# DELAWARE LEHIGH AMATEUR RADIO CLUB Inc. APRIL 2011

W3OK CORRAL

Club Meeting At the Nancy Run Fire Company Company 7:30 PM April 7th 2011



John / WX3C and Carl / AA3IX at their table for the Mini Hamfest.

# **MEETING PROGRAM**

Bob / NE2C "Bits & Pieces"

Projects you can build from surplus parts

Meeting Night Theme

Most Outrageous Hat

#### FROM THE PRESIDENT'S SHACK

#### Try it. You might like it. George / N3SQD

I've been licensed for over 15 years. So, I'm not what you'd call a new ham. I am mostly a phone guy, and primarily a DX person at that. There's something about working a person on the opposite side of the planet using just the gear in my shack and a bit of wire (not the trans-global wire or fiber, or a multimillion dollar satellite) that appeals to me. That said, about a week or so ago I worked RTTY for the first time. Not only did I work some RTTY, I started working RTTY during a RTTY contest. Did I mention that I'm not much of a contester?

Now I have heard that RTTY was to digital modes, what spark was to CW. I've always associated RTTY with clacking teletype machines. Loud noise and the smell of warm oil. Not my cup of tea. I had worked some of the newer digital modes like packet and PSK31. They introduced the computer element into the equation and were interesting for their technology. I knew that RTTY had advanced to the computer age, but it always seemed something of a step backwards. So RTTY remained a mode that was understood, but not practiced.

About this time last year, Dave K3GMT mentioned that he had worked a RTTY contest and had a lot of fun doing it. Dave's setup was very similar to mine, Flex Radio and wire antennas. On the software side PowerSDR and N1MM logger. At the time, I listened to his enthusiastic descriptions. The year went by and I didn't give it another thought. Then, earlier this year, he again mentioned that the contest was coming up and that he was planning on working it. I mentioned that I'd like to learn more and Dave invited me to stop by during the contest.

On Saturday morning, I went to the Milk-house and checked out the operation. Dave explained the basics of tuning stations and the exchange. He then walked me through a couple of contacts and described some of the nuances of the contest. I made some more contacts. Before I left, Dave provided the details of the software setup.

After lunch, I sat down at the computer and setup the logging program for the contest. Then came the changes to operate RTTY. On a software defined radio there are no wiring changes just software changes to connect the various components. On a traditional (real?) radio, you would have cables and an interface to connect your radio to the computer (which does the RTTY decoding).

With the changes made, I fired up the radio and located the RTTY traffic on 20M. I found a station calling CQ and put his call into the logging program. Watched another station respond. Waited for the QRZ and then hit the function key for the macro to send my call. His exchange came back and was put into the logger. I hit the function key for the macro to send my exchange and waited for his confirmation. On the confirmation, I hit the enter key and my first RTTY contact (and first point in the contest) was in the log. That was easy! I began tuning for the next station and a few moments later had another entry in the log. I spent the better part of Saturday afternoon and part of Sunday repeating this process.

I found it an enjoyable way to "play radio". While I listened to the RTTY tones on the speaker, I didn't have to try and pull out a faint call. No straining, listening to faint signals, pile-up noise, or inscrutable accents. Sure, in a pile-up what came across the screen was garbled. I would just wait until I was sure of the call and then jump into the fray. I made some changes to my macros to improve the quality of the exchange (and unfortunately the length). All in all, things went very smoothly. Now, in the end, I didn't pull off this huge RTTY contest score. That wasn't my goal. Having fun was the goal, and that was achieved.

Moral of the story: Give some of the other modes a try, you may be pleasantly surprised. 'til next month.

73 - **N3SQD / George** 

# APRIL CONTESTING AT THE OK CORRAL



April 1st & 2nd – SP DX Contest – SSB & CW April 9<sup>th</sup> & 10<sup>th</sup> – QCWA Spring QSO Party April 16<sup>th</sup> & 17<sup>th</sup> – Holyland DX Contest April 23<sup>rd</sup> & 24<sup>th</sup> – Helvetia Contest April 31<sup>st</sup> & May 1<sup>st</sup> - Florida QSO Party



### **VE TEST SESSION**

There will not be a test session this month. The next session will be May 6<sup>th</sup> at 7:00 PM at the Northampton County 911 Center. Pretest registration is required. Contact George / N3SQD at george@bioserv.com or AI / W3CE at w3ce@arrl.net.

#### WEBSITE OF THE MONTH

**Anderson Powperpole IDEAS:** 

http://home.comcast.net/~buck0/app.htm

#### MINUTES FROM THE MARCH 3rd MEETING

The general membership meeting of the Delaware Lehigh Amateur Radio Club inc. was held at the Nancy Run Fire company in Bethlehem Township on March 3rd 2011.

Call to Order: The meeting convened at 1930 hours, President George / N3SQD presiding.

Members & Guests in Attendance: 57 with 4 guests.

#### REPORTS:

Approval of the minutes: 1st Rich / N3UB, 2nd Joe / KB3BTJ Motion Carried

Approval of the Treasurer's Report: 1st Terry / KB3VFB, 2nd Bob / KB3ULB. Motion Carried.

Repeater/ Web-site: no issues

VE Session: Friday, March 4th at 7:00 pm. At the Northampton County 911 Center

Club Station: Dave / K3GMT reported 90 visitors last month and the club station was active for the CQ DX

Worldwide CW Contest scoring 2.1 million points

Membership: 151 pd members - 78 not renewed and will be locked out of the web-site. He also presented an

application for one new member; Keith / KB3UMX. 2nd Terry / KB3VFB - Motion Carried

#### **EVENTS:**

2 meter Sprint - April 9 10: am - 11:00 pm

**5K Walk -** April 16 - 15 volunteers needed starts 9:00 am - Contact **Charlie / N3WXO Lehigh Valley MS Walk** - May 1st Sunday - 8:30 am, **Howard / W03P** looking for volunteers **Field Day -** June 25-26 - Louise Moore Park looking for operators for over night operation.

Bear Run Bike Ride- October

Emmaus Halloween Parade: Same date as Bike Ride

**PA QSO Party** 

#### **OLD BUSINESS:**

WIAW Bus Trip: April 11th tickets \$50.00 1st come 1st served basis

#### **NEW BUSINESS:**

Classes for Technician and General: Bob / KE3AW Reported classes start March 8th 7:00 pm at the Northampton County 911 Center

**Ed / AA3OU:** received credit for his handling of the club's arrangement with the Nancy Run Fire Company

– A motion on floor to make a donation to the Nancy run Fire Company. 1st

Gary / N2AUO, 2<sup>nd</sup> Jay / N3OW. Motion Carried

**Dues** – For members not paid by the end of December there will be a change in the dues structure, the addition of an additional \$3.00 to cover the cost of purchasing, printing, envelopes and stamps for a mailing notice.

#### APRIL PROGRAM:

Bits & Pieces by Bob / NE2C

APRIL THEME: Most outrageous hat.

Adjournment: Meeting adjourned at 7:55 by George / N3SQD. 1st Dave / K3GMT, 2nd Gary / N2AUO

Respectfully submitted by Doreen / KB3PDL, Secretary

#### **APRIL 2011 QUICK CHECK CALENDAR**

| SUNDAY                                | MONDAY          | TUESDAY | WEDNESDAY                              | THURSDAY           | FRIDAY                      | SATURDAY                 |
|---------------------------------------|-----------------|---------|--|--------------------|-----------------------------|--------------------------|
|                                       |                 |         |  |                    | 1                           | 2                        |
| 3                                     | 4               | 5       | 6 DLARC<br>RACES/ARES<br>Net (WO3P)    | 7 DLARC<br>MEETING | 8 No V. E.<br>SESSION       | 9                        |
| 10                                    | 11 ARRL<br>Trip | 12      | 13 DLARC<br>RACES/ARES<br>Net (KB3CTX) | 14                 | 15 HAPPY<br>IRS<br>DEADLINE | 16 Hanover<br>Twsp<br>5K |
| 17 NewsLetter<br>Articles<br>Deadline | 18              | 19      | 20 DLARC<br>RACES/ARES<br>Net (W3CE)   | 21                 | 22                          | 23                       |
| 24<br>HAPPY<br>EASTER                 | 15              | 26      | 27 DLARC<br>RACES/ARES<br>Net (KC3II)  | 28                 | 29                          | 30                       |

#### **WIRELESS ADVANCES COULD MEAN NO MORE CELL TOWERS**

#### from Yahoo

NEW YORK – As cell phones have spread, so have large cell towers — those unsightly stalks of steel topped by transmitters and other electronics that sprouted across the country over the last decade.

Now the wireless industry is planning a future without them, or at least without many more of them. Instead, it's looking at much smaller antennas, some tiny enough to hold in a hand. These could be placed on lampposts, utility poles and buildings — virtually anywhere with electrical and network connections. If the technology overcomes some hurdles, it could upend the wireless industry and offer seamless service, with fewer dead spots and faster data speeds.

Some big names in the wireless world are set to demonstrate "small cell" technologies at the Mobile World Congress, the world's largest cell phone trade show, which starts Monday in Barcelona, Spain. "We see more and more towers that become bigger and bigger, with more and bigger antennas that come to obstruct our view and clutter our landscape and are simply ugly," said Wim Sweldens, president of the wireless division of Alcatel-Lucent, the French-U. S. maker of telecommunications equipment. "What we have realized is that we, as one of the major mobile equipment vendors, are partially if not mostly to blame for this."

Alcatel-Lucent will be at the show to demonstrate its "lightRadio cube," a cellular antenna about the size and shape of a Rubik's cube, vastly smaller than the ironing-board-sized antennas that now decorate cell towers. The cube was developed at the famous Bell Labs in New Jersey, birthplace of many other inventions when it was AT&T's research center. In Alcatel-Lucent's vision, these little cubes could soon begin replacing conventional cell towers. Single cubes or clusters of them could be placed indoors or out and be easily hidden from view. All they need is electrical power and an optical fiber connecting them to the phone company's network. The cube, Sweldens said, can make the notion of a conventional cell tower "go away." Alcatel-Lucent will start trials of the cube with carriers in September. The company hopes to make it commercially available next year.

For cell phone companies, the benefits of dividing their networks into smaller "cells," each one served by something like the cube antenna, go far beyond esthetics. Smaller cells mean vastly higher capacity for calls and data traffic. Instead of having all phones within a mile or two connect to the same cell tower, the traffic could be divided between several smaller cells, so there's less competition for the cell tower's attention.

"If it is what they claim, lightRadio could be a highly disruptive force within the wireless industry," said Dan Hays, who focuses on telecommunications at consulting firm PRTM.

Rasmus Hellberg, director of technical marketing at wireless technology developer Qualcomm Inc., said smaller cells can boost a network's capacity tenfold, far more than can be achieved by other upgrades to wireless technology that are also in the works. That's sure to draw the interest of phone companies. They've already been deploying older generations of small-cell technology in areas where a lot of people gather, like airports, train stations and sports stadiums, but these are expensive and complicated to install.

In New York City, AT&T Inc. has started creating a network of outdoor Wi-Fi hotspots, starting in Times Square and now spreading through the midtown tourist and shopping districts. Its network has been hammered by an onslaught of datahungry iPhone users, and this is one way of moving that traffic off the cellular network. Smaller cells could do the same job, but for all phones, not just Wi-Fi enabled ones like the iPhone. They could also carry calls as well as data.

San Diego-based Qualcomm will be at the Barcelona show with a live demonstration of how "heterogeneous networks" — ones that mix big and small cells, can work. A key issue is minimizing radio interference between the two types of cells. Another hurdle is connecting the smaller cells to the bigger network through optical fiber or other high-capacity connections. That's an impediment that we're seeing many operators struggling with right now as data volumes have increased," Hays said.

LM Ericsson AB, the Swedish company that's the largest maker of wireless network equipment in the world, is also introducing a more compact antenna at the show, one it calls "the first stepping stone towards a heterogeneous network."

Small cellular base stations have already penetrated hundreds of thousands of U. S. homes. Phone companies like AT&T, Verizon Wireless and Sprint Nextel Corp. have for several years been selling "femtocells," which are about the size of a Wi-Fi router and connect to the phone company's network through a home broadband connection. The cells project radio signals that cover a room or two, providing five bars of coverage where there might otherwise be none.

British femtocell maker Ubiquisys Ltd. will be in Barcelona to demonstrate the smallest cell yet. It's the size of a thumb and plugs into a computer's USB drive. According to Ubiquisys, the idea is that overseas travelers will plug it into their Internet-connected laptops to make calls as if they were on their home network, but there are potential problems with interference if used that way.

According to Rupert Baines, marketing head of Picochip Ltd., a more realistic application for a tiny plug-in cell is to make it work with cable boxes or Internet routers, to convert them into femtocells. A key part of the "small cell" idea is to take femtocells outside the home, into larger buildings and even outdoors.

Picochip, a British company that's the dominant maker of chips for femtocells, will be in Barcelona to talk about its chips for "public-access" femtocells, designed to serve up to 64 phone calls at a time, with a range of more than a mile. They could be used not just to ease wireless congestion in urban areas, but to fill in dead spots on the map, Baines said. For instance, a single femtocell could provide wireless service to a remote village, as long as there's some way to connect it to the wider network, perhaps via satellite.

Analyst Francis Sideco of research firm iSuppli pointed out a surprising consumer benefit of smaller cells: better battery life in phones. When a lot of phones talk to the same tower, they all have to "shout" to make themselves heard, using more energy. With a smaller cell, phones can lower their "voices," much like group of people moving from a noisy ballroom to a smaller, quieter room. "Ultimately, what you end up with is a cleaner signal, with less power," Sideco said.

# THE MARCH THEME PRIZE WINNER

**Doug Mackey / KB3NOW** was the winner of the loudest Hawaiian Shirt. The field was large but Doug prevailed.



# MORE OF THE COMPETITION











#### **MONTHLY BRAIN TEASER**

"A special prize awaits the first Club Member to submit the correct answer to this month's Brainteaser to Pete / NL7XM at nl7xm@arrl.net via E-mail. He must be present at the next Meeting to receive it, or it goes unrewarded. Officers, Board members, and Brain Teaser Authors are not eligible to win."

de NL7XM

# MARCH BRAINTEASER ANSWER With a Pumpkin Patch

The winner is Wendell / KB3UNB



#### **APRIL BRAINTEASER**

Where will you find roads without cars, forests without trees, and cities without houses?



# THE LATEST ON ARISSat-1 Mike / KA3JAW

I like to pass along new information that I obtained on ARISSat-1. As you know, the satellite is still inside the International Space Station awaiting the revised spacewalk deployment in July this year.

An announcement has been made that on Tuesday, April 12, 2011 the satellite will be powered-up inside the ISS and connected to an external antenna. This is to celebrate the 50th anniversary of Yuri Gargarin's first manned space flight.

For those stations reporting reception of the signal, certificates will be issued.



#### **SOMETHING FROM KA3JAW**

Here is a video I posted on YouTube yesterday. It is a educational reminder to anybody that stores a radio(s) outside in a shed for extended amount of time.

I went to the shed to take out an old tube type receiver that I have not used in years. When I was still inside the shed I turned the radio around so I could see the back of it. When I did I noticed something dark moving between the metal chassis and cabinet. Once I realized what it was, I placed the radio on top of an outside cement patio table.

At this point I decided to video tape the event so others will learn (educated) not to directly take radio equipment (or other personal equipment) inside your home without checking the inside first, even if it means taken it apart all the way. If you don't take time to do this step you might find yourself at home in your ham shack using the radio equipment and this lycosidae comes out of the cabinet looking at you in your face with it's eight eyes.

http://www.youtube.com/user/Insulatedwire336#p/a/u/0/ENVJM5yew8I

#### THE 2011 DLARC (2-METER) SPRINT

This years event will be held on Saturday, April 9, from 10:00AM until 11:00AM EDST.

All activity will be on 2-Meter **SIMPLEX** in the 146MHz portion of the band. Each individual simplex frequency will have a letter assigned as if it were a different band as hereby shown,

146.43=A, 146.46=B, 146.49=C, 146.52=D, 146.55=E and 146.58=F.

It is important that the letter designation must be entered in your log for each contact. You are encouraged to make QSO's with each station on as many different frequencies as you can, (see scoring). Times should be entered for each contact.

The **EXCHANGE** will be a personally chosen 3 letter group. Suggested is the 3 letter abbreviations for the PA Counties as used in the PA QSO Parties. Or, you can use your personal initials. Choose one of the county abbrevs as shown here.

ARM, ADA, BUX, BRA, CMB, CAR, DAU, DCO, ERI, FAY, FRA, GRE, HUN, INN, JUN, LAW, LUZ, MGY, MER, NUM, NHA, PHI, POT, SCH, SUS, TIO, UNI, VEN, WAR, WAY, YOR.

**SCORING** will be **ONE** point for each contact, (all frequencies totaled). A **multiplier** will be determined as follows; **ONE** multiplier will be awarded for each station that is contacted on a minimum of 4 different Frequencies.

These requirements will make it truly a sprint atmosphere. Chit-chatting will be less productive, so be forewarned. If you want to make a real splash then be sure to have all the Frequencies programmed into your radios.

Log requirements are; Each page must show in the header your CALL and your chosen 3-LETTER exchange sent. The individual log entry must include; TIME, FREQ LETTER, CALL and PERSONAL 3-LETTER INFO RECEIVED.

Final score may be your arithmetic, but will be checked by the committee.

Logs may be mailed to **Pete / NL7XM**, or to me, or may be turned in at the May meeting. The winner awards will be made at the June meeting. A list of the scores will be available. [If you work 25 people on all 6 Freqs, (that's 150 QSO's) which would give you a multiplier of 25, your score (max.) would be 3750 points. Surely possible, but? 150 Q's in one hour?]

Questions? e-mail to w3tdf@ptd.net

#### **2011 MS WALK**

The MS walk will be held Sunday May 1 2011 at Coca-cola park, Directions are:

Take U.S. 22 W to Exit for Airport Road South. Merge Right off exit ramp onto Airport Road South. Make a Right on American Parkway (at light, with intersection). Make a Left into Coca-Cola Park complex.

Registration starts at 9 A.M.

Walk starts at 10 A.M. (Rain or Shine)

Our members should show up at 8:30 am to get into place,

Thank you, Howard / WO3P



# **NEWS FROM THE MILKHOUSE**

92 visitors this month. Looking for warm weather so the ADO guys can set up out side. Its been a long winter!

#### **NEW MEMBER**

The DLARC is continuing to grow, so be sure to greet our new member, shake his hand, and give him a warm welcome to our club. The newest member is **Keith Gottwald / KB3UMX** 

#### MARCH MEETING PROGRAM

Another mini-hamfest was the program for March. The time to move the dust collecting extra equipment and any other items that would be of some use to another member. And from all appearances, it was another success. The tables around the meeting room were full and interest seemed high. At the end there were many smiles on the faces of the buyers and sellers which would indicate the satisfaction of all.

#### THE LOST ART OF CABLE LACING

#### By Dan Romanchik, KB6NU

The Make: magazine blog is a wealth of information for amateur radio operators. Recently, they ran a post on what they consider to be on the "lost technology" of cable lacing <a href="http://blog.makezine.com/archive/2009/07/lost-knowledge-cable-lacing.html">http://blog.makezine.com/archive/2009/07/lost-knowledge-cable-lacing.html</a>.

The blog post does a great job of explaining the technique and includes several illustrations. One of them <a href="http://cdn.makezine.com/make/blogs/blog.makezine.com/upload/2009/10/lost\_knowledge\_cable\_lacing/cableLacing6b.gif">http://cdn.makezine.com/make/blogs/blog.makezine.com/upload/2009/10/lost\_knowledge\_cable\_lacing/cableLacing6b.gif</a> is a drawing from an old ARRL handbook. There are also a link to the Wikipedia page on cable lacing <a href="http://en.wikipedia.org/wiki/Cable\_lacing">http://en.wikipedia.org/wiki/Cable\_lacing</a>.

Nowadays, we mostly use zip ties to bundle cables, but there are disadvantages to using them. For one thing, to apply them properly, you should have a tool that controls how tightly the zip tie holds the wires. This is to prevent crushing the insulation.

Also, I've found that zip ties don't do so well when the cable has only two or three wires. They're just not designed to hold so few wires. I think that cable lacing would do a much better job of keeping a small bundle of wires together, say wires that connect front panel components to a PC board.

Cable lacing certainly looks much cooler than zip ties. This is the perfect technique for those homebrewers that want to make their projects look great as well as work great.

I asked on my blog, "Now, where can I find the 'wax-impregnated cotton or twine'?" and my readers came through. Hamilton said, "Apparently you find wax string here: <a href="http://www.kitkraft.biz/product.php?productid=1496">http://www.kitkraft.biz/product.php?productid=1496</a>. I remember using it for something as a kid, but I can't place it." Ron McKenz wrote, "I notice that a number of telco vendor sell waxed lacing cord. Here are a few URLs: <a href="http://www.sourcetelsupply.com/catalog/index.php?cPath=27">http://www.sourcetelsupply.com/catalog/index.php?cPath=27</a>, <a href="http://www.tessco.com/yts/resourcecenter/pdfs/clablelacing-FAQ.pdf">http://www.tessco.com/yts/resourcecenter/pdfs/clablelacing-FAQ.pdf</a>, and <a href="http://www.oelsales.com/product.cfm/267/">http://www.oelsales.com/product.cfm/267/</a>.

Ned, WB4KBO, said, "I would suggest a large roll of dental tape and a large-diameter curves sewing needle for fabricating harnesses. I was told that this was the material of choice for lacing harnesses when i worked at Heath Company many years ago. Makes sense to me. Buy it at Meijer for an occasional harness, or a dental wholesale supply house if you are going into production. Also great stuff for kite rigging, vine lacing and many other things."

Mike, WA6ARA wrote, "What you want is Mil-T-43435. It is better than a cord, it is a flat weave tape, nylon, and waxed. It is made for cable lacing but is use now in the parachute industry as "super tack". Item T1050 at <a href="http://www.paragear.com">http://www.paragear.com</a>"

So, there you have it. Links to show you how to do it, and a couple more links for where to find the lacing material. I now expect all of our homebrew to look a lot neater.

When not worrying about how to lace cable instead of using zip ties, Dan, KB6NU, blogs about ham radio at <a href="https://www.kb6nu.com">www.kb6nu.com</a>, teaches ham radio classes, and operates CW on the HF bands. Look for him around 7.030 MHz or e-mail him pictures of your beautifully-laced cables at <a href="mailto:cwgeek@kb6nu.com">cwgeek@kb6nu.com</a>.

#### **REDNERS' SUPERMARKETS SAVE-A-TAPE PROGRAM**

#### Here's how it works:

Redner's has a terrific program to support the Club **AT NO COST TO THEM**, if our members simply sign up for a Gas Card that records their shopping points, and give their cash register receipts to, **Pete / NL7XM**, He'll do the rest. **Note: This does not affect your gas points in any way.** 

# **HELP THE ENVIRONMENT**

Donate your old, empty printer ink cartridges to the Club for recycling. Any brand, model, size or shape; color or black. Please bring them to the meeting in a leak proof ziplock type baggie and give them to Pete / NL7XM. This simple act can

help your Club by reducing recurring expenses, and make you feel a lot better about our environment.

#### 2010 PENNSYLVANIA QSO PARTY

The results are in and the Delaware-Lehigh Amateur Radio Club was third in the club competition with a score of 674,795. Behind 2<sup>nd</sup> place Murgas Amateur Radio Club, with a score of 947,578 and the winner the Frankfort Radio Club with a score of 1,538,989. the DKLARC had 22 operators on the air for the event, with **Ray / W3TDF**, top score for the club and also for Franklin County. Other county top scores were, **Jeff / N3QO** top score for Montgomery County, **AI / W3CE** top score for Potter County and **Tom / N3EBH** top score for Union County.

#### **WANTED: OLD CALLBOOKS**

Pete / NL7XM is paying cash for OLD Callbooks. Contact him directly at: NL7XM@arrl.net

#### DID YOU KNOW THAT ...

#### Cocoa reduces inflammation?

People who drank 17 ounces of skim milk with 40 grams of unsweetened cocoa every day for four weeks had significantly lower levels of inflammation and higher levels of HDL ( good ) cholesterol, potentially slowing or preventing the development of atherosclerosos. Cocoa is rich in flavonoids, which may help to reduce inflammation.

#### **HINTS & KINKS**

#### Waterproofing Your Automatic Antenna Tuner

#### Geoff Haines / N1GY

As an avid Amateur Radio operator, I sometimes use an automatic antenna tuner to operate more than one band with the same antenna. My mobile unit uses an LDG RT-11 autotuner to feed a pair of "Hamstick" style antennas on several different bands. One antenna covers the lower bands and another antenna covers the higher ones. An excursion into operating "fixed portable" with a telescopic vertical had me looking for another solution. In order to minimize the coax losses when feeding a



Figure 1

vertical monopole away from its resonant band it is necessary to reduce the distance between the tuner and the antenna to a minimum. The use of ladder line is not feasible when the antenna is fed almost at ground level. In order to do this, it is necessary to place the tuner almost directly at the base of the antenna and thus reduce the coax run from the tuner to the antenna to nearly nothing. The coax from the tuner to the transmitter can then be any appropriate length since the mismatch has already been corrected. Owning an LDG Z-100 automatic tuner already, I looked for a way to mount it at the base of the antenna and yet protect it from the elements. A phone call to LDG gave me the necessary specifications for a 50 foot extension of the control cable so the only thing left was to find a workable enclosure for the tuner itself. I discussed the requirements for such an enclosure with my spouse, Audrey. Without a word, she rummaged through a kitchen cabinet and produced a semi flexible plastic container that had a snap-on lid and fit my Z-100 and its cables to a T. I drilled four small holes in one end of the container into which I fitted two short coax jumpers, one for the antenna and one for the radio. I also

made up and installed a

short 4-conductor cable to connect the stock control harness to the 50 foot extension. The fourth opening was used for a similarly short insulated wire to connect the grounding stud on the Z-100 to the radial system of the antenna. Once these four cables were in place, I sealed the drilled openings with hot glue. Silicone caulk could be used just as easily, provided it will stick to the container. I did not try that because the hot glue was at hand so you are on your own there (see Figure 1). With the jumpers connected to the tuner, the extension cable and coax were run to the transceiver and the antenna erected. Now, testing was in order. The pressing of the TUNE button on my IC-706MKIIG did exactly what it was supposed to do. The Z-100 ran through its paces and signaled a good match. Now if the afternoon showers come while I am operating "fixed portable," the only thing I have to worry about is keeping me and the radio dry. The tuner is cozy in its own



Figure 2

little raincoat (see Figure 2)

Total cost, even if you had to buy the container new at the discount store, would probably not exceed \$10. That does not include the extension control cable of course. The container was already here and I had enough UHF connectors, coax, wire and weatherproofing on hand for the project. The only thing I had to buy was the 4-conductor cable and Molex connectors to build the 50 foot extension cable. This project has enabled me to comfortably operate "fixed portable" from the beach, at Field Day and many other events where a vertical was the only feasible antenna. As long as the container can handle the physical size of the tuner with room for the connecting cables, any automatic tuner could be protected in this way.

#### THE STORY BEHIND THE STORY OF PENICILLIN

Everyone knows that the Scottish scientist Alexander Fleming discovered penicillin in some moldy bread in his laboratory at St Mary's Hospital in London. Penicillin was one of the first antibiotics discovered and is still one of the most widely used to combat bacterial infection. Although the story of Fleming's discovery is true, he wasn't the first to observe the beneficial effects of penicillin, which is derived from the penicillium fungi commonly found in mold.

Bread with blue mold growing on it was used to treat infected wounds during the middle ages – Arabian stable masters, for example, used it to cure sores on horses. In 1896, a French medical student named Ernest Duchesne submitted a paper on penicillin's healing properties to the Institute Pasteur, but his findings were ignored because of his youth. A Costa Rican doctor Clodomiro Picado Twight, reported similar observations on the4 effects of the Penicillium fungi in treating infections, On September 28, 1928, Fleming noticed blue-green mold growing on a plate of but his discovery won little attention. Staphylococcus bacteria that had been left open. The mold produced a halo of inhibited bacterial growth from which Fleming concluded that the mold contained a substance that resisted the bacteria. It wasn't until the 1940's though, that the active ingredient in Penicillium was identified and the doctors began using it to treat infections.

#### ATLANTIC DIVISION NEWS

March 9, 2011 Bulletin 2011-04

# \*\*\* IMPORTANT - Letters to your US Representative Requested \*\*\*

Your prompt help to defend one of our amateur bands is urgently requested. Please read and follow through on the requested action.

You may have already heard that our 440 MHz band is being attacked by a bill introduced into the US House of Representatives. In its current form, HR 607 would take away the 420-440 MHz segment that is presently allocated to Amateur Radio on a secondary basis as our 70 cm band. Along with certain other segments not allocated to Amateur Radio, the 420-440 MHz segment would become part of a spectrum "give back" involved in allocating 758-763 and 788-793 MHz for a Public Safety broadband network.

The concept of this network has merit. Everyone wants first responders to have the radio systems they need in order to protect themselves and us. However, there is absolutely no need to take our 440 MHz band in making it happen. We need to let our US Representatives know we oppose the current form of HR 607.

To let your US Representative know you oppose the present bill, go to <a href="http://www.kd4pyr.net/hamletter.htm">http://www.kd4pyr.net/hamletter.htm</a>. Insert your call sign where indicated and follow the simple instructions. The name and address of your US Representative will automatically be put into the letter, as will your name and address. It will be ready to be printed and signed.

IMPORTANT: Please be sure to observe the following once you have printed your letter: - Be sure to sign it. Letters without a handwritten signature are not effective. - Signed letters can be sent by fax or postal mail. They can also be scanned into PDF format and e-mailed as a file attachment. Postal mail: John Chwat, Chwat & Co., Suite 103, 625 Slaters Lane, Alexandria, VA 22314. E-mail: john.chwat@chwatco.com. Fax number: (703) 684-7594. - Do not send this letter or any letter about HR 607 to your US Senators at this time. The bill is only in the US House of Representatives. Letters sent on HR 607 to US Senators will merely waste their time and demonstrate lack of knowledge of how our system of government works.

WHY SHOULD the letter be mailed to John Chwat? There are two reasons. First, all postal mail to members of the US House (and other government bodies) is delayed 6 to 8 weeks in being searched for hazardous materials that may be included in them. Second, Mr. Chwat will increase the value of your individual letter by combining it with others and delivering the stack of letters directly to your Representative's office. This manner of delivery makes a particular impact on our Congressmen. If you feel it necessary to mail your letter directly to your Representative, do it. However, please also send a signed copy of it to Mr. Chwat for the reasons outlined above.

# \*\*\* Third Call Bureau Changes \*\*\*

There is a group of amateur radio volunteers that provide an excellent service to the amateur community and that is the incoming call bureaus. The Atlantic Division has two call bureaus serving members of our division. These volunteers receive incoming QSL cards for amateur radio operators within their respective call district and pass them out to sorters who sort them down and them mail them out to the amateur radio operators who the cards are being sent to.

To receive QSL cards through the bureau, it is important to send self addressed envelopes with stamps so that the call bureau can mail your cards to you. And it is also important to make sure that you keep enough envelopes and enough postage on file with your call bureau so they can send your incoming cards to you.

The Third Call Bureau manager, Fred Laun K3ZO, announced that the 'P' sorter, Brian Gaffney K3PU had to step down due to some family commitments and that a new 'P' sorter has been appointed. So while materials are being transferred and the new 'P' sorter brought up to speed, there may a little delay in the 'P' QSL cards being distributed. If anyone has any questions, please send an email to Fred at hs0zar @ gmail.com

73,

Bill Edgar / N3LLR, Atlantic Division Director Tom Abernethy / W3TOM, Atlantic Division Vice Director

#### **ORIGINS OF COMMON TERMS**

The origins of some figures of speech are obvious – putting the cart before the horse, for instance. Others are little more obscure. From Jeff Rovin's book "The Unbelievable Truth!" (Signet) here's a look at the explanations behind three common expressions:

**Pulling the wool over their eyes.** In the 17<sup>th</sup> and 18<sup>th</sup> centuries, thieves and robbers would yank their victim's wool wigs over their eyes so they couldn't see who was attacking them.

**Blackmail.** In the 16<sup>th</sup> century England, mail meant "rent" or "tribute". Debts that had to be paid in silver were called "white-mail". A debt that could be paid in any other way – from livestock to property was called "black-mail". Because blackmail did not have a set value, the person collecting the debt could extort any amount or anything they wished from the debtor.

**Red Tape.** For centuries, it was the British custom to seal important documents with red wax and red tape. Cutting through it was the only way to get at the documents and read them.

#### STOP THAT TWITCHING EYE

It can happen at any moment. Suddenly, without warning, your eye begins to twitch, as if it is doing a little dance. What the heck is going on?

Allergies, stress, fatigue, and even certain medications can irritate nerve endings in the eye, causing muscles in the eyelid to twitch. It can last a few minutes, or a couple of days, but in some cases it can go on for as long as a month.

Here is a cure if you are getting tired of all the twitching: Simply hold down the upper eyelid with your finger for one minute. For stubborn twitched, apply a warm compress for five minuets up to three times a day, for two straight days. If this fails, and it starts to get to you, consult a physician.

# The May Program will be Operating QRP (Live demo) Barry / KU3X

The D.L.A.R.C. meets the "FIRST" Thursday of each month. Membership, friends and interested persons meet at the Nancy Run Fire Company Social Hall (3564 Easton Avenue, Bethlehem, Pa. 18020) at 7:30 PM. Committee reports and announcements of all present and future activities will be presented at that time. Followed by that month's program.

The EASTERN PENNSYLVANIA District 2 ARES Net meets every Wednesday at 1930 hours local time. (Just after the DLARC Net ) On 147.255 (pl 162.2). And linked to 449.375 on Blue Mountain, 443.350 in Allentown and 147.180 in Berks County.

D-Star Mid-Atlantic Regional net meets the second and fourth Tuesdays of each month on the 147.165 port with a number of other repeaters in Eastern Pennsylvania, New Jersey and New York City area.

The OK Corral is an organization publication for the purpose of informing members of the D.L.A.R.C. of educational and training opportunities, club events, relevant news articles and a monthly calendar of daily activities, meetings and dates. Every member of the D.L.A.R.C. Is welcome to contribute articles of interest to this newsletter. Opinions, items of interest, and even suggestions towards the improvement of newsletter and/or the DLARC, itself would also be accepted, as a sort of "Letters to the Editor" section.

The Milkhouse telephone number is 484-895-7038.

# EXECUTIVE COMMITTEE 2009 – 2010 OFFICERS

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# PHONE NUMBERS FOR THE EXECUTIVE COMMITTEE OF THE DLARC CAN BE FOUND ON THE WEBSITE / MEMBERSHIP LISTING

#### **CLUB MEETINGS**

All regular meetings of the D.L.A.R.C. Are held on the first Thursday of each month at 7:30 PM at the Nancy Run Fire Company TALK IN ON 146.700 (PL 151.4)

#### THE W3OK TRUSTEE --- DON REAMER / KA3JWE

The W3OK Corral is published monthly and is the Official Publication of the DELAWARE LEHIGH AMATEUR RADIO CLUB INC.

14 Gracedale Avenue

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# ARES, RACES AND DLARC NET

All Radio Amateurs are welcome to participate in the ARES, RACES and DLARC net. This net meets Wednesday at 1900 hours local time, on the W3OK Repeater 51.76, 146.70 and 444.90 ( pl 151.4 ). With an alternate frequency of 147.370 ( 167.9 ) W3OI Repeater.

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