

Noise Floor

Vol. 1, No. 2

Pacific Northwest VHF Society

Summer 2002

VHF Conference set for September 27-28

The 9th annual Pacific Northwest VHF Conference will be held in Bend, Oregon, on September 27-28, 2002. Registration forms will be mailed out soon and an on-line registration form is available on the society web site at www.qsl.net/pnwvhfs.

Now sponsored by the Pacific Northwest VHF Society, the conference activities will kick off Friday evening with a no-host "Pizza Party" where old friendships can be renewed and new ones made. The "Pizza Party" will be held at Papa's Pizza, 20265 Meyer Dr, from 6:00 pm until whenever. Buy your own food and drink.

2002 Conference Programs

- "Surf, Sun & Six Meters: 2001 Cook Islands DXpedition"
- *Ralph Parker, VE7XF*
- "Taste the Alphabet Soup: WSJT, JT-44 and more"
- *Bob Larkin, W7PUA*
- "Coming to a City Near You: Microwave Update 2003"
- *Rick Beatty, NU7Z*
- "Maybe You Can Get There From Here: Radio Mobile software"
- *Mike Pinault, W7GHZ*
- "VHF Roving: Amateur Radio's 'Extreme Sport'"
- *Jim Aguirre, W7DHC*

"VHFer of the Year" nominations sought

Most of the categories in the fledgling PNWVHFS awards program are oriented toward on-the-air activity. One, however, is much broader. It's the "Pacific Northwest VHFer of the Year" award.

This award recognizes the contribution of an individual or group of individuals to furthering VHF, UHF and microwave activity in the Pacific Northwest. Recognition may be given for such activities as technical achievement,

Continued on Page Four

The conference location for Saturday's programs is the Central Oregon Environmental Center, 16 NW Kansas, and the "semi-official" lodging place for the conference is the Cimarron Motor In North, 437 NE 3rd St.

Saturday's program will include a catered breakfast and speakers (see sidebar). At the end of the day, a brief annual business meeting of the Pacific Northwest VHF Society will be held. Cost for the conference is just \$25.

Election-by-mail set

It's time to think about electing Pacific Northwest VHF Society officers and directors for the coming year. This is a new process for the organization since the society was formed just last September.

After consideration by the board of directors, it was decided that the election should be conducted by mail in advance of the annual meeting to be held at the September 28 conference in Bend, Oregon. This will allow all members to vote instead of just those who are able attend the annual conference. A vote-by-mail procedure is provided for in the society's constitution and by-laws.

A survey of the existing officers and directors was recently conducted by President Lynn Burlingame (N7CFO) to determine their interest in running for re-election. Most have indicated their willingness to be candidates; however, Oregon Director Don Krug (K7HSJ) has indicated that he does not wish to run for another term. Don has provided long and faithful service to the pre-society Pacific Northwest VHF Conference and as a director of the newly formed society during this past year. He is currently coordinating the 2002 conference. At age 80, Don now feels the need for a much-deserved retirement.

Continued on Page Three

A note from the PNWVHFS President

By Lynn Burlingame (N7CFO)

It has been an eventful spring and summer!

- The society continues to grow. We now have 137 members. I suspect that we are already one of the larger VHF societies in the country.
- We had record participation in the January and June ARRL VHF contests by society members. Several members have even cracked the magic 100,000-point level as rovers. I believe that's a first for the Pacific Northwest.
- We have had three bulk transverter buys at Down East Microwave. This has significantly increased the number of members that are up on microwave bands and has added a lot of action during contests. Many thanks to Rick (NU7Z) for coordinating these group purchases...at a nice discount, I might add... and for serving as an Elmer to the kit builders.
- The annual conference has been scheduled for September 27-28 in Bend, Oregon. Don Krug (K7HSJ) has done an outstanding job of organizing it, and we anticipate a strong turnout.
- I just returned from a 2,600-mile trip covering three states, two provinces, two hamfairs, one contest, and I don't know how many grids! I hit both the Glacier-Waterton Hamfest and the Radio Amateurs of Canada (RAC) convention, picking up new society members at both events.
- At the RAC Convention, I made a presentation on VHF and the new Pacific Northwest VHF Society. Let me assure you that there is real interest out there in the bands above 50 MHz...and in our new organization. We are having an effect.

VHF Conference history

In 1992, six VHFers got together in Moses Lake, Washington. The gathering was arranged by the late Bill Clemow (KE7CX). This was the foundation on which the annual (with one exception) Pacific Northwest VHF Conference was built.

The first conference that was actually called the Pacific Northwest VHF Conference was held in 1993 at Oregon City, Oregon. It was decided at that time to rotate the annual gathering on an every-third-year basis between the greater Portland area, greater Seattle area and Bend, Oregon, in order to even out the travel distance for attendees over time.

Subsequent conferences were held in Tacoma, Washington (1994), Bend, Oregon (1995), Oregon City, Oregon (1996), Fife, Washington (1997), Bend, Oregon (1998), St. Helens, Oregon (2000), and Tacoma, Washington (2001). There was no conference in 1999.

Special thanks to Don Krug (K7HSJ) for providing this brief history of the Pacific Northwest VHF Conference.

Closer to home, I have recently received a number of inquiries about events, both operating and social. The answer on this is always the same; if you have an idea, please go to work on it. We are an informal society of people with a common interest, and the best way to make something happen is to take action and do it yourself.

We have had a lot of fun with the informal breakfast gatherings at the Poodle Dog Restaurant in Fife and several members have asked about similar gatherings in the Portland, Spokane and Blaine areas.

Well, first off, the Poodle Dog breakfasts are not an organized event...they just happen. Someone will post a note that they will be there on a given Saturday morning and others just drift in.

So, there is not really much to it; just pick a place and time and issue an invitation via the reflector. You might be surprised who shows up. Marty, N7MX, regularly makes it over to the Poodle Dog, driving all the way from Spokane. That's a pretty strong commitment (Marty is a "rover," however!) and there are a lot of us that would probably make a day trip to somewhere else if we knew some folks were planning even an

Election process explained; nomination period open...

Continued from Page One

In order to simplify the nomination process, it was decided that incumbent officers and directors expressing an interest in seeking re-election will be considered as nominated. This should in no way discourage additional nominations for any office or directorship. Incumbent nominees include:

- President Lynn Burlingame (N7CFO)
- Secretary-Treasurer Jim Aguirre (W7DHC)
- British Columbia Director Ralph Parker (VE7XF)
- Eastern Washington Director Bob Lee (N7AU)
- Idaho Director Bob Hallock (K7TM)
- Western Washington Director Eric Olsen (N7EPD)

As a result of K7HSJ's decision to step down at the end of this current term, the Oregon directorship is without an incumbent nominee.

The nomination period will open on August 1 and close on August 21. Nominations may be sent to the Secretary-Treasurer by e-mail at w7dhc@arrl.net or by regular mail to PNWVHFS, PO Box 527, Preston, WA 98050. Each nomination must include a statement noting that the nominee has been contacted and has agreed to run for the position.

Nominations for President and Secretary-Treasurer can be made by any member and the nominee can reside in any of the five society sections; British Columbia, Eastern Washington, Idaho, Oregon and Western Washington. Nominations for directors can only be made by members residing in the section represented and the nominee must also reside in that section.

Ballots with the names of all nominees and spaces for a write-in candidates will be mailed to members by August 31. Sectional ballots will be used to ensure that only residents of each section cast votes for the director representing them.

Ballots must be returned to the Secretary-Treasurer by US mail not later than September 25. They will be held, unopened, until the annual meeting in Bend, Oregon. At the annual meeting, the ballots will be counted and recorded by the Secretary-Treasurer in the presence of at least one board member and one member of the

society not currently holding or running for an office or directorship. Results of the vote will be announced at the business meeting.

Officers and directors terms begin October 1 of each year. The President and Secretary-Treasurer serve one-year terms; directors serve two-year terms, staggered so that not more than three directors terms end in any given year. Names will be drawn by lot after this year's election to determine whether elected directors will initially serve one-year or two-year terms. In following years, all directors will be elected for two-year terms of office.

Awards program coordinator needed

One of the areas that has not come together for the new Pacific Northwest VHF Society as quickly as was originally hoped is the awards program. Some months ago, in conjunction with the board of directors, an awards program was established and several annual awards were created, recognizing a variety of achievements.

Despite several calls by President Lynn Burlingame (N7CFO), no permanent awards program coordinator has stepped forward. In the absence of an awards coordinator, Webmaster Kevin Imel (KF7CN) has held the program together by sheer force of will over the past few months. His work on the web page and management of the e-mail reflector already take a lot of time and effort, so Kevin is not able to also serve as the permanent awards coordinator.

Without a permanent coordinator, the program will likely not mature. It would be a shame to let a good idea like this die for lack of someone to keep it going. The level of work required is not huge and should be easily accomplished by one person.

If you have any interest in serving as the awards program coordinator, please contact President Burlingame at n7cfo@ix.netcom.com to let him know.

2002 Contest Calendar

The schedule of major contest events for the remainder of 2002 is shown below.

August 17-18: ARRL 10 GHz & Up Contest – Part 1

September 14-16: ARRL September VHF QSO Party

September 21-22: ARRL 10 GHz & Up Contest – Part 2

September/October: Fall Sprints (dates TBA)

VHFer of the Year...

Continued from Page One

advancement of the art, teaching, “Elmering,” public service, or similar activities..

The PNWVHFS Board of Directors will be the jury for this award. Nominations must be received by a PNWVHFS director on or before September 1, 2002, to be considered for this year. Announcement of the winner will be made at the Pacific Northwest VHF Conference in Bend on September 28, 2002.

Nominees do not have to be members of the Pacific Northwest VHF Society; however, nominations should be made by society members. To nominate someone for this award, please send a statement outlining the reasons why you believe the individual or group is deserving of this award to your PNWVHFS director. A list of directors and their e-mail addresses can be found on the society’s web site at www.qsl.net/pnwvhfs.

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

**DOWN EAST
MICROWAVE**
FRENCHTOWN, NEW JERSEY

**Amateur radio equipment
for 50 MHz and above.**

- o Transverter kits and assembled units
- o Amplifier kits and assembled units
- o Antennas
- o Components

For a complete on-line catalog, check...

www.downeastmicrowave.com

*Down East Microwave Inc.
954 Rt. 519 Frenchtown, NJ 08825 USA
Tel. 908-996-3584 (Voice)
908-996-3702 (Fax)*

C3i®

Antennas & Accessories

6 Meters thru 1296 MHz

**Proven in Contest after Contest Under
Extreme Operating Conditions**

**Superior Performance, Superb Quality,
Sustained Durability**

Others make claims --- C3i® Delivers

**Call, E-mail, FAX or order from our Web
Site. We accept VISA, MC & Discover**

**VISIT OUR HOME PAGE TODAY FOR MORE INFORMATION.
<http://www.c3iusa.com>**

1-800-445-7747

sruffin@C3iusa.com

Rebuilding a storm-damaged 432 array

By Richard Ewing (KO7N)

During February 2002, the region in which I live was hit HARD by a storm. Winds peaked in the 90+ mph range and, as a result, my original 432 MHz four-antenna array needed repairs. Reconstruction was in order.

The new design required adding four more 24-element K1FO Yagis, creating an array of eight 24-element Yagis at 140 feet! I live in a pine tree forest, so mounting the array high in the air is critical. I also wanted a good tropo array.

I e-mailed Steve Powlishen (K1FO) to get his input on Yagi spacing when using eight of these antennas together and implemented his suggestion. Vertical stacking was 72" and horizontal was 68". After extensive modeling on K6STIs YO 7.x I was ready to go.

A counter-balancing arm was added to correct for any possible weight balance issues during the construction. Using both the counter balancing support frame and the bridge center support, I used 2,100-pound test Dacron rope with turn buckles to make a three way support for the horizontal boom. After tensioning the whole system it became very strong. The boom does not sag or move in the wind.

I also wanted to place a four-yagi 1296 array inside the 432 array, but all the aluminum tubing on the supporting frame presented a real problem for 1296. As a result, I used EXTREN, a strong, nonconducting composite tubing to construct a bridge center support for the whole array and as mounting masts for the 1296 antennas. EXTREN is very stable and far superior to standard fiberglass tubing, which will break down after so many years. This kept as much metal as possible away from the 1296 antennas.

On the electrical side, I used LMR 400 for all the phasing runs to W7CQ-made four-way power dividers. From the power dividers, I used Andrew LDF-4 (1/2" hardline) to a W7CQ 2-way power divider. Visit W7CQ's web page at http://home.teleport.com/~rewing/power_dividers.htm for details on the power dividers.

Needless to say, much testing was required. Every part was tested individually; then as two-Yagi and four-Yagi arrays before assembling the complete eight-Yagi array.

My good friend Jimmy (W7CQ) is brilliant in the mechanical aspects of design. He made precision sleeves, power dividers and other items, and we bounced ideas off each other until we came up with final engineering designs for each component the array.

It was also a considerable engineering process to raise the array up to its perch at 135 feet! After four hours and help from a lot of great friends, it was up. Henry (KB7RTA) and Bob (WA7RED) were the climbers; ground crew included Larry (WJ7S), Steve (AI7W), Jimmy (W7CQ), Jim (KI7AY), James (KG7FU), Ron (WJ7R) and Henry's two boys, among others.

The system now consists of eight 24-element K1FO Yagis. The azimuth rotor is a RC-5 Create and the elevation rotor is a Emoto EV-700. It has a remote T/R and LNA enclosure that includes an ARR LNA with 0.6dbnf and 15 db gain (not so good). The feedline is single run of Andrew LDF-6 1-1/4" hardline.

Additional photos of the completed array can be found at <http://home.teleport.com/~rewing/antennas.htm>.

