
SPARKS

Vol. 20, No. 1

Puget Amateur Radio Society

January 2004

This Month's General Meeting

The next meeting will be held on Thursday, January 15 from 7 to 9 PM, at the Bellevue Senior Center, located at 4043 - 148th Ave. in Bellevue, just north of the 148th exit on I-520.

◇ Former PARS member Kirk Bellar, now the ARES/RACES King County District Emergency Coordinator and RACES Regional Coordinator, will speak about ARES and RACES. We've also asked him to give us a refresher course on the features of our repeater.

◇ As usual we supply coffee, juice and cookies.

◇ There will be a **Door Prize**: the book, **The ARRL/RSGB International Antenna Collection**,

Edited by Dr. George Brown, M5ACN, published by ARRL.

◇ It is dues time. We have been very fortunate and have held the dues structure, as before, to \$15.00 annually per member or \$22.50 per family.

◇ The Mike & Key Flea Market is rapidly approaching, and the club is asking for donations.

◇ Remembering that the club is a 501c3 organization, any donation made can be used as a tax rightoff for this year (04).

We hope to see you there.

Happy birthday to you!

Jan 3	Joe Langjahr	KJ7DG
Jan 24	Art Rolfe	N7YKI
Feb 17	John Heflin	KD7E

Holiday Party

Thanks to Don and his wife, Pat, who graciously invited the club to have our holiday party at their house. Fun was had by all.

Call for Speakers

Charles needs ideas for speakers for upcoming meetings. Please call him at 425-822-2339 or email him at cebeck@gte.net.

Sparks News Articles

Many *Sparks* articles come from recent issues of the Amateur Radio Newline (abbreviated ARNewline). You can sign up to receive the weekly Amateur Radio Newline at www.arnewline.org or hear it Mondays on the PSRG Net at 7:30 PM on the 146.96 repeater, or at 8 PM on the 146.78 repeater. Sometimes the report includes audio clips that aren't transcribed in the printed version, so it's better to listen to the audio version when you can.

Required Reading: Surge Protection - Separating Myth From Fact

From ARNewline(tm) Report 1372 - Nov. 28, 2003: If you think that \$2.98 bargain basement power strip will protect your ham gear from power line spikes, you could be in for a rude and very expensive awakening. This is the gist of a feature article in the December issue of Popular Communications Magazine titled Surge Protection: Separating Myth From Fact.

The author is Popcom Editor Harold Ort, N2RLL. In it, Ort takes you on a mind boggling journey into the world of powerline surge protectors. He tells you why power surges take place and what really works to protect your station - and - what does not.

The article is must reading for any ham that operates his station from mains power. You can find Popular Communications on many newsstands worldwide or subscribe over the web at www.popular-communications.com. (ARNewline(tm))

Amateur Radio Newline Needs Continuing Support

From ARNewline(tm) Report 1373 - Dec. 5, 2003: This is Andy Jarema, N6TCQ, Newline Support Fund Administrator. As we move into the holiday season, we ask that you include Newline on your list of giving. This is the first request we've made since April, and we'll be back in the following weeks to thank everyone that helped in that campaign. But with support in the months since that campaign only averaging between \$200 and \$250, and with our normal monthly expenses of between \$600 and \$800 each month to bring you the latest news on Amateur Radio, you can see where the math is headed.

Next general meeting - Thursday, January 15 at 7:00 PM at the Bellevue Senior Center, 4063 148th Ave. NE in Bellevue. Also join us at 5:30 PM for dinner at Coco's, 14804 NE 24th St. in Redmond. Visitors are always welcome at the meetings and at Coco's.

Next board meeting - Thursday, February 5 at 7:00 PM at the Cowboy Steakhouse, located on the east side of the Totem Lake Mall in back of the Bank of America Bldg. Take the 124th St. exit off of I-405 and go east to the first street with a left turn lane. Turn left, cross the railroad tracks, continue to the next light, turn right at the bank, go one block and take a right. All PARS members are welcome.

The address for the Newline Support Fund is Newline, PO Box 660937, Arcadia, CA 91066.

Bringing the Dead Bands Back to Life

From ARNewline(tm) Report 1374 - Dec. 12, 2003: And finally, its that time of year that the VHF frequencies are pretty dead as far as propagation goes. So here's as idea from Terry Hosack, WA3LTB, on how to bring them to life.

Terry suggests over the VHF Reflector that you download a copy of the WSJT program for digital high speed meteor scatter, weak signal, trop and EME. He says to be certain that you get all the current updates including the new JT65 mode.

Hosack says that other than skeds, activity may be found on 144.140 and 50.260 Mhz mainly during contest and activity periods. If you are on the East Coast just beam west. Conversely, if you live out West, beam to the East and you might be surprised at what you might hear.

Terry says to just put the program in the monitor mode and see if you can decode any signals. If you find an interest in the mode you can buy or build an interface to actually transmit and help bring the dead VHF bands back to life.

The following web site is used for Skeds and chat about WSJT and meteorscatter:
www.pingjockey.net/cgi-bin/pingtalk (VHF Reflector)

Talk Show Host W6OBB Takes on BPL

From ARNewline(tm) Report 1375 - Dec. 19, 2003: Those opposed to the FCC permitting the rollout of Broadband over Powerline Internet access got some unexpected help on Sunday night December 14. This, when famed talk show host Art Bell, W6OBB, brought up the topic on his Coast to Coast AM radio program. Our producer Bill Pasternak, WA6ITF, just happened to tune in at the right time and tells us what he heard:

That's exactly what happened. I was tuning the AM band looking for the latest news on the capture of Saddam Hussein when I heard Art's voice. He was announcing that his guest was to be author Harry Helms, W7HLH, and the two were going to discuss the hazards of Broadband over Powerline Internet. So I stopped and rolled tape. In a nutshell, heres what was said.

Bell started the discussion by explaining in easy laymen's language that the bottom line to BPL was that the power companies and the Internet providers could rake in a lot more money. He also explained the way this would happen would be to send Internet data over the unshielded power system that were, in effect, giant

antennas capable of causing massive interference to existing radio services. How bad? To quote Bell: "It would wipe out the short-wave bands. It would wipe out ham radio. It would wipe out CB. It would wipe out international broadcasters. It would wipe out FEMA - The Federal Emergency Management Agency."

He then noted that FEMA had filed in opposition to BPL and asked Helms if he thought that action would stop the rollout of this technology. Helms responded that he hoped it would, and noted that if it proceeds, that it could also adversely impact on AM broadcast band reception. Helms used the noise one hears on a car radio when passing near power lines as an example of what BPL might do to broadcast band reception, adding: "Imagine that noise not being restricted to being near a powerline, but virtually anywhere in the United States."

In all, Helms and Bell spent about 5 minutes discussing BPL and the dangers to the nations high frequency communications infrastructure that its implementation might bring. And in doing so, they accomplished something that the ARRL could not. They made some 10 to 12 million Americans who tune in to hear Bell's show aware of the danger that Broadband over Powerlines could mean to the man in the street.

For the Amateur Radio Newline, I'm Bill Pasternak, WA6ITF, listening in to Coast to Coast AM on KFI in Los Angeles.

Bell took back the weekend hosting duties of Coast to Coast AM earlier this year. The show is heard 7 nights a week over the Premiere Radio Network and its affiliate stations in the United States and Canada. Its also on Ask Channel XM 165 on the XM Satellite Radio service. (ARNewline)

FEMA vs. BPL

From ARNewline(tm) Report 1375 - Dec. 19, 2003: Still with the issue of Broadband over Powerlines, another major player has stepped up to voice its concern. The ARRL Letter says that this time it is the Federal Emergency Management Agency - FEMA - which is expressing what it calls grave concerns about likely interference from unlicensed BPL systems.

In its own December 4th filing to the FCC, the agency says that Broadband over Powerlines could severely impair FEMA's mission essential High Frequency radio operations in areas serviced by this technology. FEMA expressed primary concern over BPL's potential impact on the FEMA National Radio System which operates on the High Frequency bands and serves as the agency's primary command and control backup medium as part of the Federal Response Plan. (ARRL)

73 Magazine Archives On-line at HamCall

From ARNewsline(tm) Report 1375 - Dec. 19, 2003: The complete archives of 73 Magazine will soon be available to view online at the hamcall.net website as a fee based subscription service. According to the HamCall folks, more issues are being added daily and they will eventually have the entire 73 library available.

73 Magazine was published from 1960 to 2003. With its demise a few months ago HamCall has become the magazines official on-line home to preserve it for future generations. To do this, the HamCall staff has scanned every issue in full color, cover-to-cover, making every page is identical to the paper magazine on a subscription basis.

Want to try the free on-line demo? You can. Simply take your browser over to www.hamcall.net and click on the words 73 Magazine Archives. (HamCall)

Science: What is Foam?

From ARNewsline(tm) Report 1375 - Dec. 19, 2003: From the Newsline science page a question. What's made mostly of gas, a dash of liquid, and acts like a springy solid? The answer is foams.

Foams are so common we seldom appreciate how strange they are. In fact, much of what is known comes from trial and error. There are even metallic foams that can be shaped into antennas for radio transmission and reception. Because of this and other high tech uses, the precise stiffness of a foam is crucial for many uses.

At the moment, no theory currently exists for predicting exactly how stiff or oozy a foam will be based on its traits like the size of its bubbles or the amount of liquid it contains. But scientists are designing an experiment for the International Space Station to investigate the puzzling physics of these everyday substances. You can read all about it at science.nasa.gov/headlines/y2003/09jun_foam.htm?list950329 (NASA News)

ARNewsline Thanks PARS

Recall that back in April, PARS voted to send a donation to ARNewsline. This has been acknowledged on the air:

From ARNewsline(tm) Report 1376 - Dec. 26, 2003: Ladies and gentlemen, we end this year and begin the next by saying thank you to more listeners who kept the Amateur Radio Newsline on the air throughout 2003. Here's Andy Jarema, N6TCQ:

This week we have the second half of our list of people who helped us financially in the month of April:

[Long list removed - Ed.], The Puget Amateur Radio Society of Kirkland, WA, [Long list removed - Ed.], And Newsline Staff volunteers who paid out-of-pocket to keep Newsline on the air.

Thank you to everyone. Your April response to our crisis was exceptional, and we promise to do our best to continue to earn your care and support. A reminder that Newsline is a 501c 3 California non-profit corporation. FCC regulations prohibit us from telling you exactly how to support us, but that information is on our website at www.arnewsline.org. I'm Andy Jarema, N6TCQ.

More from Andy in future Amateur Radio Newsline reports. (ARNewsline(tm))

Electronic Assistance: RepairClinic.com

From ARNewsline(tm) Report 1376 - Dec. 26, 2003: A new Web site has been created to usher Americans away from their throwaway habits and into the world of yesteryear when we just kept it working.

Called RepairClinic.com, the cyberspac port provides aids for those looking to repair anything from a refrigerator or air conditioner to more complex devices such as microwave ovens. The site appears to derive most of its income by selling spare parts and factory manuals.

At the moment the site sticks to typical kitchen appliances. It does not provide advice on such items as radios, TV sets, VCRs and other consumer electronics. At least, not yet. (Science Today)

Lompoc Says No to BPL

From ARNewsline(tm) Report 1376 - Dec. 26, 2003: The City of Lompoc, California, has said NO to Broadband over Powerlines, and its a big win for ham radio. Amateur Radio Newsline's Bruce Tennant, K6PZW, has been monitoring the situation and has the details:

Paul Andreasen, K1JAN, said it this way - quote: "Well, we won ONE at least!"

What Andreasen is referring to was a plan by Lompoc city leaders to deploy Broadband over Powerlines in that city and the work of the ham community to head it off.

Andreasen is the ARRL Technical Coordinator for the Santa Barbara Section and a ARRL Technical Advisor for the League's Southwestern Division. And he was one of the organizers of the movement to stop the deployment of BPL in the Lompoc area.

In an email, Andreasen says that his group sprang into action when they learned of plans to permit powerline

broadband. He presented city leaders with several studies and some facts on interference effects to and from other licensed RF users.

Andreasen: "I know the mayor so I stopped in one day and asked him. He said yes they were and I introduced him to some of the facts of radiation not only causing problems with public communications, the CHP, Amateur Radio, etc., but about it also causing problems with the BPL system (itself).

Meantime, Eric Lemmon, WB6FLY, made the California Highway Patrol aware of their efforts. The statewide CHP radio system operates on low-band FM which falls right smack in the middle of the spectrum used by BPL.

And then they wait until December 17th for the newspapers to report the results of their City Council vote on the matter. The good news: No Broadband Over Powerlines in Lompoc. Instead, the City Council approved a rival, non radiating system that uses fiber optic technology.

But that's not all. The company that did the study for the planners was told by the City Administrator not to entertain any radiating methodologies at all. All because ham radio operators spoke up and provided proof that BPL could be hazardous to the region's RF environment.

For the Amateur Radio Newsline, I'm Bruce Tennant, K6PZW, reporting.

Another quote from Paul Andreasen, K1JAN, kind of sums it up. "We not only win one, but a bureaucracy kept it's word!" (K1JAN, W6YN)

Ham Radio in Space: PC Sat Update

From ARNewsline(tm) Report 1376 - Dec. 26, 2003: AMSAT North America reports that PC sat is doing fine and will continue in good sunlight through New Years Eve. The satellite is seeing about 50 packet users per day and 30 per pass over the USA.

Anyone with a 2 meter transceiver and TNC can easily copy this bird. Just tune the radio to 145.825 and watch for 1200 baud normal AX.25 packet. (AMSAT)

The Changing of the Guard: Joe Knight, W5PDY, - S.K.

From ARNewsline(tm) Report 1377 - Jan. 2, 2004: Some truly sad news to report. One of the nicest people ever to hold a ham radio license, Joe Knight, W5PDY, the recently retired New Mexico ARRL Section Manager, died on December 28th. Knight was in declining health when he passed away in Albuquerque at age 76.

For those not aware, Joe Knight held the honor of the longest tenure of any Section Manager in history. He was elected to the post in the mid 1970's and only stepped down last July after his health began to fail. In all he served as New Mexico Section Manager close to 27 years. A record never before matched.

Knight was the subject and chief narrator of an article, "The Luckiest Man Alive," which appeared in the January 2003 issue of QST Magazine. In it, Knight said that Amateur Radio will exist as long as there are people who love the art and science of communicating by radio. The article also outlined the vast emergency communication resources that Knight and hundreds of other dedicated volunteers built up over the years in New Mexico.

John Stuart, AC5ZO, the president of the Albuquerque DX Association, visited Knight on December 22nd. At that time Stuart presented Knight with an honorary membership certificate in that group.

Survivors include his wife, Lois, KC5CXO, who often accompanied Knight on his hamfest and convention visits and was a tireless recruiter for new ARRL members. (ARRL, W7AS, N7US, others)

BPL Interference Proven Two-Way

From ARNewsline(tm) Report 1378 - Jan. 9, 2004: Two organizations have filed comments with the FCC that augment previously expressed worries about potential interference from and to Broadband over Power Line systems. One of them shows that service providers could loose a lot of income if anyone operates even a low power radio near a BPL transmission line. Amateur Radio Newsline's Bruce Tennant, K6PZW, reports:

Picking up on the what it terms as grave concerns expressed by the Federal Emergency Management Agency over implementation of BPL on December 4, the nonprofit Disaster Preparedness and Emergency Response Association has called on the FCC to require impartial BPL field testing as well as additional public comment and full and open public hearings.

The ARRL Letter says that in comments to the FCC the Disaster Preparedness organization concluded that serious interference to and disruption of critical emergency communications systems in several licensed services throughout North America would almost certainly result from BPL implementation as currently proposed.

Endorsing earlier FEMA remarks, the group said that proposed BPL systems don't just pose a risk of interference. Rather, they have already been shown to actually cause harmful interference to licensed radio services.

Meanwhile, the Amateur Radio Research and Development Corporation has filed additional test data

with the FCC. This, to support preliminary findings suggesting that BPL systems are susceptible to interference from even modest Amateur Radio HF signals. AMRAD said its newest data demonstrated that amateur operation in the test neighborhood would cause many homes to lose their Internet connectivity.

For its RF susceptibility experiment, AMRAD used the Potomac Electric Power Company system test site. It features a mid-1960s vintage home with unshielded interior electrical wiring and overhead power lines.

AMRAD's tests found that at a distance of just over one-half mile, data transfer ceased in the face of a signal from a mobile 100 watt transmitter on 3 point 980 MHz. When sited adjacent to the test property, AMRAD said data transfer went away in all but one instance at a transmitter power of just 4 watts operating in the proposed Broadband Over Powerline spectrum.

For the Amateur Radio Newline, I'm Bruce Tennant, K6PZW, in Los Angeles.

What AMRAD has now done is to prove that interference with BPL will be a two way problem. More so for data providers who won't see much profit if something as simple as a 5 watt CB radio can shut down a neighborhoods BPL operations. (ARRL)

BPL: Tampa Tribune Presents Both Sides

From ARNewline(tm) Report 1378 - Jan. 9, 2004: An excellent article that details both sides of the BPL controversy appeared in the January 5th edition of the Tampa Tribune. In it, reporter Will Rodgers provides not only the industry side of the issue, but the ham radio side as well. You can read the article on-line at www.tampatrib.com/Business/mgalzo1pd.html (Via email)

Space and Science: New Traveling Space Exhibit

From ARNewline(tm) Report 1378 - Jan. 9, 2004: The largest traveling space exhibit ever has made its first stop The 12,000 square foot display will allow visitors to touch rocks from Mars and the moon, take a virtual visit to the red planet and explore the international space station.

The exhibit employs the most advanced technology available here on earth to get its message out. The exhibit will be at Seattle's Pacific Science Center through May 9th. Then, it begins its own journey on a 15 city tour over the next five years. (NASA News)

New Products: New Quick-Charge NiMH Batteries

From ARNewline(tm) Report 1378 - Jan. 9, 2004: Turning to the latest in electronic products of interest to

hams, we have this from battery maker Rayovac. That company has announced a new charger that it says is capable of fully restoring a specially designed Nickel Metal Hydride cell in only 15 minutes. Dubbed the IC3, the new rechargeable cells and charging system uses Rayovac's In-Cell Charge Control technology that puts the control of recharging into the battery instead of the charger. The company says that doing this offers significant performance and convenience advantages over existing rechargeable and disposable battery systems. More information is on-line at www.rayovac.com (Rayovac)

Nacogdoches Amateur Radio Club Honors Shuttle Astronauts and Recovery Workers

Clubs,

Some of your members may want to work this special event.

73,
Ed Bruette, N7NVP
ARRL WWA Section Manager

Visit <http://www.arrl.org/sect/wwa>

----- Original Message -----

Nacogdoches, Texas January 8, 2004. On February 1, 2004 the Nacogdoches Amateur Radio Club (NARC) will honor the crew of the Space Shuttle Columbia as well as the numerous volunteers and agencies involved in the recovery effort. They will do this by operating an amateur radio "Special Event Station" much like the amateur radio setup used during the Shuttle recovery effort.

Amateur Radio Emergency Services (ARES), Radio Amateur Civil Emergency Service (RACES) and Deep East Texas Skywarn volunteers assisted with the Space Shuttle recovery effort by providing the other responding agencies with a unified radio communications system as well as providing up to the minute weather information for the recovery workers. More than 350 volunteer amateur radio operators logged over 5,100 man hours and 60,000 miles on their personal vehicles during the recovery effort.

"The amateur radio community really came together to serve during that time. That is what we train to do," commented Kent Tannery, NARC President. "We were honored to play a part of the recovery and this Special Event Station is our way of showing respect to all of the volunteers and especially the crew and their families."

During the Special Event, which runs from 7:00 a.m. to 7:00 p.m. at the Knights of Columbus Hall on East FM 1878, the amateur radio operators that volunteered during the recovery effort will work other amateur stations via HF as well as through an UHF/Echolink based system. The Echolink conference room

maintained by Deep East Texas Skywarn, WX_TALK, will be the main meeting point for Echolink based contacts. QSL cards will be available for worked stations.

Volunteers that helped with the Shuttle Recovery effort are invited to attend and participate. Additional details as well as an online sign-up form can be found at <http://www.andersoft.com/narc>.

Representatives from the City and County of Nacogdoches as well as NASA are expected to attend to get a first hand look at how amateur radio contributes to emergency management and disaster recovery.

For More Information:
Tim Lewallen
Public Information Officer
Nacogdoches Amateur Radio Club
KD5ING@arrl.net
936-560-2007

Additional Resources:
www.arrl.org – The Amateur Radio Relay League

Minutes of the PARS General Meeting, 20 November 2003

The members met at the Bellevue Senior Center. The meeting began at 7:09 PM with the Pledge of Allegiance, with 5 members: Charles Beckmeier, W7CEB; Don Hickman, WF7Z; Doug Bell, KD7KKR; Dick Schwanke, W9HXM; and Arthur Rolfe, N7YKI. Also in attendance were our speaker, John Fiskens, KD7GEW, who spoke on the American Red Cross and their mass disaster drill that was held in King County a couple of months before, and one guest, Edna Rideout, KA7HNH.

The business meeting began at 8:10 PM.

It was moved, seconded, and carried to accept the minutes as published in Sparks.

Treasurer's report: The treasurer could not be present at the meeting, but we are solvent. Art recommended that we at least look at the letters from the bank that Van hasn't picked up yet.

PARS 2003 - 04 Club Officers:

President	Charles Beckmeier	W7CEB	425-822-2339
Vice-President	Don Hickman	WF7Z	425-821-7025
Secretary	Doug Bell	KD7KKR	206-362-2421
Treasurer	Van Kichline	KD7QIT	425-820-7278

The Puget Amateur Radio Society (PARS) is an ARRL-affiliated club serving radio amateurs in the greater Seattle area. Meetings are normally held on the third Thursday of the month (except July, August, and December) at 7:00 PM at the North Bellevue Senior Center, 4063 148th Ave. NE. Visitors are always welcome.

There was a discussion about how the recent sunspot activity affected ham activities.

Don mentioned that we are one of the few clubs in the area that have our own equipment, specifically the trailer with ham equipment. Dick mentioned that the trailer is leaking rainwater between the rig and the microfiche machine.

Old business:

We still haven't replied to the QSL cards we have received. Doug mentioned he needs to work on them without waiting for Van's help.

We're still working on the current members' roster. Van hasn't been able to help due to work commitments, so Doug has been waiting.

For the good of the order:

Don now has two copies of the tapes Dick brought that contained two video presentations. One copy of the tape is for the club and one for himself as a spare. He gave one copy to Charles, who said he would put it in the trailer so it will be available. Doug recalled that one presentation showed an actual spark transmitter, the other showed tiny working models of antennas.

Charles called upon Arthur to draw the door prize ticket, and Edna won the prize, which was another block of AA batteries from Costco. Charles hoped to have something a bit different from AA batteries for the door prize in January.

Charles proposed that since the first Thursday of January will be New Years Day, we should postpone the Board meeting for a week later, on January 8. The next general meeting will be on January 15.

Don and his wife, Pat, had graciously invited the club to have our holiday party at their house, 6-9 PM Saturday, December 13. Don also invited our guest, Edna.

Charles declared the meeting adjourned at 8:28 PM.

Respectfully Submitted -
Doug Bell, KD7KKR
PARS Secretary

Annual dues are \$15.00 for individual membership, \$22.50 for family (2 or more persons at the same address). PARS will prorate the dues of new members joining after Jan. 31. Contact Doug, KD7KKR, for a membership application.

Visit our Web page at www.qsl.net/k7par This is always a work in progress, so check back often. **Visit our Repeater** at 443.200 MHz, positive offset, PL tone 103.5 Hz.

Send articles, comments, want ads, etc. for inclusion in this newsletter to Doug Bell, KD7KKR, 12755 27th Ave. NE, Seattle, WA 98125-4311, or email to Doug at kd7kkkr@arrl.net. **Send all other club-related correspondence** to PARS, PO Box 32, Kirkland, WA 98083-0032.