

DELAWARE LEHIGH AMATEUR RADIO CLUB Inc.

OCTOBER 2011



W3OK

CORRAL

**Club Meeting October 6th 7:30PM
At the Nancy Run Fire Company**

ELECTIONS 2011/2012

The October meeting is the DLARC's annual election month. The following are the candidates for the up coming year. Below is the election roster for the DLARC. The only "race" is for the office of vice president.

President – Charles Lazarchak / W3OPA

Vice President – Tom Slapinsky / KB3IUE;

David Blankenship / N3EYT

Secretary - Joe Garvey / KB3VZP

Treasurer – Mike Gower / KB3LOD

Board of Directors, of which 5 to be elected:

Gary DeMave / N2AUO

Bob Oppen / NE2C

Jon Matson / NJ3I

Dave Mellman / KA3IWC

Jay Mason / N3OW

The the end of this newsletter there are 2 ballots for the election.

One is for voting at the meeting and a second ballot for absentee voting. Be sure to vote!

MEETING PROGRAM

DLARC Mini Ham Fest II

MEETING THEME

Halloween Costume Night



FROM THE PRESIDENT'S SHACK

Thanks for the memories.

George / N3SQD

The kids are back in school, the September club meeting is behind us, and the nominations for the board and officers are closed. Next up is the October meeting and the club elections. With the October elections, my term as club president comes to an end. For me, this has been a great experience, and I am indebted to the membership for the opportunity to serve.

I thought that I would take a moment to share an observation or two from my time as president. When I was thinking about the topic of this article, I thought that I should try to thank individually all those that have helped me in one way or another over the past two years. I quickly realized that it would be the bulk of the club roster and would make for too long of an article. So, I must thank you collectively. Thank You.

For me, what makes the DLARC such a great club is the scope of activities and the camaraderie. We have meetings with interesting programs, mini - hamfests (the next one is at the October meeting), help at public walks and bike rides, fox hunts and project Lifesaver, weekly breakfasts and dinners, club trips, contests (PA QSO party second weekend in October), and a club station that is open just about every Wednesday night, Tuesday night, most Friday nights and many Saturday and Sundays. We also offer classes for those that want to be hams and classes for those that are hams and want to upgrade. We have equipment that can be borrowed and small library for reference. The club station is equipped with a broad variety of radios and antennas, and can put three simultaneous stations on the air. It has been my good fortune to be able to participate in all of this. I know that there have been some weeks in the last few years when every day of the week had some DLARC activity! Keep in mind that this is a bounty of activities and companionship that is open to all the members.

Without a doubt, the greatest aspect of this club is the thousands of acts of kindness, generosity, and support that I have observed. I have watched our members help other members erect antennas, repair equipment, clear brush, learn new operating modes, understand new technology, encourage upgrades, loan equipment, assist at public events, make hospital visits, chair events, setup and tear-down for meetings, cook, clean, transport to and from meetings, coordinate events and operations, and just plain have a good time. We would do well to continue to foster this sense of community as it appears to be the very heart of the success of our club.

With this in mind, stay active in the club by participating in club activities as your time and capabilities permit. If you do, you will enjoy the same sense of community that I have experienced as a member of the DLARC.

I hope to see you at the next club meeting (or sooner).

Thanks again.

73 - N3SQD / George

OCTOBER 2011 QUICK CHECK CALENDAR

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
						1
2 GAP GALLOP	3	4	5 DLARC RACES/ARES Net (N3SQD)	6 DLARC MEETING	7 NO V. E. SESSION	8 PA QSO PARTY
9 PA QSO PARTY	10	11	12 DLARC RACES/ARES Net (KR3U)	13	14	15 Black Bear Bike Run Halloween Parade
16	17 NewsLetter Articles Deadline	18	19 DLARC RACES/ARES Net (NB3R)	20	21	22
23	24	25	26 DLARC RACES/ARES Net (KB3CTX)	27	28	29
30	31					



MINUTES FROM THE SEPTEMBER MEETING

The general membership meeting of the Delaware-Lehigh Amateur Radio Club Inc. was held at the Nancy Run Fire Co. in Bethlehem Twp., PA on September 1, 2011.

Call To Order: The meeting convened at 1933 hrs. with President **George / N3SQD** presiding.

Pledge of Allegiance: Led by **George / N3SQD**

Moment of Silence: A moment of silence in memory of 9/11 started the meeting

Members in Attendance: 51 with 3 guests

REPORTS:

Approval of Minutes: Motion by **Gary / N2AUO**; 2nd by **Jon / NJ3I**. **Motion carried.**

Approval of Treasurer's Report: Motion by **Marvin / KA3TEO**; 2nd by **Robert / KB3ULG**. **Motion carried.**

Repeater: AI / W3CE reported that the Wind Gap site is down and that there is low output at the Lehigh Valley site. **Barry N3NVA** is working to restore operations at these sites.

Website: Nothing to report.

VE Schedule: George / N3SQD reported that a VE session was scheduled for the following night, September 2, at the Northampton County 911 Center.

Tech Classes: Bob / KE3AW announced that training sessions for Technical and General will start 9/13/2011. The training sessions will run for nine weeks.

Milk House: Dave / NB3R reported that the Milk House made it safely through Irene. The antennae and the equipment are intact. However, the firewall is down, and the Magic Jack phone line is down with it. Calls can be made to the Milk House by calling 610-746-1900, ext. 8306, until the problem is corrected.

Membership: Dave / NB3R reported that membership at 176. Two new members were inducted. **Joe O'Brien / W1ZE** was inducted on a motion by **Don / KC3II**, 2nd by **Doreen / KB3PDL**. **Evelyn Uhler / WA3YRK** was inducted on a motion by **Pete / NL7XM**, 2nd by **Marvin / KA3TEO**. **Motions carried.** Membership is now 178.

EVENTS:

Emmaus Halloween Parade: Bob / KE3AW announced that we will again provide communications for The Emmaus Halloween Parade on October 15th with a rain date of October 16th. Volunteers are needed.

Technical Training: George / N3SQD took a few moments to solicit volunteers to help with the technical training sessions. Those with experience should consider helping those new to Amateur Radio by helping to instruct at the training sessions.

Picnic: AI / W3CE reported that the Club picnic originally scheduled for August 27th was held the evening of August 29th due to Irene. The turnout was surprisingly good. Members were treated to hamburgers and hot dogs, various salads, snacks and desserts.

VIA Marathon: Mark / AK3M is looking for volunteers to work the VIA Marathon on September 11, 2011. Contact Mark for details.

Lehigh Valley Wheelmen Century Bike: AI / W3CE reported that the event will be held October 2, 2011. Volunteers should contact AI for details.

Black Bear 100 Mile Bike: Ben / KB3CTX reported that the ride will occur on October 15th. The trek takes bikers from Portland, PA, to High Point, NJ, and back. Volunteers should contact Ben. APRS radios are particularly welcome.

PA QSO Party: George / N3SQD reminded the members that the party will occur October 8th and 9th.

OLD BUSINESS:

Project Lifesaver: AI / W3CE reported that the county is moving very slowly on this project. We will continue to drill while we wait for the county. A drill is planned for September 10th. Contact AI for details.

Nominations: Dave / N3EYT presented the slate of nominees for Club offices and for the Board of Directors

President: **Charles Lazarchak / W3OPA**

Vice-President: **Tom Slapinsky / KB3IUE, David Blankenship / N3EYT**

Secretary: **Joe Garvey / KB3VZP**

Treasurer: **Mike Gower / KB3LOD**

Board of Directors (5 to be elected):

Gary DeMave / N2AUO

Bob Oppen / NE2C

Jon Matson / NJ3I

Jay Mason / N3OW

David Mellman / KA3IWC

With no additional nominations offered by the membership, the nominations were closed on a motion by **Pete / NL7XM**, 2nd by **Marvin / KA3TEO**. **Motion carried.**

Mini Ham Fest: Dave / NB3R reminded the members about the Mini Fest scheduled for the next meeting. Members should bring equipment for barter or sale next month.

NEW BUSINESS:

No new business to report.

Adjournment: With no further business, **Marvin / KA3TEO** moved to adjourn, 2nd by **Jon / NJ3I**. **Motion carried.**

Program: Dave / NB3R – DXpedition.

Respectfully submitted by **Joe Garvey / KB3VZP** acting Secretary

NEW MEMBERS

The DLARC is continuing to grow, so be sure to greet our new members, shake their hands, and give them a warm welcome to our club. The newest members are **Evelyn Uhler / WA3YRK** and **Joe OBrien / W1ZE**

VE TEST SESSION

There will not be a test session this month. The next session will be November 4th, 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.

MONTHLY BRAIN TEASER

"A special prize awaits the first Club Member to submit the correct answer to this month's Brainteaser to the Pete / NL7XM at nl7xm@arrl.net. The winner 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**



SEPTEMBER BRAINTEASER ANSWER

By setting the snooze time to 9 minutes, the alarm clock only needs to watch the last digit of the time. So, if you hit snooze at 6.45, the alarm goes off again when the last digit equals 4. They couldn't make it 10 minutes, otherwise the alarm would go off right away, or it would take more circuitry.



NO WINNER THIS MONTH

OCTOBER BRAIN TEASER de Paul / KB3LIC

A keeper puts 6 snakes into 4 cages. No cage is left empty, or contains an odd number of snakes. How is this possible?

HIGH FREQUENCY RF AMPLIFIERS

What do I need to know?

Barry G. Kery / KU3X

- How much RF output power do I need?
- Do I need an amplifier with tubes or solid-state devices?
- If tubes, is one tube enough?
- Pi or Pi-L?
- Why do I need a 3 KVA power supply when I can only run 1500 watts out?
- Can I use an RF amplifier on my 120 volt @ 15 amp wall outlet?
- What would be a good amplifier to purchase?



Let me first start out by saying one important thing, **"Put your money into a good antenna system before buying an amplifier."** If you can't hear them, you can't work them.

A good antenna gives gain in two directions, receive and transmit. If you use a poor antenna, you will get poor performance in both directions. If you install an antenna that has a 5 DB gain over a dipole, you will get 5 DB gain in ERP (effective radiated power) as well as 5 DB gain in receive that will show on the S meter. Also, don't forget to use quality transmission line. You won't go wrong with RG-213.

If you are not a, "Big Gun" contester, you probably do not need an amplifier that is designed to operate at 1500 watts of output power all day long. You will find that an amplifier that can produce anywhere from 500 to 800 watts of output power is more than enough power for the average ham.

Let's see what the S meter reads when we increase output power. First we have to understand what the S meter is telling us. Each increase of one S unit is about 5 to 6 DB, depending on how the manufacture calibrates their rigs. To go from a reading of S6 to S7 you will need to increase your output power by 5 to 6 DB. Let's use 6 DB as our reference since most modern rigs are closely calibrated to this scale. Every time you double your output power you increase your power by 3 DB. If you again double your output power you will get another 3 DB increase in power which is a total of 6 DB from your original power level. If you are transmitting at a 100 watt power output level and the ham on the receive end of your signal is seeing an S5 on his S meter, in order for him to see an S6 on his meter you would have to increase your power output level by 6 DB or go from 100 watts to 400 watts. In order to go from an S6 to an S7 on the receive end of the same signal you would then have to go to 1600 watts of output power. Seeing 1500 watts of output power is the legal limit, that's as close as you are going to get to an S7 meter reading.

If you have an amplifier that produces 750 watts of output power you will have an 8.75 DB gain over a 100 watt radio which comes out to about an S unit and a half. If you go from 750 watts to 1500 watts, you will have a 3 DB advantage which is only one half of an S unit. "So why go to 1500 watts?" If you are in a DX pileup or going one on one with another ham, that 3 DB may be enough for you to be first in the pileup. If you and your friend are both running 750 watts of output power and both of you are giving the ham on the receive end of your signal exactly the same S meter reading, by you increasing your power to 1500 watts you will have a half of an S unit advantage which will get you through to the other ham first, all things being equal.

Tubes in general are more forgiving than solid-state devices in today's amplifiers. Most of the older and smaller tube amplifiers have little, if any, protection circuitry. Going back in time and looking at RF amplifiers like the old dependable Heathkit SB200 or the SB220, the only protection they had were fuses in the AC primary lines. You just had to watch how you tuned the amplifier. The only value the fuses offered were to give some protection after a catastrophic failure like a shorted power transformer. If a tube shorted, the meters would blow and maybe the fuse would eventually blow. The first real level of protection amplifier manufactures incorporated in amplifiers was grid protection. If you drove the amplifier with too much power or did not tune the amplifier properly, you would over drive the grid(s) and do possible damage to the tube(s). With grid trip protection, if the grid current went past a predetermined value, the grid protection relay would drop out and the amp went into a standby mode.

Tube type amplifiers of today are either grounded grid or grid driven, class AB1 or AB2. These make for good linear amplifier designs. Some of the older amplifiers were grid driven class AB1 and could also be driven into class C. You should not drive any amplifier into class C and use it on SSB. If you did, the signal would be distorted and cause splatter on the band. Class C would be for CW only. The efficiency of a class AB1 or AB2 amplifier would be in the range of 55 to 65%. In class C you would increase the efficiency to a range of 70 to 75%. Many years ago amplifiers were rated on input power and class C would give an advantage of more power out with less power in.

Let's talk efficiency. "What does it mean?" Hams debate the following formula all of the time. Go to any forum on the internet that talks about amplifiers and you will see what I mean. Bill Orr, W6SAI worked at Eimac tube division and wrote many books about ham radio in general and also wrote what was referred to as, "The West Coast Handbook." These were a series of handbooks that gave, what I call, the best place to read and learn about RF amplifiers. I refer to them as, "The Amplifier Builder's Bible." Bill Orr's formula is comparing power output to power input. He does not subtract drive power, from the radio, in his formula. Example: 1500 watts of output power divided by 2400 watts of input power equals .625 or 62.5% efficiency. Your next question is, "how do we figure input power?" We multiply plate voltage times plate current under load. Example: 3000 volts key down times 800ma equals 2400 watts of input power.

Here is where efficiency really comes into play. It not only tells you how good of a job the manufacture did when they designed the amplifier but it tells you how to choose the proper tube or tubes for the RF section. Looking at the above formula we can see the amplifier starts out with 2400 watts of input power but only produces 1500 watts of output power. What happened to the difference in power of 900 watts? Well, that is what the tube has to dissipate. If the tube is not designed to dissipate that much heat, or the tube is not cooled properly, the tube will fail. If your amplifier is only 50% efficient, that means you will need 3000 watts of input power to produce 1500 watts of output power. Now the tube will have to be able to dissipate 1500 watts of power that is turned into heat.

When it comes to transmitting tubes, the old dependable 3-500Z tube is still a great tube to use in RF amplifiers. They are still reasonable in price, take a lot of abuse before failure and produce a lot of power. A properly designed RF deck with a single 3-500Z is capable of producing 1000 watts of output power. I have never seen any design on the market that can do this without abusing the tube. The Ameritron / MFJ AL80 series amplifiers advertise 1000 watts of output power and they will do it. The problem is, they are over driving the tube, producing IMD on the bands and shortening the tube life. Their plate voltage is too low and the tube is not cooled properly. A pair of 3-500Z's is a nice amplifier, can produce 1500 watts of output power if designed properly and can give you years of dependable service. The old 572B series tubes are still available and are still widely used. Four of these tubes will generally produce 1200 watts of output power. Some amplifiers still use 811A's and are inexpensive to replace. I would not run RTTY on an amplifier using 811A's. Going up the list of tubes, the 3CX1500 / 8877 tube is a very rugged tube but very expensive. One of these tubes is capable of producing as high as 3000 watts of output power. The 4-1000 tube is still readily available and can easily produce 1500 watts of continuous output power all day long.

Svetlana, a Russian tube manufacture, has been supplying tubes for amplifier manufactures for many years. Some top of the line RF amplifier manufactures are using Svetlana tubes, like the 4CX800, 4CX1000 and 4CX1600 series tubes.

Pi and Pi-L refer to the tank circuitry in your tube amplifier. Pi-L uses an extra inductor or the addition of a 4:1 unun in the tank coil assembly. A properly built Pi network will offer about 45 DB of third order harmonic attenuation. This will vary with plate load impedance and does comply with FCC specification. Pi-L offers 65 DB of third order harmonic attenuation and is not affected with plate load impedance. A second advantage Pi-L offers is smoother tuning on 80 and 160 meters.

Power supply requirements can vary. There are two types of ratings, CCS and ICAS. CCS stands for, "continuous commercial service." This rating means the amplifier can put its rated power out, non stop, 24 hours a day 7 days a week. That would equate to a 100% duty cycle. TV and radio broadcast stations look for these ratings. ICAS stands for, "Intermittent commercial amateur service." This usually equates to a 50% duty cycle. VA stands for Volt - Amp ratings. KVA is 1000 Volt - Amp rating. If it takes about 2400 watts of input power to produce 1500 watts of output power, a good choice for a rugged power supply would be a supply rated at 2.4 KVA. If the transformer produces 3000 volts and can handle 800ma of current load, the transformer is rated at (3000 x .8) 2400 VA or 2.4 KVA. If the transformer is rated at 2.4 KVA, it does not mean the power supply is rated at 2.4 KVA. Remember, there are bleeder resistors across the capacitors in the power supply and that will generate a partial load on the transformer. That load can be as high as 10% of the total load. Watch how the manufactures advertise their power supply ratings, it's all in the wording.

Very few amplifiers have high KVA ratings for their power supplies. Most of them are rated well below the 2 KVA. Unless you get an amplifier, like a Command, QRO or an Alpha top of the line models, the KVA rating of most amplifiers are in the range of 600 VA to around 1.2 KVA. The high rating is not really needed unless you are running a very high duty cycle. A 600 VA power supply can easily supply a tube with enough power to produce a comfortable 800 watts of output power. This is the reason most manufactures tell you to reduce the power output of their amplifier when running RTTY or SSTV.

You can gauge the capacity of a transformer by its weight. A transformer that weighs 30 pounds has a capacity of 700 watts of commercial service. This same transformer has a rating of 1500 watts of CW service and 1900 watts of SSB service. These ratings are watts delivered to the RF deck, not power output from the amplifier.

Years ago Dentron made a 2000 watt PEP input amplifier model number MLA-2500. This amplifier weighed only 47 pounds. Although the tubes were the weak link in this amplifier, it could run 1200 PEP watts out all day long and not overheat the power supply. I am not suggesting you look for a lightweight RF amplifier. I am just trying to give you an idea of a duty cycle comparison between commercial service and amateur radio service.

Solid-state amplifiers have come a long way and have become very popular with contesters. The reason is, they do not have to be tuned which makes for fast band changing. The Icom and Yaesu amps are very popular as well as the Tokyo Hy Power amplifiers. The efficiency of SS amplifiers is in the range of 50%. For these amps to produce 1000 watts out you must have a power input of 2000 watts. That means you have to dissipate 1000 watts of heat. SS devices are not as forgiving to high SWR or over driving as tube type amps. SS amps have a lot of protection built in. They trip if the SWR goes over 1.5 :1, if you over drive them, if you put them on the wrong band or if they get too hot. Remember, the amp's protection is the last line of defense before failure. Watch carefully how you treat a solid-state amplifier. Don't learn to depend on the protection circuitry built into the amplifier for everyday use. Most tube amplifiers can easily handle a 2:1 SWR or higher without doing any damage to the tube(s) or the RF deck. Solid-state amplifiers can not handle high SWR without failure. Your only choice is to either use a transmatch to get the SWR down or reduce the output power. SS amps read reflected power, not SWR.

The standard wall outlet can deliver 120 volts at 15 amps (1.8 KVA). This is a variable and depends on the wiring, not only in your house, but in your neighborhood. Even the time of day and the season of the year can come into play. On a very hot summer afternoon everybody who has air conditioners on adds more of a load to the power grid. This can cause the voltage to drop.

Just because you can supply 1.8 KVA from your standard wall outlet, it does not mean that you can run 1200 watts of output power from your amplifier. Remember, you may think you are delivering 1800 watts to the tube to get 1200 watts out, but you are actually pulling more than 1.8 KVA from the wall outlet. Don't forget the lights, relays, filament transformer, ALC and the bleeder resistors in the power supply are all using power from the same wall outlet. If your amplifier is the only item that is on your 120 volt line that goes from the breaker box to your shack, you should not have any problems running your amplifier at a 750 watt output level. Remember, the circuit breaker in your house's power distribution panel has a small time delay. If you are using a 15 amp breaker, it won't trip as soon as you draw 15.2 amps or even 16 amps. Your voice peaks can easily draw 16 amps, for a very short period of time, off of a 15 amp breaker and not trip the breaker. But key down on RTTY and draw 16 amps off of a 15 amp breaker and the breaker will trip in a very short time.

Here are some nice choices for some new or used HF amplifiers:

• Heathkit SB-200	Two 572B tubes	10 to 80 meter 500 watts out
• Heathkit SB-220	Two 3-500Z tubes	10 to 80 meters 1200 watts out
• Ameritron AL-80A	One 3-500Z tube	10 to 160 meters * see note below
• Heathkit SB-1000	Clone of the Ameritron AL-80A	* see note below
• B&W PT-2500	Two 3-500Z tubes	10 to 160 meters 1500 + watts out
• Drake L4	Two 3-500Z tubes	10-80 meters. 1200 watts out
• Drake L7	Two 3-500Z tubes	10 to 160 meters 1200 watts out
• Kenwood TL-922	Two 3-500Z tubes	10 to 160 meters 1200 watts out
• Ameritron AL-1200	One 3CX1200 tube	10 to 160 meters 1500 + watts out
• Ameritron AL-1500	One 3CX1500 tube	10 to 160 meters 1500 + watts out
• BTI LK-2000	One 3-1000Z tube	10 to 80 meters 1200 + watts out
• Alpha 8410	Two 4CX1000 tubes	10 to 160 meters 1500 + watts out
• Alpha 77DX	One 3CX1500 tube	10 to 160 meters 1500 + watts out
• Command HF-2500	Two 3CX800A7 tubes	10 to 160 meters 1500 + watts out
• QRO HF2500DX	Two 4CX800A tubes	10 to 160 meters 1500 + watts out
• Dentron Clipperton L	Four 572B tubes	10 to 160 meters 1200 watts out
• Icom PW1	Solid-state	10 to 160 meters 1000 watts out
• Yaesu VL-1000	Solid-state	10-160 meters 1000 watts out
• Tokyo Hy Power 1.5	Solid-state	10-160 meters 1000 watts out

* **AL80A / SB-1000** These amplifiers were grossly over rated. They are advertised to produce 1000 watts of output power. By doing so you would be over driving the grids and this not only leads to premature tube failure but poor IMD and splatter on the bands. The absolute maximum grid current for a single 3-500Z tube is 150ma. The manual tells you to drive these amps to 230 ma of grid current. These amplifiers will usually produce about 700 to 800 watts of clean output power with good power line regulation.

A word of caution pertaining to tube type amplifiers and their power supplies.

Most tube amplifiers have voltages ranging from 2000 to 4000 volts. **These voltages WILL KILL YOU!** They only use 2000 volts in the electric chair to put people to death. The capacitors used in amplifier power supplies also pack a high amperage charge. If you touch the high voltage line in an amplifier, you will get a charge of 2000 or more volts plus, over 100 amps of surge current. You won't get a second chance.



NEWS FROM THE MILKHOUSE

Attendance is still strong on Wednesday.

The firewall and the internet was not working at the Milk House for almost 3 weeks. Ben, KB3CTX and Jeff N3QO got us back on line this past Wednesday. We had to switch out the computer that was running the firewall. The D-star gateway is still down (local repeater is fine). We hope to have it back up next week.

The bands have been great the last couple of weeks and the Milk House is working some great DX.

JT1RF Mongolia, 17 meters, CW
Z21BB Zimbabwe, 20 meters, CW
ZL6RWC Australia (Rugby World Cup Special Event Station), 15 meters, SSB
A71BU Qatar, 20 meters CW
FR5MV, Reunion Island, 20 meters, PSK31
ZB2FK Gibraltar, 15 meters, 15 meters, CW
A61HA United Arab Emirates, 20 meters, SSB
TJ3AY, Cameroon, 15 meters, SSB
HL5NLQ, South Korea, 15 meters, CW

de Dave / NB3R

OCTOBER CONTESTING AT THE OK CORRAL

October 1st & 2nd – EPC Russia DX Contest
October 8th & 9th – Pennsylvania QSO Party
October 15th & 16th – Worked All Germany
October 22nd & 23rd – Araucania VHF Contest
October 29th & 30th – CQ WW DX Contest – SSB



PENNSYLVANIA QSO PARTY 2011

October 8th and 9th are the dates for the 2011 PA QSO Party. As in the past the DLARC is hoping to regain its position as the number one club in the state. Now is the time to check your station and antennas, so you are prepared for the party. The **Norm Zoltak / K3NZ** award for the highest scoring single operator station will be awarded again this year.

The Party sponsors, the Nittany ARC will be adding a new class for the 2011 party. They have been getting more Multi-op mobiles in the party in recent years, so they are going to divide the mobile division into Single-Mobile, and Multi-Mobile classes. This way the two different classes will be better able to compete. So it not too early to begin to get ready for the event.

EMMAUS HALLOWEEN PARADE, OCTOBER 15!

An annual enjoyable and very helpful public service event, the Emmaus Halloween Parade is scheduled for the evening of Saturday, October 15 (Rain date Sunday, October 16). Annually DLARC assists this activity by providing communications during the entire parade.

We will need 16 amateur radio operators to properly cover this event, in which the hams are in their vehicles, using 2-meter rigs, interspersed between parade units throughout the parade. This allows us to have eyes and ears from beginning to end, all along the parade route. We will watch for any problems, including breaks in the parade progression, rowdy behavior, etc., and report them to net control where the proper authorities will be contacted to correct the problems and keep the parade moving along safely.

After the parade we'll have our traditional Dutch Treat social gathering at a local restaurant. This Halloween Parade has been successful for about two decades, and is recognized by the Emmaus Halloween Committee as a prime reason for smooth operation of the parade.

Anyone interested in participating in this year's parade, please contact Bob, KE3AW@arrl.net or 610.432.8286.

Bob / KE3AW

LEHIGH WHEELMEN 2011 GAP GALLOP

The Gap Gallop's great scenery, varied terrain and lightly traveled roads make it one of the most enjoyable centuries in the Northeast. Starting at the Northampton Community College, the 100 mile route crosses the Kittatinny Ridge (Blue Mountain) at Little Gap in Danielsville, then meanders for miles through the heavily wooded and sparsely populated countryside north of the mountain. The Gallop returns via the Delaware Water Gap, where the Delaware River makes a spectacular cut through the ridge. A 68-mile option crosses Little Gap with the 100, but returns through Wind Gap. Riders always appreciate the predominately downhill final 25 miles of both routes! There is also a 50 mile option, which runs along the south side of the Blue Mountain without crossing the ridge.

We will be helping out the Lehigh Valley Wheelmen again this year with their 100 mile (Century) ride on Oct 2nd, 2010. The ride will start at the Northampton County Area Community College, continue to Little Gap, then to the Delaware Water Gap and finish by going back to the community college. We still need a few more volunteers to fully man the stations and sag wagons. If you have not already signed up to help and would like to please email Al at w3ce@arrl.net. The Wheelmen were very appreciative of our help with communications last year, and are enthusiastic about having us back again.

DLARC TO ASSIST IN 100-MILE BIKE TOUR

A "Century Run" bicycle tour will take place on October 15, 2011. DLARC will provide the communications for the tour. **Ben / KB3CTX** will chair the contingent of member amateur radio operators. The route will include the Delaware Water Gap National Recreation Area and High Point State Park. If you are interested in more details, please contact KB3CTX@arri.net.

SEPTEMBER PROGRAM

The September program was the Dxpedition to Desecheo Island. **Dave / NB3R** brought us the video of the K5D adventures. Months of preparation went into this project, to operate from the 6th most needed DXCC entity world wide. While only about 10 miles off the coast of Puerto Rico, this island is off limits to human occupation. The Bureau of Fish and Wild Life have this island as a wild life sanctuary and thus it is a KEEP OFF area. Gaining special permission to operate the KP-1-5 project set about to operate from this area, and upon getting the necessary permission set out to put K5P oOn the air. Weather conditions were not always conducive to the operating and logistics at time not the best, they managed to get their stations on the air and ended up with 115,787 QSOs in the period of February 12th to the 26th.



SEPTEMBER THEME WINNERS

The September meeting theme was Uniforms, whether military, sport or job. There were several contestants, no military uniforms, as one could guess. Might have been too dangerous, squeezing into them. The winners were **Dave / WD5BRP** and **Bill / W0RSJ**

OCTOBER PROGRAM

The 2011 DLARC Mini Ham Fest II is the program for October. It is the time to clean out those closets and empty the shelves of that unused ham equipment and other items that can be of use to other club members. There is no fee to sell at the hamfest. Contact **Dave / NB3R** at nb3r@nb3r.com if you want to reserve a table. And Dave says that even if you didn't make reservations, he would find table space for you.

HEATHKIT RETURNS TO THE KIT BUSINESS

A notice on the Heathkit [website](http://www.heathkit.com) announces that the venerable kit manufacturer, well-known to all Amateur Radio operators of a certain age, will be reentering the kit business in late August. The notice states, in part: "Heathkit will debut their new line of Do-it-Yourself kits for common around-the-house items. The first kit will be a Garage Parking Assistant (GPA). The Garage Parking Assistant kit lets you build your own system that uses ultrasonic sound waves to locate your car as it enters the garage. The system signals to the driver using LED lights mounted on the wall when the car is detected and in the perfect spot for parking.

"The GPA-100 kit consists of two primary assemblies -- the LED Display in kit form and the pre-assembled ultrasonic range module. The kit will include everything you need to complete the project except a soldering iron and hand tools. "Next on the market will be a Wireless Swimming Pool Monitor kit followed by many more. Heathkit wants to continue to bring to its customers interesting, unique Heathkit products. Heathkit is interested in learning what types of products kit builders would like to build. Kit builders can submit their suggestions through this website using the Contact Us email." Although there's no indication that Heathkit Educational Systems is planning to reenter the Amateur Radio market, the St Joseph, Michigan-based company is actively looking for kit suggestions.

After several decades of successful kit manufacturing, Heathkit left the kit business in 1992. Heath sold Amateur Radio equipment, at first only kits and later its own line of non-kit products, from 1954 to 1992. The company has been sold a number of times since its founding back in 1912 as an aircraft company.

UP COMING EVENTS

- October 2nd – Lehigh Wheelmen Gap Gallop
- October 6th – DLARC Elections
- October 8th & 9th – Pennsylvania QSO Party
- October 15th – Black Bear Bike Run
- October 15th – Emmaus Halloween Parade

Your participation is requested for these events. Especially October 15th when we are supplying communications for the Black Bear Run in the morning and afternoon and the Emmaus Halloween Parade in the evening.

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.

RACES EMERGENCY REQUIREMENTS

As of September 2006, NIMS IS-700 and ICS-100 course certifications are required in order to receive the county issued photo IDs. The photo IDs are required by federal law for participation in, on site RACES emergency operations. These courses can be taken on line by going to www.fema.gov and following the directions. These requirements are not needed to participate in the weekly Wednesday nets. The only requirement for these nets is a valid amateur radio license and an interest in emergency communications.

WEDNESDAY NIGHT NETS

Additional Net Controls are needed for the Wednesday Night ARES, RACES & DLARC net. If we have enough interested operators, it will only be necessary for each operator to have only one net session in each three month period. Actually 13 weeks in a period, so 13 net controls would be ideal, and maybe some extras to fill in if needed. This would give us a pool of experienced controls, for any emergency which would arise. Interested operators should contact Don / KC3II at kc3ii@arrl.net. The NIMS IS-700 and ICS-100 courses are not required to be a net control, but should the need arise and we do supply controls and operators for real emergencies, then the courses requirement will be in effect and EMA issued IDs will be needed to be on the scene of an emergency.

MISSOURI HAMS HELP OUT WHEN 911 SERVICE GOES DOWN

It doesn't take a major disaster for Amateur Radio to step in and save the day. Around 9 PM on September 5, a cable cut completely isolated the Johnson County 911 Center in Warrensburg, Missouri, impacting landline, Internet and cellular service. Johnson County -- home to Whiteman Air Force Base -- is located just east of the Kansas City metro area. Johnson County's emergency plan called for the telephone company to transfer all 911 calls to the Henry County 911 facility in Clinton, Missouri; Henry County is the next county south of Johnson County. But an equipment problem at Henry County's center prevented the transfer from completing successfully. Calls were then routed to the Benton County 911 Center in Warsaw, Missouri; Benton County is the next county west of Henry County. This transfer was successful and calls started coming in to Warsaw. Unfortunately, Warsaw is more than 40 miles from Warrensburg, and the two centers were unable to establish communication using the county VHF radio facilities.

It was then that radio amateurs were brought in to provide communications support. Johnson County Emergency Management Director Gloria Michalski, KC0TPB, activated the Johnson County ARES® group, while Benton County Emergency Management Director Gary England, KC0ZYL, activated the Benton County ARES® group. Amateur Radio operators from both groups reported to their respective Emergency Operations Centers, and using the VHF repeater facility operated by the Warrensburg Area Amateur Radio Club, quickly established reliable communications. Hams relayed the 911 calls between the two centers, with the hams in Benton County handing the calls off to Warrensburg officials for dispatch. "Many people think a major disaster is the only time ARES® members may be called into action," said ARRL Missouri Section Emergency Coordinator Kenneth Baremore, W0KRB. "This type of real-life example helps to point out why we need to have good relationships with our served agencies, as well as being prepared to respond at a moment's notice. We know about severe storms as they come into the area, be it tornadoes or ice storms. But we can't be aware of when a backhoe is going astray."

According to Michalski, radio amateurs remained at both sites until the local telephone company fixed the problem at 9:30 AM the next day. While only about 15 calls were transferred, she said that amateurs handled at least one life-critical call.

Calling Amateur Radio operators "awesome!" she said that the service that both ARES® groups provided during the 911 outage was "invaluable. I assure you that this office has a healthy working relationship with our ARES® group. They are always there for us and the community. I use every opportunity to promote the group publicly and support their Amateur Radio classes." -- *Thanks to Rick Harkins / W0YGH, of Benton County ARES® for some information*

VERY INTERESTING

If you are right handed, you will tend to chew your food on the right side of your mouth. If you are left handed, you will tend to chew your food on the left side of your mouth.

To make half a kilo of honey, bees must collect nectar from over 2 million individual flowers

Heroin is the brand name of morphine once marketed by 'Bayer'.

Tourists visiting Iceland should know that tipping at a restaurant is considered an insult!

F.Y.I.

The winners of the September Prizes were **Dave / WD5BRP** and **Ray / W3TDF**.
The November Program will be LP-PAN Panadapter by **Jon / NJ3I**

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**

President – George E. Wieland III / N3SQD ----- president@dlarc.org
Vice President – Ben Ramig / KB3CTX ----- vicepresident@dlarc.org
Secretary – ----- secretary@dlarc.org
Treasurer – Mike Gower / KB3LOD ----- treasurer@dlarc.org

BOARD of DIRECTORS

Gary De Mave / N2AUO ----- captiangdm@gmail.com
Bob Oppen / NE2C ----- ne2c@arrl.net
Al Wiemann / W3CE ----- w3ce@arrl.net
Jon Matson / NJ3I ----- cjfishing@rcn.com
Jay Mason / N3OW ----- n3ow@rcn.com
Jeff Welsh / N3QO ----- jeff@jeffwelsh.net

**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 --- Jon Matson / NJ3I

**The W3OK Corral is published monthly and is the Official Publication of the
DELAWARE LEHIGH AMATEUR RADIO CLUB INC.
14 Gracedale Avenue
Nazareth, Pa. 18064-9211**

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.

THE NEWSLETTER STAFF

Editor – Don Holmes / KC3II ----- editor@dlarc.org
Web Master – Brad Snyder / W3JXQ ----- w3jxq@dlarc.org
Photographer – Dave Arwood / NB3R ----- nb3r@nb3r.com
Circulation – Pete Varounis / NL7XM ----- nl7xm@arrl.net

OFFICAL 2011 DLARC BALLOT AND INSTRUCTIONS For Attending Members

This is the official ballot for the DLARC elections to be held at the October 6th 2011 general monthly meeting. You must follow these instructions in order to have your vote count.

1. Select one candidate for each of the officer positions. **This year, since there is only one candidate each for President, Secretary, Treasurer, and Board of Directors according to the DLARC By-Laws, “the secretary shall cast the necessary vote” for those positions, and no vote is needed by you. The only necessary vote is that for Vice president.**
2. Fold and return your ballot to the counters by 7:45 PM.

Below are the candidates that have been nominated to run for this year's Executive Committee. Please select one for Vice President.

Position	Nominee	Vote
President	Charles Lazarchak / W3OPA	(No vote needed)
Vice President	David Blankenship / N3EYT	<input type="checkbox"/>
	Tom Slapinsky / KB3IUE	<input type="checkbox"/>
Secretary	Joe Garvey / KB3VZP	(No vote needed)
Treasurer	Mike Gower / KB3LOD (Incumbent)	(No vote needed)
Director	Gary De Mave / N2AUO (Incumbent)	(No vote needed)
Director	Bob Oppen / NE2C (Incumbent)	(No vote needed)
Director	Jon Matson / N3INJ (Incumbent)	(No vote needed)
Director	Dave Mellman / KA3IWC	(No vote needed)
Director	Jay Mason / N3OW (Incumbent)	(No vote needed)

The tenth position on the Executive Committee, according to the DLARC By-Laws is “**the most recent past president**”, so **George Wieland / N3SQD**, will be the tenth member on this year's Executive Committee.

Official DLARC Absentee Ballot and instructions

This is the official absentee ballot for the DLARC elections to be held at the October 6, 2011 general monthly meeting. You must follow these instructions in order to have your absentee vote count.

1. Select one candidate for each of the officer positions. **This year, since there is only one candidate each for President, Secretary, Treasurer, and Board of Director according to the DLARC By-Laws, “the secretary shall cast the necessary vote” for those positions, and no vote is needed by you. The only necessary vote is that for Vice president.**
2. Place the ballot into a plain unmarked envelope and seal it.
3. Put the sealed unmarked envelope containing the ballot into another envelope, which contains your call, and return address. Mail this envelope by September 30, 2011 to:

William Fahs, NC3P
3976 Kenrick Drive
Bethlehem, PA 18020-4557

Position	Nominee	Vote
President	Charles Lazarchak / W3OPA	(No vote needed)
Vice President	David Blankenship / N3EYT	<input type="checkbox"/>
	Tom Slapinsky / KB3IUE	<input type="checkbox"/>
Secretary	Joe Garvey / KB3VZP	(No vote needed)
Treasurer	Mike Gower / KB3LOD (Incumbent)	(No vote needed)
Director	Gary De Mave / N2AUO (Incumbent)	(No vote needed)
Director	Bob Oppen / NE2C (Incumbent)	(No vote needed)
Director	Jon Matson / NJ3I (Incumbent)	(No vote needed)
Director	Dave Mellman / KA3IWC	(No vote needed)
Director	Jay Mason / N3OW (Incumbent)	(No vote needed)

The tenth position on the Executive Committee, according to the DLARC By-Laws is “**the most recent past president**”, so **George Wieland / N3SQD**, will be the tenth member on this year's Executive Committee.