Noise Floor

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Pacific Northwest VHF Society

Summer

2004

2004 Pacific Northwest VHF Conference update

Plans for the 2004 Pacific Northwest VHF+ Conference are moving ahead nicely at this point. A tentative program schedule is under development and at least one speaker has already been booked. Several others are still needed. Plans are underway to publish "Proceedings" for the first time in conference history. This is a great opportunity for people to participate by submitting a paper. (See "Call for Papers" elsewhere in this issue.)

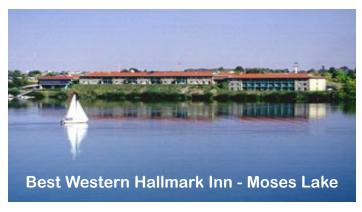
As stated in the last issue of Noise Floor, the conference will be held October 1-2 at the Best Western Hallmark Inn at Moses Lake, Washington. Conference registration will open August 1, 2004, and the cost will be \$25 per person, including a buffet lunch. This is a great facility



5,951-mile rove!

Here's a photo of PNWVHFS member Ed Cole (AL7EB) in the hot south Texas sun trying to work some 10 GHz while enroute from Mississippi to Alaska...a 5,951-mile trip. In early May, Ed and his wife made a brief stop at the Poodle Dog in Fife on their final leg of this epic journey.

and is a convenient location to get to from just about anywhere in our three-state, one-province coverage area.



Special conference lodging rates of \$55 per night (one queen-size bed; \$60 for two queen-size beds) have been negotiated with the Best Western Hallmark Inn. Make your reservations early as the block of rooms with special rates will be held by the hotel only until September 1, 2004. After that date, rooms will only be available at the regular rate of \$75. To make a

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Call for "proceedings" papers

This year, for the first time, the Pacific Northwest VHF Conference will publish a "proceedings." This will be a compilation of technical papers and presentation outlines as is done at many of the other major VHF+ conferences. Material submitted by members and others is needed to make this a reality.

If you'd like to submit a technical paper (more on that in a minute) or would like to be considered as a potential conference speaker, please contact PNWVHFS Secretary-Treasurer Jim Aguirre (W7DHC) before starting to work on your material. This will ensure that two people are not working on the same subject. E-mail him at secretary@pnwvhfs.org.

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President's Message

Lynn Burlingame (N7CFO)

The annual Pacific Northwest VHF Conference is shaping up and I have confirmed everything with the Best Western Hallmark Inn in Moses Lake. Mark your calendars for the weekend of October -2 and be sure to make your reservations as soon as possible. This gives the Hallmark Inn some lead time for their planning and gives us some numbers to work with. We plan to have a tailgate swap meet after the conference, so now is the time to start dragging those treasures out and running them through the dishwasher!

Last issue, I talked about developing a speaker's bureau. I was pleased when K7MDL stepped up and took on a major presentation for the Radio Club of Tacoma. He reports that it was well received and that the RCT members were very enthusiastic about weak-signal work. These presentations are critical in that they will help us increase our membership, and they will help get the word out for contests and other operating events.

Most of us belong to a local radio club and the program coordinators of those organizations are always looking for presentations. If you would like to have a VHF/UHF presentation at your local club, and are not comfortable making a presentation yourself, please contact me and I will find somebody that will help out.

I have noticed in the last year that we are not getting as many new members at hamfairs. Most hamfairs are well attended, but in most cases, the attendees are only a fraction of the local ham population. Some hams

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Editor Jim Aguirre, W7DHC

Submit items for publication to w7dhc@arrl.net or to PO Box 527, Preston, WA 98050

just don't go to them, so I feel that the next recruiting area will be clubs.

At MUD 2003 last year, there was a lot of talk about "Joe 706" - the guy that has an IC-706 or Yaesu FT-100 but who has never really gotten onto the VHF/UHF bands. I have talked to many of them that did not have good information about calling frequencies, contests and operating practices (USB, *not* LSB!) etc. It is apparent that we can do a lot of good by getting the word out. Our \$10 membership fee is nominal and members get a lot of value for this amount.

In the last issue of the *Noise Floor*, our editor announced that the PNWVHFS is the third largest VHF society in the country! I knew that we were growing, but this was still a bit of a shock. Increasing society membership is in our best interest and a larger membership base increases the strength of the society in dealing with vendors, the ARRL, conference facilities and the like. If you make a presentation to a local club or coordinate a program for some organization, please be sure to include a pitch for society membership (applications are on the web site; www.pnwvhfs.org) and also let me know so I can add it to our "accomplishments" list.

VHFers Guide to Scheduling Breakfasts (just slightly tongue-in-cheek!)

By Jim Aguirre (W7DHC)

- 1. Pick a restaurant in your area (preferably one with a side or back room for groups)
- 2. Pick a date.
- 3. Pick a starting time.
- 4. Post 1, 2 and 3 above to the nwwsvhf reflector with a catchy subject line such as "Breakfast at (name of restaurant)?"

That's it! Anyone can do it. If someone else shows up, enjoy their company; if no one else shows up, enjoy breakfast. How can you lose?

Recent Board Actions

The Pacific Northwest VHF Society board of directors has decided to provide minutes of matters discussed and decided. This will let the membership know what items are being discussed and considered, how the directors voted and what collective decision was reached. Where matters considered deal with privileged information, only general descriptions will be provided.

Below is the first set of minutes received from board chairman Eric Olson (N7EPD) regarding a proposal for the society to obtain equipment that could be loaned to members.

5/23/04 - Kevin Imel (KF7CHN) submitted a proposal to have a VHF radio [available] for members to use. Secretary-Treasurer Jim Aguirre (W7DHC) explained that our funds are not adequate for such a purchase and President Lynn Burlingame (N7CFO) cautioned about past bad experiences in other clubs regarding damage [to such equipment] and disputes over who gets to use it.

Board members Bob Hallock (K7TM) - ID, Bob Lee (N7AU) - EWA, and Eric Olson (N7EPD) – WWA decided, after discussion, that the idea should be dropped. Directors Hallock, Lee and Olson voted Nay; Directors Ralph Parker (VE7XF) – BC and Art Moe (K7WW) – OR did cast a vote.

Conference Update...

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reservation, call the Hallmark Inn directly at (509) 765-9211 and ask for the special "PNWVHFS Conference" rate. Using the Best Western toll-free number or web site to make reservations may not guarantee you the special conference rate.

Eastern Washington director Bob Lee (N7AU) has done a terrific job with all the preliminary arrangements and he is continuing to look after the many details that will need to be attended to. As we get closer to the conference date, Bob will need some assistance in a variety of areas. When he posts a call for helpers, I hope many of you will respond. If everyone picks up a small piece of the action, no one will have to carry a heavy burden.

Silent Keys

Two notable Pacific Northwest VHFers have recently become Silent Keys.

Phil Barrett (VE7MJY), West Vancouver, British Columbia, Canada - Phil was a member of the Pacific Northwest VHF Society and an active VHFer.

Richard Berndt (N7VWJ), Seattle, Washington – Richard was an active contester and VHF operator.

Both will be sincerely missed.

Call for papers...

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Completed papers must be submitted not later than August 31, 2004, in order to be considered for publication; however, initial contact with the editor should be done well ahead of that deadline. Preferred format for papers is electronic; most any MSDOS/Windows word processor file is acceptable. Any other format will require prior approval.

The final proceedings will be published in PDF format on CD-ROM. Paper copies will not be available. Those desiring traditional printed copies can simply take the CD to any local quick-print store (Kinkos, Office Depot, Staples, etc.) and have a copy printed for a small cost.

Regarding the term "technical" in "technical papers;" you do not have to be a nuclear physicist to write a "technical paper." For the purpose of the proceedings, papers covering some aspect of VHF+ amateur radio that would be of interest to attendees is what is desired. This could be on anything from antenna-building tips or specialized equipment construction to operating techniques, contest strategies, etc. As long as the focus is on some aspect of VHF+ radio activity, your paper will be considered. As with all publishing endeavors, the editor reserves the right of final judgment on the suitability of a paper for publication.

Club competition entries

Let's put the Pacific Northwest VHF Society on the map! In the past several contests, we've had 30-35 entries in the club competition category. While that's good, we can do better. Considering that we have nearly 250 members and most of them at least get on the air during any contest, we could easily double that number!

One of the most cited reasons for not submitting a score is "I only made a few contacts and my score was small." Lots of small scores can add up to a BIG score...if they are submitted.

Another reason cited is that "the ARRL no longer accepts paper logs." Not true! You can still submit a paper log in handwritten format. What is true is that if you log using a computer, then you must submit an electronic entry in the approved Cabrillo format. Heck, if you used a computer to log, why wouldn't you want to submit an electric entry? It's far easier and less prone to error than a handwritten log.

Most logging programs now support Cabrillo output. You can create a Cabrillo file manually too. Go to http://www.kkn.net/~trey/cabrillo/ for the format. A little work with either a MS Word table or an Excel spreadsheet will set up the format. Save it as an ASCII file when you're done and "instant Cabrillo."

When you submit your entry, be sure to put "Pacific Northwest VHF Society" in the summary sheet where it asks for the club name. Avoid abbreviations such as "Pac NW VHF Soc" or PNWVHFS to be sure the society gets credit for your entry.

Updated BDsoftware available

According to a recent post on the WSVHF reflector by Paul Wade (W1GHZ) an updated version of BD (Bearing-Distance) is available. Thanks to Mike Owen (W9IP) the program has been updated to remove the last known bug. Grids beginning with Q can now be calculated. Apparently, this has been a problem for some in the past.

Go to http://www.w1ghz.org/ to download the new version of the bearing and distance calculator.



What's a "Hohentwiel?"

Mike Lewis (K7MDL) knows!" He's building one!

The Hohentwiel 2M SSB/CW transceiver is a German QRP (5W) rig available in kit form from DK1HE. It is finding great acceptance in Europe...and elsewhere...as a transverter IF.

Mike has put together a nice web page with photos and a brief description of the rig at http://mysite.verizon.net/michaeldlewis/HohentwielKit.htm. He plans to update the web site as the project progresses.

You can also find information on this interesting rig at http://www.qrpproject.de/Media/pdf/HohentwielEnglish.pdf.

ARRL Contest Rate Sheet

By Jim Aguirre (W7DHC)

Boy, have I been missing a good thing! I recently took a look at the ARRL Contest Rate Sheet, edited by Ward Silver (N0AX), and found lots of good information about contesting...even VHF/UHF/Microwave contesting. Yes...N0AX is the same Ward Silver who is also a member of PNWVHFS.

This electronic publication comes out every other Wednesday...that's 26 times a year that I have been missing a good thing...and is available free to ARRL members. There's an index of past issues available, so even if you're a slow learner like me, you can get up to speed in short order.

For those who are not ARRL members, what can I say except...JOIN. No, the ARRL doesn't always do everything right. Neither do you or I! The organization does, however, offer some nice benefits...like the Contest

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Evaluating VHF+ contest logging software

By Eric Olson (N7EPD)

I started this project twice intending to evaluate specific VHF contest logging programs that I was aware of. However the number of available programs kept growing and the updates for the older programs were flying out fast. This made accuracy and feasibility of the evaluation a problem as I might leave some important corrections out. I also could not financially afford to buy all of the updates. So I have now decided to just explain my evaluation criteria and let you decide how good whatever software you are using is.

Contest logging software should give you more information than a simple day-to-day log as you are looking to maximize your QSO and grid multiplier count while keeping an eye out for possible costly errors. The features listed and discussed below are tools that help you do this. If your software is lacking you might consider looking into other programs that might assist better.

Items to evaluate:

- 1. Ease to set up a new log file
- 2. Partial/ possible call checking
- 3. Dupe checking
- 4. Finding needed calls or grids for each band
- 5. Ease of fixing entry errors
- 6. Grid map
- 7. Logging rovers
- 8. Cabrillo conversion
- 9. Operating as a rover and changing grids
- 10. Updating point and multiplier structure
- 11. General ease of use

Unlike a general log where the same file just keeps growing, contests require a new file for each event. Setting up a new log file may not be as easy at it seems. Does your software help you create subdirectories to save each contest log in, allowing itself to be started

Contest Rate Sheet...

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Rate Sheet...and provides the only real voice we have to be heard by government and others who can have a big impact on our activities. 'Nuff said!

We live in a world of information overload and sometimes good things come along that we fail to grasp. This was surely one of them that I missed. I am NOW a subscriber. If you want to subscribe, go to http://www2.arrl.org/contests/rate-sheet/about.html

from another directory for a particular contest file, or at least know how to recognize subdirectories when you save your log? Or, does it save each file under the same name under it's own directory? If so, you need to manually move and rename the file when done or it will be overwritten during the next contest.

What is partial call checking you ask? It is the software's ability to show possible calls if only a few characters are entered, based on previous QSO data or even a database of calls from previous contests. Very useful if you hear "W7M___." Just type this information in and it may show W7MEM as a possible...better turn toward Idaho and see if it is really Mark. Another use of this is if you thought you heard K7AAB but the possible list shows K7AAV as a dupe on the current band. Better ask the station to send his call again phonetically as B and V can sound alike when said fast. There may be two different stations with similar calls or you just heard wrong and it is really a dupe. Not seeing a warning like this may result in a "busted" call being entered which could result in a point penalty by the contest sponsor.

Another feature some programs add to the call data is the last logged grid or exchange data and will place it in the received line after a call is entered for you to confirm when you hear it. Very handy for saving time and checking for bad entries.

How soon do you know if a call sign being typed is a dupe (a call sign already worked on a particular band) for that band? Some programs will show possible dupes along with the possible calls as you are typing. Others will only alert you if it is a dupe after the whole call has been entered. The earlier feature can save unnecessary typing if you start entering a call and it shows up in red in the possible list; just quit and move on.

Does the software show that a grid or call entered is needed on other bands while logging a QSO? This alerts

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Evaluating logging software...

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you to move stations or needed grids to higher frequencies if possible so you don't miss stations on one band or the other. Does it also show this information for a dupe call or just show the dupe?? You already worked him on the current band but what about 432 etc? Can you enter just a grid you hear and check its worked status on the other bands? Some programs allow this, but many don't.

If you discover you've made a mistake in an entry, how easy is it to correct it? Can you just scroll up to the erroneous entry and retype? Does it require you to start a separate editor program to correct or do you have to shut down the logging software and correct the entry in a text editor or word processor? The latter can be quite frustrating when trying to work a flurry of new calls before they disappear while trying to remember what needs to be corrected. Some programs also allow notes to be entered into a log and will filter them out of the final copy for submission so you can remind yourself afterwards of possible mistakes or interesting events.

Does the logging program show a grid map: the grids around you in a row/column format that change colors or highlighting for each band so you can see what your coverage is and if any "easy" grids are missing from your log? If you are missing a grid that is right next to yours you might want to keep the antenna in its direction and keep calling out there.

Does it allow you to log a /R call in different grid squares? Believe it or not some early VHF programs did not support this and the operator had to resort to "creative" ways of logging a rover in several grids. Does it show you what grids you have already worked a rover in for a particular band after entering a /R call? It is very easy to forget if you have worked a rover in CN85 on all bands and miss points or multipliers if you think you have.

While on this subject how about logging different grids for a non rover? Some programs will allow this to happen! For example you log K7AAA in CN86 on 6 meters. Later you work him on 2 meters and your fast, fancy fingers on the keyboard type "CN87" as the grid. Some programs will just take the entry without any warning (bad), others will still allow it after you acknowledge and bypass a big warning (good), and others will not

allow it at all (best). You should only be allowed to log rovers again with different grid squares.

It is hard to believe modern software can not convert a log to the new "Cabrillo" format (or create the file format on the fly) but if you are still using an old version it is time to upgrade or change programs. Make sure it supports the latest Cabrillo revision.

If you like to go roving in VHF contests you will need software that will allow you to easily change the grid you are operating from or be prepared to have several directories for separate files ready for each grid you plan to activate, and then do the math afterward. You also need to make sure it calculates your rover score/multipliers correctly and this can be different for each contest depending on the sponsor.

The point structure of contests can change too. The most recent case was the CQ July VHF contest and the ARRL might be changing the points per QSO for their contests depending on the outcome of their recent surveys. So how easy is it to adjust the point structure in your software or is it actively updated by the author to keep up with the times?

Lastly, how easy is it to log a QSO in a contest with your software? Some programs may require more keystrokes than others to completely enter a call and grid while deleting a dupe entry. A good one will take a call and grid with single enter, tab, or space key strokes between fields and alert you of a dupe while wiping the input fields automatically for the next entry.

How easy is it to enter a paper log in to your software after a contest? Can you increment the time and date for each QSO entered as you go to match the paper one or do you have to go back and edit the date and time info with a text editor or word processor?

Well hopefully, you are thinking about your contest software more as a tool now rather that just a database. If you have not been using or simply not aware of the features good contest logging software provides then please consider using them to help build your score and maintain accuracy!

73 and happy contesting de Eric N7EPD PNWVHFS awards chairman

PowerPole Connectors Revisited

By Jim Aguirre (W7DHC)

Recently, I was asked about the difference between 15-amp, 30-amp and 45-amp Anderson PowerPole® connectors since they APPEAR to be the same when assembled. All three use the same plastic housing (Anderson Part# 1327xx), so they do, in fact, APPEAR to be the same. The difference is in the snap-in contact. MOST of the PowerPoles you will run across are the 30-amp variety. Here's the difference between the three sizes.

The 15-amp contact has a smaller contact barrel that accepts 16-20 gauge wire while the 30-amp contact barrel accepts 12-16 gauge wire. The 45-amp version uses a U-shaped wire receptacle instead of the tubular contact barrel, allowing it to be used with 10-14 gauge wire. The mating contact surface on all three are exactly the same.

When using PowerPole connectors with 10-gauge wire, the primary consideration is the diameter of the insulation, not the conductor. Frequently, you will have to shave the insulation into a cone shape in order to get the contact to seat fully into the housing.

The fact that the mating contact surfaces are all the same allow the careful installer to use the "30-amp" versions on 10 gauge wire with a small modification, resulting in a perfectly acceptable 45-amp connector. Careful examination of the 30-amp barrel will reveal that it is rolled into a tube and has a noticeable seam.

Standing the barrel vertically on a firm surface (preferably one you don't mind marring a bit...the dining room table

is probably a poor choice...use a pocket knife blade to force the seam open. A little bit is all it takes. Be sure you don't expand the barrel so much that it will not fit into the housing. By the way, this same trick will work to expand the barrel on 15-amp contacts, but is really unnecessary. Just buy 30-amp units and use them for everything, modifying them for 10-gauge wire when needed.

PowerPole connectors can be either crimped or soldered; either way, there are some considerations. Unless you use the special (and expensive) crimp tool sold by Anderson, you will likely have problems getting the full amperage ratings from your connectors without heating. That's because inexpensive crimp tools simply apply pressure to the wire connection on two sides, leaving small voids at other points. Anderson's crimp tool uses four pins to apply pressure all the way around the barrel. If you don't use the connectors for applications drawing the full rated amperage, this may not matter.

Soldering the contacts to the wire does provide a full-rated amperage connection; however, if you're not careful, you will get solder on the contact surface, rendering the connector inoperable (in the worse case) or reducing its current-carrying capacity (in the best case). Wiping the solder off the silvered contact surface DOES NOT restore full amperage rating as a small amount of solder will always remain.

If you need specific information about Anderson PowerPole connectors, the company has an excellent web site at http://www.andersonpower.com. Look under the "SINGLEPOLE Connector Series."