
SPARKS

Vol. 19, No. 9

Puget Amateur Radio Society

November 2003

This Month's General Meeting

The next meeting will be held on Thursday, November 20 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. John Fiskin, KD7GEW, will speak on the American Red Cross and their mass disaster drill that was held in King County a couple of months ago. As usual we supply coffee, juice and cookies. There will be a **Door Prize: a box of 48 AA batteries** from Costco. See you there.

PARS Holiday Party

We're continuing our tradition of holding a holiday party in December, in lieu of a general meeting. Don and Pat Hickman have graciously offered to host once more. This year's party will be held on December 6 or 13, at dinner time, to be finally determined at this month's meeting, and emailed to those members for whom we have email addresses. As in previous years, this will be a potluck affair. If you plan on attending, give Don a call at 425-821-7025 and let him know whether you plan to bring an entree, salad, side dish, or dessert. The only "business" to be conducted that night will be to present the Ham of the Year award to one of our members, assuming that he or she shows up for the occasion. Don's address is 12807 NE 136th Street in Kirkland.

Note that there will be no issue of *Sparks* and no Board meeting in December. We'll have the next general meeting on January 15. I'm not sure when the next Board meeting will be, since the first Thursday of January is on New Year's Day.

Happy birthday to you!

Nov 4	Mel Carlson	W7KDZ
Nov 6	Jim Von Seggern	KC7FEH
Jan 3	Joe Langjahr	KJ7DG

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.

Radio Politics:

NOAA Space Weather Service Threatened

From ARNewline Report 1367 - October 24 2003: Solar propagation reports could soon disappear. CQ Magazine's news service reports that the service on which many amateurs depend for reports on ionospheric conditions may have its funding sharply cut or eliminated under two versions of a Congressional spending plan for Fiscal Year 2004.

The Space Environment Center, part of the Commerce Department's National Oceanic and Atmospheric Administration, provides space weather reports on solar and geomagnetic activity that affect the ionosphere, which in turn affects radio propagation. In addition, the bureau monitors solar flares and similar events that can damage satellites. This gives advance knowledge that can help protect them. And for radio amateurs, the propagation predictions in CQ and other publications depend on these space weather observations.

The Space Environment Center is actually operated jointly by NOAA and the Air Force, but its funding is in the NOAA budget. It suffered a 40% budget cut in the current fiscal year. The House budget proposal for 2004 calls for an additional 40% cut. But the nail that could close the coffin lid is in the Senate. That version of the bill cuts funding for the Space Environment Center altogether. The Senate says that such activities are rightly the domain of the National Aeronautics and Space Administration and the Air Force.

According to an email from CQ, the House Science Committee's Environment, Technology and Standards Subcommittee will be holding a hearing October 30th on this funding bill. CQ says that any letters and comments from the public will be entered into the record. If you are concerned about the possible loss of information gathered and disseminated by the Space Environment Center, you may write to the House Committee on Science, Environment, Technology and Standards Subcommittee, 2320 Rayburn House Office Building, Washington, DC 20515. (CQ News Release, W2VU)

Next general meeting - Thursday, November 20 at 7:00 PM at the Bellevue Senior Center, 4063 148th Ave. NE in Bellevue. And be sure to 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, January 1 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.

Emerging Technology: Balloon Delivered Radio

From ARNewsline Report 1367 - October 24 2003:
Turning to the emerging technology page, it now looks as if balloon delivered radios could bring new sound to North Korean residents. This, if a preacher gets his way.

Reverend Douglas Shin wants to help liberate North Korea by delivering radio receivers by balloon. Shin's idea is to have helium filled balloons would carry radios across the Demilitarized Zone into North Korea. An automatic valve would let the gas out slowly so the balloons touch down softly without damage to the payload. Once retrieved by the people in North Korea, they would only have to turn them on and listen.

Shin says that he plans to launch his balloons from South Korea or ships off shore. Included along with each radio will be prayer material and a North Korean bank note. The latter is worth about one US Dollar. (Published news report)

Measuring the Speed of Gravity

From ARNewsline Report 1367 - October 24 2003:
It appears as if Albert Einstein was right. Amateur Radio Newsline's Mert Garlick, N6AWE, tells us about what:

The great Albert Einstein was correct when he said that the speed of gravity matches the speed of light. This, according to astronomers who took advantage of a rare planetary alignment to survey the relationship of these two fundamental forces of nature.

Edward B. Fomalout of the National Radio Astronomy Observatory, and, Sergei Kopeikin of the University of Missouri, measured the amount that light from a distant star that was deflected by the gravity of Jupiter as the planet passed in front of it. The researchers used 10 radio telescopes scattered around the world to precisely gauge how light from a distant quasar was bowed or warped as it passed by Jupiter on its way to the Earth.

To make the measurement, the instruments had to detect a minute deflection of the light. Dr. Fomalout compared the required precision to being able to measure the width of a human hair from 250 miles away.

Jupiter is in the precise position for such a measurement only once a decade. The locations of the telescopes ranged from Hawaii to Germany. Researchers are very happy with the experiments seeming total success.

For the Amateur Radio Newsline, I'm Mert Garlick, N6AWE, near the Queen Mary in Long Beach California.

Knowing the precise speed of gravity is important to physicists looking for technologic break-throughs. It also affects some of the basic theories of the relationship of space and time. (Science Today)

Radio Law: Authorities Looking for Alleged Tower Terrorist

From ARNewsline Report 1368 October 31 2003:
Law enforcement authorities in northern California and southern Oregon are searching for a man seen tampering with electrical towers. This, as one official says that the incident smacks of being an act of domestic terrorism.

According to the CGC Communicator, the latest incident took place the week of October 20th just south of Redding California. It involved a heavy-set man who used large wrenches to completely unbolt one leg of a four legged transmission tower.

Authorities say that he had half the bolts removed from a second leg when he was spotted and fled. Witnesses chased the suspect onto Interstate 5, where he sped south into Tehama County and disappeared. As we go to air he is still at large.

According to a news release from the Federal Bureau of Investigation, the suspect is similar in description to a man seen removing bolts at another tower near Klamath Falls, Oregon earlier in the day. He is described as a white male, in his early 60's with long, blackish-gray hair and a salt-and-pepper beard.

More details on this story and the suspect are in cyberspace at: http://redding.com/top_stories/local/20031022toplo043.shtml (CGC Communicator)

Enforcement: Alleged Tower Unbolter Caught

From ARNewsline Report 1370 - Nov. 14, 2003:
A follow-up to a story we aired two weeks ago about a man trying to unbolt power transmission towers in three western states. He has now been captured.

According to news reports, the suspect is identified as Michael Poulin. He claims that his actions illustrate how vulnerable the power grid might be to acts of terrorism. At airtime, charges against him are pending. (Published news reports)

Radio Law: Emergency Officials Concerned About Public Access to "MIRT"

From ARNewsline Report 1369 - November 7, 2003:
Emergency responders are concerned that MIRT, or mobile infra red transmitters are falling into the wrong hands. Mainly, into the hands of people not willing to obey traffic laws.

A mobile infra red transmitter allows personnel aboard emergency vehicles responding to emergency calls to quickly change specially-equipped traffic signals in their favor. That was fine until Internet websites began offering the same devices for use by the public for around \$300 a pop.

Unlike radar jammers and certain laser detectors that emit radio signals, the mobile infra red transmitter and other signal changers send out a beam of invisible light. Since light is not controlled by the FCC the devices do not run afoul of the agency's rules.

Needless to say that this is causing concern for those who rely on the technology for legitimate needs. Don't be to surprised if states begin enacting their own laws to control the sale and purchase of the units.

More on the situation and the device is at www.detnews.com/2003/commuting/0310/26/a01-307303.htm and <http://www.themirt.com> (CGC, others)

Emerging Technology: Get Ready for Book RFI

From ARNewsline Report 1369 - November 7, 2003: Remember those Radio Frequency ID tags that are of such concern to ham radio? Well you will never guess where they are about to show up. Ken Butler, WINNR, tells us:

The San Francisco Public Library's plans to track books by inserting an RFID tag to each one. These are the same radio tags that hams tried to get the FCC to not deploy earlier this year.

Now, library officials in the Bay area say that they will install the RFID's, into the roughly two million books, CDs and audio visual materials patrons can borrow. The system still needs funding and probably will not be ready for deployment until at least 2005.

So in a few years when you receive QRM to your ham radio operations, you might find that its coming from that novel you are reading late at night. (Science Today)

Emerging Technology: New Fractile Antenna Design

From ARNewsline Report 1370 - Nov. 14, 2003: Engineers at Pennsylvania State have developed innovative design methods for a new class of antennas. One composed of an array of fractal-shaped tiles that offer anywhere from a 4 to 1 to 8 to 1 improvement in bandwidth compared to their conventional counterparts.

According to Space Daily, the new broadband antennas are composed of irregular but self-similar, repeated fractal-shaped unit tiles called "fractiles." These "fractiles" cover an entire plane without any gaps or overlaps.

While fractal concepts have been used previously in antenna design, the Penn State research team are the first to introduce a design approach for broadband phased array antenna systems. One that combines aspects of tiling theory with fractal geometry. (ANS, Space Daily)

Physics Carols



(Melody: Jingle Bells)

When something hits the earth,
You'll notice in a trice,
It makes a great big bang,
Now isn't that so nice?
So what makes things fall down?
What makes them go ker-plop?
The answer's in this song, my friend,
We'll sing it 'till we drop.
Oh!
Gravity, Gravity,
Keeps us on the ground.
It was explained by Newton,
(The scientist renowned!)
Gravity, Gravity,
Mass times nine-point-eight.
Is a vector pointing down,
That's sometimes known as "weight."

Walk around the earth.
Keep a steady pace.
If gravity weren't there,
You'd float away in space.
Now some call it a push--
Well, call it any name,
But gravity will always PULL--
Attraction is its game!
Oh!
Gravity, Gravity,
Keeps us on the ground.
It was explained by Newton,
(The scientist renowned!)
Gravity, Gravity,
Mass times nine-point-eight.
Is a vector pointing down,
That's sometimes known as "weight."

Minutes of the PARS General Meeting, 16 October 2003

The members met at the Bellevue Senior Center. The meeting began at 7:07 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, and one guest, Bob Flye, KD7WSI.

We watched an interesting videotape of Ed Redington assembling a working spark transmitter piece by piece while describing his boyhood adventures (and misadventures) in spark communications. We had some goodies, then began the business meeting at 8:02 PM.

Don had received both the email copy and the hard copy of *Sparks*, but Art hadn't received his email copy, nor the back issues Doug had sent him via email. Doug gave him a hard copy of the latest issue.

Treasurer's report: Charles reported that Van was unable to attend due to commitments at work, but at the last board meeting Van had reported that we are still solvent. Don remarked that we are actually quite rich compared to other clubs, since we have our own trailer with ham equipment. Most other groups, when they want to work a contest, use their members' equipment.

Interesting contacts: Don has been working 80, 40, 20, and 15 m afternoons and evenings. He's been trying to work England, but hasn't yet.

Christmas party: Don volunteered to host the Christmas party this year. It will be on Saturday, either on the 6th or the 13th of December, to be decided at the November meeting.

Updated member roster: Van and Doug were supposed to come up with an updated roster. Van hasn't sent Doug the current roster, but Charles gave Doug a hard

PARS 2002 - 03 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.

copy of the roster from our web site. Doug could use the web site information to start an updated roster.

New Business: Arthur Rolfe brought up the issue of Broadband over Power Lines. There was some discussion.

It was moved, seconded, and carried to accept the minutes as they appeared in the latest issue of *Sparks*.

Charles updated the club's information with ARRL online, and had a hard copy for us to see.

Don announced that he heard at the recent Kirkland ARES meeting that the ARRL would like a copy of everybody's time and distance spent on volunteer work. There was some discussion.

Charles announced that at the next meeting, on November 20, John Fiskens, KD7GEW, will speak on the American Red Cross and their mass disaster drill that was held in King County a couple of months ago. He has a nice overhead view presentation.

The next board meeting will be held on Thursday, November 6 at the Cowboy Steakhouse.

Our guest, Bob Flye, has been looking for a club to join. He has a 10 m rig that a friend gave him. He's been trying to decide what kind of antenna to get for it.

Arthur won the first door prize, a box of AA batteries.

The meeting was adjourned around 9 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. Call 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 e-mail to Doug at <kd7kk@arrl.net>. **Send all other club-related correspondence** to PARS, PO Box 32, Kirkland, WA 98083-0032.