

THE OVMRC RAMBLER

Volume 39, Number 6 - January, 1995

DIGI HUNT?

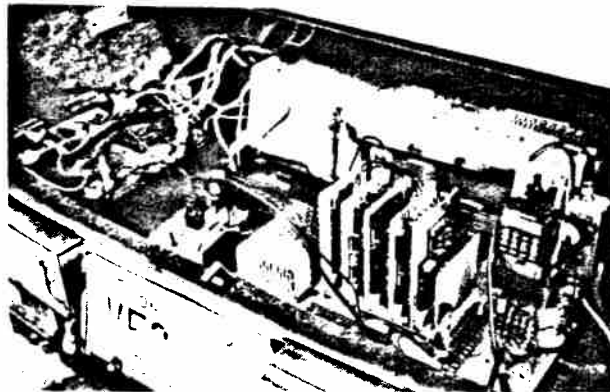
Photos & Story By Larry, VE3WEH

Did yee hunt on Saturday, Dec. 10, 1994? Many did and the prototype Digital Audio repeater, VA3XMT, operating on 147.495 MHz simplex, was found first by Darryl, VE3EKV.



Wil Warren, VE3XMT, on the left, with Darryl, VE3EKV, the Bunny Hunt winner.

Fourteen DFers tried to track down the elusive Bunny transmitting on high and low power in various directions through a five element beam mounted on a trailer hitch! This hunt was very different from others! Each hunter transmitted on 2m analog and tracked their signal which was processed digitally by a special card in an IBM type PC. This repeater is the prototype to a new Digital Audio Repeater (DAR) using an ANC



The new Digital Audio Repeater complete with power supply just fit into Wil's car trunk.



Part of the group of Bunny Hunters inspecting the Digital Audio Repeater in Wil's car trunk.

(Audio Network Controller) technology which is being developed by Wil Warren, VE3XMT. When completed, the system will introduce a new concept in repeaters, namely, Cellular Repeater Nodes (CRN). The objective is to allow anyone with an Advanced Licence to set up an ANC node using an IBM or compatible PC with a special plug in card and a modified HTX-202. This would allow you to telephone home and use your radio on low power to talk to someone locally in your neighbourhood. Or, someone in your neighbourhood could call into your radio and your computer would call another PC with a similar remote system and then you would be able to transmit through the remote radio. This would allow local HT users to talk on simplex through a radio located in region A, then through a second radio in region B and finally they could talk to other local Handi Talkie users just as if they were on a "full wide area repeater". However, no one outside of these regions would be able to hear or to interfere with the conversation (no more button pushers!).

If you did not participate, you missed out on hearing your own transmissions echoed with great clarity and precision! The repeater functioned very well and Wil was pleased with the workout it received. In January, Maurice-Andre, VE3VIG, is planning another hunt, not with a digital repeater but you are welcome to try your hand at DFing! Listen on the local nets for the announcement!

The Ottawa Valley Mobile Radio Club

RAMBLER

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We gratefully acknowledge the support of the Corel Corporation in producing the Rambler.

Mark Your Calendar !

Next general meeting:

Thursday, January 19th at 1930 hours in the main auditorium of the Museum of Science and Technology. Our guest speaker will be Jim Dean, VE3IQ, Vice President of RAC who will be speaking on the possibility of RAC assuming amateur radio administrative responsibilities in Canada and other important subjects.

Deadline for next Rambler:

Friday, January 27th, 1995.

OVMRC's Repeater:

**VE3TWO , 147.300MHZ (+)
444.200MHZ (+)**

Affiliated Clubs

The OVMRC exchanges newsletters with the following organizations:

Algoma ARC, Sault Ste Marie, ON
Augusta Amateur Radio Assoc. Augusta, ME
Border City Radio Club, Windsor, ON
Chatham-Kent ARC Inc. Chatham, ON
Calgary Amateur Radio Assoc. Calgary AB
Comox Valley ARC, Comox, B.C.
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West Island ARC, Dorval, PQ
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Sponsors

The OVMRC provides newsletters to the following organizations for their past support of our activities:

Bytown Marine, Ottawa, ON
Kenwood Electronics Canada Inc.
Mississauga, ON
Corel Corporation, Ottawa, ON

Ramblings

Wise words from our President,

Ernie Jury, VE3EJJ



As is customary at this time of year I will look back at the past year, and forward at the coming year. The Club has had a very active fall program that included both very interesting speakers and a very well received technical "how to make a printed circuit board" session. I want to express the thanks of all Club members to Larry, VE3WEH, for arranging an very good December meeting program, to Lillian, VE3ZDK, for the Christmas party preparations and to Steve, VE3RUU, and his crew for the Christmas party set-up and clean-up, and to all members who brought in those delicious, low cal home baked goodies. We all had an enjoyable evening, particularly the opportunity to visit with one another in a casual and relaxed atmosphere. Looking ahead, there is an interesting program lined up for the next few months. In response to requests for more "information" sessions for licensed amateurs, we are looking at the possibility of having such sessions in the next few months. If you would be interested in participating, please contact Larry, VE3WEH. Another forthcoming event is the commissioning of the revitalized demonstration station VE3JW at the museum. Before turning the rest of the column over to Jerry, VE3CDS, to tell you about it, I want to extend "73" and wishes for loads of enjoyment in the hobby during 1995 to each and every reader. And now Jerry, take it away.

VE3JW, the Museum of Science & Technology Amateur Radio Station - at long last we are getting close to the re-installation of the station in the public area of the museum. The new communications display is well underway and it is expected to be up and running in the latter part of February. The centrepiece of the display is to be the

Ham Station. We are being provided with an excellent new display area approximately twice the size of our previous set-up.

For many of the Club members, particularly those licensed during the past three years and who did not see the old set-up, the new station will be interesting and an operating challenge. Here is a short description of the equipment to be installed. The high frequency station will consist of the Kenwood TS 850S driving an Ameritron ALS-600 solid state broad band linear amplifier. The antennas for HF are an R-7 vertical for 40 through 10 and we have a 7-element beam on a 48 foot tower for 20, 15 and 10. This will give us a booming signal on a worldwide basis. With our 600 watts on 80 there is little doubt that we won't be heard! We also have catered to the CW enthusiasts in that the 850 includes an electronic keyer and we have a new bencher paddle, of course a straight key is also available for the novice hams. The 850 also has a 500 cycle filter for CW use. We have a variety of other HF equipment including a ten-tec transceiver with a kilowatt linear, a Yaesu 757 and other older equipment. Initially we will have some of these on display and as we progress we will place them in operation. A VHF station will be part of the display and operation on packet and radio teletype will be set-up. We also have slo-scan TV capability which was operational in the old station. Anyone interested in getting this equipment running should call me .

All of this equipment requires set-up and check out during the next several weeks. Continuing work is necessary to ensure that we expand the station over the next few months. We also need members to operate the station on weekends. Get involved - give me a call 225-7374.

Minutes

OVMRC Regular Meeting 15 December, 1994

The meeting was called to order by President Ernie, VE3EJJ, at 1936 hours.

The membership welcomed visitors Jason, VE3TYG, Al, VE3ZTU, John, VA3LAR, Lytton Jenkins and Cindy Teevens.

The President reminded members of the executive that the next executive meeting is scheduled for Monday, 19 December in the museum's classroom.

Jerry, VE3CDS, informed the membership that construction was progressing well and we should be able to commission our new station VE3JW by the end of February. Volunteers are needed to receive the necessary training to operate the club's equipment which will be installed in the new station, particularly during week days. More details in the President's Ramblings column. Seventy-five children spoke with Santa Claus last Sunday at the Museum of Science and Technology. They will have another opportunity to do so this Sunday between 1300 and 1600 hours. Volunteer "Helpers" are welcome!

Ed, VA3CEJ, is still looking for a scanner, preferably with good front end selectivity, for a students' project at Algonquin College. See Ed if you can help.

Rick, VE3IHI, pointed out an error in the December issue of the Rambler. In the article titled, "FM Amateur Satellites", OSCAR 21 is no longer operating.

Larry, VE3WEH, introduced the 'Soap Box' speakers. Al, VE2TYJ and Ann, VE3TSB, volunteered to judge the speakers based on the memberships' applause.

Fred, VE3BAJ, was not able to attend. He will be given speaking time at a future meeting.

Ed, VA3CEJ, spoke on "Computer Memories". The end result is we now have more computer memory capacity to save all kinds of information for which we have no use.

Andre, VE3CLW, spoke about the construction and installation of the first 2m repeater in this region and his role in putting it up at Camp Fortune with help from James, VE3CGD and George, VE3BNO.

David, VE3UES, made an eloquent plea for the memberships' help in collecting pop and beer can pull tabs. These are being collected to purchase wheelchairs for those who need them.

Gerry, VE3GK, 'tuned' his 5 string banjo and played a few renditions of familiar songs.

The judges decided the following: first place to Andre, who chose a carry-all bag as his prize; second place to David, who chose a CD carrying case; third and fourth place was a tie between Ed and Gerry.

Larry, VE3WEH, read an entertaining Christmas poem, especially geared for "Hams".

Andre picked the winning door prize ticket, won by David, VE3OMI, a double faced clock showing UTC and local times.

Bob, VE3SUY, advised that a few of the QRP receivers are available to the members for rent. Those interested please see Bob.

The President thanked Lillian for coordinating our Christmas Social Hour and Steve and his committee for organizing the room.

"GOOD WISHES FOR THE SEASON,
EVERYONE"

The meeting adjourned at 2040 hours.

January 19th, 1995, Meeting

GUEST SPEAKER

Jim Dean, VE3IQ

RAC Vice President

Will be speaking on negotiations with Industry Canada for RAC to assume responsibility for administrative functions associated with amateur radio in Canada as well as other pertinent subjects. Plan now to attend!

Keep Us Informed

Have you moved to a new address lately ?
Have you got a new call sign?

If you answer "yes" to either of the above questions - have you informed the OVMRC of the change ? By advising the club of your change of address you ensure uninterrupted delivery of the Rambler each month. And the club's records are maintained up-to-date with your new call sign and address.

Your cooperation in providing, in writing, this information to the Membership Chairman would be most appreciated !

Discounts for Hams Continues

Another opportunity to gain a discount is being offered, this time on automobile transmission repairs. B & N Transmissions, 1086 Gladstone Avenue, Ottawa, will give you a 10% discount on all transmission repairs, front or rear wheel drive, standard or automatic transmission, if you identify yourself as a Ham operator and provide your call sign. Two fellow amateurs, Danny, VA3DLM and Leonard, VE3LPH, are employed at B & N Transmissions and will proudly do any necessary repairs to your vehicle.

Radios For Rent

Bob, VE3SUY, announced at the December meeting that because enrollment in the OVMRC's Amateur Radio Course was down this year, some of the 40 meter receivers specially built for code practise are available to club members to rent for \$5 a month. This is a great way to try out a direct conversion receiver to ascertain whether you might like to build a similar unit, or purchase a simple receiver.

Some members got the mistaken impression at the club meeting that the training budget had been overspent this year. This is not true. The Training Group is well within their budget. However, with lower enrollment they

will not require all 30 receivers. Of course, the students must come first. The code class run by Jerry, VE3CDS, on Monday evenings will require some receivers, but several of these students have their own HF equipment.

The club requires a \$75 fully refundable deposit against the return of the receiver, as well as the \$5 rental fee per month. What an inexpensive way to have some real radio fun, recall the days of simpler rigs and explore the possibilities of homebrew receivers that you can build. If you are interested, please contact Bob at 737-9443. If there is sufficient interest among members, Bob could organize three Sunday sessions to build these receivers. They can be built for any amateur band up to 10 m. Cost of all parts and sessions would be about \$100.

OVMRC Code Practice Sessions

All those who want code practice at 5 to 12 wpm may tune into the code training sessions that will shortly begin on 7.050 Khz. The sessions will feature Farnsworth spaced code - each character sent at 15 wpm but spaced out to the lower rates. This helps overcome the code "plateau" at about 10 wpm. Although the schedule and operators have not all been worked out, try tuning in at 1830 hours and 2130 hours EST to see if the sessions have started. Each session will indicate when the next transmission will take place. For course members only, there will be some surprises for those who tune in ! Call Bob, VE3SUY, 737-9443 or John, VE3NJ, 224-5204 evenings, if you require more details.

If there are any volunteers to help with the code sessions (you require a PC close to your transmitter), call Bob or John.

What's good for amateur radio is good for Canada ! This is where bright young minds get their start. And if we don't nurture those bright young minds, the next time we need engineers we may have to rent them from Taiwan or someplace.

The J Pole Antenna **Effective, Reliable and Cheap to Build !**

The J Pole Antenna

Everyone talks about the effectiveness of their J pole antenna, how little it cost and how easy it was to build. However, as simple as a J pole is and how reliable and durable, you have to search through a number of publications to find a design schematic for one.

It's the Rambler to the rescue !

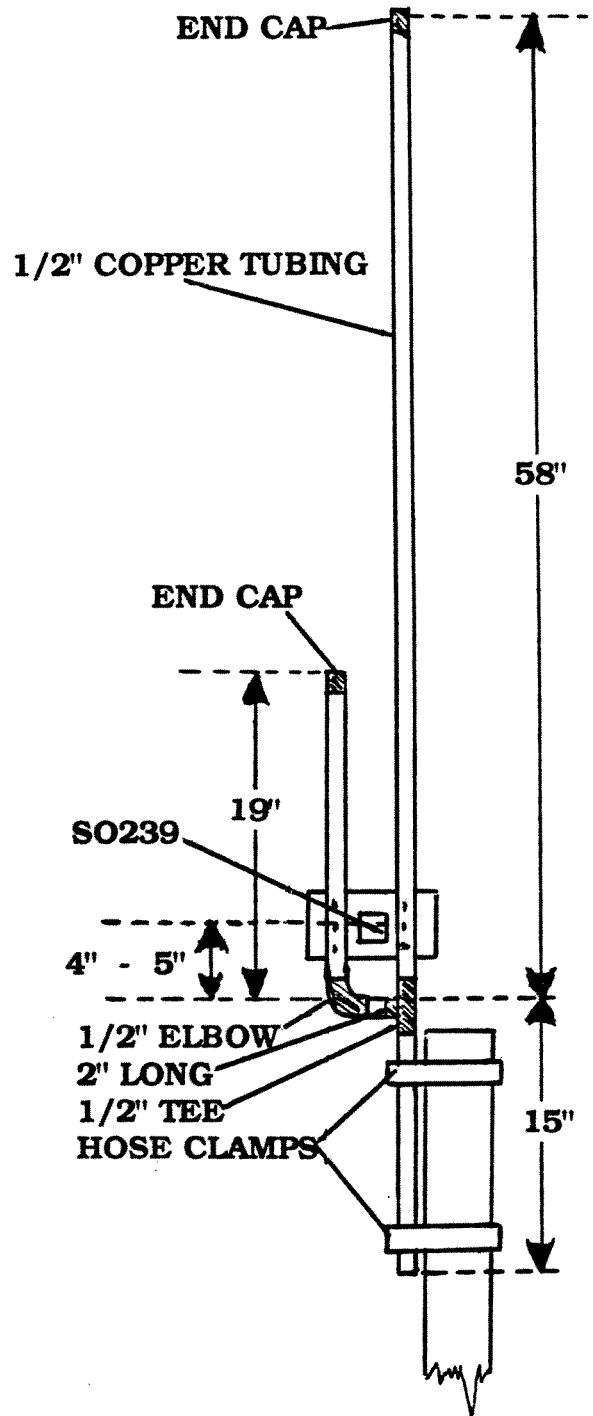
The entire antenna is constructed using one eight foot length of one half inch copper pipe, 2 end caps, one 90 degree elbow, one tee, an SO239 connector, a piece of rigid plastic measuring about 7" x 2" , some silicone sealant, solder, two hose clamps and four metal screws.

Cut 3 pieces of copper pipe - 58" , 19" , and 2" long. Save the remaining piece of pipe, it will form the base.

Before soldering the pieces of pipe together, use a strip of fine emery cloth or sand paper or steel wool to clean about 1 1/2" at the end of each piece of pipe - and remember to also clean the inside of the elbow and tee - this will remove all traces of oil, wax or flux.

Mount the SO239 coax connector near the centre of the plastic sheet - the braid from the SO239 should be connected to the 58" length and the centre connector to the 19" length. After some sliding this piece up and down the pipes a point will be found where the SWR will be at its minimum, this should be around 4" to 5" up from the bottom of the " U ". Solder the wire ends to the copper pipe and fasten the plastic in place onto the pipe with the metal screws. Add the silicone sealant to the rear of the SO239 to discourage rain water, which is slightly acidic, from accumulating and electrically shorting the centre conductor and braid together.

The hose clamps are used to fasten the antenna to the top of the mast or tower. There it is an effective and reliable antenna.



Tiny Loop Antennas: Do They Really Work ?

Reprinted from the Magnolia Report, Jackson, MS

In my travels, I often encounter old friends who are now retired. They say something like, "I'd love to get on the air, but I can't put up a tower at my town house." If code restrictions aren't the problem, physical ones can be. (When was the last time you scampered up a tower?)

We've all seen ads for compact loop antennas - the so-called "magnetic antennas." Perhaps you've mentally classified them as "dummy loads in the sky." After all, how can anything that small work? And, even if it does, it must be limited to working locals, right?

A magnetic antenna comprises a loop three to ten feet in diameter resonated by a capacitor and fed by a smaller coupling loop. The radiation resistance is so low you must measure it in milli-ohms. So efficient loops have extremely high "Q" - and resulting bandwidth as narrow as 10 KHz on 20 meters.

Yet a good magnetic antenna can provide pleasant surprises. It can be almost as efficient as a dipole, and you can mount it vertically and rotate it to null local noise. The narrow bandwidth means it acts as a narrow bandpass filter, so it protects your receiver from overload on strong signals. On transmit, the same filtering provides a high degree of harmonic suppression, reducing the risk of television interference.

The author recently had an opportunity to compare such an antenna with the monoband beams atop a 70 foot tower. The loop was mounted on a 10 foot stick lashed to the chimney of a house. Signals on the loop were only 10 to 12 dB below those on the monobander on 15 and 20 meters. And those beams play well, so this is respectable performance.

On the other end, when the signal from the beam was S9 plus 20dB, it was still S9 plus 10dB on the loop. Several DX stations answered the first call, and the 599 report received from a rare DX station when using the loop antenna was quite a thrill.

The cost of a loop is a tenth that of a tower,

concrete base, guy wires, guy anchors, rotator and rotor cables, high strength mast, and beams. And you don't need a building permit, professional engineering services or an erection crew.

An excellent article on compact loop antennas by John Belrose, VE2CV, appeared in the November, 1993, QST. A review of manufacturers' specifications can also help you understand how magnetic antennas work.

But when reading a performance specification sheet, keep in mind that, as with mobile HF antennas, a wide bandwidth can indicate inefficiency.

Because a magnetic antenna's bandwidth is so narrow, you'll be retuning almost every time you QSY. So take a good look at how handy its tuning unit is to operate.

Magnetic antennas can work effectively in an attic, away from prying eyes, and they are unbeatable for portable or emergency communications work. If you think you can't work DX because you can't put up a tower, you might consider getting a magnetic antenna; it can put you back on the air and in touch with the world again!

Correction

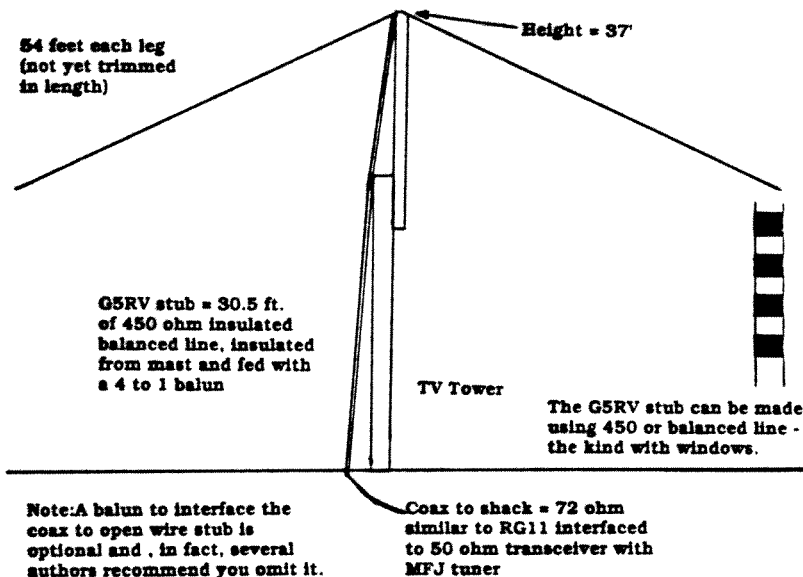
There was an error in the Rechargeable Batteries Part 4 series which appeared in the December, 1994 issue of the Rambler. On page 9, the first sentence should have read, "If the diode is connected in the positive lead between the power supply and the battery then the anode is connected to the power supply positive and the cathode to the battery positive." In the December Rambler we inadvertently said "the cathode to the battery negative" which, if done, would cause all kinds of problems. For those who kept the series as a reference, please make the foregoing correction and accept our most sincere apology.

THE UPS AND DOWNS OF A G5RV

Written by E. Andrews VE3AB

Several problems can crop up when you use less than optimum equipment like us poor folks. I put up a G5RV (similar to the sketch below) and it worked fine, for awhile. I had some good reports including a QRP to QRP, G5RV to G5RV QSOs on 10 meter CW with a station in England. However, my results began deteriorating. My signal reports were getting down-right poor so I began experimenting with other antenna types.

G5RV Antenna

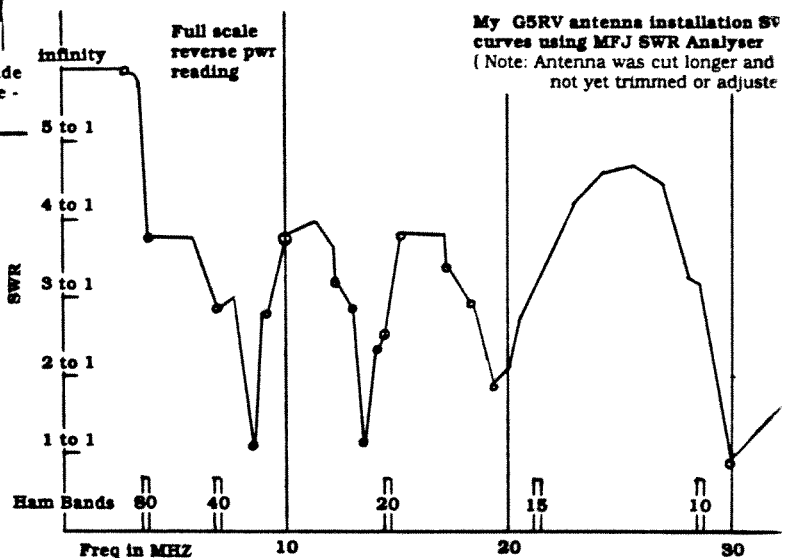


I didn't have much luck with some of the other types of wire I tried so I began to look at the common denominator to the whole situation. I came up with a few. My patch cords? They were getting old and maybe there was a bad connection or missing ground connection or something. Then I finally put my finger on the real culprit - a small MFJ antenna tuner that I used in all my multiband systems. There were two variable capacitors, one coil and a selector switch to select the tap on the coil. The real problem turned out to be the capacitors. There was an oxide build-up on the contacts leading to the rotating plates on the capacitor.

Touching them during receive made the signal levels increase significantly. I've had the tuner over 11 years now and I bought it second hand so it was well overdue for an over-haul.

I really went to town cleaning all contacts and putting good pressure on the capacitor contacts in order to make sure there was good electrical contact with the moving parts of the capacitor. Then I rebuilt the G5RV shown in the pictorial and I find I'm getting decent signal reports again.

Recently, I had the opportunity to borrow one of the MFJ SWR analyzers. The one I borrowed went from 1 to 30 MHz and has the built-in digital readout. It's a real handy device to have and I plan to get one myself. Anyway, I did some plotting of the antenna just as I built it without trimming or adjusting of element lengths and the length of the stub. The curve I came up with is illustrated.



I won't go into any great detail on the development and design of this antenna but I will mention that I have on file a number of articles by other amateurs
Continued on page 9

Continued from page 8
who have experimented with this antenna. There are some variations on this type of antenna designed by several hams. However, I think there "may" be a variation which will produce a real good low SWR on at least 4 bands simultaneously which would allow operation without the cumbersome adjustment of an antenna tuner. However, this is only a theory of mine! It is the search for the "Holy Grail" of multiband HF antennas; something which will have less than 2 to 1 SWR over several or all bands (including 80 & 40) and would require little or no tuning when you went to operate; and of course, it would have to radiate efficiently. Such an antenna of practical dimensions for the average ham does not exist yet (to my knowledge). Oh, yes! One outfit did produce a no hands match network (The Maxcom), but I believe all it consisted of was a 50 ohm resistor capable of dissipating a lot of power. The Windom may be the closest candidate I know of to fulfil the need for a multiband wire antenna for the low bands that has a wide bandwidth. I plan to adjust the leg length of my G5RV and run it in the configuration of a Windom. If I do, I'll publish the results in a future Rambler with a set of SWR curves over the 1 to 30 Mhz range.

My version of the G5RV has a heavy duty 4 to 1 balun at the junction of the balanced line and the coax cable. I have read in at least one article that a balun is really not necessary but many of the commercial G5RV kits either use a balun or some kind of feedline isolator, so it may not be a bad idea to use one. I like heavy duty baluns such as the ones that "Radio Works" make because they have big cores which are less likely to saturate.

I find this antenna quite forgiving but I don't think it is as good as a full size dipole as far as performance goes yet I've heard some really good signals from close in stations on 75 meters whose G5RV seems to be working very well. It seems to be a good compromise multiband antenna but requires a tuner to be of any

use over any significant range of frequencies. Looking over the SWR curve, the G5RV has a lower than 3.5 to 1 SWR over the range of 3.5 to 30 Mhz and should be easily tuned by even the tuners that are now built in to many of the modern transceivers.

Note the SWR curves I have illustrated. This is probably similar to the curves you might expect from a typical installation. To me, it looks like the element lengths are too long for 20 meters and I could experiment with the feed point along the stub. Of course when you adjust for one band you will throw out the curve for the other bands as well. What I will probably do, in my case, is prune a bit off each end of each element and get it working at optimum on 20 meters (maybe to the point where I wouldn't need a tuner on that band) and I would use the antenna match to operate the other bands. In other words I'll make the best compromise for my particular situation. That's about what most people do in the average installation. If you would like a copy of any of the QST articles I can make them available at a future OVMRC meeting. The ARRL Antenna Compendium Series has several articles on this antenna including one by Reg Varney "G5RV" himself. This antenna can be scaled to half its size for operating 40 through 10 meters or doubled in size to include operation on 160 meters although I don't have the dimensions for the tuning stub on that band.

I might mention, too, that I had some good 72 ohm coax similar to RG-11 and I used it for the lengthy run from my shack to my tower, (about 140 ft). Low loss 72 ohm coax may be easier to get and cheaper than an equivalent grade of 52 ohm stuff but it goes well with this antenna. The antenna tuner acts as the impedance match and interface.

I feel the G5RV would make a fairly good SWL antenna as well if you were limited to the number of wires you could string around the property. I hope you found some of my experiences interesting and next time you have some spare time have a close look at the inside of your antenna tuner...maybe it's time for a tune-up!

Choosing The Right Feedline

Reprinted from the July '93 Stanislaus ARC (Modesto, Calif.)

You've purchased a new rig, bought or built the antenna of your choice, and you're ready to put a station together. But you need a way to deliver the signal from the transmitter to the antenna.

Since selection of the transmission line affects the performance of your station, you want to make the right choice. To do so you should be aware of some factors.

First, what range of frequencies does the antenna cover? All transmission lines are not created equal. The manufacturer specifies each transmission line type as having a certain loss in dB per 100 feet, at a specified frequency. But as frequency rises, loss increases. Sometimes this can be critical.

Other factors to consider are the shape of the transmission line, and its conductor and dielectric (insulator) materials. The smaller the cable, the higher the loss and the lower the power it can handle without overheating. Loss increases if SWR is high, which happens when the cable "characteristic impedance" is greatly different than the antenna's "terminal impedance". Of course you can use a tuner to keep your transmitter from "seeing" a poor match, but a tuner can't reduce the SWR in the transmission line between itself and the antenna.

If the run between the shack and the antenna is long, or if your antenna is for VHF or UHF, you may need a higher quality transmission line - bigger in diameter and, of course, more expensive. The cost of a hundred-foot run at UHF frequencies can get downright unreasonable. But in the HF bands, you have many economical choices. The cable's characteristic impedance should be similar to the antenna's terminal impedance. But putting a 50-ohm cable on a 75-ohm cable doesn't produce enough SWR to worry about - on HF. Some antennas have much higher terminal impedance, like 200-ohms. For these, you need a transformer balun to "step" the impedance down to 50-ohms (in this case, a 4 : 1 balun).

When it comes to loss, open-wire feedlines outperform coaxial cable. If you run less

than a few hundred watts, you can even use 300-ohm TV "ribbon" line. You can put a 4 : 1 balun under your eaves, to convert to coax for the last few feet, or use a tuner with balanced output. One advantage of open-wire lines is that you can easily make your own. Many articles published over the years show how to do this.

Every type of transmission line has a limit on how much power it can handle. Excess power melts the insulation, leading to a short circuit between the conductors. Losses in the conductors increase with increasing frequency and SWR. A transmission line rated for 500 watts at 14 MHz can safely handle only 400 watts at 28 MHz. If you further allow for a maximum SWR of 2 : 1 at 28 MHz, that line's rating becomes 300 watts.

Don't overlook connectors. The PL-259/SO-239 ("UHF") connectors are fine for HF, but even for two meters you should consider using type-N. At 70 cm, type-N or similar connectors are necessary to avoid serious losses. And don't forget to weatherize your outdoor connectors; if water gets in, coax gets lossy - fast.

Qualify As a Wise Owler !

Once again this year the Wise Owl Net will be offering a decorative "Wise Owler" Certificate to those who check into the net on successive weeks. Beginning Friday, January 20th to March 31st, anyone checking into the net will have their call sign recorded and credited towards a certificate. During the 11 week period, you will qualify for a CLASS "A" Certificate by checking into the net on a minimum of 10 separate dates. To qualify for a CLASS "B" Certificate you must check into the net on a minimum of 7 separate dates. These handsome decorative certificates, which are easy to earn, make an ideal conversation piece to hang on the wall of your ham shack !

Coming Soon !

The Rambler is pleased to announce that two new featured columns will soon be included in our monthly newsletter !

In response to a number of requests from OVMRC members, arrangements have now been made to add a new regular monthly feature on "Packet" in the Rambler. Ken Asmus, VA3KA, who has had considerable experience with packet radio has agreed to author this new column and share his expertise.

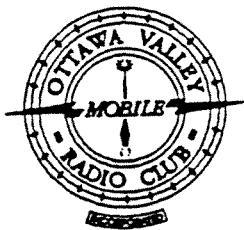
By the way, Ken has promised to write his column at a level which will interest both the beginner and the advanced "packeteer".

The second new feature that will grace the pages of the Rambler will be a column on various aspects of computers. Ed Strange, VA3CEJ, who lectures on computers at Algonquin College has also agreed to provide Rambler readers with basic information in a monthly column on this rather complex subject. Ed promises to provide some insight into this electronic marvel which should eliminate much of the mystery surrounding it operation.

It is hoped to introduce both new columns in the February issue of the Rambler.

OVMRC Adopts Logo

The OVMRC executive, after long discussion, has adopted an official logo for the Club ! Over the years several versions of the logo were used but none was officially recognized.



The official OVMRC logo

The executive move means the logo can now be used on various OVMRC signs, banners,

letterhead, windbreakers, crests, hats and the Rambler's masthead which is making its first appearance with this issue.

PC Boards - What To Do With Them

After the successful printed circuit board party last month, Bob, VE3SUY, is interested to ascertain how many people would like to participate in another Sunday session to populate these boards. The cost would be \$10 which would include all board-mounted parts for the level-devil, an audio amplifier that maintains the same level output for a wide range of input levels.

You must have the board which was produced during the circuit board party, as there will not be sufficient time to produce additional boards.

If you're interested, please telephone Bob, VE3SUY, at 737-9443. This session most likely would be held in February so as not to interfere with the Power Supply building party scheduled for mid-January.

Learning A New Language

An African chieftain flew to the United States to visit the President. A host of reporters and television camera operators met him at the airport . One of the reporters asked the chief if his flight had been comfortable.

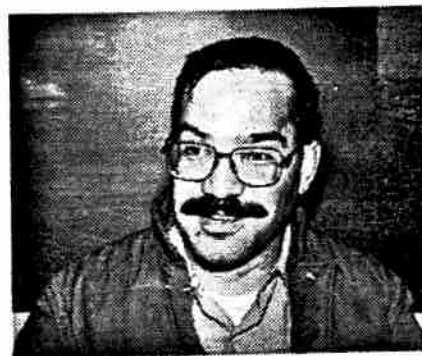
The chief made a series of weird noises - "screech, scratch, buzz, whistle" - then added in perfect English, "Yes, thank you, I had a very nice flight.

Another reporter asked, "Where did you learn to speak such flawless English ?"

"Screech, scratch, buzz, whistle, - from shortwave radio," was the chief's reply.

Potpouri

*A sampling of news and comments
from newsletters and newspapers
from across the country - written
by Jacques Choquette, VE3TSC*



Winnipeg (VE4KI) - An article was written that with HF propagation down due to lower sunspot numbers, all is not lost ! We could try something different; we could meet new and different operators by trying to work all states RTTY/AMTOR, working a new band such as 160M, building a new antenna, conversing on AM/satellite or some home brewing. All of these can be educational and instill more interest in the hobby until the bands get better.

Calgary - Ian VE6IXD has a cave radio system which provides reliable contact through 300+ metres of rock. It is portable and operates at 185 hz USB, 2W PEP. He is using this system in caves near Elbow Falls, Alta. If tests are successful, contact into the UK could be a possibility.

Mike Bedford G4AEE sent a message mentioning he would like to attempt cave-to-cave contact between the UK and Canada. The system works by having the cave transmitter connected to an HF system up top. There is increasing interest in VLF which tends to go through the earth rather than reflect off it. New Zealand amateurs have made contact up to a few hundred miles using this mode.

Montreal (VE2SHW) - Another area of DXing to look at is the medium wave (530-1610 Khz) band. Depending on various radios and antennas used, and a bit of patience, different North American and international stations can be heard. Prime periods of the day are sunset/sunrise. These are when stations have not yet changed their antenna patterns or reduced their power output.

RAC (Nov) - The highest repeater in Canada (VE6HWY) is located on Protection Mt., Alta. The station took a lightning strike in August and has recently experienced building side damage due to high winds.

London - Several hams set up a Goblin Patrol during Halloween to help local authorities. Several hours and miles were logged by amateurs who reported such items as garbage fires, property damage and suspicious people.

London (Internet) - Would you believe?? It is common practice in England to signal a telephone subscriber by connecting 90 volts across one side of the two wire circuit and ground. When the subscriber answers, it switches to the 2 wire circuit for the conversation. This method allows 2 parties on the same line to be signalled without disturbing each other.

One elderly person called the telephone company to report that sometimes her phone failed to ring when her friends called. When it did ring her dog always barked first.

A serviceman was sent to locate the problem. Climbing a nearby pole, he hooked his test set and dialled the subscriber's house. The phone did not ring. He tried again. This time the dog barked loudly and the phone rang. Here is what he discovered. The dog had been tied to the telephone system ground post via an iron collar and chain. When the phone rang the dog received 90 volts of signalling current. After several jolts the dog urinated on the ground and started barking. Finally, the wet ground conducted the current and the phone rang!!!

THE HT POWER SUPPLY BUILDING PARTY WHICH WAS ORIGINALLY SCHEDULED FOR MID-JANUARY HAS BEEN RESCHEDULED TO THE LATTER PART OF FEBRUARY DUE TO WORK DEMANDS ON WIL WARREN, VE3XMT, THE INSTRUCTIONAL LEADER OF THE BUILDING PARTY.