



Newscaster

The Official Publication of the
Winnipeg Amateur Radio Club
Winnipeg Senior Citizens Radio Club

December 1999

Annual Xmas Party & Get-together

raffle ticket draw, the best decorated coffee mug, best decorated hat and an attendance draw

Date: December 13th, 1999
Time: 7:30 p.m.
Place: Sturgeon Creek Regional Secondary School

Other Important Dates:

Articles: Dec 29th. - Article Deadline January Newscaster

WARC: Jan. 10 - Monthly Meeting
Feb 14th - Valentine's Meeting - Bring the (X)YL
Mar 13 - Monthly Meeting

WSC: Dec 9 - Christmas party
Dec 15th - Annual general meeting - Club Rooms

ARES: Dec 4 Winnipeg Fire Dept test net
Dec 5 ARES-RCMP test net
Dec 19 ARES-RCMP test net
Dec 21 CAA Winter Driving Video, Y2K briefing

Other: Dec 25 - Santa brings that new rig
Dec 31-Jan 1st - Y2K public service

WARC: Executive for 1999-2000			
Past President	Norm Coull	VE4EH	885-1692
President	Darcy Wilson	VE4DDW	783-0421
Vice-Pres./ PR			
Treasurer	Sue Collings	VE4SYM	694-1525
Secretary	Ruth Mills	VE4XYL	837-6915
Goodwill	Vern Dutton	VE4VQ	256-5346
Membership	Mariska Maguire	VE4MMG	256-3143
Program	Tom Mills	VE4SE	837-6915
Director@Large	Susan Keller	VE4SUE	888-9011

RADIOGRAM FROM THE PRESIDENT: by Darcy, VE4DDW

It rained this morning... how often does that happen? It is Dec 2nd and the weather is just fantastic. I sure hope everyone has been enjoying this late winter. It hardly feels like Christmas is just a few weeks away, which means I haven't even started buying gifts yet!

I have to apologize for not having a message for last month's newscaster. I was called out of town on late notice just before the flea market. Therefore I will include part of last month's message.

The month of October brought with it the semi-annual WARC Flea market. Despite a rough start on the sale of tables we of course pulled through again. We managed to drag in over 225 people on that Sunday morning. The flea market would never happen without the hard work and dedication of the executive and all the volunteers that gave up their time to help out. A special thanks goes to Richard VE4KAZ and Michael VE4MJM for helping me out in a pinch when I was called to Ottawa on last minute notice. They took the reigns and produced another fantastic flea market. BRAVO ZULU!!

This month's meeting is a very special occasion. This year's Christmas party should be something to remember. We have the classic "decorated mug contest" and a new contest for a best decorated hat. Along with these funny contests there are some great prizes for us to give away, and of course lets not forget the FOOD! Please bring your spouse or special friend for the party, it will be a great time to meet and greet!

Whatever your plans are for Christmas, New Year's and Millennium, please have a safe and happy holiday!



**NEWS from the Winnipeg Seniors' Radio Club
by Gil Frederick, VE4AG**

November has been a busy month - the big event for the Club was the Old St. Vital BIZ Christmas Festival Program in which we were involved. This was the 4th Annual Community Christmas festival and Tree Lighting held on Sunday, November 21, 1999 from 1 p.m. to 5 p.m.

Mr. & Mrs. Claus made a special appearance. There were free sleigh rides, hot chocolate, hot dogs and apple cider. "The Senior Citizens Radio Club, located in the old fire hall next to the Civic building, will be helping children contact elves at the North pole." - from the Program Guide. We decorated our Club for this festive occasion. We had 12 of Santa's helpers assisting the children (and some moms) with their radio contacts to the elves at the North Pole. The children told the elves what they wanted for Christmas so the elves would know which production lines they had to run to fill the various orders. The following Santa's helpers, some with antler growths on their heads, were at the Club to help with this successful event: Members - Lila VE4LIL, Bert VE4AND, Albert VE4AX, Adam VE4SN, Ed VE4YU, Colin VE4JCM, Alf VE4ALF, Harsha VE4SAI, George VE4GOM, Bob VE4RJH. Non-Members - Bob VE4RCJ and Iris XYL of George VE4GOM. The St. Vital Biz supplied cookies and candy canes for our guests. We utilized both doors to our club rooms, one entrance and one exit, for a

safer and more organized movement of people. We had 1,015 guests this year compared to 592 last year. The warm weather may have contributed to this increase. Lila, amongst her other Santa helper duties, kept an accurate count of our visitors this year. This year her numbers were audited by the accounting firm of George VE4GOM. It appeared that the children and families enjoyed our portion of the festival. Some moms even placed their orders with the elves at the North Pole. Our Santa's helpers, some with antlers and some sans antlers, also seemed to enjoy the day. We have recorded this as another successful community event for our club. Many thanks to all of our Santa's helpers who were there for the Club to make this event the success it was. See you all again next year. (This report by Bob Hall, President).

In other news, a sympathy card was sent to the Colin Kiddell family re Colin, VE4CBK, who became a silent key on November 13, 1999. It was noted that a sympathy card had been sent to him on August 16, 1999 on the loss of his wife.

Membership in the Club at present is 172. A study has been done and approx. 25% of the members are regular attendees at the Club.

A display ad was printed in the Free Press by the Winnipeg Foundation, with the new Satellite station being featured as one of the recipients of W.F. grants. It showed 2 smiling Club members at the operating desk (you can view the pic on VE4WSC homepage:

<http://www.pangea.ca/~ve4wsc>).

Paul, VE4OPC, the nominating committee chairman, requires 3 or 4 more nominations.

George, VE4GNG, reports that there will be "unbelievable" door prizes at the Seniors' Christmas Dinner, being held on Thursday, December 9. He has approached "Dolff the Clown" (David Rosner, VE4DAR) who will be performing his act.

Ruthie, VE4CRS, has given the club a souvenir "Shalom" plaque from Israel, which is now hanging at the Club. The 'George Reynolds, VE4AJ' 1984 Seniors' Award Certificate has been framed and hung in the Clubrooms. You can view it on the VE4WSC homepage.

We have joined RAC, as a Club member.

And finally, all members are earnestly requested to come to the Clubrooms on December 15, 1999 for the Annual General Meeting, which begins at 9:30 a.m. If you need a ride, phone the Club at 233-3122.

MINUTES for W.A.R.C. November 8th, 1999

Industry Canada Amateur Centre
Voice 1-888-780-3333 (toll-free)
Fax: 1-613-991-5575
Email: spectrum.amateur@ic.gc.ca
Web: <http://strategis.ic.gc.ca/spectrum>

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Newscaster Advertising Rates:
All advertising is black & white and must be submitted in electronic format.

full page \$75.00
½ page \$40.00
¼ page \$20.00
bus.card \$10.00

For more information or to place an ad please contact Tom, VE4SE or e-mail ve4se@rac.ca

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Comments or if you just want to reach us :

Newscaster Editor
Winnipeg Amateur Radio Club
C/O VE4WSC
598 St. Mary's Road
Winnipeg, MB R2M 3L5
<http://www.freenet.mb.ca/amradio>

Submitted by Ruth, VE4XYL

President Darcy Wilson VE4DDW welcomed the 58 members in attendance followed by introductions of all.

MINUTES

Moved by Dave VE4DAR, seconded by Jeff VE4JNF that the minutes be accepted as printed in the newscaster. Carried Business arising from the minutes. None.

TREASURERS REPORT

Sue VE4SYM reported as of October 30th 1999 the bank balance is \$4018.05 and all outstanding accounts to date have been paid.

MEMBERSHIP

Mariska VE4MMG announced that to date our membership total count is 201. There are 189 regular members, 2 life, 9 clubs and 1 associate.

FLEA MARKET

Darcy VE4DDW reported on the event being very successful. There were 228 in attendance and 26 tables were sold. The break down is as follows, Tables sold, 16 at \$5.00, 6 at \$10.00 and 2 for clubs, total was \$140.00. Admission \$228.00 and canteen profit was \$132.08 for a grand total of \$500.08.. For comparison in 1998 there was 280 in attendance and total profit was \$513.81 The next Flea Market has been booked for April 16, 2000 at the Victoria Heritage C.C

PROGRAM

December will be the Christmas party, slated for January will be QRP, February radio transmitter identification, March is still open and April will be home brew night. These are subject to change.

MONTHLY MEETING PRIZES

It has been agreed by the executive that as our bank balance is quite stable we will raise the cost spent on the raffle prize and reinstitute the attendance draw prize.

DX SLEUTHS

Adam VE4SN reported that 10 meters was wide open several times the past month and feels anybody could have gotten their DXCC. He encouraged any one with the basic plus 5 to try their luck. Also there was some rare DX coming as well. There are some DXpeditions coming up so keep listening and keep your finger on the PTT or the key.

CHRISTMAS PARTY

Ruth VE4XYL said the Christmas party will be on December 13. A brief business meeting will be held in the cafeteria area beginning at 19:30hrs. We will then have food, treats and visiting. About 21:15 we will have some prize draws. There will be prizes for the following, the raffle ticket draw, the best decorated coffee mug, best decorated hat and an attendance draw. As Sue VE4SYM and Mariska VE4MMG will be in charge of the prizes we are sure to have other surprises as well. The executive invites all members to join us as this being the last Christmas in the Millennium.

PRIZE DRAW

Attendance draw, a dual band antenna won by John Delaine VE4YD. The raffle draw, an SWR power meter won by Norm VE4EH and the big one for the membership renewal draw, a Kenwood 261A 2 meter mobile radio, donated by Comtelco Electronics, went to John Drajewicz VE4NVF. Congratulations to all.

NEW BUSINESS

Darcy VE4DDW wants to know if there is any interest in getting club jackets and hats. He needs at least 12 orders. If there is the interest Darcy already has some one to make them up and prices will be announced if the interest is there.


Meeting adjourned at 20:00hrs.

Contest Calendar

December

- 03-05 2200-1600 CW ARRL 160 meter Contest
- 04-05 1800-0200 RTTY TARA RTTY Sprint
- 04-05 1800-1800 CW TOPS Activity 80m Contest
- 05 2000-2400 CW QRP ARCI Holiday Spirits
- 11-12 0000-2400 CW/SSB ARRL 10 meter Contest
- 11 OK DX RTTY Contest
- 12 0300-0500 CW The Great Colorado Snowshoe Run
- 18 0000-2400 RTTY OK DX RTTY Contest
- 18-19 1400-1400 CW Croatian CW Contest
- 18-19 1600-1600 CW/SSB International Naval Contest
- 19 0000-2359 CW/SSB RAC Canada Winter Contest**
- 19 0200-0400 CW 12th Internet CW Sprint Contest
- 25-26 1500-1500 CW Stew Perry Topband Distance
- 25-26 1500-1500 CW Original - QRP - Contest

Winnipeg ARES Report



Season's Greetings

by Jeff, VE4MBQ - Winnipeg EC

Winnipeg ARES members were most shocked and saddened at the recent passing of one of our members Brian Ward VE4RBL. Our deepest sympathies are extended to Grace and their respective families.

BIG THANKS to Dick Higgins VE4RHG for his significant donation to Winnipeg ARES Inc.

Our November meeting featured Mary Genyk who gave us a fascinating presentation on MTS Emergency Planning. Mary and Clarence Zacharias from MTS Corporate Emergency Planning also lavished those present with a variety of pens, calendars, and band-aid dispensers, all Y2K compliant. We welcome a new member, Richard Sheridan VE4ESX. Richard spent a lot of time during the 1997 Flood as the ARES Liaison Operator at Dakota Community Club.

By the time that you read this report there will have been several test nets for ARES-RCMP volunteers coordinated by Wayne Warren VE4WR. The next two ARES-RCMP test nets will be at 2000h local 05 and 19 DEC. Several crews of volunteers have gone out to remote communities for antenna installations. Winnipeg ARES is looking after Headingley Detachment- we attended there SUN 28NOV to install 40m Dipole VHF Vertical and coax feedlines. Thanks to Eric Napady and VE4s ERB, GWN, KU, MBQ, and TV.

The 10 Winnipeg ARES members involved with Winnipeg Police ran a test net SAT 27NOV. The ARES-WPS operation is scheduled to run 2200h 31DEC to 0600h 01JAN. The 40 or so amateur volunteers involved with Winnipeg Fire Dept are running a test net SAT 04DEC, possibly one more test net later on. The ARES-WFD operation parallels WPS in that it is scheduled for 2200h 31DEC to 0600h 01JAN. Hopefully those volunteers will be off duty and into the champagne by 0200h. We only have 7 volunteers at this time available for duty from 0600h 01JAN onwards, not much of a comfort factor in case of severe communications disruptions.

We have not yet run any test nets from VE4EMO, DND, or Manitoba Health. The volunteers for those projects will be contacted individually to set up some dates. The provincial ARES operation runs 31DEC to 02JAN.

In the Winnipeg area we are running a simplex Interagency Net utilizing amateur radio to link:

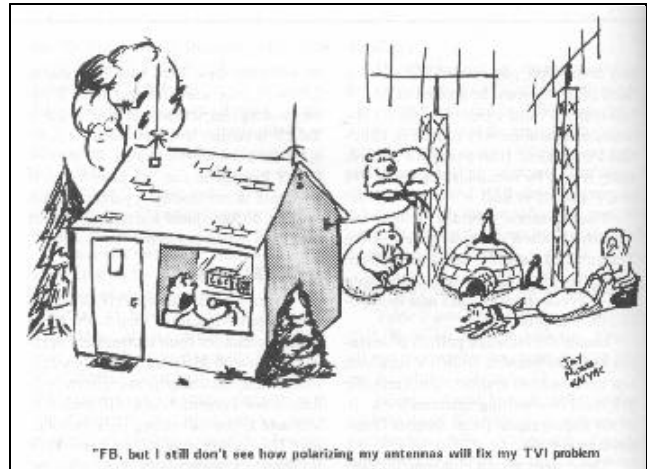
Manitoba Emergency Management Organization
RCMP "D" Division

Manitoba Health Emergency Operations Centre
Manitoba Hydro System Control Centre
17 Wing Operations Desk, CFB Winnipeg
City of Winnipeg Emergency Operations Centre
Winnipeg Police Communications Centre
Winnipeg Fire Communications Centre

We have booked Sir Wm Stephenson Library for our monthly meeting through DEC 2000. 1900h third Tuesday of the month, except for June which is fourth Tuesday of the month (avoid conflict with Mb Marathon briefings). Our next meeting is Tuesday 21DEC 1900h 765 Keewatin St. In lieu of a guest speaker we have a CAA Winter Driving Video, a review of Winnipeg ARES call-out procedures, and a final Y2K briefing. In January we have invited Shauna Eggertson from SAR Manitoba to talk about Cold Weather Preparedness.

On behalf of the Winnipeg executive and members I wish you a happy holiday season and an uneventful New Years!

Hints & Kinks



de Ralph, VE4RY

If you own one of those plastic toolboxes with the lift-out tray and a raised moulded handle in the middle, you may have been annoyed by small tools etc. falling down the hole under the handle. You may think you've lost them, but instead they're just buried in the bottom somewhere.

I originally glued blocks of closed-cell plastic foam in the opening. This fixed the "lost tool" problem, but I later realized that the space was being wasted. It dawned on me that by gluing a rectangle of thin sheet material over the hole on the bottom surface of the tray, the space under the handle would become usable. Just about any plastic or metal slightly larger than the opening will do, and contact cement works fine.

With this simple modification not only do all your small tools stay in the top tray, but you get the added advantage of additional storage space becoming available for smaller items such as solder, fuses, etc.

A Ham's Night Before Christmas

'Twas the night before Christmas,
And all through two-meters,
Not a signal was keying up
Any repeaters.

The antennas reached up
>From the tower, quite high,
To catch the weak signals
That bounced from the sky.

The children, Tech-Pluses,
Took their HT's to bed,
And dreamed of the day
They'd be Extras, instead.

Mom put on her headphones,
I plugged in the key,
And we tuned 40 meters
For that rare ZK3.

When the meter was pegged
by a signal with power.
It smoked a small diode,
and, I swear, shook the tower.

Mom yanked off her phones,
And with all she could muster
Logged a spot of the signal
On the DX PacketCluster,

While I ran to the window
And peered up at the sky,
To see what could generate
RF that high.

It was way in the distance,
But the moon made it gleam -
A flying sleigh, with an
Eight element beam,

And a little old driver
who looked slightly mean.
So I thought for a moment,
That it might be Wayne Green.

But no, it was Santa,
The Santa of Hams.
On a mission, this Christmas,
To clean up the bands.

He circled the tower,
Then stopped in his track,
And he slid down the coax
Right into the shack.

While Mom and I hid
Behind stacks of CQ,
This Santa of hamming
Knew just what to do.

He cleared off the shack desk
Of paper and parts,
And filled out all my late QSLs
For a start.

He ran copper braid,
Took a steel rod and pounded
It into the earth, till
The station was grounded.

He tightened loose fittings,
Resoldered connections,
Cranked down modulation,
Installed lightning protection.

He neutralized tubes
In my linear amp...
(Never worked right before-
Now it works like a champ).

A new, low-pass filter
Cleaned up the TV.
He corrected the settings
In my TNC.

He repaired the computer
That would not compute,
And he backed up the hard drive
And got it to boot.

Then, he reached really deep
In the bag that he brought,
And he pulled out a big box.

A new rig? I thought!
A new Kenwood? An Icom?
A Yaesu, for me?!
(If he thought I'd been bad
it might be QRP!)

Yes! The Ultimate Station!
How could I deserve this?
Could it be all those hours
that I worked Public Service?

He hooked it all up
And in record time, quickly
Worked 100 countries,
All down on 160.

I should have been happy,
It was my call he sent.
But the cards and the postage
Will cost two month's rent!

He made final adjustments,
And left a card by the key:
"To Gary, from Santa Claus.
Seventy-Three."

Then he grabbed his HT,
Looked me straight in the eye,
Punched a code on the pad,
And was gone - no good-bye.

I ran back to the station,
And the pile-up was big,
But a card from St. Nick
Would be worth my new rig.

Oh, too late, for his final
came over the air.
It was copied all over.
It was heard everywhere.

The Ham's Santa exclaimed
What a ham might expect,
"Merry Christmas to all,
And to all, good DX."

Happy Holidays to all from Mike and
the crew at Comtelco Electronics!

Silent key

VE4RBL - Brian Ward
VE4CBK - Colin Kiddell
VE4BJ/VE3WDX - Bill Stunden

Selecting a Multi-Band Vertical



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HF Vertical antennas have long been popular with hams and for good reason. They can be very effective antennas for their size, and have the advantage of taking up very little space. The typical vertical radiates at a low angle of elevation, usually the most effective angle for working extended ground wave and for working DX when skip is in.

All verticals work against a ground or a ground image. The ground or ground image serves as the necessary reverse half of the antenna. (By way of illustration, the classic dipole antenna has two sides fed in opposite phase, usually by coax cable. In a simple dipole, one side of the antenna is fed by the center of the coax, the other by the coax shield. All real world antennas need two opposed sides so that the feed line, usually coax cable, can drive them. For verticals, the opposed side to the coax center lead may be the earth if the antenna is ground mounted and used with radials, tuned radials if elevated, or some form of counterpoise. When considering vertical antennas, a good way to think of the ground image is like a mirror, with the vertical antenna rising from the center of it.

The coax center goes to the vertical, the braid of the coax is attached to the ground side. The ground may be nothing more than a metal rod pounded into the ground plus the shield of the coax feeding the antenna, which capacitively couples to the earth it is lying on. But such grounds are very poor, like a very dark mirror, letting your RF energy be wasted in the earth as ground losses instead of transmitting it into the air. What is desired is a good ground system that will reflect the RF into the ionosphere. For ground mounted antennas radials are the only realistic way to achieve a good ground system.

For some reason several manufacturers' marketing departments have spent a great deal of money marketing "No-Radial" verticals. Indeed, they have tried to turn "radial" into a dirty word. They propose to modify the laws of physics in suggesting that their vertical antennas need no ground. But all vertical antennas need a ground to work against, and the better the ground the better the performance. Why do they trash this time honored antenna technique that gives outstanding results and requires a hour or so of work to install in such a way that it is invisible to the eye and lawnmower? Clearly, to obtain market advantage for their products. Their antennas do have a ground - the mounting stake pounded into the ground, and the coax running on the ground to the antenna.

Consider this: virtually every AM broadcast station on the air today uses a vertical with a well developed radial system. These are stations designed by professional engineers who use lab grade field strength test instruments. If the radio station's customers don't hear the station they

are out of business. So they use radials. If a better antenna design existed they would use that instead.

Surely, some amateurs have limited space for an antenna, and an extensive radial system is not possible. But there is almost always a way to install an effective vertical one way or another that makes provision for a decent ground. In return, the operating benefits of a good antenna installation are most rewarding.

A "no radial" vertical will work people - sometimes even some pretty good DX - but a well designed vertical working against a good ground system is a substantially better antenna. A good ground - a bright and shiny mirror - has good conductivity and dielectric qualities, and serves to reflect and thus radiate the power fed to it. It is an active partner in the radiation of the RF energy from the transmitter. A poor ground, on the other hand, is a silent partner - it sucks up resources and gives little or nothing back in return, other than perhaps a good match to the transmitter. (A poor ground can also lead to RFI problems, such as TVI, telephone interference etc.)

Offering a good match to the transmitter is not the same thing as radiating RF. Far too many newer hams have been lead to believe that because an antenna has low SWR all is well. A vertical with a poor ground is entirely capable of offering a perfect match to the transmitter, with 1:1 SWR, yet with the ground absorbing much of the RF and turning it to heat, cooking earthworms perhaps but emphatically not radiating into space.

The same is true of a vertical of inefficient design in the antenna itself. Engineering analysis has proven that an inefficient vertical antenna needs only an inefficient ground, and that a superior ground under an inefficient vertical will not significantly improve its performance. This fact has proved a blessing to those antenna manufacturers who advertise their antennas as needing no radials.

This, by the way, also explains one brand of verticals that actually advertise their products as being "quiet" antennas. The antennas are quiet because they are horrendously inefficient and ineffective! (The company making these claims quotes from product reviews in several smaller ham magazines about how quiet and how effective their antenna was in tests. Curiously, they don't quote the review of the same antenna published in the world's largest ham radio magazine, which pointed out that the antenna was strangely DEAD on several important bands, both receiving and transmitting, even though that company advertises heavily in that magazine.)

Verticals have a reputation of being "noisy" antennas - and so they should - a good vertical receives signals from all directions, unlike antennas with definite patterns, such as

yagis, quads or even dipoles. If a vertical is "quiet" something is wrong. Even if the SWR is good.

If you live along the east coast, working a log-full of European and African DX is no big deal, even with an inefficient "no radial" antenna. After all, there are easily a hundred DXCC countries little further from you than California, and with a path that is mostly salt water, frequently over easier north/south paths. But if you live in the dryer parts of the west, over thin and rocky soil, such antennas are guaranteed to lead to DX'ing frustration. East or West, there is no valid reason not to try to put up the best antenna you can, and if it is to be a ground-mounted vertical then you should try to get the best ground system under it you can reasonably manage.

What constitutes a decent ground? The ideal ground is considered to be 120 radials, of half a wavelength long, equally spaced around the antenna. Of course few can manage such an ambitious approach. A good ground would consist of 15 radials $\frac{1}{4}$ wavelength long, using the wavelength of the lowest frequency band to be considered. An acceptable ground can be made of 8 radials at least $\frac{1}{8}$ wavelength long - which would be only 16 feet on 40 meters. And even three or four radials of 10 feet or more is a good deal better than the casual stake in the ground. But putting down more radials will be well worth the effort, even if some of them can not be as long as others. More is better.

Ideally the radials would radiate from the base equidistant in spacing. But in reality the radials will work fairly well anywhere they are put. Bending a radial around a corner, a tree, the doghouse etc. or running it next to the driveway are all perfectly acceptable variations. Radial wire can be any copper wire from about #20 and larger, insulated or bare. Aluminum or steel wire will work, but are harder to get good connections with, and tend to corrode more rapidly.

Radials need not mess up a lawn either. A little trick works wonders - if you are putting down a radial system in a lawn, purchase some very large nails at the hardware store, preferably at least 4 inches long. Put a turn of radial wire around a nail, press the nail all the way into the earth. Draw the radial out perhaps ten feet, take a turn around another nail, lay it on the grass and pull it tight, then press that nail into the dirt. Draw the remaining wire out further, put another nail in, etc. If necessary, in between nails push in wire staples, perhaps cut and bent from a few inches of the wire from old coat hangers, to hold the wire tight to the ground. If done right, within about 6 weeks the radials will disappear into the thatch and will never bother the lawn or lawnmower.

A recent design effort by several manufacturers has involved adding a limited counterpoise as a standard part of the antenna. Such a counterpoise generally consists of a

few rods or tubes perhaps six or seven feet long radiating horizontally from the antenna. The idea behind this is to capacitively couple with the real earth below. While such a counterpoise is definitely better than nothing, they do present several problems. For one, they are limited by the quality of the earth below them. Damp, loamy earth gives far better results than does sandy or rocky dry soil. Regardless of the soil quality, such a counterpoise works better for the higher bands than the lower bands, where it becomes progressively less efficient.

Another problem is that because of the variable nature of the soil the antenna is above, some tuning of the antenna will surely be required, even though the manufacturer is trying to keep the antenna installation extremely simple. However, lossy antennas with poor grounds may not require tuning for good SWR - the losses mask the matching problems - and also the weak signals. In such cases, the manufacturer's marketing department tries to make lemonade out of a lemon by calling the product "quiet", and bragging that their antenna requires no tuning.

When considering a "no-radial" vertical, remember - virtually every AM broadcast station uses verticals with radials - lots of radials. If professional broadcasters with years of research and experimentation behind them thought there was any better way to build a vertical than to use radials, they would certainly do so. Don't be confused by gobbledegook buzz words like "elevated asymmetric feed." If that is so good, why isn't it used by professional broadcasters? Answer - it isn't.

RAC Bulletins

WARC membership draw

Kenwood 261A 2 mtr. transceiver

donated by:

Comtelco Electronics and
Kenwood Electronics
Canada.

is John Drajewicz VE4NVF

Please visit the shop and thank them for the donation.

<http://www.rac.ca/~racnews/othernotices/racbulletin.htm>

99-104E

Easier Access to RAC Field Manuals

In response to many requests, several downloadable documents and files that have been in the password-access portion of the Radio Amateurs of Canada web site (<http://www.rac.ca>) have been moved to the open-access area of the web site. These include:

- ✎ the RAC ARES Emergency Coordinator's Manual - the ARES EC's bible.
- ✎ the RAC Section Manager's Survival Guide - also useful for other Field Organization leadership appointments
- ✎ the RAC Affiliated Club President's Workbook and associated documents for RAC-affiliated clubs.

It is hoped that the wider availability of these documents will encourage greater participation in ARES and other RAC Field Organization programs, as well as the RAC Affiliated Club Program.

RAC Bulletin 99-110E

RAC Activates Official Observer Program

The new RAC OO program was developed to encourage high standards on the amateur radio bands, entirely independent of government. Government has long held that amateur radio is self-governing and this program continues in that tradition of self-help. The OO program objective is to reinforce good operating habits. Penalizing bad operating habits is the task of enforcement by Industry Canada. A detailed description of the RAC Official Observer Program appeared in the September/October, 1999, issue of The Canadian Amateur and is also posted on the RAC web site. The first "Good Operator" and "Advisory" notices are being mailed as this is written.

The Official Observer will actively look for and report on stations that have unusually good signals or operating procedures, and which set an example for the rest of the community. At least 70% of notices sent every month by new Official Observers, will be such Good Operator notices.

The OO also notes troubling operating practices or technical difficulties. The OO task is not to find fault, but to find ways to achieve solutions. Advisory Notices are to be the result of detached objective monitoring in which the Official Observer is not otherwise personally involved. The OO is not to send a notice to someone interfering with them or with a net or repeater on which they are operating.

If you receive an Advisory Notice, please remember that the Official Observer is trying to do a good job in service to his/her fellow radio amateurs, especially you. He/she is simply reporting a condition relating to your radio signal (or

of someone using your call sign); and is not attacking you personally. You need not reply - the OO has completed his/her task by simply alerting you. Compliance is up to you.

The OO must not only be well qualified and service-oriented, but must also be capable of exercising good judgment, tact and diplomacy. While others are rag-chewing or working DX, the Official Observer is performing functions vital to the future of Amateur Radio, and dedicated to a mission of help and fraternalism.

Home Computer Networking RFI

The use of personal computers in the home has created a demand for easy to install home computer networks. Vendors are shipping simple to install solutions that use existing wiring - telephone extensions and AC power line wiring - or wireless networking solutions. Systems that use existing wiring("no new wires"), however, have been shown to cause significant interference to shortwave listeners and ham radio operators. These systems are also highly susceptible to interference from nearby transmitters. These problems occur because they use HF radio frequencies to send computer data over unshielded in-home wiring.

An existing telephone wiring based computer network operates between 5.5 MHz and 9.5 MHz and generates radio frequency interference across that spectrum. It is also extremely sensitive to Amateur transmissions in the 7 MHz band. A newer form of telephone networking is under development and will use a different set of HF frequencies. Major companies including AT&T, Intel, Microsoft, Lucent, Broadcom, 3Com and Compaq Computer are backing this technology. As of July 27, 1999, a version 2 specification has been reached. Version 2 (not yet published for the public) will, according to press releases, achieve 10 Mbps in late 1999 and 30 Mbps in late 2000. According to industry white papers, these higher speeds are made possible by modulating signals across the HF radio spectrum from 2 to 30 MHz.

Power line networks operate in a similar fashion, modulating computer data signals between 2 to 30 MHz. Since the quality of a home's internal AC or telephone wiring is an unknown in any installation, these technologies may spew large amounts of noise into the radio spectrum. Recently, a well known telephone line extender (using AC power lines in a house for the link) generated very strong signals in the 3.5 MHz band; in some situations, signals were traced to units over 6 miles away!

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RAC Canada Winter Contest rules

In December each year, the Radio Amateurs of Canada (RAC) sponsors the Canada Winter Contest. Amateurs all over the world are invited to participate.

Contest Period:

0000 UTC to 2359 UTC, 19 December 1999.

Bands and Modes:

160, 80, 40, 20, 15, 10, 6 and 2 metres, CW and phone (SSB, FM, AM, etc.) Suggested frequencies: CW - 25 kHz up from the band edge; SSB - 1850, 3775, 7075, 7225, 14175, 21250, 28500 kHz. Check for CW activity on the half-hour.

Exchange:

Stations in Canada send RS(T) and province or territory. VEØs and stations outside Canada send RS(T) and a serial number.

QSOs:

Contacts with stations in Canada or VEØs are worth 10 points. Contacts with stations outside Canada are worth 2 points. Contacts with RAC official stations are worth 20 points. RAC official stations are: VA2RAC, VA3RAC, VE1RAC, VE4RAC, VE5RAC, VE6RAC, VE7RAC, VE8RAC, VE9RAC, VO1RAC, VO2RAC, VY0RAC, VY1RAC and VY2RAC. You may work any station once on each of the two modes, on each of the eight contest bands. It is prohibited to make CW contacts in the conventional phone sub-bands, phone contacts in the conventional CW sub-bands, or to make or solicit contest QSOs through a repeater during the contest period.

Multipliers:

Canada's 10 provinces and three territories, and may be counted once on each mode on each of the eight contest bands. The multipliers, with their postal abbreviations and prefixes are: Nova Scotia [NS] (VE1, CY9, CYØ); Quebec [QC] (VE2, VA2); Ontario [ON] (VE3, VA3); Manitoba [MB] (VE4); Saskatchewan [SK] (VE5); Alberta [AB] (VE6); British Columbia [BC] (VE7); Northwest Territories [NT] (VE8); New Brunswick [NB] (VE9); Newfoundland and Labrador [NF] (VO1, VO2); Nunavut [NT] (VY0); Yukon [YU or YT] VY1; and Prince Edward Island [PE] (VY2).

Final Score:

Total your QSO points from all bands, and multiply by the total multiplier points from all bands.

Categories:

- Single Operator All Bands;
- Single Operator Low Power (max. 100 W output);
- Single Operator QRP (max. 5 W output);
- Single Operator Single Band;
- Multi-operator.

Single operators who receive assistance from a DX spotting system or PacketCluster network during the contest must classify themselves as Multi-ops. There are no

single-mode categories. Multi-operator stations may operate on several bands simultaneously.

Awards:

Plaques will be awarded to the top scoring entrants in each category. Thanks to the following for their sponsorship:

Single Operator All Bands - Radioworld

Single Operator Low Power - Durham Radio Sales Service

Single Operator Single Band - Elkel Products

Single operator QRP - QRP Canada

Top Scoring Foreign Entrant - Alan Goodacre VE3HX

Multi-operator - Radioworld

Certificates will be awarded to the top-scoring entrant in each category in each province, territory, USA call area, and DXCC country.

Results:

will be published in the May issue of "The Canadian Amateur", and will be sent to certificate winners.

Entries:

Radio Amateurs of Canada

720 Belfast Road, Suite 217

Ottawa Ontario Canada

K1G 0Z5 Send entries by 31 January to:

Email entries are encouraged and should be sent to Dave Shipman, RAC Canada Winter Contest Manager, at .

Entries must contain a summary sheet showing score calculation, a dupe sheet listing calls worked on each mode on each band, a multiplier check sheet and log sheets. Log sheets must show time, band, mode, call of station worked, exchanges sent and received and points claimed for each QSO. New multipliers must be clearly marked in the log.

Field Day Results

From QST (Dec) Canadian Club Summary

CLUB	QSO's	Points
VE5NN	1495	5490
VE7NSR	1652	5382
VE2CWI	1155	3460
VE3YRA	836	2712
VE4BB	681	2674

We were 5th in Canada for points and 7th for number of QSO's out of 28 Canadian entries. And Who says CW is not worth the effort. Thanks to Adam and all those who used CW to raise us up so high in the points. Also thanks to everyone else who made contacts and just plain showed up. While the whole event may be a contest and the idea is to gain points and contacts. We were just there for the fun, Right Yeah, right, Yeah, sure we were!!!

Editor Ramblings

By Derek, VE4HAY

Ahh... The close of another great year of Amateur Radio. And with that comes the time to think back and recall the year. The year started off with a surprise for me. Someone, somewhere, thought how great it would be if I were nominated for the OSCAR award. What I shock I had when my name was said, and here all along I was thinking, lucky Adam, VE4SN to win another duly deserved award. Normally I can take the pressure of being in front of people, but this floored me, I was beet red and for once I had nothing to say. The year only got better from there. The numerous public service events like Sled Dog races, Manitoba Marathon, Pan Am Games, Field Day. Note: the standings above, not to bad for a bunch of guys & gals who had so much fun. And also operated. While the year was full of highlights there were unfortunately a few down points as well. The second half claimed a number of Silent Keys, VE4MP, VE4DT, VERBL immediately come to mind and VE4CBK, an old school principal of mine, and of course Bill, VE4BL/VE4WDX. There were a few others as well, but unfortunately I do not have their call signs available. This just goes to show you that our hobby while growing, also shrinks.

Yes, the year is almost over. And not just the year, but as most people think the Millennium as well. (Technically not for another year, but who can stop the mass population from partying like there's no tomorrow) Anyway, with the ending of this year, there is one final bit of business to take care of beside the various well wishes that always happen at this time. That's right one final public service event. One that will never really amount to anything (knock wood), but one that we owe to ourselves and the privilege that we have with this hobby. We get to help out our various government agencies with our skill, knowledge and equipment. So if you have not already volunteered to help out for the non-event of the year, Please do so now. There are still a couple of spots available. Get in Touch with Jeff, VE4MBQ, Wayne, VE4WR or Don VE4DGM. They will be glad to help you out. Have a great Holiday Season, and the bands will be even better in 2000. Enjoy !!

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