



Newscaster

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

December 1996

Annual Christmas Party

*Come out and meet your
fellow Amateurs*

Other Important Dates:

Articles: Jan 1 - for Jan Newsletter

WARC: Jan - Meeting

WSC: Dec 12 - Xmas Party
Dec 18 - Annual Meeting
Jan 2 - Advanced Course Tuesday & Thursday

ARES: Dec 17 - Meeting -

Other: Dec 15 - Talk to Santa on the MRS system

WARC: Executive for 1996 - 97			
Past President	Barrett Filbert	VE4ABA	338-2441
President	Richard Kazuk	VE4KAZ	895-4778
Treasurer	Rick Lord	VE4OV	896-0631
Secretary	Roxanne Byron	VE4ZF	388-6114
Vice-President	Jim Ross	VE4AJR	256-6366
Program	Lee Smith	VE4ANC	864-2334
Membership Norm	Norm Coull	VE4EH	885-1692
Resigned	Jeff Dovyak	VE4MBQ	

Words from the President of WARC: by Richard, VE4KAZ



Merry Christmas to everyone. Yes, it's that time of the year already. Christmas is just 3 weeks away. On behalf of the WARC Executive I would like to invite everyone to our annual Christmas party on Monday, December 9th in the cafeteria of Sturgeon Creek School. Remember to bring your favourite Christmas mug, or decorate one for the Christmas Mug Contest - right Roxeanne!

If you are unable to come to the Christmas party to share in the spirit of Christmas with your fellow hams and partake in the scrumptious delights from *Ruth's Kitchen*, the Executive would like to take this opportunity to wish you and your families a Merry Christmas and Happy Holidays. I hope Santa Claus is good to you all and that each and every one of you find something ham'ish in your Christmas stocking.

Seasons Greetings and best wishes for a healthy, happy New Year.

Winnipeg Senior Citizens Radio Club Released by Alf, VE4ALF (President - 96)

Another reminder about our upcoming Christmas Party, to be held at the St. James Civic Centre,Ness Ave. on December 12 (Thursday). The dinner will start promptly at 1 p.m.; those bringing cold plates (deli meats, pickles, salads, dainties, rolls, breads, desserts, etc.) can bring them anytime after 12 noon — however, those bringing HOT dishes (including the cooked turkeys) must arrive as close to 1 p.m. as possible, in order to maintain this food in its 'fine' eating state. Members can bring their spouses, and guests. Although this is a club-sponsored dinner with no ticket

required, there will be a container for donations if you wish to help out with the expenses. We expect the dinner, and socializing after, to end about 2:30 p.m. Members who wish to donate food are asked to call the club at 233-3122 - a list has been posted for donor's name and kind of foodstuff they will bring. We encourage ALL members to attend this party. There is ample parking for all, with drop-off right at the door; the event is on the main floor (no stairs), so it is very convenient for those with canes or wheelchairs.

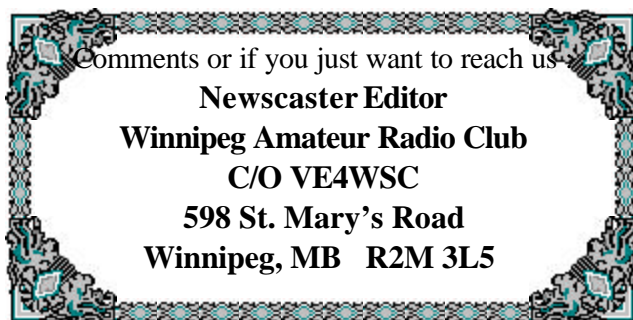
The next meeting of the club is the ANNUAL MEETING, at which time we will be voting in the new Executive to run the club during 1997. It will take place on the 3rd Wed., being December 18. We have 165 members - let's see a BIG turnout please.

Alf, 4 ALF reported on the meeting held to form the new Pan American Amateur Radio Organization Group, an umbrella group comprising all the ham clubs and groups in Manitoba to aid in the communications needs of the Pan Am Games. This new group will have one representative from each radio club - Gil, VE4AG has been appointed as our rep, and will attend the inaugural meeting in January, at which time a vote will be taken to elect the chairperson.

We now have touch-tone dial service at the club, and expect to have a second line into the club premises at an early date. There will be a motion to this effect at next Board meeting.

The Manitoba Callbooks will be available through the club very soon. Cost is \$10.00 each, and can be obtained from any duty officer during the weekday operating hours of 9 to 3.

The 'Sparks' should be in the mail to all members in the first few days of December. Extra copies are available for others wishing to obtain one.



The November breakfast meeting had 23 turn out. It has been arranged that we will hold the breakfasts alternately between the Norlander Inn and the Garden City Inn. The breakfasts at the Norlander will be January, March, May; those at Garden City will be February, April and June. We will have the larger room now at G.C.I., so there will be more elbow room and less noise.

The main computer at the packet location has been upgraded from a 286 to a 386, thanks to Alf who donated the motherboard, and to Harsha who did the work - quite an improvement, and with Windows too! (Great for playing Solitaire).

Saturday, Nov.. 23, saw the involvement by the club in the Channel 12 TV - St. Vital BIZ 'Christmas Tree' program on property right around the club. Some club members circulated among the young people and had them talk to 'Santa' on 2 m. Manning the base station were a few members on various frequencies - those who had a good 'Ho, Ho, Ho'.

Sandy, 4SZ has announced that the ADVANCED course is a 'go', as sufficient members have signed up. There will be some outside advertising to generate further interest. Classes will start on Thursday, January 2, 1997, and run from 11 a.m. until 2:30 p.m. If you are interested in taking this course (Seniors have priority), please call Sandy at 633-2877.

The cleanup of our premises was a big success. Eight members turned out, and the job was finished in short order. Colin, 4JCM said that a comment was made that it was so shiny and bright that one had to put on sunglasses when entering.

The packet course, to be put on by Dan, 4SYG, has been postponed until sometime in January. Watch for further details.

Two new members were voted in - George Kent, 4YM, and Norman Coull, 4EH. This brings our current membership to 165.

George, 4YM made use of the club station during J.O.T.A. when he brought 10 Scouts and their Leaders (the White Ridge Scout Group) for an on-air session. Adam, 4SN handled the CW contacts. It was a big success - the Scouts were NOT mike-shy.

A big change that will be of benefit to all members is that, beginning in January/97, there will be a GENERAL meeting EACH month - on the 3rd Wednesday. Board meetings will be held prior to this meeting, so that an agenda can be prepared, along with a program. Members can come out, make their voices heard, and vote - so they can now have a much bigger say in how the club is run, each month! And the program should be an added incentive to attend. This is being done to increase the turnout of members to the club premises - we want to see everyone from time to time.

The next Board meeting is on Wednesday, December 18. All committee heads should have their annual reports available. Members who have been involved in activities pertaining to ham radio should also prepare reports - we want to know what you have been doing.

The VE4WSC Board and members wish to extend to ALL amateurs very best wishes for a happy holiday season, and may 1997 be the year that all your 'ham'

'HAM' RADIO OPERATOR'S COURSE **COURSE INSTRUCTOR**

Larry R. Burkhardt, VE4LRB
Electronics Engineer

Once again, regrettably, the Amateur Radio Operator's course was cancelled at the last minute because the required minimum of 10 students per class was not met. For those interested parties who still wish to take this course, I am pleased to announce that I can now offer an alternative venue and am willing to teach classes of less than 10 students. My goal is to offer this course at the beginning of 1997. As I do not have a list of the students who enrolled to take this course at Sturgeon Creek Collegiate, I cannot contact each one of them individually to advise them of these new arrangements. I would, therefore, appreciate it if members of WARC who know of anyone who is interested in taking this course would pass on this information and ask interested parties to contact me *PERSONALLY* after 6 p.m. at 487-0509.

dreams come true!

ARES Committee Report **by Jeff, VE4MBQ - Winnipeg EC**

Our November meeting saw an excellent speaker in Dr. Peter Markestyn, Chief Medical Examiner of Manitoba. Dr. Markestyn provided us with an entertaining yet educational view of what the Medical Examiner's Office is responsible for.

Our next meeting 17DEC96 1900 hrs at St John Ambulance includes a presentation from the Coast Guard Rescue Auxillary. At this meeting I will require input from the general members of Winnipeg ARES as to our possible participation as communicators during snow emergencies working with an UNORGANIZED collection of 4WD vehicle operators.

In the past year we have had presentations on a wide range of topics that are relevant to emergency communications: Red Cross, Digital Communication, Spring Flooding Plan, Severe Wx Watch, Considerations for 2 metre Bicycle Mobile, Rosner's Rules of Order, Civil Air Search and Rescue, Cold Wx Survival, Medical Examiner.

In the coming year we hope to start off with presentations on: Edmonton Tornado, Net Control, Emergency Plan Review, Mennonite Central Committee, and EMO reorganization to name a few.

MINUTES for W.A.R.C. Nov 18, 1996 **Submitted by Norm, VE4EH**

The meeting was called to order by Rick, VE4OV with 38 members in attendance. Everyone introduced themselves.

Minutes

Amend the date for WARC minutes in the November Newscaster to Oct 21, 1996 vice Sep 9, 1996.

Amend to reflect that the lease extension (renewal) for the property located at 598 St. Mary's Rd. is the sole concern and responsibility of the WSCRC and the lease does not involve WARC/MRS.

Amended minutes to be approved Moved by Norm VE4EH, Second by Derek VE4HAY Carried

Treasurer's Report

Rick VE4OV reported a current balance of \$6,026.95 as of Oct 31, 1996 With expenses of \$321.00 for School rental charge.

Standing Committees

Flea Market - VE4PLG informed the membership that the proposed date for the next fleamarket is Apr 20, 1997 at the Waverley Heights Community Club, 1885 Chancellor. Bookings are being accepted.

Membership - Norm VE4EH announced that a 2 meter Wilson mag mount would be the prize for the next membership draw.

Old Business

License plates - Tom VE4SE continues to persue clarification concerning the cost and procedure to be followed to obtain the new plates.

Interference - The WARC executive has delayed until the Dec/96 executive meeting any action to form a committee to deal with the current interference on the bands.. Rick VE4OV the regional RAC Director will approach Industry Canada to discuss the current interference problems.

New Business

Derek VE4HAY suggested that the executive appoint a field day chairperson.

Announcements

RAC Regional Director Election

The membership notes will pleasure the interim Regional Director (Midwest) Rick, VE4OV has been elected by the RAC membership and returned as our Regional Director based no doubt on his many years of dedication to the hobby. Congratulations Rick.

Basic course - VE4LRB, Larry will be offering a course in the New Year for the cost of \$145.00 which will include books, materials and test fees. The course will be for 12 weeks on Thursday evenings. VE4LRB is a licensed examiner.

Advanced Course - WSCRC will offer an advanced course every Tuesday and Thursday

commencing Jan 2, 1997 from 11:00 - 14:30. For further information contact Sandy, VE4SZ - 633-2877

- Meeting adjourned by Rick VE4OV
- Attendance Prize for members only - CO2 & Smoke detector won by Tom, VE4SE
- Raffle Prize - Digital multimeter won by William VE4YR

The WARC DX SLEUTHS Report for October by Ed, VE4YU

So far no one has claimed the first certificate for working 10 WARCS members on HF after the starting date of Nov, 1st, 1996. Congratulations to Norm, VE4EH, on getting his feet wet on HF and mixing with the fray in the contests. Speaking of contests, it was tongue in cheek that we mentioned giving Rob, VE4GV, some stiff competition in the November ARRL Sweepstakes. I don't know about the CW part but, on the SSB side, when last heard, Rob was close to the 1000 QSO mark, far and away from anyone in this neck of the woods. Rob is still among the elite in contesting when he puts his mind (and equipment) to the task.

The ever popular CQWWDX tests once again showed that the upper bands (in this case 15M) aren't as dead as they appear. Several Sleuths were active in the test and we managed to work some real neat DX such as 5V7, ZD9, VK8, C21, ZM and a bundle of JAs. Who says there is nothing out there!

Don't forget to get on for the Winter RAC test, Sunday, December 29, 1996. You can use all bands

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including 2M (except WARC bands). If you want info call Ed, VE4YU. Also don't forget that we can use the special XL4 prefix until December 29, to celebrate the 60th anniversary of CBC Radio. Good hunting!

RAC Bulletin #16

Reply-To: rachq@king.igs.net

ELECTION RESULTS

On Monday, November 18, 1996 the Committee of Tellers, consisting of:

Ralph Cameron, VE3BBM

Jim Dean, VE3IQ

Brice Wightman, VE3EDR

met at the RAC Headquarters to count the ballots received for the election of Director for the Mid-West Region. The results follow.

Mid-West Region:

Ballots sent out: 550

Ballots returned: 344

Ballots spoiled: 2

Total Valid Ballots: 342

Candidate Richard Lord VE4OV: 206

Candidate J.G.R. "Bob" Shehyn VE5FY:

136

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We hereby declare that the successful candidate for the Mid-West Region is: **Richard Lord VE4OV**
ORIGINAL DOCUMENT SIGNED BY:
Ralph Cameron, VE3BBM James Dean, VE3IQ
Brice Wightman, VE3EDR

High-Temperature Superconductivity by Vern, VE4VQ

Manitobans have a pretty fair idea of what high temperatures are; they are high enough to melt snow. "high" is a subjective adjective, of course, and, like beauty, definitely resides in the eye of the beholder. The researchers who work in the field of superconductivity are excited by their latest success; they are almost half way from absolute zero 0 C - about 135° K. You'll find the details in 'Probing High-Temperature Superconductivity' in Scientific American (Aug. 1996) and it is a fascinating read.

"An electric current in a superconductor will flow with out voltage and, once set in motion in a loop, will persist forever - so long as the substance is kept cooled to below the critical temperature."

The materials that permit this superconductivity are not metals but ceramics called cuprates - compounds of lanthanum, barium, copper-oxide, and other exotic chemicals. How they work to produce resistanceless flow to electricity, at appropriate temperatures, is still keeping some of the world's best minds busy. "Superconductivity is a single topic for which the most Nobel Prizes have been awarded (five so far). A correct theory would surely garner another for the field."

One theory - called the "Old model" - was developed by L.N. Cooper and two associates. This theory involves the formation of "Cooper pairs" from the electrons. As these pairs move through the lattice of the cuprate, they cause a distortion of the lattice, this distortion being called a "phonon" (which is not to be confused with Einstein's "Photon", which is a "glob" of energy).

A "new model" is based on the concept of "spin waves: The idea, here is that the electrons, as they

pass through the lattice of material, causes the magnetic spin of the ions to “flip”.

There are also Josephson junctions, s-waves and d-waves, and “tricrystal” rings. A few minutes spent in scanning this article at your local library should be time well spent.

Amateur Radio and Your Health **by Robert, VE4RST**

Sitting at the last WARC meeting I could not help but overhear the conversations of fellow Hams, young and seasoned, regarding their aches and pains now that nasty old winter has come upon us. As the snow falls we all tend to be a bit more inactive with outdoor activities and become a bit more housebound.

This being the case, the ham shack is a very good place to spend your time. However, sitting in front of your computer or microphone for extended periods of time can cause a sore neck, headache, eye strain or back and leg pain. There are many issues dealing with correcting this discomfort such as proper posture, the proper setting up of your shack, stretching exercises, etc. In this article I will be dealing with the proper requirements for your chair.

Chair Selection

The design of the chair has a major influence on the sitting posture that an individual assumes. Studies have shown that sitting for long periods of time with incorrect posture, over the years, can lead to the development of degenerative disc disease and low back pain. Appropriate chair selection is very important for reducing spinal loading when sitting, as well as decreasing fatigue and discomfort while sitting in your shack. Stools and other “backless chairs should not be used for any extended period of time. These types of chairs do not support the back. The shape of the seat surface should be either uncountoured or slightly concave. A padded, upholstered seat that does not compress more than 2.5 cm is good. This will be comfortable yet still be firm enough to give the support the body needs to stay stable. The best type of chair for most sitting activity is the “secretarial chair”. These chairs usually have no arms and have four types of adjustments, chair height, chair angle, back height and back angle. It is important to note that chairs with

arms are useful for getting up and supporting yourself when you initially sit. However, they can become cumbersome when doing that 72 hour contesting.

Adjusting Your Chair

When you adjust a chair of this “secretarial” type use the following simple rules:

- ☺ Adjust the seat height so that your knees are bent at an angle of slightly over 90 degrees and that your feet are comfortably flat on the floor.
- ☺ Don’t cross your legs while sitting. This can constrict blood flow, causing “tingling” and making your legs “go to sleep”.
- ☺ Adjust the seat angle of your chair so that there is not a great deal of pressure on the part of your upper leg just above your knee.
- ☺ Try to avoid chairs with arms. They put extra pressure on your arms and also position them in an unnatural angle if you tend to rest your arms on them.
- ☺ You may need further back support than your chair provides. The inexpensive way of doing this is to roll up a towel or put a pillow at the base of your spine against your chair. When you sit, this will force you to push your shoulders back to allow for a more correct body position. If you need further support an “Obus Forme” chair back (usually priced about \$57.00 tax included) is an excellent way of giving your back full support.

Taking Breaks

If you spend more than 1 hour per day in the ham shack sitting in your chair, the best thing that you can do for your body and mind is to take breaks. Most computers or ham shacks have clocks. Set the alarm to tell you when to take a break. The old saying “a change is as good as a rest” is quite true. Give your body the chance to get up and move around. This in itself is a good, basic way to stretch your muscles and get out of that “tired” feeling. Remember, determine how long you can sit in your shack before you need to take a break. Then TAKE that break!

Professional Services

If you have aches and pains that you cannot seem to get relief from the best bet is to see a health care professional. A physiotherapist or massage therapist can give a lot of relief to pain that has been nagging you for a long time. They can also help with stretching and exercise programs to keep you fit and functional. We must all learn that you do not have to live with discomfort and any physical pain we do have can be lessened.

These are just a few suggestions on choosing that all important chair and becoming a bit more pain free during those long winter months or that long blizzard we always experience in Manitoba. As a wise person once said,

“ Merry Christmas to all and to all a good night.”
73.

Electrons and Antielectrons **By Vern 'Skink', VE4VQ**

I now know how Lief the Lucky must have felt when he discovered the little bay, that is known l'Anse aux Meadows, after his sail across the North Atlantic. I made landfall on the shores of what I now know is called the Anitworld. I wonder how many “friendly natives” will read this article and ask, “What took you so long, Dutton?” I made my discovery of this new world in Science & Vie, Mars 1996. For those in the boats that are still waiting for a favourable breeze, here are some of the land-marks that may help you move around this new world after you've landed.

Paul Dirac was working at Cambridge attempting to express the comportment of electrons by means of a mathematical equation that would include the quantum theory and Einstein's restricted theory of relativity. It was in 1931 that his work can to an end in an unexpected way. He obtained the desired equation but it had to possible answers, one positive and one negative. You may well imagine what a laugh this brought from many physicists of the day.

Fortunately, Dr. Dirac was loathe to abandon his work. He eventually proposed “another interpretation that resolved impasse. A particle with negative energy moving backward though time is mathematically equivalent to a particle with positive energy moving through time in the conventional sense and having the same mass but an electrical charge of opposite sign - an electron having positive charge rather than negative charge - an antielectron.”

Them less than a year later, an American researcher, Carl Anderson, was working on cosmic rays. One day on the film that recorded events in his detector, he found the trace left by an unknown particle. After analysis of the magnetic fields in the

equipment, he concluded that he had detected a particle having positive charge and the same mass as an electron. Dr. Anderson had found physical proof of Dirac's antielectron. The world of antimatter had been confirmed for all to see.

At his point, caution about terminology is in order. One might almost think that the antielectron is Spanish as it has four names:

antielectron = positive electron = positron = positon

Dirac continued with his work and eventually showed that all particles have antiparticles. The physicists have been having good fun ever since as the number of cyclotrons around the world witness.

We now reach 1975. That year, a Dutch physicist, Simon Van der Meer, figured out how to create a beam of antiprotons. Working at CERN, in Geneva, he and Carlo Rubbia discovered, in 1983, the W and Z bosons for which they received a Nobel prize.

With the techniques developed at CERN, a team of German and Italian physicists have now managed to “give birth to nine antiatoms of Hydrogen”. The birthing pains are described in the article. The research was carried out in CERN's LEAR (Low Energy Antiproton Ring) - a antiprotons make three million circuits of the Ring per second”. These anitprotons collide with a fine jet of xenon gas on each pass around the Ring. I'll let you do the mathematics but, in three weeks, nine (9) antiatoms of hydrogen have been produced as a result of the occasional (“tresrarement) collision between one of the antiprotons and the nucleus of an atom of xenon gas.

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Ph:(204)



The article concludes by recording that Gerald Gabrielse, at Harvard, has succeeded in storing antiprotons, at negative 269 degrees Celsius, in a magnetic "trap". We are also told that the physicists now know how to put positrons (i.e.. antielectrons) in a "bottle".

At his point, the Gaelic sense of humour puts the icing on the cake. "The next step will be more difficult - to pour the contents of one bottle into the other!"

Editors Ramblings **BY Derek, VE4HAY**

Another short newsletter this month. My cupboard is bare, and barely an article to be found anywhere. If something does not happen soon, I will be forced to submit my 6 year olds latest masterpiece, of literary delights. While I like what she is doing, DO YOU REALLY WANT TO READ ABOUT IT!! Please submit anything you may have that is Amateur Radio related. It can be on your favourite mode or transmission. Why you prefer it over other modes, a review of that new transmitter you will get for Xmas, etc. Newsletter articles can always be sent to ve4hay@ve4kv.wpg.mb.ca via packet. or e-mailed to derek@facs.mb.ca

The other day I receive a phone patch from way up north. It seems that good old St. Nick wants to chat with all the young OM & YL's in VE4 land. He has set up a sked for December 15th, right after the MRS 2m net. This will be on the various linked repeaters. So please check in. Last year Santa had many good contacts, and looks forward to updating his log book with even more this year.

WARC members renewing RAC membership

Please ensure that you quote WIN102 when renewing or beginning your RAC membership. The Winnipeg Amateur Radio Club receives a commission from RAC each time a member uses WIN102.

TALK TO SANTA CLAUS **by VE4HOHO**

T'was shortly before Christmas
And all through the shack
All the harmonics were thinking
Not too long until St. Nicholas comes
back

They did not have to look too far
Thanks to the station of VE4DAR

Get ready for it! Get your harmonics by the 2 meter rig, and in the Christmas spirit! The Manitoba Repeater Society will have the Third annual "Talk to Santa Claus" net, immediately after the 2 meter net on Sunday, December 15 at 2:00 pm (local time) on the VE4WPG repeater and any linkable repeaters.

Yes, Santa will put in an appearance, live and direct from the North Pole, while he makes last minute preparations for his big ride. Maybe Rudolph and a few of the other reindeer will drop by for a visit, too. Santa Claus has agreed to spend about an hour, talking on the radio with any youngsters in the crowd.



At that time of year we spend a lot of time with all our friends, relatives, and of course our families. But lets not forget about all of ham friends, not just on VHF/UHF, but also our HF friends, those rare DX contacts, packet friends, and

of course these who we see eyeball to eyeball. Why not send a holiday greeting to them as well. We may not be able to spend time with them in person, but a festive holiday QSO is sure to warm their hearts. We all share a great hobby, and with it the ability to share our warm thoughts and joys for this truly festive season, both locally and the world over. Merry Christmas Everyone 73 to all