

Noise Floor

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Pacific Northwest VHF Society

Spring

2003

“Microwave Update 2003” comes to Seattle

The organizers of Microwave Update 2003 and the Pacific Northwest VHF Society have joined forces to host a joint conference in the Seattle, Washington, area on September 25-28, 2003. “MUD 2003” chairman is Rick Beatty (NU7Z); John Price (N7MWV) is co-chair. Both are also members of PNWVHFS.

Registrations for the joint conference will be accepted beginning April 1, 2003. Cost of the registration will be \$40 prior to September 12, 2003, and covers all three days. Single-day or single-event registrations are not available. Late registrations, including at the door, will be \$50. MUD 2003 registration forms can be downloaded at www.microwaveupdate.org. Completed forms and

registration payment can be sent to John Price (N7MWV), 12026 81st Ave NE, Kirkland, WA 98034. Make checks payable to “Microwave Update 2003.”

Joint conference sessions and the Saturday evening banquet will be held at the Everett Holiday Inn and Conference Center, a short drive north of downtown Seattle. Special rates have been arranged with the hotel for conference participants. Rooms are \$69 per night plus tax...a real bargain for the Seattle area! It is suggested that early reservations be made directly with the hotel at (425) 337-2900. Be sure to mention “Microwave Update” to get this rate. Reservations must be made by August 21 to obtain this special rate.

Webmaster's work Is never done!

The Pacific Northwest VHF Society web site is one of the best around. It hasn't gotten to that level by accident. Webmaster Kevin Imel (KF7CN) spends a lot of time keeping it up.

Kevin's involvement actually predates the establishment of the society. He had established the NWWSVHF e-mail reflector long before the society actually kicked off in September 2001. When the society was formed, Kevin offered up the reflector as its “official voice;” an offer that was gratefully accepted.



Kevin Imel (KF7CN)

It wasn't long before the need for a web site surfaced and, again, Kevin, was right there. He immediately set up the society's first web pages. As content grew, he solicited input and began the process of upgrading that

“White papers” are currently being solicited from potential authors and speakers for publication in the 2003 conference proceedings. Topics specifically of interest to Microwave Update attendees, as well as those on VHF and UHF subjects usually associated with the annual Pacific Northwest VHF Conference are solicited. Papers will be accepted until July 1, 2003.

White papers should be sent directly to Jim Christiansen, K7ND, via e-mail at k7nd@att.net. MS Word format is preferred. Microwave Update 2003 and the Pacific Northwest VHF Society respectively will be the sole judges of whether presentation requests and white papers are accepted.

If you are interested in making a session presentation at one of the Microwave Update 2003 sessions, please respond to NU7Z (nu7z@aol.com); for presentations at the Pacific Northwest VHF Conference sessions, contact N7CFO (n7cfo@ix.netcom.com). LCD projection equipment will be available for those using PowerPoint presentations (which are strongly encouraged). Slides and video presentations can be accommodated with advance notice.

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From the PNWVHFS President

The past 18 months have been eventful for the PNWVHFS. We have all had a lot of fun and the society continues to grow. Now that we are organized and nearly 200 strong, we need to define what we are going to "do". We have had several events in the past few months that had a lot of participation. A partial list is:

- Microwave demos at the Silverdale and Bellingham hamfairs
- A club table at the Longview hamfair
- The Thanksgiving "Turkey Shoot"
- Straight Key Night activities
- Poodle Dog breakfasts

These events were all a lot of fun, and didn't require much work or organization - they just happened. Unfortunately, all of these events occurred in Western Washington and, while I feel that we should continue these events, we need to do our best to encourage similar activities in other PMWVHFS sections. All it requires is somebody to take the lead and make some minimal arrangements. In most cases it is just a matter of stating the time and place.

A good example is KF7CN's recent efforts to set up monthly VHF breakfasts in Eastern Washington. Kevin sent several emails to the reflector and got things going with little effort. They have had two of these breakfasts, and a good time was had by all.

Don't forget that we need to make sure that non-members feel welcome to attend these events as they serve as an excellent recruiting ground. We pick up two or three new members at each of the Poodle Dog breakfasts, and will likely do the same at the ones in Eastern Washington.

I have several ideas for events in 2003 and would like to hear from the membership. One that I particularly would like to do would be BBQ's in central locations. This would be easy to organize - all we would have to do is book space in park and announce the event. The social aspects would be great, and we could have antenna testing, tailgate swap meets, show-and-tell and whatever other activities come to mind. If you know of a good location, please send me an email.

As for other events, the sky is the limit! If you have any suggestions, please contact your section director.

Columnists needed

Want to write a quarterly column about a weak-signal area? VHF/UHF? Microwave? Contesting? "Tips 'n Tricks?" Activities and gatherings? VHF+ operator profiles? Well, here's your opportunity. *Noise Floor* needs 2-3 columnists to provide quarterly coverage of VHF/UHF/Microwave activities or technical happenings.

One of the reasons *Noise Floor* is missing its quarterly publication schedule is lack of suitable material for publication. What's needed is good, solid information that members will both enjoy and benefit from. The other important part is that this be a continuing endeavor rather than a one-shot article...though those are welcome too. A couple of solid columnist anchors each quarter would make all the difference.

Not a writer? No problem! The *Noise Floor* production staff...your Editor...has the capability to polish up draft articles. You pull the facts together and take your best shot at stringing the words together; the polishing...if needed...can be done on this end.

If you're interested in writing a column, drop a line to Secretary@pnwvhfs.org with a brief description of the topic area you'd like to cover on a quarterly basis.

Section Directors

Below are the current directors for the five PNWVHFS sections, along with their official e-mail addresses for use in contacting them about society business.

Idaho: Bob Hallock (K7TM) - id@pnwvhfs.org

Oregon: Art Moe (KB7WW) - or@pnwvhfs.org

Eastern Washington: Bob Lee (N7AU) - ewa@pnwvhfs.org

Western Washington: Eric Olson (N7EPD) - wwa@pnwvhfs.org

British Columbia: Ralph Parker (VE7XF) - bc@pnwvhfs.org

Getting “plugged in” to 12VDC with “PowerPole” Connectors

By Jim Aguirre (W7DHC)

Much of today's amateur radio equipment runs on a 13.8 VDC, but there's no standard plug or receptacle as with 115 VAC household power. Isn't it odd that all you get on most 13.8 VDC power cords are bare wires on one end?

There is an emerging standard, however. It's the Anderson PowerPole® connector. While not new...it's been in use for at least 20 years...it's finally taking hold with amateur radio groups like ARES and other emergency service organizations.



Webmaster...

From Page One

has resulted in what you see today when you log onto www.pnvhfs.org. Regular web site users will notice that the trend toward improvement continues.

What's not so obvious is the amount of work it takes to create and maintain a web site. Even those who have created a personal web page likely don't have a complete understanding of what's involved in continually updating content, dealing with ISP issues and responding to requests from officers, members and others regarding suggested changes and upgrades.

We are fortunate to have Kevin's services at the society's disposal. We are also fortunate in that he has the skill to manage both the web site and e-mail reflector professionally. It helps that he does that kind of work in his real-life job at Washington State University.

Thanks, Kevin!

The basic Anderson PowerPole® is a modular, genderless, polarized single-pole connector. It is available in a variety of colors, including red and black. Best of all, individual modules can be joined together to form multiple-pole connectors. The most common configuration is a two-pole red/black connector used for DC power.

Standard PowerPoles come in four sizes with power handling capability from 15 to 180 amps. (Their BIG “Multipole®” connectors can handle up to 700 amps!) For amateur use, the 15/30/45-amp PowerPole® version is the most commonly used. The housing is the same for the three amperage ratings; only the snap-in contacts are different, with varying size wire receptacles. A larger 75-amp PowerPole® is ideal for connecting storage batteries used as station power supplies or for rover operation.

Each module housing is a square plastic tube with a metal keeper inside to lock the contact in place. Housings have two dovetail bosses and two dovetail slots alternating on the four sides. By matching the bosses and slots, you can mate up two or more housings to form pairs or multiple-contact connectors. Just slide the two housings together and they form a solid unit. The 15/30/45-amp contacts can be crimped or soldered to individual wires and snapped into place. For most ham equipment, the 30-amp contact is perfect.

One issue arises when assembling two or more PowerPole® housings into a DC connector configuration, however. Despite the fact that each individual module is polarized; it is possible to assemble multiple housings in such a way that you can mate DC connectors with reversed polarities...not a good thing! (*I once did this with a pair of 75-amp connectors and two deep-cycle batteries. The resulting pyrotechnics were worthy of a Fourth of July display! – Editor*)

This is not quite the problem it might first seem to be, however. Using red and black housings to assemble a DC connector will give you an immediate visual clue as to polarity. Secondly, an assembly standard is now emerging where the BLACK/negative housing is always positioned on the right side of the Red/positive housing.

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Repeater coordinating group raises 903 MHz concerns

The Western Washington Amateur Radio Association (WWARA) is the FM frequency coordinating body in Washington state. It was recently learned that they are developing a “band plan” for 903 operation in Western Washington.

An early proposal in that area raised the interest of 903 MHz weak-signal operators because it suggested locating additional FM repeater outputs in the 902.000 – 902.200 band segment. The ARRL band plan lists this as a weak-signal area.

As a result, contact has been made with WWARA and the person proposing the changes. A delegation of weak-signal representatives from the PNWVHS has been invited to attend the April meeting of WWARA in Shelton, Washington, to discuss the concerns of the weak-signal community.

It is anticipated that Rick Beatty (NU7Z) will make the initial presentation to WWARA. Tom Saunders (N7OEP) and Jim Aguirre (W7DHC) are scheduled to attend as well. Other interested parties are also welcome to attend.

After the first meeting, a permanent WWARA liaison will be named by PNWVHFS President Lynn Burlingame (N7CFO) to continue the dialogue regarding 903 MHz and other bands as proposals are made regarding them. Hopefully, this will keep weak-signal interests “on the table” as future band planning considerations are encountered.

Noise Floor is the official publication of the Pacific Northwest VHF Society. All opinions expressed herein are those of the individual authors unless specifically stated as being otherwise.

Editor

Jim Aguirre, W7DHC

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

PowerPole...

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(See illustration at right) That ensures that DC connectors configured to the standard cannot be physically mated with one of an opposite polarity.



In Western Washington, some amateurs (including several in the society) started using PowerPoles about 20 years ago and a DIFFERENT standard was adopted back then; Red/positive on the right. Most of those folks (including me) have now converted to the new standard, but be aware that if you are loaning or borrowing any equipment with these connectors on the DC cables, you should CHECK carefully for matching color-coding!

PowerPole® connector modules can be obtained from a number of sources found on the internet. One source in the Pacific Northwest is DC Power/Wes Allen (K7WWG). He attends most of the major hamfests and also sells them mailorder through his web site at www.dcpwr.com/. Other suppliers include West Mountain Radio (www.westmountainradio.com/), PowerWerx, <http://www.powerwerx.com>, and Cable X-Perts, www.cablexperts.com.

If there's sufficient interest, we may be able to get a discounted price on PowerPole® connectors from one of the suppliers. The order quantity would probably need to be at least several hundred to get much of a savings. If you would be interested in a group order, drop a note to Secretary@pnwvhfs.org. If the quantity is sufficient to proceed, the society will shop for a price.

West Mountain Radio also offers a series of multiple-connection panels (called “RigRunner”) that are pre-wired with fuses and voltage indicators. DC Power/Wes Allen has begun to offer a similar panel. These panels are really handy for setting up a shack or rover outfit. Most come with a full set of PowerPole® connectors for the individual power cables as well. Check the supplier web sites listed above for more details.

Backscatter!

As editor, I guess it's incumbent on me to write an editorial periodically. Seems like that's what they do in the "mainstream" amateur radio publications. In keeping with the intent of most editorials, I plan to call my little corner of the PNWVHFS newsletter "Backscatter." Not very original, but it may be fairly descriptive of future subjects to be discussed here.

(Now climbing up on soap box...)

The ARRL Band Plan is an imperfect document! Just about everyone agrees. However, it's also the best friend weak signal operators have!

We've all heard the "gentlemen's agreement" argument that's usually followed by "but it's not in Part 97 and the FCC can't enforce it." There's some truth...and a lot of fiction...in that statement.

It's true; you won't find the ARRL band in Part 97. It's not federal law. Neither is it purely a "gentlemen's agreement" that we can take or leave with impunity. The FCC has repeatedly noted that abiding by the band plan is "good amateur practice." That statement IS in Part 97 and the FCC CAN act when good amateur practice is not followed.

None of the above is the reason that the band plan is our best friend, however. As "weak-signal" operators, we need a portion of the spectrum where the noise level is as low as possible. We already have enough interference problems with unregulated devices, shared spectrum, etc. and we don't need competing amateur activities adding to them.

In the ARRL Band Plan, there are weak-signal portions set aside in all of the VHF, UHF and microwave bands. In some cases, these segments are smaller than we would like, but they're there. If you've ever been on the air when an FM operator inadvertently (or otherwise) strays into the weak signal part of the band, you know that he or she does NOT usually receive a cordial welcome. We're very protective of our weak-signal segment. Rightfully so!

Should it be any different if we start using the FM or

data portion of the band for weak-signal activity? No! Those operators have the same concerns we do about maintaining the usability of their allocations. And...if we insist on using their segment, why shouldn't they have the same attitude and use ours? That would be a losing situation for the weak-signal operators because many of the other modes aren't bothered as much by an increase in the noise floor.

So, when you are tempted to move out of the weak-signal segment for whatever reason...contesting, experimentation, rag-chewing, etc...just remember that "what comes around goes around." In the end, weak-signal operators will be the big losers if the band plan starts getting ignored.

—Jim Aguirre (W7DHC)

New subcommittee will study VHF+ contests and awards

The ARRL Membership Services Committee has established a new subcommittee to study VHF+ contests and awards. Chairing the subcommittee is ARRL New England Division Director Tom Frenaye (K1KI).

Other subcommittee members include ARRL First Vice President Joel Harrison (W5ZN), Contest Advisory Committee member and QST columnist Ward Silver (N0AX), and ARRL Membership Services Manager Wayne Mills (N7NG). Harrison is an active VHFer. Silver is an adjunct professor of electrical engineering at Seattle University and lives in Vashon, Washington.

If you responded to the on-line questionnaire regarding VHF activity posted on the ARRL web site a couple of months back, you can take some of the credit for the formation of this new subcommittee. Responses to the questionnaire indicated strong interest by VHF and above operators while expressing some concerns regarding how contests were conducted and the publicity of results.

Stay tuned to see what the subcommittee comes up with.

“T-shirt diplomacy:” it’s all about “visibility”

PNWVHFS President Lynn Burlingame (N7CFO) has been practicing “T-shirt diplomacy” for the past several months with surprising effectiveness. With a bit of “zany marketing,” Lynn has managed to place about 75 walking billboards in circulation and attract a great deal of interest in the new society.

Getting “noticed” is always a challenge for any new organization and the T-shirts are a major factor in the continuing growth of the society. You may never attract the attention of “super models” as Lynn’s off-the-wall marketing pitch hints at, but wearing one will certainly let other hams know about the society.

When someone stops you and asks about PNWVHFS, put on your salesman’s hat (we’re working on those too!) and give them your best pitch. Refer them to the

web page for information on joining and encourage them to subscribe to the e-mail reflector. And...yes...anyone can subscribe to the reflector; you do not have to be a PNWVHFS member. Once subscribed; however, it’s likely that they will BECOME a member.

In addition to increasing visibility, T-shirt sales are putting a few bucks into the PNWVHFS treasury as well. The pricing includes a slight markup that provides “seed money” for the next order and any remainder goes into the society treasury.

If you figured N7CFO was making anything on the deal, perish the thought. He’s actually out-of-pocket for some miscellaneous expenses on each order; not to mention the hassle of packing T-shirts to the hamfests he attends and making sure they get delivered to buyers.

The bottom line is that the PNWVHFS T-shirt program is not about making money; it’s about increasing visibility...and, it’s working even better than expected!

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