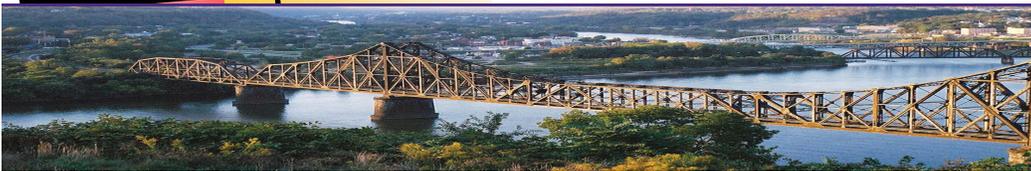




THE BEAVER VALLEY AMATEUR RADIO ASSOCIATION
 WWW.W3SGJ.ORG
 BEAVER COUNTYS ONLY 75 YEAR ARRL AFFILIATED CLUB!

The eQRM Newsletter

Home of W3SGJ/R
 145.310- 100 Hz PL



Volume 2, Issue 3
 January 29, 2008

Bob, WA3ZRM - Editor

N3LLR TO VISIT AREA ON FEBRUARY 2, 2008

Bill Edgar, N3LLR, ARRL Atlantic Division Director will be visiting our area on Saturday, February 2, 2008.

All area amateurs are invited to attend Bill's visit which will be 1:00 PM at the Tree of Life Wellness Center located on the corner of Sims Street and Betty Street in Elwood City, PA 16117.

Talk-in will be on the W3SGJ repeater on 145.310- 100 Hz PL, with a back-up repeater frequency of 145.170- 100 Hz PL.

Bill recently attended the ARRL Board of Directors annual meeting on January 18-19 in Houston, Texas. One of the first items on the agenda was the election of ARRL officers, as well as members of the Executive, Administration and Finance, and Programs and Services Committees.

All officers were re-elected to another two-year term without opposition: Joel Harrison, W5ZN, ARRL President; Kay Craigie, N3KN, First Vice President; Rick Roderick, K5UR, Vice



President; Rod Stafford, W6ROD, International Affairs Vice President; David Sumner, K1ZZ, Secretary, and James McCobb Jr, K1LU, Treasurer.

As ARRL President,
(Continued on Page 3)

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Newsletter & Information Exchange Program

- Have your club's latest news and happenings printed here for FREE!
- Is your club having a VE session or classes? Let me know and I'll help spread the word!
- Planning a Hamfest? Drop me a line and get some FREE PR in the eQRM!
- Having an ARRL night, special speaker or program? The eQRM can help by spreading the news within our region!

COMMENTARY: A Perfect Time for Your Questions

Editor's Note: The following article is a commentary and does not necessarily reflect the opinions of the ARRL or the Beaver Valley Amateur Radio Association.

As many of you are aware, I received some life threatening information about my health last week and was unable get out a newsletter. I would like to thank those of you for your phone calls, cards, e-mails and prayers. It feels good to know that people are in your corner when the chips are down. Thank you and God Bless.

As you can see from the lead story, ARRL Atlantic Division Director Bill Edgar will be in our area this coming Saturday, February 2. I can not emphasis strongly enough the need for you to attend his visit with questions you have been asking me over the past several months. Bill is one of the 15 that actually runs the ARRL. **(Continued on Page 3)**

FEBRUARY 2008

The Beaver Valley Amateur Radio Association meets at the Beaver County Emergency Operations Center located at 250 East End Avenue, Beaver, PA on the second Thursday of every month at 7:30 PM. Everyone is welcome.

Don't forget to listen to the BVARA club nets every Wednesday Night! 2 Meter Net on 145.31MHz 100Hz PL at 8:30PM and the 10 Meter Net 28.370 QSY +/- 10 at 9:00PM. Also, don't forget the Rip Vanwinkle Net on 2 meters at 7:00AM daily.

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	N3LLR 2
3	4	5	NETS 6	E-Board 7	8	Dinner 9
10	11	12	NETS 13	Meeting 14	15	Dinner 16
17	18	19	NETS 20	21	22	Dinner 23
24	25	26	NETS 27	28	29	

The BVARA 10 Meter Net Lunch group will be meeting this Thursday at Kings in Center Twp at 11:00 AM. The Saturday Dinner group will determine where they will be meeting following N3LLR's visit on Saturday. All area amateurs are invited and encouraged to attend these outings.

VE TEST SESSION TO BE HELD ON FEBRUARY 2, 2008: The BVARA sponsors ARRL VE examinations at the Community College of Beaver County's Aviation Science building, 125 Cessna Drive, (Chippewa Twp.) Beaver Falls, PA. For more info on the test session, dates and times, contact Tony, KE3ED @ 724-774-4173 or by e-mail at KE3ED@arrl.net.

2008 BVARA OFFICERS & DIRECTORS

- President:** Gary Hutchinson, KA3TYK
- First Vice President:** Robert DeMarco, WA3ZRM
- Second Vice President:** Debbie Mehutes, KB3EAQ
- Acting Secretary:** Phyliss Pander, N3KUG
- Secretary Elect:** Norm Trunick (Call Sign Pending)
- Treasurer:** Shawn Hastwell, KB8UDE
- Director:** Chris Moratis, W3OUF
- Director:** Jack Spencer, KZ3Z
- Trustee:** Tony Petrucci, KE3ED/W3SGJ
- Chief Engineer:** David Heim, KA3SMF

CLUB NOTES

REPEATER FUND ESTABLISHED

At the recommendation of the club's Technical Committee, a Repeater Fund has been established to be used for upcoming projects and repairs on the BVARA's repeaters.

At the request of several BVARA members and the club's Executive Board, the Technical Committee has been asked to investigate new controllers and antennas for our repeater system.

At the time of this writing, over \$250 has been pledged to the fund by various club members.

If you are interested in making a pledge to support our repeaters, please contact Shawn, KB8UDE. Donations can also be made by using the membership application found on page 5 of this issue.



N3LLR TO VISIT ON 2/2/2008 (CONTINUED FROM PAGE 1)

Harrison also serves as Chair man of the Executive Committee; its members are Directors that are elected by their fellow Board members. The Executive Committee members for 2008 are Coy Day, N5OK, West Gulf; George Isely, W9GIG, Central; Tom Frenaye, K1KI, New England; Bill Edgar, N3LLR, Atlantic, and Henry Leggette, WD4Q, Delta.

Members of the Administration and Finance Committee and Programs and Services Committee are appointed by the ARRL President.

The Administration and Finance Committee members for 2008 are

Chairman Jim Fenstermaker, K9JF, Northwestern; Jim Weaver, K8JE, Great Lakes; Jay Bellows, K0QB, Great Lakes; Dennis Bodson, W4PWF, Roanoke; Brian Mileshosky, N5ZGT, Rocky Mountain, and Cliff Ahrens, K0CA, Midwest.

Members of the Programs and Services Committee for 2008 are Chairman Bruce Frahm, K0BJ, Midwest; Greg Sarratt, W4OZK, Southeastern; Dick Norton, N6AA, Southwestern; Frank Fallon, N2FF, Hudson; Bob Vallio, W6RGG, Pacific, and Howard Huntington, K9KM, Central.

Three members were also selected

to sit on the Ethics and Elections Committee: Coy Day, N5OK; Frank Fallon, N2FF, and Greg Sarratt, W4OZK. Members of this committee are Directors not up for re-election in 2008. Per the ARRL By-Laws, this committee applies guidelines for ethical conduct by ARRL officials, determines eligibility of candidates for Director and Vice Director, certifies a nominee's eligibility to fill a Vice Director vacancy and supervises the balloting for Director and Vice Director.

Further details on the 2008 Annual Meeting are available on the ARRL Web site and in the April

COMMENTARY (CONTINUED FROM PAGE 1)

This will be your opportunity to ask him many of the questions you have been asking me. For example, why should I join the ARRL? What is it doing for me? How does an Atlantic Division Directors responsibilities and duties differ from that of a Section Manager? What strategic plans does the ARRL plan or have in place to enrich and grow our hobby? How can the ARRL assist clubs in need with membership issues... or, even worse, infighting? **THIS IS YOUR OPPORTUNITY TO LET YOUR VOICE BE HEARD! IF YOU CAN'T MAKE THE MEETING, PASS ALONG YOUR QUESTIONS TO SOMEONE WHO CAN! I HAVE PERSONALLY MET WITH BILL EDGAR ON SEVERAL OCCASIONS DURING THE PAST YEAR. IN MY OPINION, HE IS AN HONEST AND STRAIGHT TALKING MAN. DON'T MISS THIS OPPORTUNITY TO MEET AND TALK WITH HIM!**

Next, I sincerely hope that the presidents and officers of the BVARA, ECARA and Triple A will be in attendance at this

meeting so an open dialog can begin on how the clubs can better work together to help our hobby survive and grow. To this end, I plan on bringing my check book with me... and plan to join both ECARA and Triple A. I hope that other area amateurs join me in this gesture of solidarity and support for our hobby. Additionally, I hope that Beaver County Radio Officer and ARRL EC Frank Cole, N3TN, makes sure that RACES and ARES applications are on hand for anyone interested in joining... I know I have. With that said, I look forward to seeing everyone this Saturday.



2008 Executive Board Meeting Dates Set

At the request of BVARA Executive Board members, Gary, KA3TYK has established time and dates for club e-board meetings.

Meetings will be held on the First Thursday of the month at 7:30 PM. The first regular 2008 meeting will be held at Eat & Park in Monaca on February 7. E-Board meetings are open to any interested club member; however, if you plan to attend, please let everyone know by checking into the 2 or 10 Meter Wednesday night nets prior to the meeting so seating accommodations can be made for you. Both Gary and I hope to see everyone on February 7th.



THE HAM'S HOROSCOPE

BY MADAM ZELDA, ST1ARS

That's Gold	I'm Happy	Can't Complain	Not Happy	Turn down the heat	
Sign	Romance	Home & Family	Finances	Career	General
Aries					
Taurus					
Gemini					
Cancer					
Leo					
Virgo					
Libra					
Scorpio					
Sagittarius					
Capricorn					
Aquarius					
Pisces					

SATELLITE SERVES AS VOICE REPEATER

Launched in January 1990, AMSAT-OSCAR 16 (AO-16) -- a digital satellite -- has been unavailable for use while the command team dealt with a serious computer problem. The satellite has since been recovered, and is now a voice repeater, at least for an unspecified "test period" using FM voice on the uplink, but transmits DSB voice on the downlink (best received on SSB).

Since AO-16 was recovered approximately six months ago, the command team -- Bruce Rahn, WB9ANQ, Jim White, WD0E, and Mark Hammond, N8MH -- attempted to reload the satellite software almost a dozen times without success. The team performed a series of memory tests that pointed toward a hardware failure that prevented the spacecraft software from restarting successfully.

AMSAT Vice President of Operations Drew Glasbrenner, KO4MA, said, "After concluding that the spacecraft computer system was damaged, and as discussions about decommissioning were taking place, Jim recalled a series of low-level commands that Tom Clark, K3IO, included in the spacecraft design during construction. One of these commands allows an uplink receiver to be directly tied to a downlink transmitter. The twist is that the uplink is regular FM, but the downlink via the BPSK transmitter is DSB (Double Sideband). Mark placed the satellite in this mode early this week and did some testing."

Glasbrenner said the satellite hears very well; the reduced bandwidth by using either USB or LSB on the ground station receiver "allows for a very robust downlink. Tuning the downlink is just like on a linear transponder, meaning it is tight and with fast Doppler. Uplink tuning is not required, just as with the FM mode V/U satellites. My personal observations include being able to access and hear the satellite within one degree of the horizon, much lower than any other current bird for my location [in Florida]. This should be an easy satellite with omni antennas and a 70 cm preamp."

Glasbrenner said that he would like to open the satellite to general use for a test period. The uplink is 145.920 FM, and the downlink is 437.026 SSB +/- Doppler shift. He asks that users restrict their uplink power to a reasonable power level, and do not transmit without being able to hear the downlink; all general single-channel guidelines apply. Please submit reports via e-mail <ao16@amsat.org>. "Enjoy this bird's new life!"

Ground Stations Needed for ARISS Operations

Do you want to be part of the international network of ground stations that help support Amateur Radio on the International Space Station (ARISS) operations?

ARISS is looking to add numerous ground stations capable of relaying ISS Amateur Radio sessions with schools and also serve as back-up communications relays should they be needed.

Locations all over the world will be considered, but the greatest need for stations is in Central America, South America, Falkland Islands, Western Australia, Canada and Alaska. The following are guidelines for stations wanting to be considered:

- * Third Party agreement with United States or waiver from their telecom agency
- * Ability to speak and understand English
- * Minimal horizon obstructions
- * 24/7 access and availability of station
- * Operator(s) willing to support scheduled contacts at various times
- * Phone patch
- * AZ/EL tracking satellite system, preferably an auto tracking system with the capability for manual override
- * Multi-element Yagis for 2 meters and 70 cm (circular polarization preferred)
- * Pre-amps
- * Transmit output 70 Watts +
- * Note: If you can specify your station's EIRP and receive sensitivity (thereby taking into account cable losses, pre-amps and antenna gain), it would be greatly appreciated.

Stations that can support the following will be given special consideration, but these items are not required:

- * Auto Doppler adjustment of frequencies

- * Ability to speak and understand languages other than English
- * 1.2 and 2.4 GHz satellite hardware
- * Packet
- * SSTV
- * Digital ATV
- * Redundant power system
- * High-speed Internet

If you or your club would like to be considered for selection as one of the new ARISS ground stations, send an e-mail to ARISS at, ARISS-telebridge@amsat.org, with details about your station.



BY BECOMING A MEMBER OF THE BVARA, YOU CAN HELP SECURE THE FUTURE OF AMATEUR RADIO IN BEAVER COUNTY. ADDITIONALLY, THE BVARA RECEIVES A PORTION OF EACH ARRL AND/OR WORLD RADIO SUBSCRIPTION YOU PURCHASE!

Join the BVARA, ARRL and World Radio

Sign up for:	Price	Quantity
<input type="checkbox"/> BVARA FULL MEMBERSHIP	20.00	
<input type="checkbox"/> BVARA STUDENT MEMBERSHIP	15.00	
<input type="checkbox"/> BVARA ASSOCIATE MEMBERSHIP	10.00	
<input type="checkbox"/> BVARA SPOUSE/CHILD MEMBERSHIP	5.00	
<input type="checkbox"/> ONE YEAR ARRL MEMBERSHIP	39.00	
<input type="checkbox"/> WORLD RADIO SUBSCRIPTION	21.00	

Subtotal: _____

Donation: _____

Total: _____

ARRL MEMBER? YES NO

Your License Class (if any):

- Novice
- Technician
- General
- Advanced
- Extra

Name _____

Address _____

Phone _____

Your Call Sign: _____ Exp. date _____

Signature _____

**Make Check or Money order payable to:
The Beaver Valley Amateur Radio Association, P.O. Box 424
South Heights, PA 15081**

CONTEST NEWS VIA NOAX

They're new! They're red! They can hold your favorite beverage without leaking! What are these amazing items? The coffee mugs you can purchase as your reward for making a "Clean Sweep" in the 2007 ARRL Phone or CW Sweepstakes, of course. If your mug is itching for a mug of mud out of one of these mugs, stop smugly mugging in the mirror or you'll miss the order deadline on 31 Jan! Activity pins for 100 QSOs (or more) may also be ordered. Surely you will want to proudly display the imprimatur of Sweepstakes savoir faire in your shack? <http://www.arrl.org/news/stories/2008/01/11/101/?nc=1> (Thanks, Sean KX9X, ARRL Contest Branch Manager)

The Directors of the Yasme Foundation are proud to announce the first winners of the recently announced Yasme Excellence Awards <http://www.yasme.org> for service and dedication to amateur radio as recognized by the foundation's Directors. The prizes are in the form of a plaque and a monetary award. The winners include: Joseph L. Arcure, Jr., W3HNK for his long service as a QSL manager Sheldon C. Shallon, W6EL for his free propagation prediction software James Brooks, 9V1YC for DXpedition organization and videography Jukka Salomaa, OH2BUA and Antti Kantola, OH5TB for conceiving, operating, and maintaining the DX Summit. (Thanks, Wayne N7NG, President YASME Foundation)

Amateur radio has had a touchy relationship with the FCC in recent years. While the Enforcement Bureau's return to the scene has been incredibly welcome and smartly responsive, the bureau's support of BPL in the face of clear violations of long-standing policies on interference has called its decision-making processes into question. This hasn't gone entirely unnoticed by Congress as Ars Technica reports <http://arstechnica.com/news.ars/post/>

[20080109-congress-to-probe-fcc.html](http://www.fcc.gov/pressroom/2008/01/20080109-congress-to-probe-fcc.html) in this 9 January article. Perhaps we'll learn more about what's really going on down there at 445 12 Street SW as a result of this inquiry.

And maybe Riley Hollingsworth will tell us! The North Coast Contesters proudly announce the 16th Annual Dayton Contest Dinner <http://www.contestdinner.com/>. CQ Magazine's Contest Editor, John K1AR will again masterfully and ceremoniously run the show, featuring Riley Hollingsworth K4ZDH, Special Counsel in the FCC Spectrum Enforcement Division as the keynote speaker! CQ WW Director Bob K3EST will announce the CQ Contest Hall of Fame Inductions, as well. The dinner will be held on Saturday evening, May 17, at 6:30 PM in the Crowne Plaza Hotel. (Thanks, Tim K3LR and to Web hosts Scott KA9FOX and QTH.com)

The Mongolian MRSF QSL Bureau is no longer operating. The QSL bureau for Mongolian QSLs is reached at Mongolian Amateur Radio Society, QSL Bureau, PO Box 830, Ulaanbaatar-24, Mongolia. (Thanks, Khos JT1CD)

Are we excited or what? Solar Cycle 24 now has it's own Web site - <http://www.solarcycle24.com>! It's only a matter of time until Ol' Sol gets it's own Facebook site. We can only hope! (Thanks, Tim K3LR)

While you're in "propagation mode", take a look at the HAARP (High Frequency Active Auroral Research Program) Web site <http://www.haarp.alaska.edu/haarp/data.html> for some interesting graphs and statistics. Take a look in this newsletter's Sights and Sounds section, too! (Thanks, Zack W9SZ)

Yeah, but can they make one that will hold up a dipole? Stanford researcher Vladlen Koltun has developed a software package called



Dryad <http://dryad.stanford.edu> that generates very lifelike three-dimensional tree images by using about 100 different tree attributes developed by botanists. In the Stanford News Service article <http://newsservice.stanford.edu/news/2008/january9/dryad-010908.htm> he explains how the tree characteristics are selected - much like navigating Google Maps, how appropriate!

Rose N7HKW (XYL of Ken K0PP) is making some nice-looking cotton fabric covers for Elecraft radios. She offers custom embroidery to really dress them up. Email Rose for details at ElecraftCovers@acninc.net.

Grid square maps based on Google Earth are available from the Stoned Monkey VHF Society Web site <http://stonedmonkey.org>. (Thanks, Kenny K2KW)

Pete N4ZR reports that the Worldwide Contest Station database and N1MM Quick Start Guide is unavailable until he is able to convert it to a new form of access supported by the servers of the new Internet host.

Most of us have visited the APRS tracking site, Findu <http://findu.com>, and here's a new site based on Google Maps <http://aprs.he.fi> When you log in to this site by call sign, it looks up your coordinates and starts off with you in the center of the action. You might find yourself surrounded by quite a lot of APRS information! (Thanks, Carl KC2LLT)

I'm not sure if this is News, a Tech Tip, a consumer warning, or just the usual raillery on a slow news day! Slashdot <http://slashdot.org> featured an item

(Continued on Page 12)

TECHNICAL TIPS AND INFORMATION

Les N1LF reports on an improvement to that simplest of components, the fuse. "Recently, I upgraded my standard fuses with a product called Smart Fuse! <<http://www.smartglow.com>>. These are OEM specification fuses with one key improvement: they incorporate a small built in light that glows when the fuse is blown. It makes troubleshooting much faster, even in poor lighting conditions. Where several radios and accessories may be sharing a power distribution panel, this can be a real aid to quickly identifying the problem, and getting back on the air. They do cost more than standard fuses, but I think the potential time savings in troubleshooting makes them worth the expense." Smart Fuses are probably available from your local auto parts store.

If you want to scan a band, but don't have a spare spectrum analyzer to dedicate to the job, there's an alternative. Joe K8FC suggests that you can do the job for a relatively small investment, a software-defined radio (SDR), such as one of the Softrock kits <<http://www.softrockradio.org>> combined with Rocky <<http://www.dxatlas.com/Rocky>> or Power SDR <<http://www.wu2x.com:80/sdr.html>> software. These are pretty amazing packages!

Multi-section fiberglass poles seem to be in abundance, but they don't come with guying hardware for the most part. How to attach the guys? Doug N6TQS uses hole saws to make guy rings of aluminum plate—first the inner hole, then the outer circumference of the ring. Use a drill press, start with a pilot hole, drill the guy attachment holes in the ring then screw the aluminum blank to a wood backing piece using the guy holes before using the hole saws. The backing piece stabilizes the workpiece, making for a cleaner, safer job. Bill AI4WM notes that you can also make

guy rings from large stainless steel washers, available from McMaster-Carr: P/N 92141-A040, stainless steel flat washer, 1-1/4" screw size, 1-5/16" ID, 2-3/4" OD, 0.156" thick.

While shopping, Dave KA1NCN came across "bed risers" that come in sets of four <<http://tinyurl.com/ytxarw>> and <<http://tinyurl.com/2bfv8x>> and seem to be remarkably strong. These seem to be widely available and so could be a possible base insulator or some other antenna-related item, should an old beer bottle be unavailable or otherwise unsuited to the task.

Here's a couple of previously unreported sources for ferrite items: Lodestone Pacific <<http://www.lodestonepacific.com/fairrite.php>> Misk Antenna Research <<http://exax.net>> Misk's site also has a lot of information on Beverage antennas. (Thanks to a pair of Johns, W0UN and ON4UN)

While antenna analyzers often fill the need for low-level signal sources (they make handy, if somewhat unstable and uncalibrated, signal generators), on occasion having a standalone signal source that doesn't require ac power is pretty handy. Bjorn SM0MDG contributes three such sources: - a 0.4-watt, 1-35 MHz transmitter by DL2KQ <<http://dl2kq.de/ant/3-32-1.gif>> - self-contained oscillators <<http://www.mouser.com/catalog/632/785.pdf>> - NorCal QRP generator kit <<http://www.norcalqrp.org/s1s9generator.htm>>

Keeping RF out of PC keyboards seems to be a frequent problem. If ferrite cores on the cables aren't doing the trick, Bill W6WRT observes, "For some reason the USB keyboards are much more immune to RF. If your computer has the PS/2 style socket, adaptors are available. If your rig and your computer are sitting right next to

each other, connect a short ground lead between them."

Here's a good tip from Tom W8JI - if filter performance changes when the case or receiver are grounded (assuming the receiver has a metal case), then there is something wrong with the shielding of the filter, the receiver, or the connecting cable. Shield or case grounding should not affect filter performance.

Wes WZ7I has found the GB Instruments "LAN Tracker" (available from Home Depot and other home improvement stores, no doubt) to be very helpful in finding and tracking wires and cables. It is a multi-purpose wire tracer using a small transmitter with a number of different plugs and a small receiver for detecting the signal.

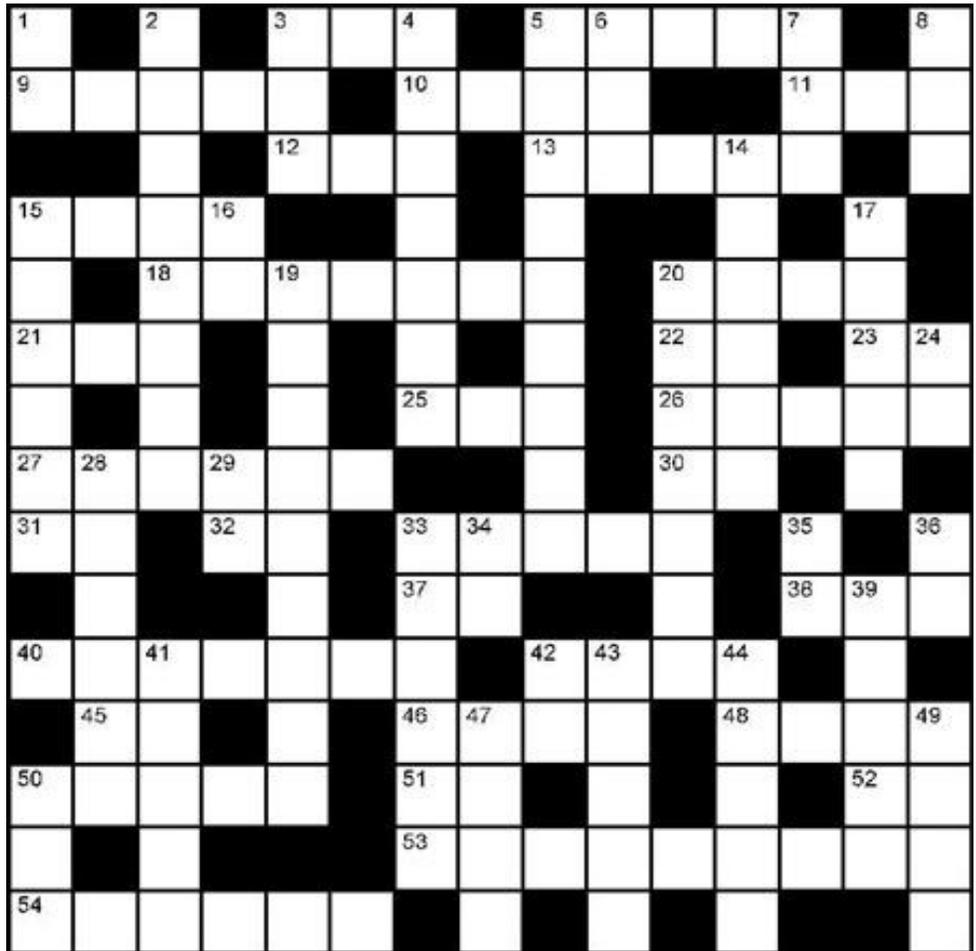
Band-pass filters are used at multi-transmitter stations to reduce interference from harmonics and phase noise. Frank W3LPL notes that lab-bench measurements of filter performance with resistive 50-ohm terminations may be misleading. Actual transmitters and antennas often present wildly different than 50 ohms out-of-band. Some filter designs are extremely sensitive to misterrmination, while others (for example, the W3LPL receive filter in many editions of The ARRL Handbook) were specifically designed to perform excellently when misterrminated. Evaluating filter performance in your station is straightforward. On receive, find a very strong out-of-band signal then insert the filter and observe the results. On transmit, have a nearby ham compare the strength of your transmitter harmonics with and without the filter installed.



Worthy Components

Across

3. Batteries with liquid electrolyte are ... cells
 5. Prevent flow of ac current
 9. Unit of inductance
 10. Translate symbols into information
 11. Old abbreviation for pico
 12. Ferrites prevent this type of interference (abbr.)
 13. This moves on a variable capacitor
 15. Designates "6" on resistor band
 18. Material of disc capacitors
 20. Resistors cause voltage to do this
 21. Adjustable resistor
 22. Common abbreviation for "that is"
 23. Mixer signal (abbr.)
 25. Receiver frequency fine tune (abbr.)
 26. Legitimate
 27. Hit
 30. Indefinite article
 31. A good job is done "just ..."
 32. Light (abbr.)
 33. Unit of capacitance
 37. Abbreviation for chip
 38. One in a million (abbr.)
 40. Printed value of a component
 42. Makes mistakes
 45. Input-Output (abbr.)
 46. Lift or carry
 48. Smallest state in the tenth district
 50. Confuse
 51. Electric vehicle (abbr.)
 52. CW abbreviation for "and"
 53. Power dissipating components
 54. These designate numbers and exponents of component values



Down

1. Thousands of microhenries (abbr.)
 2. Stores magnetic energy
 3. Opposite of delta connection
 4. Small adjustable capacitor
 5. Stores electric energy
 6. Good kind of cholesterol (abbr.)
 7. Longest possible path for a contact
 8. Main frequency control
 14. Imply hostile intent
 15. Shunt ac signals around a component
 16. Engineer that knows the most about electricity (abbr.)
 17. Divided in two
 19. Imaginary impedance
 20. Two series resistors form a voltage
 24. Rod dimension that must be less than a matching hole's ID
 28. Round core with a hole in the middle
 29. Safety lab (abbr.)
 33. Remove a signal
 34. Reversing current
 35. A correctly adjusted circuit is "tuned ..."
 36. Most popular mode on 2-meters
 39. Volts times amps
 41. Prototype or exhibit
 42. Phoned home
 43. One component of epoxy
 44. Blue-black-black
 47. Heats materials
 49. Assistant (abbr.)
 50. Keeps volume constant (abbr.)



Ham's Love to Eat

Italian Wedding Soup

Ingredients

Meatballs:

- 1 pound/454 g lean ground turkey or ground beef
- 1 egg
- 3 tbsp/45 g grated Parmesan cheese
- 1 tbsp/15 mL **Beef Soup & Gravy**
- 2 tsp/10 mL **Italian Seasoning**
- 1 tsp/5 mL **Parsley**

Broth Base:

- 1/2 cup/125 mL chopped onion
- 1/2 cup/125 mL chopped celery
- 1/2 cup/125 mL chopped carrots
- 2 tsp/10 mL **Garlic Liquid Spice**
- 1/3 cup/80 mL **Chicken Soup & Gravy**
- 6 cups/1.5 L water
- 2 tbsp/30 mL acini di pepe or other very small pasta
- 1 package (10 oz/283 g) frozen chopped spinach, thawed and squeezed dry



Cooking Directions

Meatballs:

Combine ingredients in order given; shape into small meatballs, using 1 tsp/5 mL of mixture for each meatball. Set aside.

Broth Base:

In large Dutch oven, cook onion, celery, and carrots in Liquid Spice until soft. Add soup base and water; bring to a boil. Drop meatballs into boiling soup. Add pasta and spinach, simmer 5 minutes. Adjust seasonings, if necessary. Serve with grated Parmesan cheese.

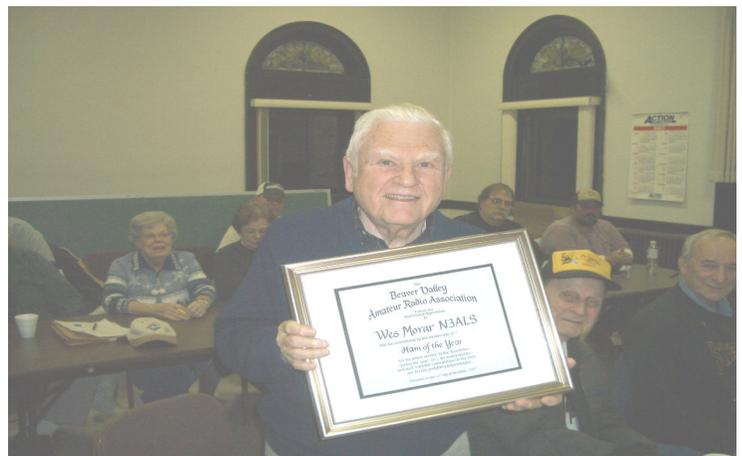
Makes 8 servings.

This Will Shake You Up

from Brenda Koth, MS, RD
Watkins Health and Nutrition Advisor



If you're a salt watcher, here's some good news that you shouldn't just take with a grain of salt! A new study reported at a meeting of the American Heart Association found that people who consumed more calcium, magnesium and other minerals tended to have lower blood pressure than those who ate less of these minerals. In this study, when calcium, magnesium and other minerals were readily consumed, salt had much less impact on raising blood pressure than expected. When intake of these minerals was low, salt intake drove blood pressure up. It appears that high intake of certain minerals can help to counteract the effects of salt on blood pressure. Calcium, magnesium and other minerals are found in a variety of foods such as fruits, vegetables, whole grains, nuts and dairy products. Watkins Superfood Multiple (Super Multi) contains these minerals and many more to help keep salt from "a-salting" you! Visit <http://www.watkinsonline.com> for more info on all Watkins Products.



The Beaver Valley Amateur Radio Association is proud to acknowledge and honor, Wes Morar, N3ALS as the BVARA's 2007 Ham of the Year. Wes was presented with his award at the January club meeting. Wes has served as club Treasurer and net control for the club's 10 Meter Net for more years than this writer can remember! Congratulations Wes for a job well done!

Now in our **THIRTEENTH** big year!

WASHfest 2008

The South Hills Hamfest

Sponsored by the Wireless Association of South Hills Amateur Radio Club, Inc.

Sunday, February 24th, 2008

8:00 AM until 3:00 PM Rain or Shine (or Snow!)

Castle Shannon VFD Memorial Hall

3600 Library Road (State Route 88), Castle Shannon, PA

Talk-In on 146.955(-) and 443.650(+) 131.8 PL

FREE Coffee for the entire Hamfest

courtesy of HAM RADIO INSURANCE ASSOCIATES

of Canonsburg, PA



MAIN PRIZES — You've Got to play to WIN!



1st Prize: Kenwood TS-480SAT

2nd Prize: Kenwood TH-D7A

3rd Prize: SGC SG-239 HF Smarttuner

Additional Hourly Door Prizes!

Main Prize tickets are \$2.00 each, or 3 for \$5.00

All Prizes Subject to last-minute changes



For reservations, or information, Contact:

Kevin Smith N3HKQ at (724) 228-4153 or Bill Hill W3WH at (724) 746-1776

E-mail us directly at washarc@yahoo.com Check out our website too!

www.n3sh.org

Solar Update via K7RA

Tad "The Sunbeams Dance, Like Diamonds, on the Main" Cook, K7RA, this week reports: Sixteen consecutive days with no visible sunspots and still counting. This is the way it is at solar cycle minimum. Enjoy it now, because there will be a time in the future when solar winds are constant and the geomagnetic field active; although we will have many sunspots, you may think back fondly on this time. Sunspot numbers for January 17 through 23 were 0, 0, 0, 0, 0 and 0 with a mean of 0. 10.7 cm flux was 73.7, 71.1, 70.8, 70.2, 71.6, 70.3 and 70.6 with a mean of 71.2. Estimated planetary A indices were 10, 10, 9, 6, 4, 2 and 3 with a mean of 6.3. Estimated mid-latitude A indices were 7, 10, 6, 4, 3, 2 and 3 with a mean of 5. The US Air Force and NOAA predict solar flux to continue around 70 through the end of this month, 75 for February 1, and 80 for February 2-3. Geophysical Institute Prague sees quiet conditions January 25-30, and quiet to unsettled for January 31. For more information concerning radio propagation, visit the ARRL Technical Information Service Propagation page <<http://www.arrl.org/tis/info/propagation.html>>. To read this week's Solar Report in its entirety, check out the W1AW Propagation Bulletin page <<http://www.arrl.org/w1aw/prop/>>

CONTEST NEWS (Continued from Page 5)

about 10 Strange Keyboards <<http://tinyurl.com/324ddx>>, some of which might be useful and some of which might be good to back away from in some haste. In particular, I like the lace doily keyboard and expect to see it in ham shacks across the country!

URL of the Week de W1LOU's ARRL Web article "How Not To Buy The Farm" <<http://www.arrl.org/news/features/2008/01/11/1/?nc=1>> really caught my eye this week. Included in the article was a link to K0BG's "Safe Mobile Operation" Web page <<http://www.k0bg.com/safety.html>>. With many of us having just completed a week-end of roving, this mention is a little late, but for many others it may be just in time. Words to live by.

Contests for February 2-3

- North American Sprint - CW
- Minnesota QSO Party
- Ten-Ten International Winter Phone QSO Party
- XE International RTTY
- Delaware QSO Party
- Vermont QSO Party
- YL-OM Contest - CW
- QRP ARCI Winter Fireside SSB Sprint
- FYBO Winter QRP Field Day
- Spartan Sprint - CW

