OB-2 voltage regulators (7 pin miniature) for disposal or exchange. -- VE3IBO

4 Ontario Hydro "Electrical Safety Code" book, 14th edition (blue) for exam in Construction and Maintenance. -- VE3IBO

5 Power supply, 13.8 volts, 10 amps or more. -- VE3EVJ, Hugh.

Wants to unload ...

1 GE Prog-line base transmitter, crystals. Up to 100 watts o/p with type 5894 tube in final (new spare). 2 type 44D Motorola receiver strips and crystals. Both installed in 25" by 16" cabinet, on casters. Asking $50. -- VE3IBO

2 SB101 transceiver, SB200 linear, HP23 power supply -- $450.00. HW12 converted to HW32 -- $70.00. Viking Ranger -- $25.00. Contact Jack, VE3ABV, at 725-0159.

3 2-meter Heath VFS-7401-2
Antenna " HDC-2201
Power Supply, Heath VFA-7401-1
SWR Meter, " HM 2101 -- Earle, VE3MKY, 668-7305

GOING PLACES?

CRRL has a new service for hams seeking **licensing in foreign countries.** They have info and application forms for over 150 nations. This service promises to be really useful: Those of us who have tried to get foreign licenses before know that embassies in Ottawa don't always know what to do or where to get proper documentation. (This applies even to some countries that have reciprocal licensing agreements with Canada!) For help in cutting through the red tape, contact Naarlon Thorn, VE3LRU, at CRRL, Box 7009, Station E, London, Ont. N5Y 4J9. (Tnx to "SPARC GAP", Feb 84).

HELP SOMEBODY IN A DEVELOPING COUNTRY

Another item concerning foreign countries: Dr. John Warnica, VE3JKW, is an eye specialist who belongs to a medical mission made up of physicians who donate their vacation time to work in developing countries. One important tool in their battle against vision disorders is a mundane, but invaluable item: Your old, discarded **eyeglasses.** Old glasses may be no use to us, but after the members of John's mission have checked the lenses to determine the prescription and catalogued the information, these used glasses can be given to some less fortunate individual in the third world who really needs them.

Last year, John and the other doctors distributed 50,000 pairs of glasses -- each pair discarded by somebody in Canada.

So please don't throw away your old glasses, or leave them gathering dust in some drawer. Bring them to the next club meeting, and VE3KSP will make sure they get to John. Or take them to the CARF booth at any hamfest or flea market.

Incidentally, John finds amateur radio a useful link to home when he's off on a mission. Maybe you'll hear him looking for a little news from home, or a phone patch someday -- and perhaps you can log an unusal new country in the process.

(Tnx "The Metro Amateur Radio Club Bulletin", Toronto.)

ATTENTION PREFIX FREAKS ...

Want to be on the receiving end of a pileup for a change? The CRRL April news bulletin says that to commemorate Ontario's Bicentennial, amateurs in this province will be allowed to use the **special prefix,** XO3 throughout the month of July, 1984.

To make the event even more attractive, the RSO is offering colorful **Bicentennial QSL cards** for use by Ontario amateurs who want to mark the province's two hundredth birthday in a special way. They're practically free: You pay only $2.00 postage for a batch of 250 cards. Send your order (indicating your name and address, and enclosing your cheque for $2) to "Bicentennial QSL cards, c/o Radio Society of Ontario, 12 Frederick Street, St. Catherines, Ontario, L2S 2S2, Attn. Dave Digweed, VE3FOI."

[continued]

About the same month, you might hear a couple other peculiar prefixes on the bands. To commemorate the 50th anniversary of their city, Yellowknife amateurs can use the prefix CJ8 from June 23 to July 6. Cornwall, Ont. amateurs can use XK3 from July 14 to 29 to celebrate their local anniversary.

UPCOMING CONTESTS

I would like to list some of the upcoming contests, in hopes of persuading a few more ops to get involved.

June	9-10	VHF QSO party
	23-24	Field Day
July	13-15	A5 International SSTV-DX contest
Aug	4-5	UHF contest
	24-27	North America UHF FSTV-DX contest (73 mag.)
Sept	8-9	VHF QSO party
Oct	6-7	ARRL QSO party (cw)
	13-14	ARRL QSO party (phone)
Nov	3-4	Sweepstakes (cw)
	17-18	Sweepstakes (phone)
Dec	1-2	160-meter contest
	8-9	10-meter contest

These are all the contests I know about. If anyone is operating one or more of these events, please get the results to me so that I can get them in the newsletter. Also, I would like to entice all hams reading this newsletter to the low end of the two-meter band -- if they can stand the action down there! With any luck, possibly we can pry a few of these multi-mode rigs that are stuck in the +600kHz position on "good old XXX", and get some real use out of all those $$$ that we have spent!

Hope to hear from some of you soon!

-- 73s de Victor Doty, VE3LNX

FROM THE EDITORS' DESKS

Last month, we had prepared 16 pages for the April issue. However, printing costs are high, and only half of the material could be published. All this in aid of explaining why the newsletter can't always be as fat as we'd like. It seems that paper doesn't grow on trees, after all!

A few people have wondered how to get things into the newsletter. There are at least four ways: Catch either of us on the repeater (at least one of us checks in for every Thursday night net on 'OSH); telephone either of us (our numbers are always on the front page of the newsletter); see either one of us at a regular club meeting; or write to us via the club address, which is shown on the outside cover. So we look forward to an eyeball, postal, telephone, or regular QSO with you!

-- Vy 73 de VE3KSP es VE3IBO

RADIO
SOCIETY OF
ONTARIO INC.

Box 246
Port Credit Postal Station
MISSISSAUGA, Ontario L5G 4L8

free 1984 RSO free

ONTARIO BICENTENNIAL QSL CARDS

Ontario Bicentennial Award

Multi-coloured parchment

Sponsored by The Radio Society of Ontario Inc.
Contacts valid only for January 1 to December 31, 1984.

VE3 stations.

Contact 200 different VE3 or portable VE3 stations. *One point each.*

Other VE, VO, VY.

Stations contact 100 different VE3 or portable VE3 stations. *Two points each.*

DX stations including USA.

Contact 20 different VE3 or portable VE3 stations. *Ten points each.*

Any mode, band endorsed at your wish. Special seals for each 200 extra points. If VE3 stations are using special call or prefix, they count double.

No QSL Cards necessary

Send certified Log Data and $1.00 or 3 IRCs to:

VE3LSS, Bicentennial Project
Listowel District Secondary School
Geography Department
Listowel, Ontario, Canada. N4W 2M4

It is the pleasure of the Radio Society of Ontario and the Ministry of Tourism to offer to the Amateurs of Ontario special BICENTENNIAL QSL CARDS. QSL cards play an important role in the heritage of ham radio community. These cards will be postcards showing an Ontario scene with a space for your callsign. On the back will be the standard report form plus and explaniation about the Bicentennial.

These cards will be available on a first come first serve bases, so don't delay fill in the order form below and send it along with $2.00 per 250 cards maximum order is 500, if you want them mailed to you.

Please send your order to:

BICENTENNIAL QSL CARDS
c/o Radio Society of Ontario
12 Frederick Street,
St.Catharines, Ontario,
L2S-2S2,
Attn. Dave Digweed, VE3FOI
416-684-7903

Listen for more Bicentennial Reports on the ONTARS net and RSO Weekly Bulletins.

CUT ALONG THIS LINE

SHIPPING LABEL (please print or type)

TO: Name:.....
Address: .....
.....
Postal Code: .....

Ship via Parcel post .....
arrange for pick up .....

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Station:.....
Address: .....
.....
Postal Code: .....
phone # .....

Date sent,..... Quantity .....

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This Antenna Is Too Good To Be True

It's cheap. It works well on all bands. And it radiates a super signal.

J. W. Spencer W4HDX
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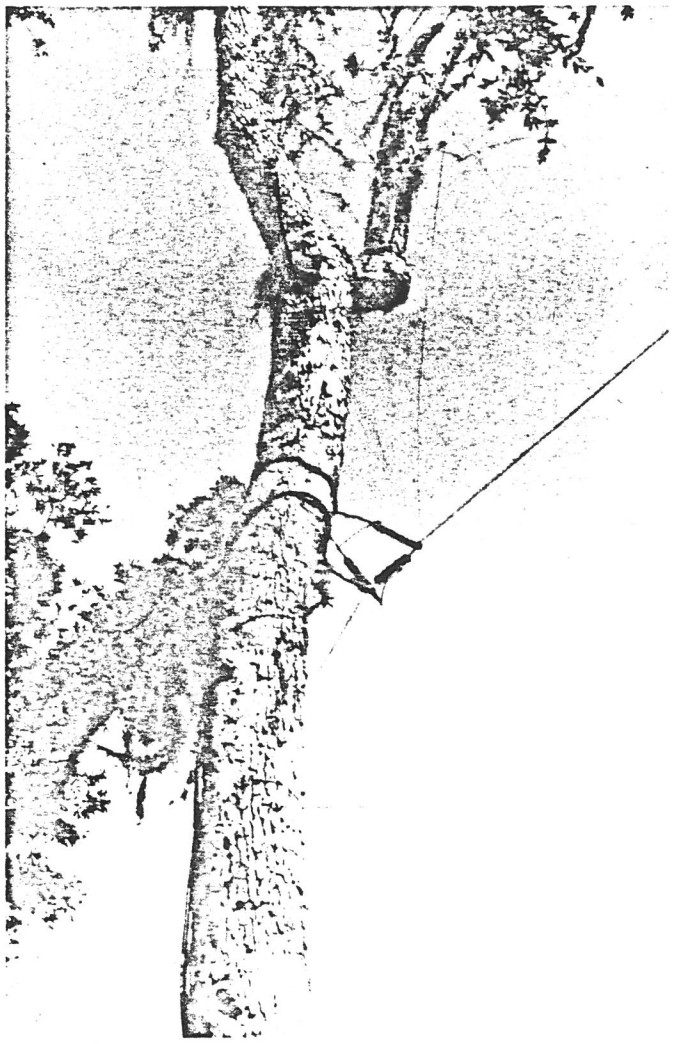
Niceville FL 32578



Completed antenna mounted in tree.

Would you like to have an antenna that is capable of working all the HF bands, or any combination of the HF bands including the new WARC bands, with excellent results, at a fraction of the cost of any of the commercially-available multi-band antennas now on the market? Would you also like to have an antenna with an extremely low noise factor? I'm about to describe an antenna that is just what you've been looking for.

This antenna is a combination of the old reliable Zepp with the addition of a balanced, shielded feeder system which has been described in various articles in past years.

This antenna has been in use at this QTH as well as other locations for over two years and has yielded many fine DX contacts and many good reports stateside.

To determine the comparable merit of this antenna, I erected separate dipoles cut for the center of each band and fed with a single coaxial cable. Then I connected all antennas so they could be switched rapidly to determine the comparable signal strength of each as compared to the Zepp antenna.

In addition to the favorable signal strength comparisons, I also found that the noise level on the Zepp antenna was as much as 5 S-units lower than the noise on the cut-to-frequency dipole with single coax feed. I noticed this particularly on

Desired Bands of Operation	Length of Each Side of Antenna From Center to Each End
160–10 meters	108 feet
80–10 meters	54 feet
40–10 meters	27 feet
30–10 meters	18.7 feet
20–10 meters	13.5 feet
17–10 meters	10.4 feet
15–10 meters	9 feet
12–10 meters	7.8 feet

Table 1.

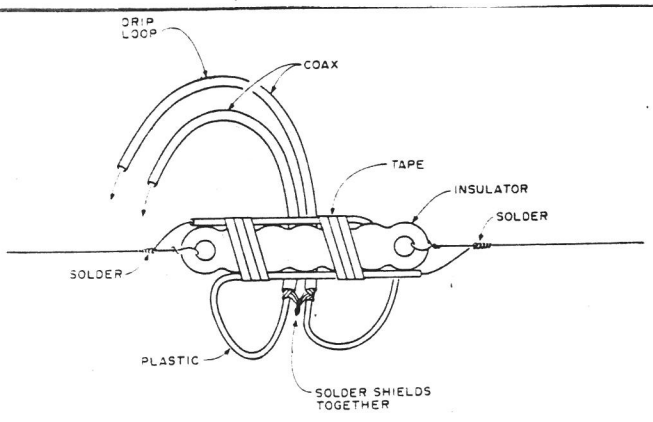


Fig. 1. Method of supporting coax cables.

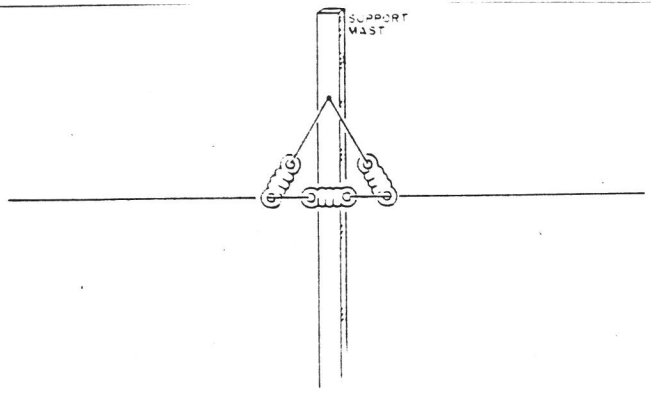


Fig. 2. Method of supporting antenna at center.

the model of this antenna which was erected inside the attic of the house in close proximity to the ac wiring of the building, where the noise level dropped from an S-7 on the regular dipole to an S-2 on the Zepp antenna.

To erect this antenna, you simply figure the length of each side of the flat-top from the center to one end by using the figures shown in Table 1.

This antenna can be cut for operation an any combination of the HF ham bands, including the WARC bands which have not yet been released. For example, if your space is limited, you could put an antenna in the attic of the house, as I did at one location where I had an attic length of only about 30 feet, by figuring the antenna for operation on the bands from 30 through 10 meters, resulting in a length each side of center of 18.67 feet. Then I ran the wire in a Z configuration through the attic to compress it into the available space.

I have used various configurations on this antenna, such as the halo and the inverted vee, and all give good results. If you can get the wire running in a fairly straight line, though, your radiation pattern will be more predictable.

The flat-top portion is designed so that it is non-resonant on all bands of operation, thereby avoiding any extremely high or extremely low impedance points at the feedpoint. It is designed to be resonant between the one-quarter, half, three-quarter, and full-wave points on each band, thereby presenting an impedance to the antenna tuner which is well within range of the tuner on each band and will not cause any loading problems. An antenna tuner is required which has a built-in balun or you must use a 4-to-1 balun at the bottom end of the line if you don't have one built in the tuner itself.

The feedline is made of two runs of RG-8/U cable for powers up to 2 kW PEP, or for low-power operation under 100 Watts output, RG-58/U cable may be used. The lower loss of the larger cable is to be desired, however, even if low power is used.

At the top end of the feedline, you connect the shields of the two coax cables together but *do not* connect them to anything else. Then at the bottom end of the line, the shields are tied together and connected to the ground connection in the shack and to the frame of the tuner.

The inner conductors of the coax cables are tied to each leg of the antenna wire at the top of the line, and at the bottom end of the line they are connected to each of the balanced-output terminals of the antenna tuner.

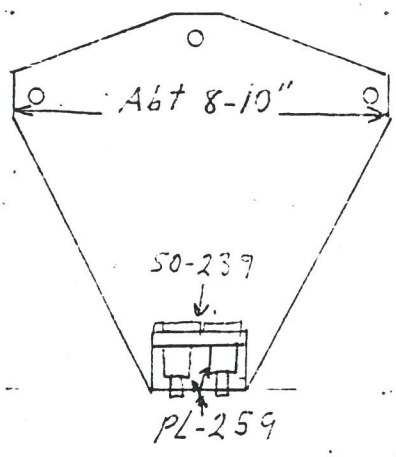
The feedline can be run anywhere—underground, through metal or vinyl conduit, or in the open. The advantage of this arrangement, however, is that unlike the old open-wire feedline previously used on Zepp antennas, it does not have to be kept clear of surrounding objects and is not affected by anything it lies against.

There is only one precaution that must be observed, and that is to cut both runs of the cable exactly the same length. They do not have to be run together, however, as the shield on the cables provides exact electrical separation of the inner conductors even if the two cables are widely separated.

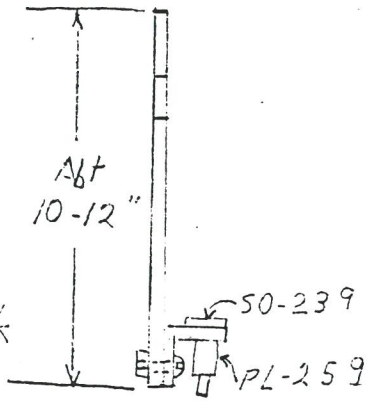
As to the length of the feedline, I found that best results were observed with line lengths of a little more than one-quarter wavelength at the lowest frequency of operation (or anything longer than that). Try to avoid making the feedline resonant at any particular frequency you are operating on, particularly the quarter-wave points, or you may have a bit of trouble tuning on this band. Optimum length seemed to be about 55 feet for 80-through-10-meter operation.

As for the mechanical construction, it is a good idea to use a long insulator, the same type used on the ends of the antenna, at the center of the antenna. Then slip the end of another insulator of the same type over the wire on either side of the center insulator, coming off at right angles to the wire and tying the support wire to these two side insulators so that equal pull is achieved on either side of the center insulator. Then

Center support and coaxial connections



Materials:
1/4" PVC or
Plexiglass
Connector support
Aluminum - 1/16" thick



Another Suggested method for center mount. - Ed

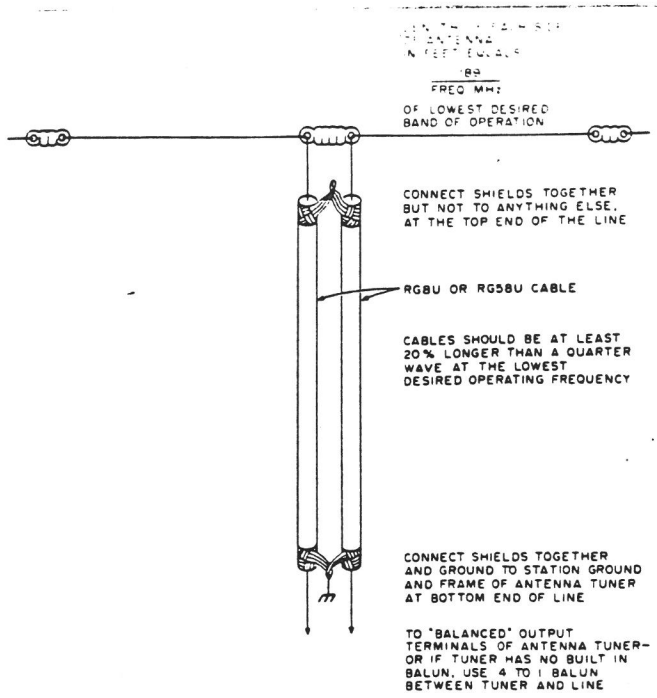


Fig. 3. Allband trapless antenna for HF.

at the point where you need to support the two coax cables, just strip off about 2 feet of the braid, leaving the plastic inner insulation, and bend this part along the center insulator on each side and tape securely to the insulator. This will make a very solid support for the coax cables and will prevent wind damage.

It is also a good idea to bring the coax up the support mast a little higher than the antenna wire and bend it over in a loop and down about a foot or so to prevent the water from leaking into and running down the inside of the shield on the cables.

To separate the braid from the inner conductor on the coax, strip the outside plastic covering off about two feet from the end, then take the end of the shield and push it down, compressing it so that it becomes larger in diameter. Then take an awl or the tip of a small screwdriver and carefully spread the strands of the braid apart, opening up a hole in one side of the braid. At this point, bend the coax in a U shape and pull the plastic insulated center conductor out through the hole in the side of the braid U-end first. This will eliminate the need for making a solder connection directly next to the plastic where it might create a weak spot.

I have used this antenna in various situations cut for all different combinations of bands and have had excellent results with all of them. I have also made up a portable version of this antenna using stranded insulated wire such as zip-cord and RG-58/U cables which I use in conjunction with a small antenna tuner for operation on 20 through 10 meters. This one is only 13.5 feet long either side of center with two runs of coax 20 feet long. It is ideal for stringing up in a motel room or apartment by supporting it with nylon fishing line. Just keep the antenna out a foot or so from the wall and support it by anything you can find to tie it to. Try it. You'll like it! ■

I just thought I would include this antenna article taken from 73 magazine for February 84, as some of you had shown interest when I mentioned it: If some of you need some PVC or sheet plastic , I have a limited supply available. It is $\frac{1}{4}$" thick. I also have a limited supply of aluminium that can be used as a support for the cable connectors if you choose to use that method of support. VE3IBO

From TCA for April 84

-:Canadian Components for Amateur Satelite:-

Canadian participation in the Space Age is not limited to the commercial field. A group of 12 Ottawa people, most of them Amateurs, recently completed two components of a new Amateur SateLite. Half of the new bird is devoted to Amateur Packet radio experimentation and half of it will be taken up with testing the performance of components for a proposed 'store-and-forward' radio system for the VITA organization. This is an international volunteer association dedicated to giving technical information assistance to third world countries. The Ottawa group, part of an international team working on the SateLite produced a 128 K microcomputer and the battery and its computer, scheduled for launching on March 1st from Goddard Space Centre; this SateLite will be known as OSCAR 11.

Still on the topic of Amateur space activity, John Henry VE2VQ, a former president of CARF, was recently re-elected as a director of AMSAT, the international Amateur satelite society. John is also president of AMSAT Canada. Both organizations are involved in the production and operation of the Amateur OSCAR satelites.

CARF News service.

-:OSCAR 10 to assist Space Shuttle:-

The next flight of the Space Shuttle, scheduled for August 31st, will have on board four experiments designed and built by U.S. Amateurs of the Marshall Space Centre ARC. The telemetry from the shuttle will transmit on 435.33 Mhz, a frequency which can be up-link to Amateur SateLite OSCAR 10 when the primary telemetry antenna is pointing away from the earth. Amateurs and SWLs will be asked to assist in monitoring.

-:Cut-rate postage for QSL cards:-

Worldwide Apparently we can mail abt 6 QSL cards for 48 cents Airmail

Canadian NewsFronts

Conducted By Harry MacLean,* VE3GRO

National ARES Program

ARES, the League-sponsored Amateur Radio Emergency Service, is active in most parts of Canada, ready to supply backup communication in times of local or regional emergency. What would happen, however, if an emergency were national in scale? What would happen, for instance, if a winter storm were to take out normal channels of communication in over half of Canada? Would we be ready?

At Minute 6 of CRRL Board Meeting No. 4, held on July 4-5, 1982 in Saskatoon, Saskatchewan, the CRRL Board of Directors appointed Jack Strangleman, VE3GV, to become CRRL National Emergency Communications Advisor with responsibility for developing a national ARES program. Jack keeps busy as Ontario Section Emergency Co-ordinator, but he's taken time to do some homework. He sees the national program as developing in four stages:

1) *Establishment of a Central Canadian ARES File.* This would include the names, addresses and telephone numbers of key personnel in all Canadian Sections, information about Section nets and details of Section ARES activities. Such a file would be of great value when making representations to national organizations, such as Emergency Planning Canada, and indispensable in time of emergency.

2) *Implementation of a Canadian ARES Net.* This net would bring together Section Managers, Section Emergency Co-ordinators and Section Traffic Managers for planning, and be a means by which ARES personnel could co-ordinate their efforts in time of emergency.

3) *Development of a Canadian ARES Plan.* This would be for later — when personnel in the Sections become comfortable working with each other, when they agree on what they can and should be doing in time of emergency.

4) *Possible Extension of the Canadian ARES Net to Become a Canadian Emergency and Traffic Net.* This is a controversial proposal. Many Canadian amateurs want such a net. They say they would take pride in moving Canadian point-to-point traffic totally within Canada. However, NTS, the bi-national National Traffic System, continues to serve Canada well. Also, it seems doubtful that there would be enough operators to support a new traffic link. More discussion will be needed on this proposal.

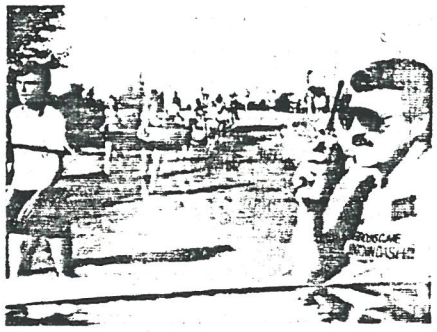
This is not the first program along these lines that has been tried in Canada. Why shouid this one succeed while others have failed? Basically because it's not starting from scratch. ARES is active in most parts of Canada. All that's really needed is some careful co-ordination of what's already in place and working well.

Still, it's an ambitious project. Jack Strangleman is to be commended for taking it on. Its success could be vital. We hope Jack receives every support.

Among the topics scheduled for discussion are the national ARES program, production of new CRRL licensing manuals and questions and answers book, possible CRRL sponsorship of the annual Can-Am contest and long-range plans.

☐ That videotape with the accent on space communications, *Amateur Radio's Newest Frontier,* is receiving excellent use across Canada. To borrow a copy, contact one of these CRRL reps and workers: VE7CSD, VE5WM, VE3GSO, VE3CDM and VE2FNK. Locations and telephone numbers are listed in last month's Canadian NewsFronts.

☐ CRRL membership is holding steady at just under 5000. This is excellent considering the difficult economic times experienced by many amateurs, and the fact that CRRL membership dues have increased twice during the past two years.



August 27, 1983: the Brooks/CJME Downtown Dash in Regina, Saskatchewan. With runners approaching, Bill Wood, VE5AEJ, sends a progress report through the VE5RRG repeater. Twelve members of Regina Amateur Radio Association assisted in this event. *(VE5WM photo)*

SPECIAL CALL SIGNS FOR SABLE AND SAINT PAUL'S

Early in September DOC rejected a CRRL request for permanent special prefixes for Sable and Saint Paul Islands, two unique parts of Canada that have DXCC "country" status. As a result of further discussions with CRRL Atlantic Director Andy McLellan, VE1ASJ, however, DOC reconsidered the matter and agreed to create two special permanent call signs for use by DXpeditions: CY9SAB for Sable and CYØSPI for Saint Paul's. (The numerals 9 and Ø were chosen so the call signs could not be mistaken for special-event call signs in VE1-VE8.)

The CYØSPI call sign got a real workout during the last week of September. Andy McLellan and a group of VE1 and W1 amateurs operated 160 to 2 metres using cw, phone and RTTY, making a total of 20,186 contacts during a 10-day Dxpedition to Saint Paul's. Much of their success was because of the special call sign provided by DOC.

CRRL AMATEUR OF THE YEAR

Bill Gillespie, VE6ABC, of Edmonton, Alberta, is CRRL Amateur of the Year. Bill is Alberta Section Traffic Manager, a District Emergency Co-ordinator, manager of two traffic nets and an Official Bulletin Station. He operates the Alberta Tube Bank and maintains a Western depot for CRRL supplies and materials. During winter months, he provides on-the-air code practice that has helped amateurs all over Western Canada to get their tickets. Despite all this, Bill always seems to find time to take on "one more job" to help others. Bill will be presented with his award this month, likely at an early meeting of Northern Alberta Amateur Radio Club.

CRRL NEWS

☐ At presstime, the CRRL Board of Directors plans to meet by conference telephone call on November 20.

DOC EXAM DATES

☐ Planning ahead? DOC will hold its 1984 Amateur Radio exams across Canada on February 4, April 18, June 20 and October 17. Applications must be submitted by January 11, March 21, May 23 and September 19, or about one month before the date of each writing. Remember, all examinations will now be based on the revised version of DOC's new TRC-24.

NOTES FROM ALL OVER

☐ About 50 amateurs attended the CARF National Symposium held in Halifax, Nova Scotia, October 14-15. CRRL was represented by Maritime-Newfoundland Section Manager Don Welling, VE1WF. Don found the atmosphere friendly and the discussions productive. We'll report on some of the recommendations next month.

☐ It's likely a new record for Canadian amateurs. On October 2, VE1BCZ and VE2s AQU, DUB, DWG, HAK and XL completed a 122-km 10-GHz contact between Mount Mansfield, Vermont, and the Westmount lookout on Mount Royal, Montreal, Quebec. Equipment included .6 metre dishes at both ends. Co-ordination was via 2 metres.

☐ On August 27, members of the Regina Amateur Radio Association provided radio communications for the "Brooks/CJME Downtown Dash" — an event hosted by Regina's Market Square, and officially sanctioned by the Saskatchewan Track and Field Association. Race director was Audrey Perra, assisted by the Pile O'Bones Striders. The first annual 10K and 5K event attracted 565 runners from 4 to 70 years of age, and the way things went, it appears that amateurs will be part of the "Downtown Dash" from now on.

☐ In co-operation with DOC, and British Columbia and Yukon industry, the British Columbia Arts, Science and Technology Centre put on a special display to mark World Communications Year. CRRL Pacific Director Bill Kremer, VE7CSD, and amateurs in the Greater Vancouver area set up the Amateur Radio display and operated special-event station VE7WCY.

☐ Finally, on behalf of the CRRL Board of Directors and your CRRL reps and workers across the country, a happy holiday season to all. Hope 1984 is your best year ever.

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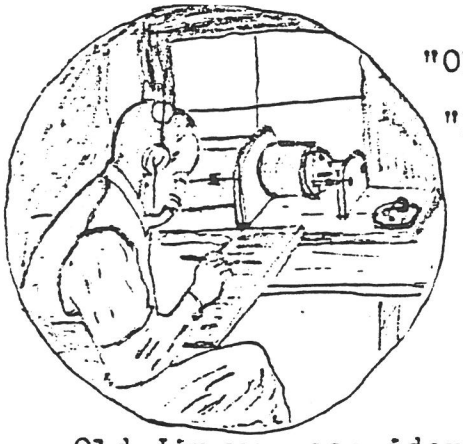
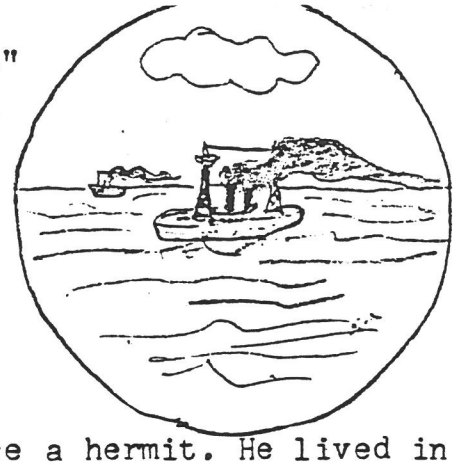


"Old Jim's Crystal Set" or "Please Take A Bath!"

by

VE3FRM



Old Jim was considered by most folk to be a hermit. He lived in a shabby moss covered cabin just where the 401 now passes over Midland Ave. It was a cosey shaded little spot, no hydro and none of the amenities considered necessities today. My boyhood chum, Johnny, and I looked upon him as a friend and a man of the world. He had seen much action in the "Great War" as he called it and town folk felt he was a bit "teched" from all the killin'that went on in Europe. We were warned to stay away from him, but boys are boys, besides his ecentricity did not bother us, in fact we even understood his outlook on life somewhat.

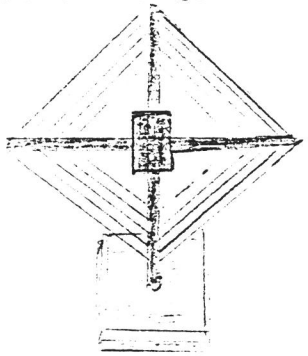
In trade for baskets of soft coal that we gathered from the railroad tracks, Old Jim would often weave us tails of his adventures "over there". He would relate to us the humorous side of his travels, his heart was filled with many fond memories. The stories would go on well past the time for lighting of the kerosene lamp that hung high over the parlor table. He would then let us listen to his crystal set that sat alone on a corner table by the coal stove, while he read one of the many books from his library case.

Many pleasant evenings were spent at Old Jims but it soon came to an end. One day while playing road hockey, Mr. Clark, Old Jim's closest neighbor approached us carrying the crystal set. We could tell the sad message he bore by the look on his face. Old Jim had passed away the night before thus leaving Mr. Clark the executor of his meager estate. Knowing the happiness the set brought us, Old Jim had previousley instructed Mr. Clark to give it to us should his time come.

Several weeks later we had the old flivver working on a length of fence wire thrown over the barn roof. Our listening post was inside a tarpaulin lean-to burrowed into the side of the manure pile. The manure sure kept us warm during those cold winter evenings, but it also made us a little offensive to our folks at home. I now realise why mother often proded me to take a bath.

Johnny and I would each take an ear phone and listen intently while searching with the slider up and down that coil. Straining our ears for some call of distress from perhaps a giant Laker as it stood on it's prop and was slowly sinking beneath the foaming water. Old Jim often related such stories to us in some of his well spun yarns. Sometimes we would catch a far away signal and have to stop breathing to hear those very feable scratchings in our ears. Soon we would tire and perhaps be happy with listening to one of Foster Hewitt's hockey broadcasts.

That crystal set was treasured and it brought us many enjoyable hours, Johnny has it yet, to the best of my knowledge.



" The Great Lakes Receptor"

With Old Jim in mind, I sat down and built a crystal set that would look good, perhaps sitting on a small table in the corner. By golly, it worked better than I hoped and it's appearance is something to behold! As one observer at the club put it, "which end does the alcohol come out"? Anyone can build this rig and I gaurentee results that will make you proud. I dubbed mine the "Great Lakes Receptor".

There are many possible circuit derivations available to the constructor. In drawing "A" we have the common two slide tuner, it's selectivity offers very little in todays crowded spectrum. Drawing "B" is the model I built in accordance with the acompanying schematic. It's the famous loose coupler used by many pioneers of amateur radio. This circuit provides amazing selectivity and sensitivity, far beyond my expectations. I am receiving about 18 stations and have separated and identified 11 so far. It's a time consuming job. My antenna is an end fed wire 20 feet up and 150 feet long.

The primary coil is wound on a 3&1/4" dia. form consisting of six inch winding of #20 enamled, close wound. The secondary is 2&3/4" dia. with #22 wound for 5", tapped every one inch. The taps are connected to the switch riding up front. Connections in and out of this arrangement is done through homemade slider contacts riding on the 1/4" rod rails. The schematic explains the rest. Use cardboard tubing as coil forms, stiffen them with Urethane. Mahogany is a good material for the base and coil form retainers. Your local lumber facilities can supply this at prices below that of Pine. For other materials, let your imagination work a little and have fun. If you feel I can give any advice, see me at the next club meeting or call me on 147.120 mcs.

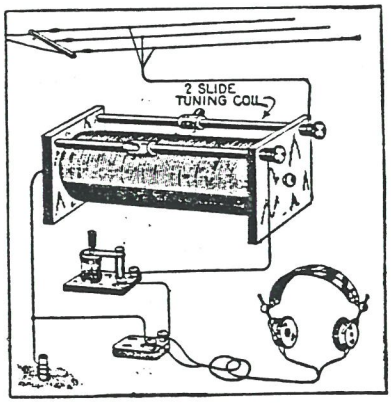
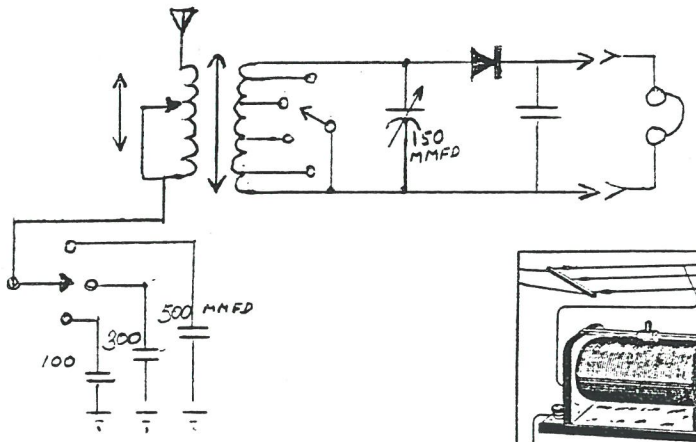


Fig. 1.—Two slide tuner divided into primary and secondary circuits by conductive coupling.

A



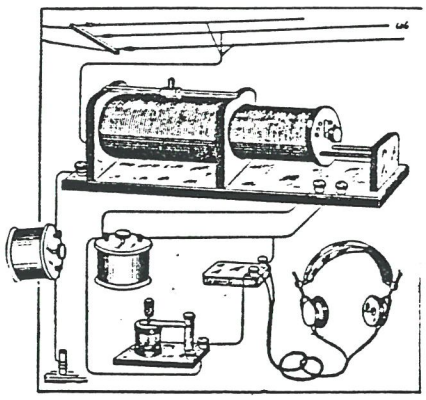


Fig. 2.—Circuit in which primary and secondary are inductively coupled by loose coupler.

B

In this suffocating world of Hi Tech., the crystal set offers a breath of fresh air for the creative. The quality of sound that a bit of wire and a hunk of rock can produce is amazing. Russ 3ATT and Hugh 3EVJ are planning one to be next on the project bench. It will be fun to see what rolls out of the old work shop. Bring your set toa club meeting so we can all enjoy it. I hope to hear from you. 73, Ed Taylor, VE3FRM.
Manchester.