

georgian bay amateur radio club

BOX 592, OWEN SOUND, ONTARIO N4K 5R1

146.34 146.94

NEWSLETTER

F E E D B A C K --- M A R C H 1 9 7 8

Editor - Jack VE3DTS

75 metre net - 3.783 Mhz Sunday 9:30 Local Time
 c.w. net 3.650 " Sunday and Wed. 8.00 PM Local Time

EXECUTIVE: President - Ian Trenholm VE3HIP
 Vice-Pres. - Ian Sutherland VE3HXX
 Sect/Treas.- Cy Weaver VE3DQA

Next Meeting: March 16th, 1978 - Thursday at Bayview Manor
 Owen Sound at 8:00 P.M. -Directions will be given
 over VE3OSR repeater if needed.

PRESIDENT'S NOTES

- > Time to think about May elections. This is your club and will only continue to grow and be of benefit to all members, dependent upon each members input and support given to the club executive. Get Involved & enjoy club functions.
- Field Day ' 78. See Vern VE3BSF for offers of assistance and participation.
- Congratulations to John VE3IYF on obtaining his Advanced ticket. Ur ssb rig sounds fb on the air John.
- Suspect Don VE3IDS and another operator (un-named), up to something really experimental on field day.. LOOK -OUT.!!!
- Comment on Bill's note this month (VE3EFX) -- Note the American version of the spelling of 'vertical' in Ted's VE3AEO's scrap book notes..... If the Ont. Hydro can ~~not~~ use 'heavy' water, I guess we should let Dick refer to 'heavy' windshi. Enough yet!!!
- The way Ted VE3AEO is rattling along on cw on 3.650 Mhz; we may have to add some automatic decoding equipment in the shack....

cul *Ian*
 VE3HIP

Jed's Scrap Book

Let's Talk Antennas.....

If you are interested in learning all kinds of antenna theory turn the page cuz you'll get no scientific, earth shattering ideas from me. However, I thought some of you might be interested in some of my findings after playing around with lots of screwball antennas.

One of the best all band antennas I have used is the Windom. This has long been forgotten but they do work nicely. They can be made of 300 ohm ribbon, fed with the same or made of single wire. By to-days standards though, they are too long.... about 190 feet and require an ant. tuner. They were popular back in the days of AM, before anyone heard of sun and the only method of determining your radiated power, was to see how long a spark you could draw off the antenna with a screwdriver. Boy, was that ever scientific! Another method was to take a 4 ft. florescent tube outside, touch it to the antenna and see if it would fire. Watch out for this method because the natives really become very restless when a guy is seen walking around his back yard holding a fully lighted tube with no apparent source of power, — So after they let you out of the looney bin you can continue with your experiments. The best all band antenna I have come across is the trap dipole. They are easy to load, they can be fitted into most lots (house lots, that is) if you have to pull them this way and that way to fit the lot it doesn't seem to bother them much. Mine is the shape of a Z and seems to kick out a fair signal.

If you want some fun try two trap dipoles tied together in the centre fed with one piece of coax. And then if you really want to go far out stick a verticle in the middle of the whole works.

Once upon a time I made a verticle by soldering pop cans together and resting this effort on a pop bottle which made a dandy base insulator. A fellow I once worked claimed to have done the same with beer cans. He said that some of the cans must have portions of beer left in them because after the sun got to work and the beer fermented.....add a little R.J. and the whole issue blew up. I rather doubt the story but it ~~ffff~~ sounds like something a ham might do.

I have used the house eaves trough for an antenna, and for the radials of a verticle. A fence makes a good radial for a verticle too.

You have likely guessed by this time that I use a beam for 20-15 & 10.....a verticle as a spare and for comparison on 40-20-15-10 and a trap dipole for 80-40.

Ted's Scrap Book

Verticles

Some fellows love them, while others think they are a waste of time. So let's take a look at the good and the bad features.

On the plus side we can say.....

1. They are cheap..... a couple of pieces of pipe, wire that is taped to a pole a pop bottle for an insulator to rest the effort on, some radials above or below ground and you are in business. I once soldered a bunch of pop cans together instead of either pipe or wire and it worked fine.
2. They take up very little yard space.
3. They are dandy for DX work due to their low angle of radiation. On 75 not so hot for daily local skeds.
4. They are portable.
5. They radiate in all directions.

On the minus side we find.....

1. As most noise is vertically polarized they pick this stuff up and dump it through your speaker.
2. If mounted at ground level a very good ground is necessary. By a good ground I mean a ten foot rod at the base of the antenna, at least 20 pieces wire buried under the ground and at least 25% of these terminated with ground rods. If roof mounted we should use at least 4 radials for each freq. to be used. If you mount the verticle above ground, buy a bird feeder and explain to your wife that the radials are really perches for the birds. This story didn't work for me but it's always worth a try.
3. Verticles appear to be rather tempermental i.e. if your friend has good luck with a verticle, it doesn't always follow that your location will give the same results.
4. They appear to radiate J.V.I.

This is the way they have worked for me....

On 20-15-10 nothing beats a directional antenna such as a beam.

On 40-20-15-10 a verticle usually is better than an all band dipole.

On 75 the verticle not worth a hoot unless you go after DX, and then it's great.

I have never tried phased verticles but the lads who use them think they are beautiful.

'til the next time I dig into the scrap bookhave a care, and have fun!

THE G5RV

an all-purpose antenna

BY JIM GRAY, W2EUQ

No antenna is really all-purpose or all-band, but this one comes close

G5RV is the Amateur Radio callsign of R. L. Varney, of Sussex, England. He is credited with having developed and used the antenna that bears his call, although an earlier antenna shown in Collins Radio manuals of the 1930s appears at least similar. It is probably true that the specific antenna known as the G5RV did, however, originate with Mr. Varney — to the delight of Amateur Radio operators everywhere.

The G5RV antenna looks very much like a center-fed Zepp antenna with a flat-top portion and an open-wire feeder portion

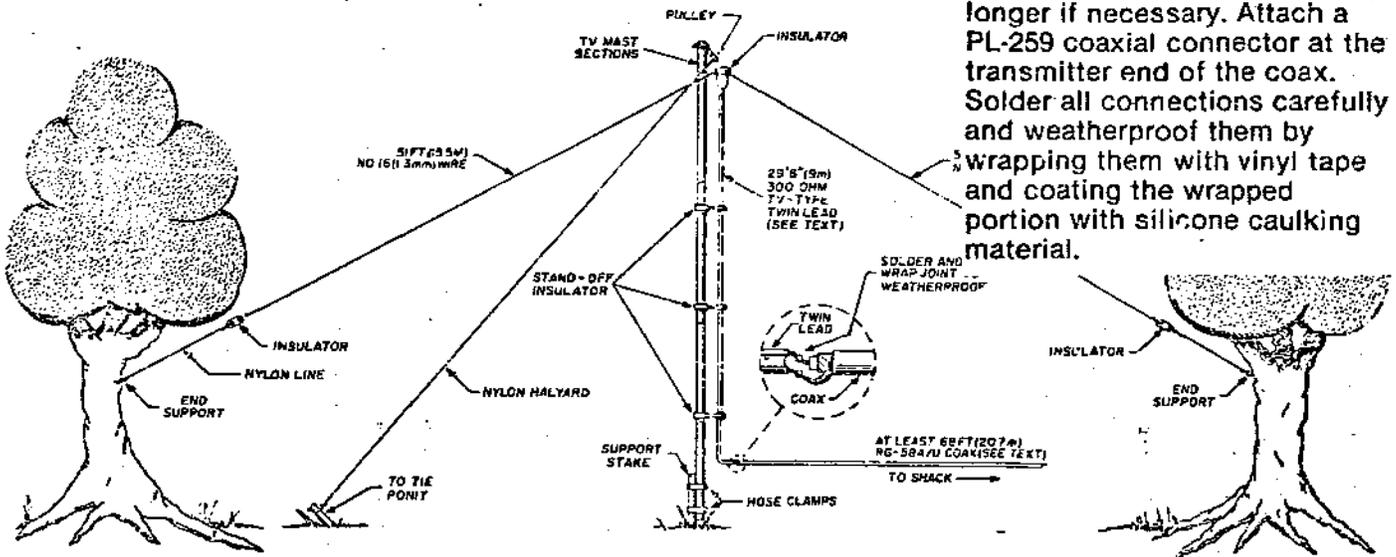
connected at the center of the flat top. The G5RV, however, lends itself nicely to installation in the popular inverted-vee configuration or, if you have the necessary supports, in the standard dipole or doublet configuration. In any case, the antenna is very simple and unobtrusive — as antennas go.

Dimensions

The flat top can be made from copper antenna wire of no. 14 (1.6 mm) or larger size. The overall length is 102 feet (31.1m) with each leg being half of that. At the center of the flat

top, place an insulator or center connector that isolates the two legs of the antenna from each other. Connect an open-wire feedline 35 feet (10.7m) in length at that point, with one wire attached to one leg of the antenna, and the other wire attached to the other leg. If you do not happen to have an open-wire feedline, although it is easy enough to make, just use a length of TV-type, solid dielectric, 300-ohm "twin lead." If you choose the twin lead, use a length of 29.5 feet (9m), a difference in length that takes into consideration the difference between the velocity of propagation of a radio signal along a two-wire "open" line spaced with air dielectric or along a two-wire line spaced with plastic dielectric material.

At the transmitter end of the two-wire feeder, attach a length of 50-ohm coaxial cable, such as RG-58A/U, for example. The center conductor connects to one wire and the shield to the other. If you plan to use a transmitter output power in excess of about two hundred watts, then use the heavier RG-8/U cable. The length of the cable should be at least 68 feet (20.7m), but may be longer if necessary. Attach a PL-259 coaxial connector at the transmitter end of the coax. Solder all connections carefully and weatherproof them by wrapping them with vinyl tape and coating the wrapped portion with silicone caulking material.



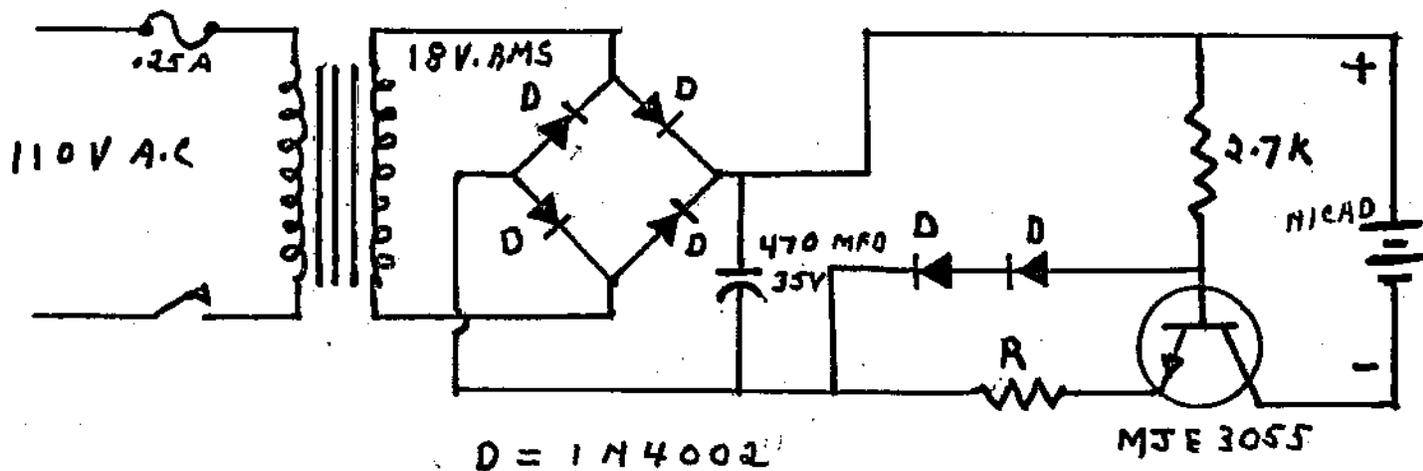
In this instance, the G5RV antenna is shown in an inverted vee configuration. A nylon halyard raises the center of the antenna to the top of a mast made from TV mast sections. Stand-off insulators keep the feedline from flapping in the wind. The antenna "legs" serve as guy wires, while the halyard acts as additional support.

A SIMPLE CHARGER FOR NICKEL-CADMIUM BATTERIES

Most nickel-cadmium (nicad) batteries require a constant current source of charging current. The rate of charging current is approximately 10% of the cells capacity. A few examples are :

<u>Battery size</u>	<u>Capacity (mah)</u>	<u>Charge current (ma) 16 hrs.</u>
AA	450	45
C	1200	120
D	2000	200

The cells are charged in series, not in parallel. If a cell has reversed its polarity it should be completely discharged before recharging. If a cell will not take a charge then one may assume that a short has occurred within the cell and sometimes this can be remedied by "zapping". This is done by momentarily discharging a high current through the cell. The charge on a 10000 mfd. electrolytic capacitor charged to a potential of 12 to 20 volts should suffice. A defective nicad battery consisting of several cells must be opened and the defective cell isolated before "zapping". The effectiveness of the treatment can be determined by checking for a charge on the cell with a voltmeter after the "zap".



R may be made switch selectable

R = 18 ohms $I_c = 50$ ma	R = 5.6 ohms $I_c = 110$ ma
R = 10 ohms $I_c = 80$ ma	R = 3.9 ohms $I_c = 180$ ma
R = 8.2 ohms $I_c = 90$ ma	R = 2.0 ohms $I_c = 320$ ma

VE3 OSR

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AMATEUR GEAR AND TEST EQUIPMENT FOR SALE & WANTED

CONTACT STAN GUZANOS ,SWL, FLESHERTON, ONT. -Tel. 519-924-2473 ;

for the following:

- 1 - R.F. Sig. Gen. Marconi Commercial Type -Model DF 888 -- \$ 80.00
- 1 - R.F. Sig. Gen. - Model 705 A ----- 25.00
- 1 - Eico Tube Tester -Model 667 ,New tube adpater ----- 80.00 *
- 1 - Model 3413 Triplet -Older model tube tester (4 & 8 pin)--- 20.00
- 1 - Stark transistor checker ----- 40.00
- 1 - 2 metre G.E. Progress Line Base rig -VE3OSR Crystals ----- 80.00
- 1 - 2 metre G.E. Prog. Line base rig,not converted ----- 25.00
- 1 - Siscom Commander 1 Transceiver - VE3OSR Crystals ----- 45.00
- 1 - DX 40 Transmitter -needs minor repairs before using ----- 40.00
- 1 - National 270 Receiver - Gud condition ----- 200.00
- 1 - Hallicrafter SX 117 Receiver ----- 300.00
- 1 - FR-DX 400 Yaesu Receiver - 2 metre conv.inc. ,New cond. --- 400.00 *
- 1 - Audio Sig. Tracer -Matches above listed sig.gen. ----- 25.00

* - indicates price negotable

WANTED: 10 metre crystal for FT 101 E -- Freq. 35.52 (osc.freq.)
 Contact VE3 IHV - Bill Taves, Box 1666, Port Elgin, Ont.

- 1 - SWR Bridge - Armaco ----- \$ 5.00
- 1 - G. E. Progress Line Base Rig. VE3OSR crystal - 1 channel - 80.00
- 1 - Marconi DF 34 - new tubes - under dash mount 2 metre rig - 60.00 *

Contact VE3FFN - Walt.Stoyko, R.R. # 1, Proton Station,Ont
for these previous three units.

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ADDITIONAL AMATEUR GEAR FOR SALE OR WANTED:

FOR SALE : Complete Heathkit Station - *** Price Negotable ***

- SB 300 Receiver,
- SB 400 Transmitter,
- SB 614 Scope,
- SB 200 Linear - 600 Watts,
- Matching speaker, power supply & Phone patch.

Contact VE3AWU Mike in Barrie. Will sell as package deal only.
Plans to update with complete new gear in station reason for selling.

FOR SALE:

Loudspeaker and enclosure 3/4 inch mahogany.

- 32 x 24 x 12 base reflex ----- \$ 20.00
- 1 - microphone -ElectroVoice -ceramic cart. -Mod; 727 ----- 10.00
- 1 - 5inch oscilloscope -working order ----- 30.00

Contact VE3BFV - Jim Harron, R.R. # 2, Kemble, Ont.
Tel. 371 - 1209

FOR SALE : 1 pair matching speakers - 8 inch - 8 ohms \$ 5.00
no enclosures

Contact VE3DTS - Jack Avis ,P.O. Box 455,Wiarton,

We expect some newly licenced operators in the area soon,
so if you have any used gear that could be used on the air,
let the editor know as soon as possible. Thanks.

-----More next month.

The February issue of Feedback, which barely made it to the membership before they left to attend the meeting, was certainly a surprise package when it did arrive.

The first noticeable change was the fiendishly clever way the pages were stapled on the right side instead of the conventional left side. This innovation left the reader with two choices. He could either start to read on the last page and progress toward the front or start on page one and flip the pages to the right, Chinese style.

On page one, the phantom felt pen wielder struck again, instead of erasing and retyping as was required.

After reading the profound statements in the December issue, concerning the intent to edit copy submitted, I was amazed to note that the echoes of the fanfare had barely faded away when we were treated to a comedy of errors, that were untouched by the censor's pen, in the article submitted by our illustrious delegate. In chronological order the spelling errors were the words, 1. huge, 2. Dowkes, in paragraph one, 3. metre, in paragraph two, 4. interested, and 5. Hensall, in paragraph three.

Over and above all that, there are blatant mistakes that will confuse anyone who reads the article without actually having first hand knowledge of the items concerned.

For instance, it was news to me that VE3BEV, VE3IXD and VE3IYE took part in the Snowmobile Marathon, who are they? Also, what is a QA, second? This cryptic information is from paragraph two.

In the last paragraph the GBARC Net frequency is given as 3.793. To the best of my knowledge I've always found the net on 3.783. I'm not sure which area stations call in on Ontario but I know many that check in on ONTARS.

Lastly, a small point but valid I believe, is the statement about the weather that demolished the MTR tower. I've heard of high winds and heavy icing, but heavy wind is a new one on me.

One can assume from the foregoing that 1. The writer wasn't concentrating on his writing, or he was depending on the editor carrying out his duties as outlined in the December issue of the newsletter. 2. The editor wasn't prepared to edit, or didn't see the mistakes, or couldn't recognise them as being mistakes.

Whatever the case may be, the publication isn't enhanced by such penmanship being allowed to slip by the alleged eagle eye of the editor and being distributed far and wide in the club's name.

Feb. 1978 MEETING

The Feb. meeting of the club was held at the Bayview Manor courtesy of John VE3IEV
The minutes were read and on motion by Cy VE3DQA, seconded by Jim VE3BFV were adopted.

Dick reported on the Southampton Snowmobile rally and read a letter from the snowmobile club indicating that they were very pleased with the efforts of our club in providing communications. Dick had a few pictures of those participating which were of interest.

Ian VE3KIP reported that preparations for the Owen Sound Rally were complete and outlined some of the check points to be covered.

A brief report on the emergency power for the repeater shows that this is at a temporary standstill due to weather conditions.

The equipment committee had nothing to report at this time but indicated that there should be something to report at the next meeting.

An effort is being made to co-ordinate with the group in Kincardine for the DOC examinations to be held in Kincardine. It was felt that this would make good sense

A further discussion was held on the merits of a link between VE3OSR and VE3MTR with nothing concert being decided, however the members felt the matter should be left open in order that further discussion could be resumed at a later date if required or wanted.

A letter from CRRL was read regarding the recent symposium in which it was pointed out the friction which exists between CRRL and CARF. Dick read a rebuttal letter from CARF.

A ~~XXXXXX~~ lively discussion followed and as a result it was moved by Cam VE3CTQ, seconded by Jim VE3CRV that the club compile a letter, to be sent to CRRL, CARF, DOC RSO and other interested ~~XXXXXX~~ related bodies condensing the derogatory remarks directed at each other. Cam was appointed to draft up a suitable letter and have it read and approved over the Sunday net.

Moved by Jim VE3CBV seconded by John IIF that any additional cost for the lunch be picked up by the club. Carried

Once again John provided an excellent lunch and again many thanks John for the use of the room and the lunch.

Meeting adjourned at 10:15.