Antennas & transmissions Lines
By Walter, VE4VB

Date: November 8th, 2004
Time: 7:30 p.m.
Place: Sturgeon Creek Regional Secondary School

Other Important Dates:

WARC Dec. 13th - Christmas party
Jan. 10 - Monthly Meeting
Feb. 14 - Monthly Meeting
March 14 -- Monthly Meeting
April 11 - Monthly Meeting
April 17 - Flea Market
May 9th - Monthly Meeting
June 13 - Monthly Meeting

WSC: 2nd Thurs. of month - Breakfast - Garden City Inn
December 7th - Christmas Party

ARES:

Other:

Nets: Daily 01:00 UTC MB Evening Phone net 3760 KHz
Daily 01:30 UTC Prairie traffic Net (CW) 3660 KHz
Daily 02:30 UTC Aurora #2 net 7055 KHz
Daily 14:30 UTC MB Wx Net 3743 KHz
Weekdays 9:00 Seniors morning net 147.390 MHz
Wed. 9:00 pm Six Meter net 50.238 MHz.
Thursday 9:00pm MRS Net 147.390 MHz +
Sunday 9:00pm MRS Net 147.390 MHz +
**Notice of Motion**
*By Derek VE4HAY*

Motion to amend by-laws 3.12(a) and 3.12(b).

Whereas the present by-laws read,

3.12(a) The term of office of any member of the Board of Directors shall not exceed three (3) consecutive years.

3.12(b) A member who has served three (3) consecutive years may not serve again without at least one (1) year absence from the Board of Directors.

To be changed to and to read as follows...

3.12(a) A term in office as a Director of the Board shall be one (1) fiscal year.

3.12(b) A Director of the Board can be voted in for an unlimited amount of terms, provided that a majority of the members present and in good standing at a meeting for that purpose, have voted in said director for each term.

3.12(c) Any Director of the Board, appointed to the office of President or Vice president, shall not hold said offices for longer than five (5) consecutive terms and must step down from said positions for at least one (1) term but will be allowed to remain on the Board of Directors in any other position, provided that a majority of the members present and in good standing at a meeting for that purpose, have voted in said director for each term.

Motion made by Derek Hay VE4HAY

Seconded by Jeff Dovyak VE4MBQ

Discussion and voting to take place at the November meeting.

---

**WPGARES**
*Jeff Dovyak VE4MBQ*

The WPGARES Table at the WARC Fall Flea Market was organized by Susan VE4SYM. Table staff included Susan VE4SYM, Fred VE4TRO, Don VE4DWG, and Jeff VE4MBQ. Congratulations to Ray Hall VE4RQ who was the winner of the "50-50" draw. Thank you to all those who provided financial support for WPGARES by buying a ticket or tickets.

The Winnipeg ARES Annual General Meeting was held TUE 19 OCT 2004. In addition to "routine" reports the members present approved the 2004-04 Financial Statement and also approved the 2004-05 Budget. In the past year we have had:

- Alerts, Exercises, or Tests: 7
- Educational Meetings: 11
- Public Service Events: 5

The 2004-05 Executive includes:

- President: Glen Napady VE4GWN
- Treasurer: Susan Collings VE4SYM
- Secretary: Dick Maguire VE4HK

Thanks to out-going President Richard Kazuk VE4KAZ who served as President for almost ten years. Don Gerrard VE4DWG and Tim Rhind VE4TJR continue to be our web-masters (our public site is www.winnipegares.ca). Our operations folks (preparedness and response) are still:

- Emergency Coordinator (EC): Jeff Dovyak VE4MBQ
- Assistant EC: Richard Kazuk VE4KAZ
- Assistant EC: Richard Sheridan VE4ESX

Membership requirements and a membership application form are available on our web-site. Membership requirements include:

- live in or near Winnipeg
- have an interest in providing emergency Amateur communications
- be at least 18 years of age
- valid Canadian Amateur Radio Certificate
- Possess a working 2m HT with spare battery pack
- commit to attend at least four WPGARES meetings per year
- commit to participate in at least two on-the-air events or exercises per year
- be sponsored by a current member in good standing or complete an interview with the EC to the satisfaction of the EC
We have picked up four new members over the past month or so:
- Sandie Isaac VE4TOS
- Doug Kazuk VE4KDB
- Ron Place VE4PL
- Ellie Taylor VE4NRS.

Our next monthly meeting is TUE 16NOV 1900h at Sir Wm Stephenson Library 765 Keewatin Street. Grant Ubell from the Honda Goldwings is our guest speaker.

We will be staffing VE4WWO again this year during SKYWARN Recognition Day 04 DEC 2004. At press time we are the only Canadian weather station that has registered. The SRD web-site is: http://hamradio.noaa.gov

Our volunteer briefing is TUE 30 NOV 1900h in the 4th floor training room at PSPC 123 Main Street. Please call on 147.420 MHz for access. We have at least one WWO Operator scheduled for each shift so the other operators need not necessarily be familiar with the operation of VE4WWO but they must be ARES members. If you are considering taking a shift please let me know ASAP. We have the following shifts still open (local time shown):

FRI 03DEC 2200h to SAT 0200h for an ARES HF Operator
SAT 04DEC 0600-1000h for an ARES VHF Operator
SAT 04DEC 1400-1800h for an ARES VHF Operator

Choosing A Satellite Radio
By Emily Clarke, W0EEC – VP of Project OSCAR

The purchase of a new radio is possibly the biggest decision and most debated decision a ham makes. When I started out I asked a dozen people and got as many answers. In the end, I made my decision not on what people told me, but by considering what I wanted the radio to do. Choosing a satellite radio is easy if you know what your needs are. Rather than make specific recommendations, lets examine some general capabilities.

Simultaneous Dual Band?:
Satellites generally transmit on one band and receive on another. There are a number of dual band radios, but can you listen on 70cm and transmit on 2m at the same time? This cross band mode is an absolute requirement. If you have a radio that will do split band operation, this probably qualifies.

Full Duplex?:
Generally you don’t need a full duplex radio for repeaters, however when operating satellites it is important to monitor your own signal as it is retransmitted by the satellite. Although you can work the easy sats with a split band radio, full duplex is highly recommended. Radios with dual VFOs generally meet this criteria.

Handheld or Base?:
If you plan on working satellites indoors, antennas will probably be up on the roof or on a tower. You will need extra power (10 watts or more) because you will also have cable losses to overcome. If most of your contacts will be made outside with a handheld antenna, a handheld radio might be all that you need.

All-Mode?:
All mode radios are base or mobile radios that can do both FM and SSB/CW modes. They are more expensive but put out up to 100 watts. FM only radios can be used for many satellites, but high orbiting satellites always use SSB/CW modulation. If this is your goal, an all mode radio is for you. A word of caution – some handheld radios say they are all mode, but it is generally only AM receive not SSB.

HF?:
Currently only two operational satellites use HF. AO-7 operates in Mode A (2m xmit, 10m receive) and AO-51 has a PSK mode that is 10m xmit and 2m receive. Note that you need HF privileges to operate AO-51 in this mode.

Packet?:
Some radios have built in terminal node controllers or TNCs. These convert data from the satellite and display them on a screen or computer, and vice versa. Other radios don’t have built in TNCs but have a data port for a TNC. Make sure it supports 9600 baud data.

Computer Interface?:
Not all radios have the ability to be controlled by a PC running a tracking program that will automatically correct for Doppler shift. While not very important for FM, it is a highly desirable feature for SSB/CW operation. This feature is generally only available on all-mode base station radios.

Whatever your decision, they can sometimes become permanent. Though you can quickly sell a radio you aren’t happy with using online auctions it’s generally a decision that is difficult for hams to make. So the best advice is to buy a radio that meets your needs and possibly needs you may have in the future.
Transmitter Power, Antenna Gain, and Coax Loss Trade-offs
By Ken Larson KJ6RZ

In the 1950s and 60s many hams built their own transmitters for the simple reason that commercial transmitters were too expensive. For example, a Johnson Viking II transmitter cost $300, which doesn’t sound too bad until you stop to consider that a new Ford or Chevy cost $1,000. The alternative was to buy cheap war surplus radios and use the parts to build one of the transmitters shown in the Radio Amateur’s Handbook. In a way, that was more fun. As far as power was concerned, you had control! You could push your transmitter as hard as you dared, to squeeze every bit of power out of it, even to the point where the plates of the transmitter’s output vacuum tubes glowed cherry red.

I was convinced in those days that if I could just get another 20 watts of output from my transmitter that it would make all the difference in the world at the receiving end. If I could just get those extra 20 watts that rare DX operator in a distance land would see my signal jump from a pitifully weak whisper to a loud boom that he could not ignore, and I would get that contact. Today I know that little extra power would not have made any difference at all. However, I still have an intense desire to push my transceiver to its maximum power output to get a DX contact. But it doesn’t stop there. I want every db of gain that I can possibly get out of my antenna. As far as coax is concerned, I want that big, heavy, hard to handle, expensive coax because I don’t want to loose any of my valuable watts getting from my transmitter to the antenna. Does all of this pushing, shoving, and optimization really make a difference? Probably not!

It turns out that you must increase the output power of your transceiver by at least 3 db in order for the person you are talking with to notice any change in your signal strength. For your signal to sound twice as loud, you must increase your power out by about 9 db.

How much is a 3 db increase in power? A 3 db power gain is equal to a times 2 increase in power (3 db = x2). So, if your transceiver is running 100 watts, you must increase your transceiver’s output to 200 watts in order for the person you are talking with to notice any increase in your power. If you wanted your signal to sound twice as loud, you must increase your power to 800 watts (9 db = 3 db + 3 db + 3 db = x2 x2 x2 = x8). Clearly, increasing power by 20 watts, say from 100 to 120 watts, is not going to make any difference at all to the person receiving your signal. On the other hand, if you cut your power in half from 100 watts to 50 (a 3 db decrease in power), the other operator will hardly notice any drop at all in your signal strength. So why beat your transceiver into the ground by running it at full power?

If you run at 75 watts instead of 100, your transceiver will run cooler and no one that you talk to will know the difference. There is someone who may notice the difference however, your neighbors. If you are having interference problems, cutting your power level in half could solve those problems without having any noticeable affect on your ability to make contacts. For example, when I operated on 10 meters at 100 watts, my lawn sprinklers would turn on whenever I keyed my transceiver. When I dropped to 50 watts, the problem went away. Running at 50 watts turned out to be a great water conservation technique.

What about antennas? The same 3 db rule applies. You can go to a lot of trouble and expense on 40 and 80 meters putting up phased vertical arrays to achieve 2 or 3 db of gain. But 3 db of gain will hardly be noticeable to anyone listening to your signal, so why bother? The threshold in antenna cost verses performance gain is around 6 db. If your antenna provides 6 db of gain, operators listening to your signal will notice a difference. Your signal will not be twice as loud, remember you have to get 9 db of gain for that to happen, but at 6 db the gain will be noticeable. The table below puts antenna cost verses performance gain somewhat into perspective. This table compares various yagi beam configurations to the performance of a dipole. The table shows the db gain, relative to a dipole, achieved by each of the antennas. The antennas get more expensive as you go down the table. The table also indicates the increase in signal strength observed by the S-meter on a distant transceiver that is receiving your signal.

<table>
<thead>
<tr>
<th>Antenna</th>
<th>db Gain</th>
<th>S-unit Increase</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dipole</td>
<td>0</td>
<td>0</td>
<td>Baseline</td>
</tr>
<tr>
<td>2-element Yagi Beam</td>
<td>4</td>
<td>0.6</td>
<td>Marginal performance increase</td>
</tr>
<tr>
<td>3-element Yagi Beam</td>
<td>6</td>
<td>1.0</td>
<td>Good performance increase</td>
</tr>
<tr>
<td>10-element Yagi Beam</td>
<td>12</td>
<td>2.0</td>
<td>Excellent performance increase</td>
</tr>
</tbody>
</table>

The cost verse performance trade-off for the transmission line connecting a transceiver to an antenna is similar to the antenna cost trade-off. However, this time the trade-off relates to the difference in loss between two types of transmission lines, for example, between two different grades of coax cable. As an illustration, 100 feet of LMR 400 coax used to connect a transceiver with a 10 meter antenna will produce a loss of 0.7 db. If standard RG-8/X coax is used instead, the loss will be 2.0 db. The difference in loss between the two types of coax is 1.3 db. Is it worth buying the more expensive LMR 400 coax to reduce loss by 1.3 db? Probably not. The strength of your signal in this example will sound the same to other hams regardless of which type of coax you use. Notice in making a comparison between
two types of coax (or two types of antennas, etc.) it is the difference in loss (or gain) that is important, not the actual loss (or gain). At UHF frequencies, the differences in loss will be greater. 100 feet of LMR 400 coax at 440 MHz has a loss of 2.7 db. In comparison, RG-8/X has a loss of 8.1 db. The difference in loss is 5.4 db. In this case the more expensive LMR 400 coax may be worth the money. LMR 400 coax is relatively thick, stiff, and difficult to work with compared to RG-8/X, particularly inside the radio shack. Suppose that you use 75 feet of LMR 400 to get from your 440 MHz antenna to the wall outside your radio shack. Then you use a 25 foot length of RG-8/X to come through the wall and into the radio shack because RG-8/X is smaller and easier to handle in the shack. What performance penalty will you pay for doing this? The loss of 25 feet of RG-8/X is about 2.03 db. If you brought the LMR 400 all the way into the shack, the loss associated with the additional 25 feet of LMR 400 would be 0.68 db. The difference in loss is approximately 1.36 db, a negligible amount. Using RG-8/X within the radio shack is thus a good choice since it simplifies cable management within the shack and provides negligible additional loss.

In making trade-off comparisons, you have to look at the total system as well as the individual components. For example, a 2-element 10 meter yagi antenna (4 db gain over a dipole) feed by LMR-400 coax (1.3 db gain over RG-8/X coax) produces a total system gain of 5.3 db compared to a 10 meter dipole feed with RG-8/X coax. The total system gain of 5.3 db probably is worth the effort, even though the gains between the individual components was not that attractive. The system trade-off can easily go the other way as well. At 440 MHz, 100 feet of LMR-400 coax has a 5.4 db performance gain over RG-8/X coax and is clearly better. However, if your transceiver has power settings of 5, 10, and 50 watts, and you can hit all of the area repeaters at 10 watts using RG-8/X coax, why upgrade to LMR-400? Unless you are running off of batteries, using LMR-400 coax so that you can drop your transmit power to 5 watts probably is not worth the trouble or cost.

In conclusion, when making trade-offs between transmitter power, antenna gain, coax loss, and total system performance, it is the db difference between the options available to you that is important. A difference of 3 db will not be apparent to the hams that you are communicating with. They will hardly notice the difference if you run your transmitter at 50 watts instead of its maximum 100 watt output power. A difference of 3 db or less between two antennas, two types of coax, or two system implementations is usually not sufficient to justify higher costs. However, a difference of 6 db may justify the more expensive approach.

--- extracted from the Conejo Valley Amateur Radio Club Tech page web site

---

**News from the Net**

**Great Britain to get additional 100kHz at 7MHz Soon?**

Ofcom’s period of consultation on its proposal to vary the Foundation, Intermediate and Full amateur radio licences to permit UK amateurs to operate in the band 7100 to 7200 kHz ends on 23 October. The proposal is that the band would be allocated to the Amateur Service on a Secondary basis on the basis of non-interference to other services, inside or outside the United Kingdom. It is hoped that an announcement will be made soon after the end of the consultation about when the additional 100 kHz of spectrum will become available to UK amateurs. -- RSGB

**RAC Board of Directors Appoints New President and First Vice-president**

At a Special RAC Board Teleconference meeting held on October 12th, the Board of Directors voted to appoint a new president, selected by a majority vote among the Directors. The director from Alberta, Earl Smith - VE6NM - will be the new president, starting on October 15th. His position as Director for Alberta/NWT/NU will be filled by appointment in the near future.

RAC has a new First Vice President, similarly selected. The First Vice President will be John Iltfe - VE3CES/VA3IL - John was president of CARF during the union with CRRL when RAC was created. - He is the co-author of the study guide.

Following that Board Meeting, Treasurer Eric Ferguson - VE3CR - resigned his position. He has been replaced by Ken Pulfer - VE3PU - who will resume the position of Treasurer. -- VE5FX

**Israel - To CW or not to CW:**

The proposition has been raised lately by the Ministry to drop the Morse (CW) requirement for HF access. Many European Countries have been dropping the requirement. Resulting in a revised CEPT agreement; Israel accepts the updated CEPT T/R 61-01 and T/R 61-02 agreements. It is expected that a heated discussion will develop on the air waves once the debate opens for discussion. -- IARC

**Kenya Drops Morse Requirement,**

According to an article in QST’s August 2004 edition (page 88), the Communications Commission of Kenya has dropped the Morse requirement and made additional changes to simplify and facilitate amateur licensing in Kenya. Further information is available on the website of the Amateur Radio Society of Kenya at http://www.qsl.net/ars - No-Code International
**Calendar**

### November, 2004

<table>
<thead>
<tr>
<th>Event</th>
<th>Mode</th>
<th>Time</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>HA-QRP CW</td>
<td></td>
<td>0000Z</td>
<td>Nov 1-7</td>
</tr>
<tr>
<td>ARS Spartan Sprint</td>
<td>CW</td>
<td>0200Z</td>
<td>Nov 2</td>
</tr>
<tr>
<td>SSA 10 m Aktivitetstest CW/SSB/FM</td>
<td></td>
<td>1700Z</td>
<td>Nov 4</td>
</tr>
<tr>
<td>IPARC CW</td>
<td></td>
<td>0600Z</td>
<td>Nov 6</td>
</tr>
<tr>
<td>A</td>
<td>And</td>
<td>1400Z</td>
<td>Nov 6</td>
</tr>
<tr>
<td>Ukrainian DX CW/SSB/RTTY</td>
<td></td>
<td>1200Z</td>
<td>Nov 6</td>
</tr>
<tr>
<td>ARRL Sweepstakes CW</td>
<td></td>
<td>2100Z</td>
<td>Nov 6</td>
</tr>
<tr>
<td>NA Collegiate ARC CW</td>
<td></td>
<td>2100Z</td>
<td>Nov 6</td>
</tr>
<tr>
<td>IPARC SSB</td>
<td></td>
<td>0600Z</td>
<td>Nov 7</td>
</tr>
<tr>
<td>And</td>
<td></td>
<td>1400Z</td>
<td>Nov 7</td>
</tr>
<tr>
<td>Anatolian ATA PSK31</td>
<td></td>
<td>0900Z</td>
<td>Nov 7</td>
</tr>
<tr>
<td>High Speed Club CW</td>
<td></td>
<td>0900Z</td>
<td>Nov 7</td>
</tr>
<tr>
<td>And</td>
<td></td>
<td>1500Z</td>
<td>Nov 7</td>
</tr>
<tr>
<td>DARC 10-Meter Digital</td>
<td></td>
<td>1100Z</td>
<td>Nov 7</td>
</tr>
<tr>
<td>YO International PSK31</td>
<td></td>
<td>1600Z</td>
<td>Nov 11-19</td>
</tr>
<tr>
<td>WAE DX RTTY</td>
<td></td>
<td>0000Z</td>
<td>Nov 13</td>
</tr>
<tr>
<td>JIDX Phone</td>
<td></td>
<td>0700Z</td>
<td>Nov 13</td>
</tr>
<tr>
<td>SARL Field Day</td>
<td></td>
<td>1000Z</td>
<td>Nov 13</td>
</tr>
<tr>
<td>SL CW</td>
<td></td>
<td>1100Z</td>
<td>Nov 13</td>
</tr>
<tr>
<td>OK/OM DX CW</td>
<td></td>
<td>1200Z</td>
<td>Nov 13</td>
</tr>
<tr>
<td>SL SSB</td>
<td></td>
<td>1230Z</td>
<td>Nov 13</td>
</tr>
<tr>
<td>SSA Månadtest nr</td>
<td></td>
<td>1400Z</td>
<td>Nov 14</td>
</tr>
<tr>
<td>LZ DX</td>
<td></td>
<td>1200Z</td>
<td>Nov 20</td>
</tr>
<tr>
<td>RNARS CW Activity</td>
<td></td>
<td>1200Z</td>
<td>Nov 20</td>
</tr>
<tr>
<td>EUCW Fraternizing CW</td>
<td></td>
<td>1500Z</td>
<td>Nov 20</td>
</tr>
<tr>
<td>And</td>
<td></td>
<td>1800Z</td>
<td>Nov 20</td>
</tr>
<tr>
<td>And</td>
<td></td>
<td>0700Z</td>
<td>Nov 21</td>
</tr>
<tr>
<td>And</td>
<td></td>
<td>1000Z</td>
<td>Nov 21</td>
</tr>
<tr>
<td>All Austrian 160-Meter</td>
<td></td>
<td>1600Z</td>
<td>Nov 20</td>
</tr>
<tr>
<td>Carnavales de Tenerife SSB</td>
<td></td>
<td>1600Z</td>
<td>Nov 20</td>
</tr>
<tr>
<td>ARRL Sweepstakes SSB</td>
<td></td>
<td>2100Z</td>
<td>Nov 20</td>
</tr>
<tr>
<td>NA Collegiate ARC SSB</td>
<td></td>
<td>2100Z</td>
<td>Nov 20</td>
</tr>
<tr>
<td>RSGB 2nd 1.8 MHz CW</td>
<td></td>
<td>2100Z</td>
<td>Nov 20</td>
</tr>
<tr>
<td>HOT Party</td>
<td></td>
<td>1300Z</td>
<td>Nov 21</td>
</tr>
<tr>
<td>CQ Worldwide DX CW</td>
<td></td>
<td>0000Z</td>
<td>Nov 27</td>
</tr>
<tr>
<td>LI/NJ-QRP Doghouse Sprint</td>
<td></td>
<td>17000Z</td>
<td>Nov 27</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Event</th>
<th>Mode</th>
<th>Time</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Månadtest nr 12 SSB</td>
<td></td>
<td>1400Z</td>
<td>Dec 12</td>
</tr>
<tr>
<td>Månadtest nr 12 CW</td>
<td></td>
<td>1515Z</td>
<td>Dec 12</td>
</tr>
<tr>
<td>AGB PARTY Contest CW/SSB/DIGI</td>
<td></td>
<td>1700Z</td>
<td>Dec 17</td>
</tr>
<tr>
<td>Russian 160-Meter Contest</td>
<td></td>
<td>2100Z</td>
<td>Dec 17</td>
</tr>
<tr>
<td>MDXA PSK DeathMatch PSK</td>
<td></td>
<td>0000Z</td>
<td>Dec 18</td>
</tr>
<tr>
<td>OK DX RTTY Contest</td>
<td></td>
<td>0000Z</td>
<td>Dec 18</td>
</tr>
<tr>
<td>RAC Winter Contest</td>
<td></td>
<td>0000Z</td>
<td>Dec 18</td>
</tr>
<tr>
<td>Croatian CW Contest</td>
<td></td>
<td>1400Z</td>
<td>Dec 18</td>
</tr>
<tr>
<td>Stew Perry Topband Challenge</td>
<td></td>
<td>1500Z</td>
<td>Dec 18</td>
</tr>
<tr>
<td>International Naval Contest</td>
<td></td>
<td>1600Z</td>
<td>Dec 18</td>
</tr>
<tr>
<td>SSA Jultest (1) CW</td>
<td></td>
<td>0700Z</td>
<td>Dec 25</td>
</tr>
<tr>
<td>RAEM Contest</td>
<td></td>
<td>0200Z</td>
<td>Dec 26</td>
</tr>
<tr>
<td>SSA Jultest (2) CW</td>
<td></td>
<td>0700Z</td>
<td>Dec 26</td>
</tr>
<tr>
<td>DARC Christmas Contest</td>
<td></td>
<td>0830Z</td>
<td>Dec 26</td>
</tr>
</tbody>
</table>

### December

<table>
<thead>
<tr>
<th>Event</th>
<th>Mode</th>
<th>Time</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARCI Topband Sprint</td>
<td></td>
<td>0000Z</td>
<td>Dec 2</td>
</tr>
<tr>
<td>Aktivitetstest CW/SSB/FM</td>
<td></td>
<td>1700Z</td>
<td>Dec 2</td>
</tr>
<tr>
<td>ARRL 160-Meter Contest</td>
<td></td>
<td>2200Z</td>
<td>Dec 3</td>
</tr>
<tr>
<td>TARA RTTY Melee RTTY</td>
<td></td>
<td>0000Z</td>
<td>Dec 4</td>
</tr>
<tr>
<td>Wake-Up! QRP Sprint</td>
<td></td>
<td>0400Z</td>
<td>Dec 4</td>
</tr>
<tr>
<td>TOPS Activity Contest 3.5 MHz CW</td>
<td></td>
<td>1800Z</td>
<td>Dec 4</td>
</tr>
<tr>
<td>CIS DX Contest</td>
<td></td>
<td>0000Z</td>
<td>Dec 5</td>
</tr>
<tr>
<td>ARCI Holiday Spirits Homebrew</td>
<td></td>
<td>2000Z</td>
<td>Dec 5</td>
</tr>
<tr>
<td>ARS Spartan Sprint</td>
<td></td>
<td>0200Z</td>
<td>Dec 7</td>
</tr>
<tr>
<td>28 MHz SWL-Contest CW/SSB</td>
<td></td>
<td>0000Z</td>
<td>Dec 11</td>
</tr>
<tr>
<td>ARRL 10-Meter Contest</td>
<td></td>
<td>0000Z</td>
<td>Dec 11</td>
</tr>
</tbody>
</table>

**Minutes for W.A.R.C. October 18th, 2004**

Submitted by Ed, VE4EIH

Meeting start 19:40

The introductions were started. There were 54 people including 2 quests, and 1 new member. John welcomed all.

VE4GWN motioned to accept minutes John VE4JNF 2nd - Carried

Business arising - John informed everyone of Bob VE4ZAP departure, from the exec and club. Bob also withdrew his donation of the computer for the IRLP. Les VA4LES and has a computer he willing to donate and work on. John explained about Bob’s motion and how it does not stand. Dave VE4DAR explained his thoughts, as to the difficulties of getting volunteers for the exec. While using a chart Dave showed how other clubs work. The president, looks after the secretary, treasures, membership. While the vice president looks after, programing, flea market field day.. The at large members are in training, and would do other assignments. Dave explained that clubs are more than membership lists. Dave explained that WARC should do more for its members. This could membership development, updating, how to chair a meeting, or note taking.

### Bylaw motions on the floor

Glen VE4GWN read his motion on bylaw changes as printed in the newscaster, Tom VE4SE 2nd. The floor was opened to discussion. Dick VE4HK, sent his views on the proposal by E-mail, which was read to the club. Dick voted in favor of the proposal. The questions was called and a majority voted to approve the motion from Glen.

Adam VE4SN explained since everyone as members have read and thought on Bob’s proposal, any one can make
the motion. Derek, VE4HAY made a motion on Bob’s proposal. Seconded by Jeff, VE4MBQ Adam explained his thoughts on how stagnation would set in. Adam liked the idea of training. Ruthie VE4CRS was curious as to who would be on the board for that length of time. Jeff agreed with the proposal, for there is still flexibility. Derek told members it was a 1 year term, not 3 or 5 for key positions. Ed VE4YU explained that he does not like how the president is decided, the exec board decides. Ed fells it should be the membership. Derek re-read Bob’s proposal.

**Correspondence**

John told of a E-mail from a M. Swarnoff of Israel, then invited everyone to come up and see the pictures, that was sent.

**Treasures report**

Fred reported that There was 67 new member for $1005, 50/50 draw $10.22 School rental $650.00 prize $17.00, postal $42.00 refreshments $7.40 Leaving a balance of $6130.00

**RAC Report**

Adam told of a new President for RAC, the ex-director form Alberta and Ben Smith the Vice-president is from Ontario.

**DX Sleuths**

Adam told of a big one coming. Look for in Jan and Feb 2005. The expedition will be called Peter 1. This would be off the coast of Antarctica. They should be operating in all bands for about to weeks. They would be at the low end of the sun cycle.

**ARES Report.**

Jeff reported that the annual general meeting will be on the 19 of Oct. Wayne reported that the Provincial ARES exec met last month At the McDonald Bldg. Has budgeted for a ARES EOC. Wayne told of the space on the roof, for several antennas. If all goes well there should be a open house in about 6 weeks. Current Provincial ARES EOC has a lower elevation. The new site has good duck work to run cables. ERTS is coming along.

**Field day Report.**

John reminded everyone that field day is coming up. Field day may be at Birds Hill park, put not set in stone.

**Flea Market report.**

People were happy to help out. 230 attended, with lots of gear changing hands. Final numbers not ready.

**Good and welfare.**

Tom VE4SE and Ruth VISUAL are getting a few Blue Books, they are $12.00. Those who would like one see Tom or Ruth. Ruth has an idea for next Flea market. If there is a no-show, the table should go to the person, who is looking for one. Motion to adjoin meeting, meeting ended at 20:33 Ed Bethune won the member ship prize.

**Thank you**

By Ed VE4EIH

This is a quick thank you to all those who helped out at the fall flea market. There was many people who came out on a cool Sunday, to lend a hand helping out to set up, tear down, and manned the doors, and who helped Ruth with her sandwiches.

It is these volunteers, who make a flea market a success. Not only a success, but run so smoothly. So once again thank you. Hopefully will be able to see you at the spring flea market.

---

**The Blue Book 2004 edition** has been released. As there may not be many more Blue books printed it is important that your info in the book is correct ?? Do you know of any changes or missing info for any other hams? Depending on the updates received will indicate if another book is ever published again.

Please call Bill at 204-482-3402 and he will make the changes or you can email myself ve4hay@rac.ca and I will send to Bill for you.

If you have not picked up your copy of the MB Blue Book, please ask any executive member of WARC who will be happy to tell you how to get a copy.

---

**Parkside Appliance & Electronics**

Sales & Service of Computers & Software Home repairs offered

John, VE4JNF

386 Belvidere Street 885-9278

http://www.escape.ca/~ve4jnf ve4jnf@escape.ca
Care and feeding of your Pet Ham


Pet hams are so intelligent they often seem human, but they can be difficult to raise. Only someone with great patience should attempt it. In case you do, here is a guide to the basics.

Living Area -- A pet ham needs a private nest area, an entire room where it will not be disturbed. Your pet ham will spend many happy hours alone there with its treasures. -- boxes, wires, bits of metal, glass, paper, etc. that it will bring home whenever it ventures out. You will want to encourage your pet ham to confine its activity to this room to prevent the entire house from being subjected to noise, clutter and the boring of holes in the walls.

Expenses -- Keeping a pet ham is expensive, but, unlike most common pets, a pet ham can be trained to work outside the home for a few hours each day. It may even bring in enough money to offset its expenses.

Feeding -- A well-behaved pet ham will eat with the family occasion-ally, but it will feed more comfortable and secure taking its meals in the nest room. You must be sure your pet ham is well supplied with food and drink during the long periods it spends alone in there, even if it does not beg or whine.

Obedience Training -- A pet ham can be trained to perform simple tricks, the easiest and most common being “sit” and “speak.” Do not be alarmed if it practices them for hours at a time in the nest room.

Health Problems -- The pet ham typically suffers lower back pain and minor throat irritations from too much sitting and speaking, but health maintenance costs tend to be minimal.

Travel -- Your ham pet will gladly travel with your family by car or even by air, if allowed to bring along certain familiar items from the nest room. Most pet hams enjoy trips to places where they can meet pet hams from other families.

Breeding -- If you plan to breed your pet ham, you should do so as soon as possible after you get it. As a pet ham matures, it becomes increasingly reluctant to engage in activities not associated with its nest room collection.

-from the W5WWW Website.

(Reprinted from The Ragchew—bulletin of the North Okanagan Amateur Radio Club)