

# **The Local Club Resource**

By Norm Fusaro, W3IZ from the ARRL

Norm Fusaro, W3IZ, shares his views on how clubs play an important role in Amateur Radio. Fusaro is Assistant Manager of the ARRL's Membership and Volunteer Programs Department. He is also the ARRL AffiliatedClub/Mentor Program Supervisor.

I am very fortunate to be in a position at ARRL which allows me significant interaction with our members. It is very fulfilling to be able to put a smile on someone's face by helping them find a solution to their problem, regardless of the complexity. Sometimes it is not possible to be as helpful over the telephone

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or with e-mail, so I will try to direct the individual to a local club where they may be able to get some sideby-side coaching. The local radio club is without a doubt the place where most of us received our ham radio education. The club is where we learned the jargon and techno-speak used on the air and where we met folks to emulate and folks whom we swore we would never be like.Everything that we know about ham radio that didn't come from a book was probably learned at club meetings or late night Field Day chats over burnt coffee. Personally, I have made many longtime friendships from my involvement in local radio clubs and I am sure many others can say this as well. Clubs, by definition, are groups of like-minded people who share a common interest. In reality a club is an eclectic assembly of individuals, each with a unique perspective of



their activity. The dynamic of a club is no different than that of a large family. Think of your last family get-together and then take a look at your radio club. If everybody was the same, life would be very boring.

In every club, there is the usual cast of characters who add their distinctive flavors to the stew and make things interesting. It is diversity that makes a club work well. I have seen that no matter how varied the personalities are in a club, most of these personalities are also eager to help. Helping each other is characteristic of radio

**CONTINUED ON PAGE 4** 

#### Letters and Emails to the Editor

The eQRM welcomes letters/e-mails to the editor. Letters must be signed and contain your contact information for verification prior to publication. Preference will be given to letters of 200 words or less. Letters are subject to editing. Unused letters will not be acknowledged or returned.

#### The BVARA 10 Meter Net Lunch group will be meeting every Thursday at Kings in Center Twp at 11:00 AM. All area amateurs are invited and encouraged to attend the Thursday Morning Lunch.

VE TESTS are held by the W5YI VE Team at the American Red Cross in Brighton Township, Beaver, PA. IF YOU DESIRE TO TAKE A TEST, CONTACT DALE, KE3SV, FOR THE DATE OF THE NEXT TEST SESSION. Report time is 6:15 sharp, to fill out 605 forms and check I.D. Testing begins at 6:45 PM. Information and registration on a test session can be obtained by calling VE Team Coordinator, Dale Neely, KE3SV after 6PM. His address and phone number are as follows:

Dale R. Neely Jr., KE3SV

444 Center St. Zelienople, Pa. 16063 Phone: 724-452-3247

# 2009 BVARA Officers & Directors

President: Jack Spencer, KZ3Z First Vice President: Robert De Marco, WA3ZRM Second Vice President: Evan Finkelstein , KB3QFR Secretary: Norm Trunick , K3NJT Treasurer: Pam Spencer, W3PMS Director: George Caffro, N3HOJ Director: Chris Moratis, W3OUF Trustee: Dick Hanna, K3VVY







All area Amateur Radio Operators are invited to attend the weekly meeting of the Rossi Winery Wireless Society. The Society meets every Saturday evening at the Winery located in beautiful West Aliquippa. The

meeting begins at 6:30 PM with a traditional vino toast followed by homemade Italian foods! The Winery is

located on Main Avenue in the heart of West Aliquippa's Cultural & Historic District. Talk-in is on the ,31 repeater.





# **RACES & ARES**



## eQRM Urges ALL Beaver County Amateurs to Participate

As a matter of editorial opinion, the eQRM urges all Beaver County licensed amateur's to participate in the County's RACES and ARES programs.

Any Beaver County Amateur that is interested in participating in the RACES/ARES programs can do so by checking into the Beaver County Public Service Net which meets every Monday evening at 8:30 PM local time on the N3TN 146.850 MHz repeater (88.5 PL).

## My Quest for the Ultimate Key By Ulrich J. Steinburg, DJ8GO, from <u>eHam</u>

I have to make a confession right up front, and I have the vain hope that it doesn't kick off one of those perpetually pointless code/no-code discussions: Ever since I got started in ham radio, more than 40 years ago, I have been working 99.9% CW on HF. The way CW is produced has changed so much over time, from straight keys to bugs to single levers to Iambic paddles, keyers with and without memory features, various keyboard designs, that there was enough novelty to keep me busy searching for yet another, better way to create dits and dahs, and I never took a serious look at other modes of operation.

My first key, living in Germany then, was a Junker straight key. I remember it well because I still have it sitting on the top shelf in my display case. It made a major dent into my pocket money budget, but although I couldn't have guessed it then, even after all these years it is still one of the best straight keys that I have ever worked with. I have tried a couple of candidates to take its place, but none of them survived as long.



Using a straight key meant that I could copy faster than I could send, and to draw even I bought the then ubiquitous Hi-Mound BK-100 bug which was sold under various brand names, like Lafayette, Skillman, or Midland. For a while after that the hand was faster than the ear. Although I would have liked a Vibroplex, those were well outside of my financial reach, and the BK-100 was not bad for the money. It, too, has survived to this day. (Meanwhile there are two Vibroplexes in the showcase, too, but I bought them after electronic keyers and paddles had become main stream, and they never saw as much actual use.)



My first exposure to electronic keyers and Iambic paddles was the ETM-3, a combined keyer/paddle. I still remember the discussions whether the Schurr "Wabbler" mechanism would be a worthwhile replacement for the built-in paddles. (If you have ever wondered how the Schurr Wabbler acquired its "upside-down" finger pieces: it was designed as a plug in for the ETM keys and their construction mandated this shape) To this day, when I take the ETM-3 off the shelf, I am surprised how well it was built mechanically even compared to some standalone paddles that you can buy today. But the electronics, built with TTL logic chips, can of course not compete with a modern keyer and is a lot less forgiving when you make minute timing mistakes in your keying.



Eventually I decided to use a separate keyer in combination with a Hamco magnetic paddle, which is still available today as the Vibroplex Brass Racer (although mine was lost along the way). The Hamco settled the paddle issue for quite a while, until about 10 years ago. I also went through a few electronic keyers, until I finally hit upon the AEA MM-3, which I still consider the best memory keyer on the market today.

#### **CONTINUED ON PAGE 6**

#### THE HAM'S HOROSCOPE BY MADAM ZELDA, S T 1ARS

| That's Gold  |   | l'm Happ | У                       | Can't C | omplain | Ν   | ot Happy | Turn Down the Heat |  |
|--------------|---|----------|-------------------------|---------|---------|-----|----------|--------------------|--|
|              |   |          |                         |         |         |     |          |                    |  |
| Sign         | F | Romance  | omance Home &<br>Family |         | Finan   | ces | Career   | General            |  |
| - <b>- -</b> |   |          |                         |         |         |     |          |                    |  |
| Aries        |   |          |                         |         |         |     |          |                    |  |
| Taurus       |   |          |                         |         |         |     |          |                    |  |
| Gemini       |   |          |                         |         |         |     |          |                    |  |
| Cancer       |   |          |                         |         |         |     |          |                    |  |
| Leo          |   |          |                         |         |         |     |          |                    |  |
| Virgo        |   |          |                         |         |         |     |          |                    |  |
| Libra        |   |          |                         |         |         |     |          |                    |  |
| Scorpio      |   |          |                         |         |         |     |          |                    |  |
| Sagittarius  |   |          |                         |         |         |     |          |                    |  |
| Capricorn    |   |          |                         |         |         |     |          |                    |  |
| Aquarius     |   |          |                         |         |         |     |          |                    |  |
| Pisces       |   |          |                         |         |         |     |          |                    |  |

#### The Local Club Resource Continued from front page

amateurs. How often have you experienced something like this? Two hams will be in QSO -- perhaps discussing an antenna installation or radio repair --when another radio operator will break in with a helpful suggestion. This situation may have happened to you, or you may have even been the breaking station. The same thing happens (or should happen) at club meetings. If you need help with something, the closest resource is your local club. On the surface, the club may appear to be dysfunctional, but once you are involved, you will find that it is actually very productive.

The Pareto principle, commonly known as the 80-20 rule is a simple expression that 80 percent of the effects come from 20 percent of the causes. As applied in the business world, this would be 80 percent of the sales are driven by 20 percent

of the customers. In a club, the but the fact remains that a small responsible for making things percent of the members do not plug," some things would never get The doers don't take no for an

# "...without a 'spark plug,' some things would never get started."

percentages may be slightly different, percentage of the membership is happen. This is not to suggest that 80 participate, but without a "spark started. These people are the doers. answer and are always willing to take

on more responsibility. But where is the fun in jump-starting a project without someone telling you it would never work? Of course, it would be much more fun without the negative comments, but that goes against human nature. Ever since man tried to open a coconut with a rock, someone was right beside him offering a thousand excuses why it won't work: "You'll smash your thumb." "The rock will break." "You should invent a wheel and roll it over the coconut." "Let's just eat the bananas." The cynics of the world are an essential part of society -- and of our clubs. They challenge us and make us work harder to prove them wrong. Learn to accept these people but never let them distract you from moving forward. You only get as much from a club as you put into it. A majority of the club bashers tend to be long time hams with a "been there, done that" attitude, asking what a club has to offer them for them. To borrow from President John F. Kennedy, "ask what you can do for your club." Of course, we took more than we had to offer when we were younger and inexperienced. But over the years, we have gathered knowledge that we can share with the newcomers. Based upon my countless interactions with hams of all levels of experience, the novice has much to offer the old-timer, even if it is just reliving the joy of discovery. The local radio club has something for everybody who is willing to get involved.



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

# **A BIG THANK YOU!**

To the family of Donald McMurdy, WB3AIF for the donation of the IC-765 and Drake TR-4C and to George, NN3J for the donation of the Yaesu FT101ZD

# STUDY GUIDES TO BE USED IN UPCOMING BVARA LICENSE CLASSES

Technician Class—*The No-Nonsense, No-Code Technician Class License Study Guide* is based on a

Study Guide is based on a method developed by Bruce W8BBS. What he did for the earlier question pool is to rephrase each question in the form of a statement and then organize the statements to make them readable. Bruce was unable to update his manual for the question pool that went into effect in July 2006, so he gave us permission to do it. General Class—The No-

# Nonsense, General Class License Study Guide. This

is the study guide for those taking the General Class license exam after July 1, 2007. It follows the same format as the Technician Class Study Guide. Note, though, that there are more questions in this pool, and in general, the questions are more technical than the Tech Class, so be prepared to study longer and harder than you did for the Tech test. Visit: http://kb6nu.com/techmanual/ for more info on these guides.

#### My Quest for the Ultimate Key Continued from page 3

When the N2DAN Mercury paddle appeared it spawned, and does to this day, many similarly designed offspring, like the Hensley and the N5QVF paddles. They provided a level of precision and stunning looks that surpassed the old Hamco, and I bought and tried quite a few of them. Since I really couldn't afford keeping expensive designer paddles around just for the pride of ownership, I sold most of them to make financial room for the next one. (In hindsight I wished I hadn't done that, considering the prices that some of them fetch on eBay these days.)

About two years ago I finally found my ultimate Iambic paddle in Italy, made by Piero Begali. His keys are manufactured on expensive computer controlled machinery and embody a level of precision and beauty that seems virtually impossible to top. His Magnetic Classic key, and especially the brand new "Signature" key that incorporates some ideas that I discussed with Piero, represents everything that I ever wanted in a Iambic paddle, and he keeps refining it in subtle ways that only very experienced operators would notice.



So I could have lived happily ever after, except, of course, that that's a pretty boring state of affairs. I knew that, in terms of precision and workmanship in Iambic paddles I had probably reached the pinnacle with the Begali keys. So, where can you go from there? -- Back to the roots of manually created CW?

When you listen to signals on the bands you'll sometimes hear incredibly fast operators with a perfect fist. Most of the time you realize pretty quickly that the other guy is using a keyboard - the errors they make, which are very different from errors you make with a key, give them away. But sometimes you'll hear signals that obviously don't emanate from a computer. And that is how I found my latest challenge in the quest for the perfect key...

Alberto Frattini, I1QOD, is one of the fastest operators on the planet. And I'm not talking 599 contest exchanges here, but rag chewing with his rarefied group of EHSC buddies at speeds in excess of 60wpm. (It goes without saying that they don't use electronic CW readers.) As impressive as that is, what left me totally awestruck was when I learnt that Alberto mostly shuns the electronic crutches that mere mortals like myself have to use even at far slower speeds, and that he does much of his operating with mechanical keys.

Let me make another confession: I'm a lousy golfer. But, like most of my golf buddies, and despite overwhelming evidence to the contrary, I have this unshakable conviction that, if I would only buy the clubs that Tiger Woods uses, I could somehow perform like Tiger Woods. I guess in that same spirit I set out to determine what kind of miracle key Alberto is using. My search turned up photos of some incredible keys that he made for himself. I'm showing two of his keys here, a variation of the "Swedish Pump" straight key, and his incredible duallever magnetic bug. Both are works of art that appear to come out of a jeweler's shop. (Although Alberto was an aircraft mechanic before his retirement.)



**CONTINUED ON PAGE 7** 

#### PAGE 7

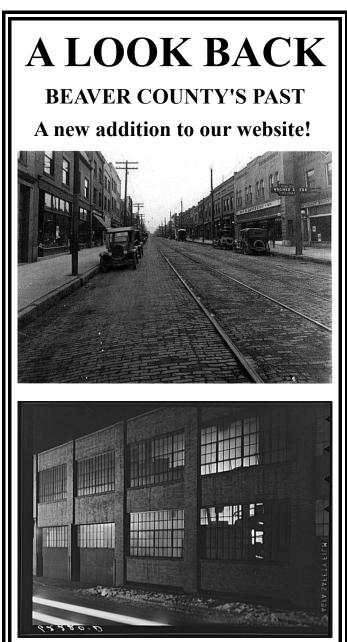
#### My Quest for the Ultimate Key Continued from page 6



I knew that I just somehow had to get these keys - which is easier said than done. Alberto makes them for his own use, and he has produced only a few for his friends. So you can't just reach for your wallet and order one. I tried to contact him by email without much success. Eventually I resorted to plain mail and solicited the support of Piero Begali, and I was able to elicit a response and work out the details about pricing and shipment. (Let me keep a few secrets here for now... If you really want to know, send me an email: ulrich@steinberg.cc). Today these two keys are sitting on my desk, and they are the most stunning combination of precision and beauty in mechanical keys that I have encountered so far -- truly on par with the Begali Iambic keys. I have actually gone back to my roots and use these mechanical keys guite often, although I have to admit that I'm still better with my Begali Signature and my MM-3 keyer. Meanwhile I have -- sort of -- convinced Alberto that he should offer his keys for sale and you may be able to order them one day...

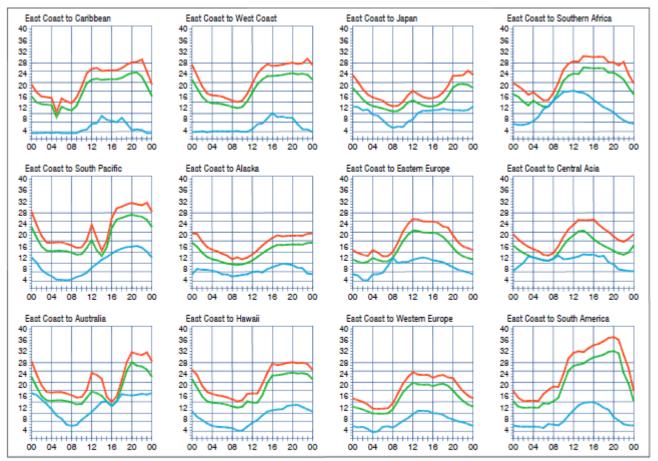
I suspect that Alberto could probably still outrun me by touching two bare wire ends to produce CW, but I'm pretty sure that in any CW shootout with mechanical keys Tiger Woods doesn't stand a chance against me now.

Keys and paddles these days have far transcended what they originally meant for me. They are not just a means to produce code but, at their finest, are affordable technical sculptures that embody workmanship and beauty in their own right. You could collect and admire them even if you are not a CW operator, although the subtle differences in construction can probably only be appreciated if you actually use them. After a while you begin to realize that a great key is more than a collection of parts. There are quite a few keys out there that use many of the right ingredients and are nevertheless mediocre at best because their creators didn't understand what makes a great key or compromised in the wrong places. And there are a few rare keys that are far better than a look at their technical specs would lead you to believe. The best keys that I own these days leave no doubt that my CW abilities are the limiting factor, but I have found satisfaction in understanding and admiring their artful design that will make this a neverending quest for perfection.



Check out more images at <u>http://www.w3sgj.org/oldbc.html</u>

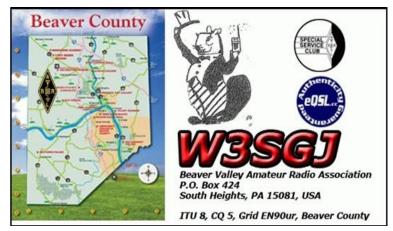
# **QST Propagation Charts**



When are the bands open? These charts, generated using CAPman, show probabilities for average HF propagation in the month of September 2009 for the paths indicated. The horizontal axes show Coordinated Universal Time (UTC), and the vertical axes frequency in MHz. On 10% of the days of this period, the highest frequencies propagated will be at least as high as the upper red curves (HPF, highest possible frequency) and on 80% of the days they will be at least as high as the agreen curves (MUF, classical maximum usable frequency). The blue curves show the lowest usable frequency (LUF) for a 1500-W CW transmitter. For S3B or a lower transmitter power, the LUF will be somewhat higher than the blue curves indicate. See Oct 1994. *QST*, pp 27-30, and Feb 1932 (QS7, pp 34-36, for more details. The predictions assume an observed 2800-MHz solar flux value of 95. This is a Medium level of solar activity. See the detailed propagation tables on *The* ARIEA. Anterna Book CO-RGM.

# The above chart is for the month of September.

# FOR INFORMATION ON HOW TO READ THESE CHARTS, <u>CLICK HERE</u>





# **Recipe of the Month: BLUEBERRY COBBLER**

## Ingredients

Cooking Spray

4 cups/1 litre blueberries, fresh or frozen (thawed)

1/2 tsp/2.5 mL Lemon Extract

1 cup/250 mL all-purpose flour

1/2 cup/125 mL sugar

1 tsp/5 mL Baking Powder

Dash salt

1 tbsp/15 mL Original Grapeseed Oil

1 tsp/5 mL Original Double-Strength Vanilla

2 egg whites, lightly beaten

2 tbsp/30 mL sugar

1/4 tsp/1.2 mL (more if desired) Purest Ground Cinnamon 6 oz.

## **Cooking Directions**

Preheat oven to 350°F/180°C. Spray a 1-1/2 quart/litre baking dish with Watkins Cooking Spray. Add blueberries and lemon extract; toss lightly. Combine flour, 1/2 cup sugar, baking powder and salt. Mix well, then make a well in center. In measuring cup, combine oil, vanilla and egg whites; mix well. Pour into flour mixture and stir just until moistened. Drop 8 dumplings of dough onto blueberries. Sprinkle with a mixture of remaining sugar and cinnamon. Bake 35 minutes or until bubbly and browned.

Makes 8 servings.



This recipe is brought to you by Watkins watkinsonline.com/w3sgj



Just think of all the products you currently use that can be replaced with Watkins products. By switching to Watkins' superior quality and value, you'll be saving money on your monthly essentials and supporting your favorite organization. *The BVARA receives 16 to 35% of ALL SALES MADE THROUGH THIS SITE!* 

If you buy flavorings, spices, salt, cooking oil, soup, desserts, dip mixes, moisturizers, lip balms, room fresheners, glass cleaners, cough medicines, dietary supplements, laundry detergents, or anything similar, head over to <u>www.watkinsonline.com/w3sgj</u> and make the switch to Watkins today!

#### Using Twitter During Mobile Operation By Jeff Nyberg, KF5KWO, from <u>eHam</u>

Whenever I get a road trip, I jump on the air with my 10-meter mobile rig. So, having the opportunity today (Saturday, August 1, 2009) to drive from San Antonio to Houston, I prepared for 7 to 8 hours of calling CQ and making a few contacts -- just a few since 10 meter conditions aren't the best right now.

I alerted the <u>County Hunters</u> with my plans -albeit late last night -- including my route (along I-10) and the counties through which I would pass. But then it hit me: With band conditions being so poor, I want to alert folks as to the county I'm in so they don't have to search and search and probably miss me.



So I created a <u>Twitter account</u> and sent updates via my cell phone as I entered each county. I added that URL to my post on County Hunter, the idea being that folks could go onto the Twitter site and see when I'm in each county and give me a call on my frequency. They could even choose to receive updates on their phones via text message if they so desired.

My plan was flawed from the standpoint that I didn't advertise my trip until late last night -- don't the best ideas always come up at the last minute? Yeah, that's the ticket... Also, I'm not sure how many hams use Twitter, or how many would care to create an account for this kind of short-duration event.

A quick search of "DX" on Twitter shows a few DX sites are there, including the DailyDX, which I have elected to "follow."



So, that's great idea I hatched late last night. I will be going that same route next Saturday (August 8), and will post that info on various websites and also on Twitter. Hope to garner

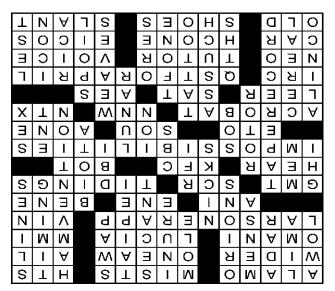
a few more contacts. Comments?

# **QUESTIONS FROM THE EDITOR!**

What is your favorite *recurring* part of the newsletter? (Ham Horoscope, Hams Love to Eat, Crossword, Prop Charts)?

Would you like to see W3SGJ use Twitter for our events (Field Day, ARMAD, etc.)?

# Let me know by clicking here and voting!



described

# **CROSSWORD PUZZLE - "HAM HUMOR #2"**

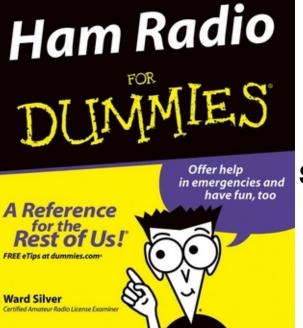
This second humor related puzzle refers to a long time contributor of... um... challenging projects

#### from the <u>ARRL Website</u>

|  |                       |          |          |          |                             |  |     |   | VIII         | une      | <u>/ / / / / / / / / / / / / / / / / / / </u> |       |          |       | <u>-</u>   |
|--|-----------------------|----------|----------|----------|-----------------------------|--|-----|---|--------------|----------|---|-------|----------|-------|--|
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| 17   | -                     | <b> </b> | <u> </u> | <u> </u> |                             | 18   |     | <u> </u>  |              | <u> </u> |   | 19    | <u> </u> |       | 1. Roll call misser  |
| 17   |                       |          |          | Ι.       |                             | 10   |     |   |              |          |   | 19    |          |       | <b>2.</b> Before mike  |
| 20   |                       |          |          | 1        | 21                          |  |     |   |              |          |   | 22    |          |       | <b>3.</b> 4X month   |
|  | 2                     | 2 2      |          |          |                             |  |     |   |              |          |   |       |          |       | 4. The brainy bunch  |
|  |                       |          | 23       |          |                             |  | 24  |   |              |          | 25  |       |          |       | <b>5.</b> Tennessee transceivers                             |
| 26   | 27                    | 28       | 2        | 29       |                             | 30   |     | 31  |              | 32       | 2 <u>9</u> - 9                                |       |          |       | 6. XE sauce  |
|  | 2                     |          | -        |          |                             |  |     | 84  |              |          |   |       |          |       | 7. Accustom (to)   |
| 33   |                       |          | 34       |          | 35                          |  | 36  |   |              | 37       |   |       |          |       | 8. Trig ratio  |
| 38   | 2                     |          |          | 39       |                             |  |     | 40  | 41           |          |   |       | 42       | 43    | <b>9.</b> BV city  |
|  |                       |          |          | Ĩ.       |                             |  |     | 10  |              |          |   |       | 72       | 10    | <b>10.</b> Shop partner, on a net, say                       |
|  |                       | 44       |          |          |                             |  | 45  | i ki k  | a a          |          | 46  | 84    |          |       | <b>11.</b> Takes place at Hara                               |
| 17   | 10                    |          |          |          | 10                          | 50   |     | 54  |              | 50       |   | 50    |          |       | <b>12.</b> It's everything, often                            |
| 47   | 48                    |          |          |          | 49                          | 50   |     | 51  |              | 52       |   | 53    |          |       | <b>13.</b> Collins sets                                      |
| 54   | 2                     | 3 5      |          |          | 55                          |  | 56  |   | 57           |          | 58  |       |          |       | <b>21.</b> Scratches, as to a wire                           |
|  |                       |          |          |          |                             |  |     |   |              |          |   |       |          |       | <b>25.</b> Flora and fauna                                   |
| 59   |                       |          |          | 60       |                             |  |     | 61  |              |          |   | 62    | 63       | 64    | <b>26.</b> JK predecessors                                   |
| 65   | 3                     |          |          | 66       | -                           |  |     |   |              | 67       |   |       |          |       | 27. Storage, for short                                       |
|  |                       |          |          |          |                             |  |     |   |              |          |   |       |          |       | <b>28.</b> What we did before way, mp3, etc.                 |
| 68   |                       |          |          | 69       |                             |  |     |   |              | 70       |   |       |          |       | <b>30.</b> Ham bane  |
| 71   | -                     |          |          | 72       |                             |  |     | -   |              | 73       |   |       | _        | -     | <b>32.</b> Ant. performance meas.                            |
| 1  |                       |          |          | 12       |                             |  |     |   |              | 1.5      |   |       |          |       | <b>34.</b> Yagi yawer  |
|  |                       |          |          |          |                             |  |     |   |              |          |   |       |          |       | <b>36.</b> KB2GSD network                                    |
| •  |                       |          |          |          |                             |  |     | 4.4   | 11           |          |   | :0    |          |       | <b>39.</b> Weep<br><b>40.</b> Shumana raflactor              |
| Acr  | OSS                   |          |          |          |                             |  |     |   | ipna<br>orme |          | e suff  | 1X !  |          |       | <ul><li>40. Skywave reflector</li><li>41. EME path</li></ul> |
| 1. R   | emer                  | nber     | ed pl    | ace i    | n W5                        | -land                                      | 1 1 |   |              |          |   |       |          |       | <b>41.</b> EWE paul<br><b>42.</b> Suffix with persist        |
| <b>5.</b> Sj   | Sprays 40. CW, to FCC |          |          |          |                             | <b>43.</b> Driver's license datum          |     |   |              |          |   |       |          |       |  |
| 11 Small rigs 47. Adobe product  |                       |          |          |          |                             | <b>47.</b> Maker of 11 across, for example |     |   |              |          |   |       |          |       |  |
| <b>11.</b> Sinah Hgs <b>14.</b> F3 compared with A1, say <b>51.</b> Dir. for HL from W2 <b>53.</b> W5 ARRL sect. |                       |          |          |          | <b>48.</b> Some like it hot |  |     |   |              |          |   |       |          |       |  |
|  |                       |          | sign     |          |                             |  | 4   |   | iniste       |          |   |       |          |       | <b>49.</b> Per se  |
|  |                       |          |          | islan    | d, wi                       | th Al                                      | 111 |   |              |          | or one  | 2     |          |       | <b>50.</b> Arm art   |
|  |                       | enize    | n        |          |                             |  |     |   |              |          | ment  |       | er       |       | <b>52.</b> Interlaces  |
|  | l6 na                 |          |          |          |                             |  |     |   |              |          |   |       |          | a QSI |  |
|  | 9/11 j                |          |          |          | <i>c</i> 0                  |  | •   |   | omet         |          | ucco  | -     |          | SAE   |  |
|  | -                     |          | autho    | or in (  | 60-ac                       | ross                                       |     | 50. F   | reque        | ent n    | lace f  |       |          | umor  |  |
|  | F9 w                  |          |          |          |                             |  |     |   | -            | -        |   |       |          |       | <b>61.</b> Loads from lodes                                  |
|  |                       |          | ower     |          |                             |  |     | <b>65.</b> Opposite of paleo-<br><b>66.</b> Elmer, in a way |              |          |   |       |          |       | <b>62.</b> TI last name                                      |
|  |                       | o CN     |          |          |                             |  |     | <b>67.</b> VOA part   |              |          |   |       |          |       | <b>63.</b> Desktop feature                                   |
|  |                       | d goo    |          |          |                             |  |     |   | -            |          | r Coi   | net r | noun     | ting  | 64. " we forget"   |
|  |                       | -        | ecess    | sor      |                             |  |     |   |              |          |   |       |          | lace  | 0  |
|  |                       | istor    | type     |          |                             |  | (   | <b>59.</b> E  | quate        | orial    | prefi   | X     | 1        |       |  |
|  | News                  |          | 41       | - 1-4    | 4                           |  |     | <b>70.</b> 720 and 753, for example                         |              |          |   |       |          |       |  |
|  |                       |          |          |          | ector                       |  |     | <b>71.</b> Opposite of 65 across                            |              |          |   |       |          |       |  |
|  |                       |          | V4 su    |          | · ·                         |  |     |   |              |          | slang   |       |          |       |  |
|  | -                     |          |          |          | h net                       |  |     |   | -            |          | ntatio  | -     |          |       |  |
| 30.  | w nat                 | . 20 a   | cross    | s' arti  |                             |  |     |   | 1            |          |   |       |          |       |  |

# ANNOUNCEMENTS

Here's what you need to know to get on the air!



Courtesy of WA3ZRM, we have a contest on our website, <u>www.w3sgj.org</u> ! Click a hidden link somewhere on the website and you can download a free copy of "Ham Radio for Dummies!"

Jack Spencer, KZ3Z, will be hosting a Radio License Class at 6:00 PM on Wednesday evenings at the Baden Legion! If you would like to attend, RSVP to KZ3Z at (724) 869-2429 !

Don't forget to vote at the polls on our site! <u>www.w3sgj.org/polls.html</u>