

DELAWARE LEHIGH AMATEUR RADIO CLUB Inc.
OCTOBER 2014



W3OK

CORRAL

**Club Meeting October 2nd, 7:30PM At the
Bethlehem Township Community Center**

OCTOBER PROGRAM

“Elections and Annual Awards Presentations”

Larry / AB3TY



“WINMOR Protocol”

AL / W3CE

MINUTES FROM THE SEPTEMBER MEETING



A general membership meeting of the Delaware-Lehigh Amateur Radio Club Inc. (the Club) was held on September 4, 2014, at the Bethlehem Township Community Center located in Bethlehem Township, Pennsylvania.

Call to Order: Dave / N3EYT, Vice President, called the meeting to order at 1934 hrs.

Member Happenings: Jerry / KB3WQL related his recent experience with Kenwood concerning his TS-590. There is an issue with the ALC and Kenwood offers a modification. The modification itself is free of charge, but shipping has to be covered. Jerry's rig was to the Kenwood service center and back in a week.

Doreen / K3PDL received her first QSL card; it's from the Indiana State Fair.

Ken / KB3MDT purchased a Swan 350 from the Club sale and now has it operating again.

Dave / NB3R attended the ARRL National Centennial Convention and had a great time. The programs, especially the ones on the early history of amateur radio, were interesting and informative. Bill / W3MJ also attended.

As a result of the W2WBL QSL card from last meeting, Ray / W3TDF gave Pete / NL7XM a batch of his QSL cards.

Among the QSLs was a card from current ARRL President Kay Craigie, a card confirming a 6 Meter contact in Hawaii, and an unopened letter from a ham in Sweden postmarked August 11, 1948. Later in the meeting Ray opened the letter and read it aloud.

Approval of the Minutes: Dave / N3EYT asked if there were any additions, or corrections to the minutes as they appeared in the last newsletter. There was one correction; in the visitors and guests item, the correct callsign for Scott is N3ATQ. Dave asked for a motion to approve the minutes of the last meeting.

Motion: It was moved by Mark / W2MB, second by George / N3SQD to approve the minutes with the correction. **Motion carried.**

Treasurer's Report: Mike / KB3LOD presented the Treasurer's Reports for July. Although not formally part of the report, Mike thanked Barry / KU3X for the ongoing sale of Club equipment which has raised approximately \$780 to date.

Motion: It was moved by Barry / K3UX, second by Doreen / K3PDL to approve the treasurer's report. **Motion carried.**

Club Logo Apparel: Dave / N3EYT discussed Mark's / W2MB efforts to make embroidered apparel available to Club members. Mark will have the catalogs and a sign-up list at the Club station. Selections should be added to the sign-up list or contact Mark if you are interested.

Club Station: No issues reported. The Club station is open Wednesday evenings and most weekends.

Disbursement of Donated Club Equipment: Barry / K3UX provided an update on the ongoing sale of donated equipment. He will continue to update the list of remaining equipment post it on the Club website and e-mail reflector.

Club Repeater: No issues or problems reported.

Website Report: Brad / W3JXQ reported that there are no issues or problems with the website. Last month, he had not updated the newsletters, but that has now been addressed. Looking forward, next month the website is due to be renewed.

Membership Report: George / N3SQD read in a new member, Ken Feldmen / KB3MDT.

Motion: It was moved by Al / W3CE, second by Chris / NU3L to approve Ken's membership. **Motion carried.**

Visitors and Guests: Visitors and guests in attendance were Scott Ellman and Janet Ellman and also John Dunker / NU4X and Robert Garland / NX3S.

Licensing Classes: Bob / KE3AW reported there are 18 individuals signed up for the of the fall Technician class and 6 individuals signed up for the General class. The classes are being promoted by flyers at area businesses, newspapers, ARRL website and on the Service Electric cable television community bulletin board.

Field Day: Bob / KE3AW reported there was an article about the Club's Field Day event in the August 20th edition of the Bethlehem Press. He circulated a copy of the paper.

Emmaus Halloween Parade: Bob / KE3AW advised that the Emmaus Halloween Parade is on October 18th and a sign-up sheet is available for anyone who is interested in providing radio communications for the event. Bob explained that 15 to 16 operators are needed for the event. The operators are interspersed (in their vehicles) with the marchers so that any issues can be immediately reported to the parade organizer. Please plan for a 6 PM arrival. The parade is typically done by 10:15 PM. Please see Bob if you are interested in the event.

Jamboree-on-the-Air: Al / W3CE was contacted by the person in charge of the Amateur Radio Operations for the Trexler Scout Reservation. On October 18th, the annual Jamboree-on-the-Air, or JOTA, is being held. The scouts would like a demonstration of fox hunting. Al is looking for an individual with fox hunting experience to assist him.

PA QSO Party: Dave / N3EYT encouraged everyone with HF privileges to try to work the QSO Party, which is on October 12th this year. The Club's call, W3OK, will be on the air for the event.

Upcoming trip to Boyertown Historic Vehicles Museum: Doreen / K3PDL is scheduling a trip to the museum for November 8th. More information will be posted on the Club forum.

Club Elections: Bill / NC3P reported Club elections are in October and that tonight will be the last chance to nominate someone for a Club position. If you are interested in running, contact Bill.

VE Test Session: George / N3SQD reported there will be VE session scheduled for 7 PM September 5th at the County 911 Center.

Upcoming Programs: Doreen / K3PDL has openings for 2015 presentations in April, May and November. If you are interested in making a presentation next year, please see Doreen so it can be scheduled.

Program Stipend: Pete / NL7XM requested an annual program stipend to support securing presenters for the monthly programs. The stipend would be used for honorarium and/or expense reimbursement for notable speakers. If he were to seek approval from the Broad on a case by case basis, it is sometimes difficult to reestablish contact with some notable speakers or others may have their speaking schedule filled by the time approval is obtained. The proposed program stipend would allow Pete some flexibility when he is negotiating with a speaker who is in high demand.

Motion: It was moved by Pete / NL7XM, second by Bob / NE2C for the club to provide an annual stipend of unto \$200 per year starting in 2015 to be used for honorarium and expense reimbursement for notable speakers. **Motion carried.**

Club Picnic: Dean / N3HOG thanked Ed / AA3OU for chairing the Club picnic. Ed thanked everyone who brought items for their time and effort to make the picnic a success.

Adjournment: There being no further business before the Club, Dave / N3EYT adjourned the meeting for the evening's presentation on WINMOR Protocol by AI / W3CE.

The meeting was adjourned at 2017 hrs.

Respectfully submitted by John / NT3P, Secretary

OCTOBER QUICK-CHECK CALENDAR

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
			1 DLARC Net (W3CE)	2 DL ARC MEETING 7:30 PM	3 NO VE SESSION	4
5	6 QCWA Net 8:30 PM	7 D-Star Mid – Atlantic 7:30 PM	8 DLARC Net (KC3II)	9	10	11 PA QSO PARTY
12 PA QSO PARTY	13 QCWA Net 8:30 PM	14 D-Star Mid – Atlantic 7:30 PM	15 DLARC Net (N3SQD)	16	17	18
19	20 QCWA Net 8:30 PM	21 D-Star Mid – Atlantic 7:30 PM	22 DLARC Net (KB3CTX)	23 DLARC BOARD MEETING	24	25
26	27 QCWA Net 8:30 PM	28 D-Star Mid – Atlantic 7:30 PM	29 DLARC Net (K3PDL)	30	31	

EMMAUS HALLOWEEN PARADE - 2014

An annual enjoyable and very helpful public service event, the Emmaus Halloween Parade is scheduled for the evening of Saturday, October 18 (Rain date Sunday, October 19). 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 / KE3A

OCTOBER CONTESTING AT THE OK CORRAL

October 4 & 5 – 15 mtr SSTV Dash Contest
– Oceania DX Contest – SSB

October 11 & 12 – Pennsylvania QSO Party

October 18 & 19 – 10 – 10 International Fall Contest
– Worked All Germany

October 27 & 28 – CQ WW DX Contest – SSB



PENNSYLVANIA QSO PARTY 2014

October 11th and 12th are the dates for the 2013 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. This year the Bonus Station is W3TDF, operated by the QCWA Chapter 17. This will be a multi-county operation using Ray / W3TDF's call honoring his 90th birthday. And many years of record producing QSO party scores.



THE DLARC K3NZ PAQSO AWARD

This award is named in honor of Norm Zoltack, K3NZ and will be awarded to the club individual earning the highest score in the club during PAQSO party. Norm was a super contester and a guiding force in his 40 plus years with the DLARC.

Requirements:

1. You must be a single operator.
2. You must apply your score to the DLARC's aggregate.
3. Portable, mobile, rover and home operations count.
4. You can operate from any county.

PA QSO PARTY CHANGES FOR 2014

Since not everyone subscribes to the party reflector, we thought it important to let people know of the changes to our Party.

First and foremost, the mailed in hard copy of the summary sheet has gone away. Electronic summary is still needed, but can now be sent in along with your log to paqsolog@nittany-arc.net 聽聽 If you wish, you can still snail mail the summary sheet and logs if you prefer, or if you have a paper log to submit.

Logs should be in Cabrillo 3 format, although Cabrillo 2 is still acceptable at this time.

The received logs pages have gone away. They did not fulfill their intended purpose. We have gone back to the previous way of checking to see if your log is in the system, by 聽 looking for it in the preliminary scores.

We have also opened a web store to take donations and pick up promotional items at 聽 <http://nittany-arc.net/PAQSOSTore.html>

The PAQSO party home page is at 聽 <http://nittany-arc.net/PAQSO.html>

And the rules are at: <http://nittany-arc.net/pqppdf/paqsorules14.pdf>

We are also pleased to announce that our bonus station this year is

W3TDF - Operated by the QCWA Chapter 17, celebrating its 50th anniversary, and the New QCWA chapter 224, celebrating it's 1st anniversary.

and... That callsign seem familiar? It is none other than that of the Grand Old Man of the Party, Ray - Da Grump, who is celebrating his own 90th year! We're excited to celebrate the guy who owns - and has owned - many party records.

Ray is a 聽 *Charter* 聽 member of 聽 *both* 聽 Chapters, and the most recent past president of Chapter 17.

They will have a Multi-County effort this year, and will be operating:

W3TDF/BUX
W3TDF/CAR
W3TDF/CHE
W3TDF/CLE
W3TDF/LEH
W3TDF/LUZ
W3TDF/MOE
W3TDF/NHA
W3TDF/SNY
W3TDF/UNI

de Mike / N3LI, chairman of the Pennsylvania QSO Party

VE TEST SESSION

There will not be a test session this month. The next session will be on November 7th at 7 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

NEW MEMBER

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 member is Ken Feldman / KB3MDT.

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, only, at nl7xm@arrl.net The winner must be present at the next Meeting to receive it, or it goes unrewarded. Officers, Board members, Newsletter staff, and Brain Teaser Authors are not eligible to win."

de Pete / NL7XM

SEPTEMBER BRAINTEASER ANSWER



Signal Ground is the common or return line for any signal, the reference point from which that signal is measured. Finding the best ground point is crucial for signal circuits that are sensitive to noise and must be minimal.

Chassis Ground is connected directly to the chassis of the circuit or device. This is used as a shield for electromagnetic interference as well as for the safety ground in AC devices.

Earth Ground is a connection to the earth itself. It is used commonly in radio systems and power distribution systems for electrical shock protection with the other end used as a safety ground.



Winner – Mark / W2MB

OCTOBER BRAINTEASER de KB3LIC

A bucket filled with water weighs 50 lbs. When one half of the water is poured out, the bucket and remaining water is poured out, the bucket and remaining water weigh 27.25 lbs. How much does the bucket weigh?

THE DLARC FORUM

A few years ago the Executive Committee established an electronic mailing list for D.L.A.R.C. Members and friends to provide an easy way to disseminate information on a timely basis. This mailing list is called the "DLARCforum" and all club members with email capability are welcome to join.

Joining the list is easy, just go to this website :<http://mailman.gth.net/mailman/listinfo/dlarcforum> for the subscription process are available on the page. If you don't have internet service, but do have email service you can still subscribe by sending a subscription request directly to the list administrator, ka3jwe@arrl.net.

The DLARCforum is a "closed" list which means only subscribers can post messages, so your mailbox won't be filled with junk mail from unknown sources. The list uses a "text only" format which means, that only messages in plain text are passed. Messages received in HTML are filtered and stripped of any formatting before being sent out to list subscribers. The list will not accept or pass attachments such as files and pictures. This is done to eliminate the possibility of spreading any type of computer virus or other harmful programs. The forum is an "un-moderated" list, which means that there is no moderator screening messages before they are passed on.

Since its beginning, the volume of messages on the DLARCforum has been relatively low compared to other similar mailing lists. So don't worry your your inbox won't be overflowing with messages if you subscribe. There is also the ability to configure your preferences for the list to your personal liking.

So, please consider joining the list if you're not already subscribed. You'll be better informed about current club activities and also have the knowledge and experience of over half the membership at your disposal. Anything you want to know, all you have to do is ask!

de Don / KA3JWE List administrator

2015 PROGRAMS

The Delaware-Lehigh Amateur Radio Club prides itself on bringing you the best programming and entertainment content possible year after successful year.

It's undoubtedly partially responsible for our unprecedented and sustained growth while ARC membership and attendance in general elsewhere struggles.

It's only July, but Program Chair Doreen Gramling / K3PDL is actively recruiting qualified talent to populate the 2015 Club calendar with presentations that deliver current and practical material to help you get the most out of Amateur Radio today. If you have a topic or idea that would be of interest to your friends and colleagues, contact Doreen promptly to secure a preferred date while some are still available.

There's plenty of time to flesh out your outline into a polished product ready for our friendly, receptive audience, but now is the time to book the month your material will be ready.

Everybody is very good at something! Share your knowledge and experience with us at the D.L.A.R.C. and write Doreen today at: country.lady06@yahoo.com

NOTICE NOTICE NOTICE

We are enjoying our superior new meeting quarters, but for that reason, it is also a very popular venue for many other groups. To reduce congestion as other scheduled activities end and folks try to exit, we have been politely asked to refrain from entering the lobby before 7:15. Your strict consideration is appreciated. With the nicer weather, a pre-meeting get together can be had in the pavilions near the parking lot area.

EARTH ORBITS INTO THE PATH IF A SOLAR FLARE

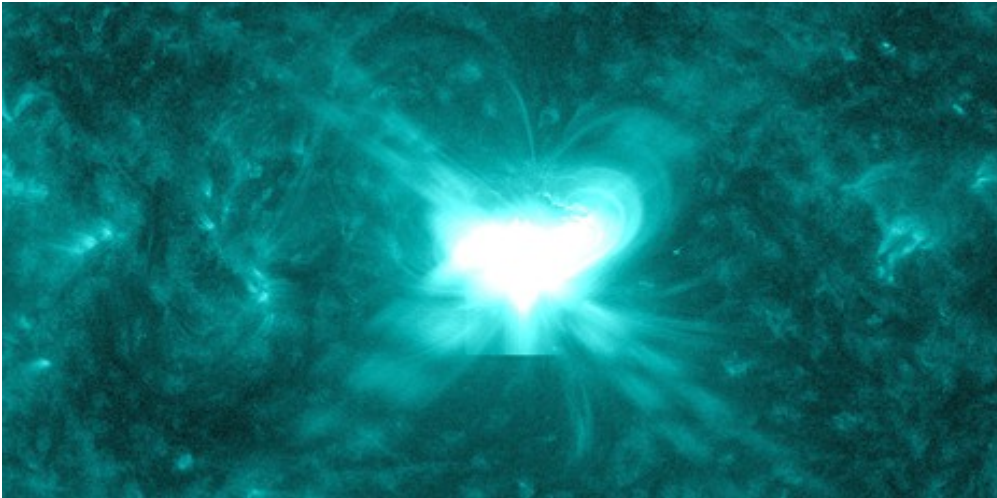


Image credit: NASA/SDO

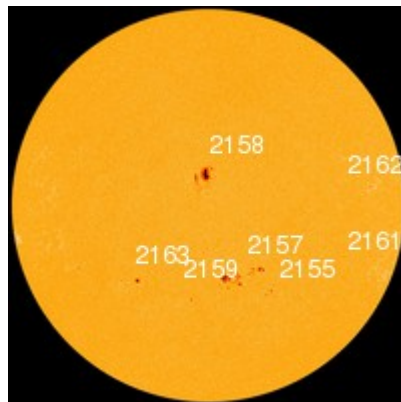


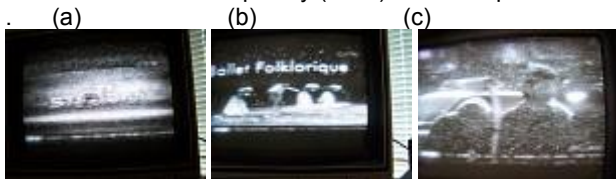
Image credit: NASA/SDO/HMI

<http://www.nasa.gov/content/goddard/significant-flare-surges-off-the-sun/#.VBYJPJRdWSo>

Fred Nordquist of Moncks Corner, South Carolina (FM03af) -33 north geographic latitude- received a fairly strong quality NTSC zero-offset analog black & white television signal from STORM-TV on channel two via sporadic-e for the first time from Port-au-Prince, Haiti on Friday, September 12 at 1416 EDT; 1816 UTC at 1,119 air miles (1,801 km) distance from an azimuth of south-southeast.

Dominican Republic Tele Antillas (HIJB) in Santo Domingo running 25kW effective radiated power (ERP) was also observed at 1,193 air miles (1,920 km).

It should be noted that he also heard 90.5 HIWP, Estrella 90.5 FM from Santo Domingo. Twenty-five minutes later the maximum useable frequency (MUF) climbed up to 107.5 MHz.



- a. STORM-TV banner across the center of screen
- b. Ballet Folklorique
- c. Small logo in the upper right corner of screen; hard to read

Something special transpired five days prior to the solar storm that has to be recognized. Christopher Dunne of Pembroke Pines, Florida (EL96sa) -26 north geographic latitude- has the honor of being the first TV-DXer in North America to pick-up Haitian analog channel 2 - Storm TV on September 7, 2014 at 1319 UTC via Es. The program airing was "Good Luck Charlie" in French. The broadcaster would be roughly 732 air miles (1178 km) distance southeast of his residence if it was coming from the capital.

Audio from STORM-TV: <https://www.youtube.com/watch?v=ZA8ttN4W-WE&feature=youtu.be>



Reference: <https://www.facebook.com/StormTv1>

Credit is due to William Hepburn of Grimsby, Ontario, Canada (FN03fe) with his Radio & TV DX information Centre website which assisted Christopher to pin down the unidentified broadcaster.

<http://www.dxinfocentre.com/tv.htm>

According to the Worldwide TV-FM DX Association (WTFDA) member Raymie in Arizona, STORM TV might be the highest powered analog channel in the capital at 5 kW. Haiti's digital transition deadline is scheduled for June 15, 2015 with plans to adapt the ATSC standard.

2206 UTC this author noted the analog TV channel 2 audio (59.75 MHz) white noise background volume had spiked roughly ten seconds on the classic 1984 Panasonic ColorPilot 10 inch cathode ray tube (CRT) tabletop receiver in south Easton, Pennsylvania (FN20jq) at 40 north latitude.

The Antennacraft model Y5-2-6 VHF low-band five element yagi mounted on an 80 inch boom with 4.9 db gain was leaning up against a sugar maple tree in the backyard tilting southeast at 13 degrees vertical sky zenith indicative of radio aurora between here and Lambertville, New Jersey along the Delaware river on the amateur six meter band (50-54 MHz). Yagi was terminated with 50 feet of low-loss satellite RG-6 single shield exterior coax cable. No antenna preamplifier was used.

2241 UTC the ON4KST QSO/SWL real time 50 MHz propagation maps spotted Donald Snider, N3MK in Chinocoteaque, Virginia (FN27hv) –37 north geographic latitude- northeast of Wallops Island in communications with Michael Toneri, VE3FGU, Keswick, Ontario, Canada (FN04gf) – 44 north geographic latitude- via aurora propagation at 485 miles (781 km) distance.

Geomagnetic K-index of 7 [NOAA scale G3 Strong] threshold was reached at 2302 UTC. A measure of geomagnetic activity to where the visual aurora are viewable. On this scale aurora may be seen as low as Pennsylvania to Iowa to Oregon with potential impact area primarily poleward of 50 degrees 'geomagnetic' latitude. To discover the geomagnetic latitude of your observing site visit <http://www.spaceweather.com/glossary/magneticlatitude.html>.

Other possible hazards include power generation system voltages irregularities; false alarms may be triggered on some protection devices due to induced currents. Spacecraft systems may experience surface charging; increase drag on low Earth-orbit satellites causing orientation problems. Intermittent satellite navigation (GPS); loss-of-lock increasing range errors. Radio high frequency bands may experience intermittent black-outs acting as if your antenna was disconnected from the receiver.

Chris Schur of Payson, Arizona (DM44) -34 north geographic latitude- detected a visual pink aurora under Usra Major, visible as a ruddy glow to the naked eye right after end of evening twilight on September 12 @ 6:36 pm MST (September 13 - 0136 UTC) but before the waning gibbous moon came up. http://spaceweathergallery.com/indiv_upload.php?upload_id=101681

Four hours after wards at 0509 UTC Randall Smith, VA6EME, Cold Lake, Alberta, Canada (DO44UK) -45 north geographic latitude- heard the 15 watt beacon with a ½ wave horizontal "V" dipole at 49 feet (15 meters) on 50.038 MHz from VY0YHK/B (EP28BP) -68 north geographic latitude- via linked aurora/sporadic-e from a distance of 1,081 air miles (1740 km). This was the last time aurora propagation was reported.

One oddity occurred twelve hours after the aurora subsided took place at 1740 UTC. Hugh in southern Portugal of Faro (IM67) -37 north geographic latitude- received two unidentified Brazilian transatlantic F2 TV stations with zero offsets; one being a probable public network that was active for over two hours during the local afternoon, early evening hours.

Distance could have been anywhere between a wide range of 3569 (5744 km) minimum out to 5704 miles (9180 km) maximum from northeast French Guiana down to the southeastern Uruguay border. <http://www.youtube.com/watch?v=Xi5wLcisReg>

Ironically, spaceweather.com website was offline for more than twelve hours during the most intense geomagnetic storm of the year due to hardware failure in the network of their Internet service provider. It was not caused by solar activity this time.

No noctilucent clouds detected down to 70 degrees north latitude. The 2014 season had probably ended on August 26th. https://www.youtube.com/watch?v=_SuxilhPUF8

NOAA/Space Weather Prediction Center – Daily Space Weather
<http://www.swpc.noaa.gov/ftpdir/indices/dayind/0912dayind.txt>

For those that are keeping tabs on decommissioned analog TV stations; owner Bell Media filed with the CRTC on July 10 to revoke their broadcast license out of Wiarton, Ontario. They were a CTV network with call sign CKCO assigned to VHF low-band (2) radiating 100 kW effective radiated power from their transmitter tower (44.56.41N 81.7.54W) in east central Bruce peninsula between Lake Huron and Georgian Bay.

Always keep your DX equipment turned on, especially your recorders because you never know when space weather is going to target Earth.

Mike Schaffer / KA3JAW

Easton, Pennsylvania, FN20jq

SEPTEMBER PROGRAM

WINMOR Protocol – Email over HF

With a slide show and the club's "Go Kit" Al presented how this system functioned and how to go about encoorporating WINMOR in to your own shack and in an emergency kit of your own.

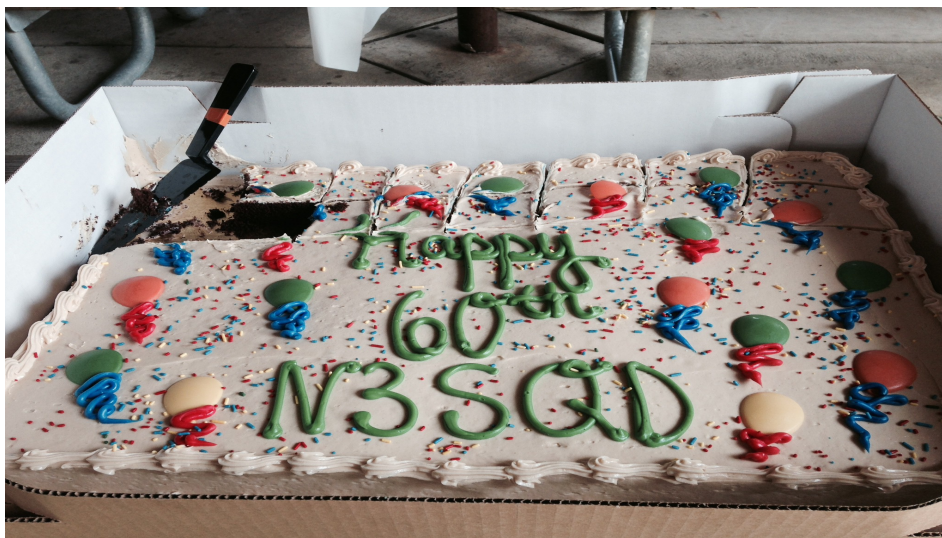
WINMOR is a radio transmission protocol intended to be used in the Winlink 2000 Global Radio E-mail System by amateur radio operators, marine radio stations, and radio stations in isolated areas. WINMOR will complement the PACTOR modes in the high frequency portion of the WinLink system. WINMOR debuted at the 2008 ARRL / TAPR Digital Communications Conference. Unlike PACTOR II & III, only a simple computer soundcard-to-radio interface is required, as compared to PACTOR's relatively expensive external terminal node controller. It has two modes, either 500 or 1600 Hertz in bandwidth, and provides ARQ speeds ranging from 67 to at least 1300 bits per second, similar to PACTOR's various modes. It is fully documented and without restrictions or license issues preventing anyone from using the protocol in other software. WINMOR supports both connected (ARQ) and FEC (broadcast) modes.

Al explained how Winlink made it possible to exchange emails with other hams on HF and to their home server. Also emails could be sent through the home server to hams on HF. Al ended with, with that if you wish to get all the information, you could contact him at , w3ce@arrl.net, and he would be glad to send it to you.

RAY / W3TDF RECEIVES OLD QSL CARD

Recently Pete / NL7XM received Ray / W3TDF's collection of QSL cards. Among them was a letter from Rune / SM5HR, which Ray had never opened. At the September meeting, Pete and Ray opened the letter, and Ray read it to the members. In it was a conformation of two contact from 1948. Also Rune related that hopefully they would meet again, because he was up grading his power and antennas.

Upon further inspection Pete found the two QSO cards acknowledging the two contacts, these are listed below.



HAPPY BIRTHDAY GEORGE

THE ROOTS OF STANDBY

Most of us have heard the phrase "I'm standing by", but did you know that it actually comes from electronics and radio practice?

Vacuum tubes were the original amplification devices, back before transistors and op-amp chips. The first vacuum tube was a diode, quickly followed by the triode (which usually works as an amplifier), and other tube types were quickly developed as applications grew; this was the dawn of electronics age, and radio was one of the first applications for the new circuitry.

For vacuum tubes to work, internal component called the filament (sometimes "heater") must receive current, so that it gets hot enough to glow; this is the orange light inside most tubes. filament voltage (called the "A-" supply) is produced by its own circuit, sometimes on a battery, sometimes on a separate winding of the power transformer's secondary. A few circuits even use a completely discrete filament supply transformer. Through the effect called "thermionic emissions", the filament turns heat energy into a cloud of electrons (having a negative charge) which clustered near the tube's cathode (the in that might actually be the filament), or it might simply be heated by the filament). This cathode is often coated with chemicals designed to enhance the creation of this electron cloud.

A much higher positive voltage ("B+") is then applied to the tubes plate, which draws electrons from the cloud towards the plate (bridging the plate/cathode circuit inside the tube's vacuum). Plate voltage is sometimes high enough that it will draw electrons even from a cold cathode, but this damages the cathode by stripping away its surface. For this reason, separate switches for the filter supply in the plate supply are engineered into most circuits.

The "standby" switch is usually part of the B+ plate supply. When the power is turned on for the device, only the filament should be activated (the "standby" serves to disconnect B+ voltage from the plate at power up). This allows the cathode/filament region time to warm up to safe operating temperatures before the plate can strip away electrons. One problem with tube technology is that the warm-up period takes several seconds, sometimes up to nearly a minute. Operators want to be able to use their devices on demand, and not have to wait for them to warm up.

Between actual transmission/reception, it is useful to disconnect plate supply, because the plates' "idle current" will quickly drain batteries, or simply waste wall outlet AC. By using the "standby" switch, the operator can shutdown the most wasteful use of current in his device, while still keeping those crucial filaments hot and ready to spring into service at the flip of a switch. Many operators switch their powerful (and energy hungry) transmitters to "standby" when monitoring their more-efficient receivers; on some radios push-to-talk (PTT) button actually activates control of the transmitter's B+ plate voltage in the manner of a "standby" switch. Thus operators adopted the phrase "on standby" to describe this situation, which led to the modern use of the phrase to indicate a period of waiting to act.

If you happen to have an old Ham rig that runs on vacuum, you might see it standby switch; now you know what it's for. But the device on "standby" before turning the power on, and then the device a minute to warm up before you turn the standby switch to "on".if nothing else your expensive to and will last longer!

Vacuum tubes still enjoy modern usage in guitar amplifiers. A tube guitar amp also comes with a Standby switch, for the very same reasons described above. Use it Standby when powering up, and if you set the guitar down to do something else for a moment, flip the amp to "standby" while you're gone; it'll be ready for instantaneous action whenever you return.

de Paul / KB3LIC

DLARC TRIP

Next trip will be to:

Boyertown Museum of Historic Vehicles
85 S. Walnut St., Boyertown, PA 19512
www.boyertownmuseum.org

Diner Day is back! Saturday November 8

2014-11 Diner Day The Boyertown Museum of Historic Vehicles will host a special event in its restored Reading Diner, a 1938 Jerry O'Mahony prefabricated diner once part of Fegely's Family Restaurant. On Saturday, November 8, with regular admission, visitors can purchase pie and coffee at 1940s prices! Visitors will also be allowed to eat in the diner itself. Pie and coffee will be available for sale from 10am to 1pm.

Meet at the Park and Ride at 8:00, leave at 8:30 to carpool to Boyertown, PA.

Arrive at 9:30 am Boyertown Museum of Historic Vehicles

Note: this museum has many different antique vehicles from bicycles, wagons, automobiles, and the restored Fegley Diner, Reading, PA

Adult - \$6.00

Senior Citizen - \$5.00

Student (Age 6+) - \$4.00

AAA - \$5.00

If anyone is interested in going please call Doreen at 610-923-7934 or dgramling.709@gmail.com. I will have a sign up sheet at the next meeting.

73,

Doreen / K3PDL Travel Chairperson

2014 – 2015 EXECUTIVE COMMITTEE

This year, since there is only one candidate each for all positions, a vote will not be required at the General Meeting on 2 OCT 2014 and according to the DLARC By-Laws, "the secretary shall cast the necessary vote" for all nine positions.

OFFICERS

President - Jay Mason / N3OW
Vice President - Dave Blankenship / N3EYT
Secretary - Larry Kaplan / AB3TY
Treasurer - Mike Gower / KB3LOD

DIRECTORS

Gabe Lantos / KZ2A
Dick Schaeffer / KB3ALG
Evelyn Uhler / W3DOY
Dave Mellman / KA3IWC
John Barbaz / NT3P

de Bill/ NC3P

DLARC EQUIPMENT SALE UPDATE

So far we have taken in over \$800 in the sale of the equipment that was sitting in the barn, collecting dust for many years. There is still some very good ham related items left that is for sale. The following is an updated list as of 13 Sept 2014.

As before, items can be picked up at the Club's Station any Weds evening after 5 PM and some Saturday mornings around 9 AM.

For more detailed information about the sale, refer to the last month's DLARC newsletter.

If you have any questions, feel free to email me at any time. bgk3x@ptd.net

4 amp regulated power supply \$5

Senior Volt Ohmyst Model WV98B \$5

50 ohm 100 watt dummy load \$5

Genameter Model TV 50 Signal generator \$10

Table top frequency counter, up to 600 MHz \$5

Yaesu YM-86 hand held mic, 4 pin connector \$5

Yaesu MH 15 ab hand held 8 pin mic \$5

Icom HM9 hand held HT mic \$5

Icom HM14 hand held 8 pin mic \$5

Audio oscillator \$2

Eicho Grid dip meter with all of the coils \$10

Numerous antenna, medium duty rotors...Untested \$25 each

One of the rotors is a CD-45 with control box. Others are light duty but still good for antennas like a Hex Beam

Two each IC 2AT 2 meter HT's with PL board. Thumb wheel frequency selection. \$10 each

Astatic desk mic with 10-DA head \$10

More may be added at a later date

de Barry, KU3X

HAM RADIO AIDS IN RESCUE OF INJURED COLORADO HIKER

While Bill Eberle, AB0MY, of Boulder, Colorado, and his wife Mary were hiking in the back country on July 21, they encountered a team of paramedics rendering aid to a 67-year-old man -- Michael Schuett, of Bloomfield, Colorado -- who had lost his footing while crossing a stream. Schuett had struck his head on a boulder and was found unconscious and face down in the water by another hiker, who had pulled him to safety. The paramedics, en route to a youth camp, also had stumbled onto the scene.

Lacking cell telephone coverage, Eberle put out a distress call on the hand-held transceiver he always takes along when he hikes. Promptly answering his call on the statewide Colorado Connection Repeater system was Ryan Frederick, KD0TSZ, in Colorado Springs. Frederick contacted the Boulder County Sheriff's office. Authorities quickly turned to Scott Whitehead, KA0QPT, of Longmont, a sheriff's department radio specialist and 30-year veteran of the Rocky Mountain Rescue Team. Whitehead was able to contact Eberle via the repeater network, and the two coordinated equipment and rescue personnel.

Schuett was evacuated from the scene, treated at an area hospital, and released. He credited ham radio for bringing the rescuers to him. -- *Thanks to John Bigley, N7UR, Nevada Amateur Radio Newswire*
Cincinnati BPL Internet Service Provider Pulls

A BRIEF HISTORY OF ARES

As we celebrate one hundred years of the ARRL, we've reached a seminal moment in time when we are sparked to reflect on the past while looking to the future with a sense of inquiry and wonder. That has certainly been the theme of the ARRL's centennial celebration this year. *QST* has featured fascinating look-backs at pivotal points in the League's and Amateur Radio's history this year, with more to come. Continuing this theme, let's take a brief look at the role of Amateur Radio in public service, disaster, and emergency communications over the past hundred years.

In the early days, Amateur Radio and hams were considered irritations and nuisances to the "real" communicators - the commercial sector and the military. We were almost outlawed, and ultimately relegated to the "useless" frequencies of "200 meters and down." That was until it was demonstrated that we could actually be of use as a service. In 1913, college students/hams in Michigan and Ohio passed disaster messages when other means of communications were down in the aftermath of severe storms and flooding in that part of the country. A Department of Commerce bulletin followed, proposing a dedicated communications network of radio amateurs to serve during disasters. Five special licenses were reportedly issued. A magazine article noted that amateurs - who were once considered nuisances - were now considered to be essential auxiliary assets of the national public welfare.

The ARRL was formed in 1914, and disaster response communications as provided by radio amateurs became organized and useful. In 1920, Amateur Radio was used to help recover a stolen car, of all things! Soon, the use of Amateur Radio for natural disasters that we traditionally think of now emerged with hams active in deadly flooding in New Mexico and an ice storm in Minnesota.

More organization followed, with an "MoU" emerging with the American railroad system for Amateur Radio support when the railroad's wire lines were down: There was an ARRL Railroad Emergency Service Committee. There was even a Q-signal designated: *QRR*, a kind of land SOS.

More reports of disaster response communications provided by amateurs appeared in *QST*, much as they do here in this newsletter today. A major New England flood had amateurs supplying the only efficient means of communications from the devastated areas to the outside world, prompting the chairman of the Federal Radio Commission to say the future of radio depends on the amateurs.

Hams worked with the Burgess Battery Company for emergency radio power. Many of us old-timers including myself have used those batteries when we were kids for our crystal radio kits; they looked like tall, thick candle columns! More organization followed, and traffic handling was recommended as the best way to gain discipline and proficiency to prepare for the efficiency and effectiveness needed in response communications situations.

ARRL Field Day was started to prepare amateurs for portable operation, as was necessary in disaster situations when commercial power and means of communications were down.

In 1935, the ARRL Emergency Corps was formed with the goal of having an Amateur Radio Emergency Station in every community -- a goal that remains just as urgent today as it did then! To wit, just look at today's emphasis on the neighborhood and community as "first responder" and on self-reliance in the post-disaster survival chain. More "served agencies" emerged as potential partners, including the Red Cross. In 1936, major flooding across a 14-state region served as the ARRL Emergency Corps' first major testing, serving well, and solidifying Amateur Radio's status as a critical disaster response communications asset and public service. Communications operating protocols and the appointment of Emergency Coordinators followed.

Technical advances supported this evolution. Spark gap transmitters gave way to the vacuum tube, making portable operations more viable. Articles on portable transmitters and receivers appeared in *QST*. Exploration and experimentation in the VHF region also spurred more development of portable equipment. The development of the variable frequency oscillator or VFO, something that modern generations of hams take for granted, was at the time a liberating breakthrough offering more versatility and flexibility, and more efficiency of course in meeting the demands of a disaster response communications situation.

World War II meant a shut-down of Amateur Radio, but many hams joined the War Emergency Radio Service, which did provide some communications during the war period for natural disasters. After the war, the ARRL reconstituted its disaster response communications programs and networks, and the first Simulated Emergency Test was run in 1946.

The Cold War followed, and the Radio Amateur Civil Emergency Service (RACES) was formed by the government for civil defense (CD) purposes, the forerunner of the modern emergency management model that we know so well today. Throughout the sixties and later up to today, the role, procedures, protocols, equipment and techniques of Amateur Radio in public service, disaster and emergency communications continue to evolve, ebb and flow. This evolution is fueled by advances in Amateur Radio technology and its application, lessons learned from each and every incident that involves amateur communications support. - *K1CE*, based on an excellent article by *Gil McElroy, VE3PKD*, that appeared in *September 2007 QST* -- *QRR: The Beginnings of Amateur Radio Emergency Communications*

END OF THE ROAD FOR RADIO SHACK

(click link below)

[http://www.foxbusiness.com/2014/09/16/radioshack-attack-and-this-one-looking-fatal/?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+foxbusiness%2Fyahoo+\(Partner+-+Yahoo+-+Latest\)](http://www.foxbusiness.com/2014/09/16/radioshack-attack-and-this-one-looking-fatal/?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+foxbusiness%2Fyahoo+(Partner+-+Yahoo+-+Latest))

F.Y.I.

The November Program will be "Exploring the 900 MHz Band" - W2MB

The D.L.A.R.C. meets the "FIRST" Thursday of each month. Membership, friends and interested persons meet at the Bethlehem Township Community Center, 2900 Farmersville Road, 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.

QCWA Chapter 17 holds a net Monday evenings at 8:30 PM on 3960 +/- depending on conditions.

Mid-Atlantic D-Star Net meets each Tuesday at 7:30 PM. The following repeaters Dstar repeaters are available in the Lehigh Valley. W3OK -145.11000MHz -0.600 Port C – W3OI -147.16500MHz +0.600 Port C, – W3OI - 445.02500MHz -5.000 Port B All repeaters on the net are linked through **Reflector 020 port A**, so all stations checking into the net should make sure that they have *their local repeater call sign followed by the letter "G" in the eight position of the RPT2 field*. Otherwise, you will only be heard locally and not over the Reflector. Dongle users wishing to check into the net should Log On by connecting directly to Reflector 20, port A, rather than through your local repeater in order to conserve local bandwidth.

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.

The Clubhouse telephone number is 484-895-7038.

**EXECUTIVE COMMITTEE 2012 – 2013
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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 Bethlehem Township Community Center
TALK IN ON 146.700 (PL 151.4)

THE W3OK TRUSTEE --- Barry Vogt / N3NVA

**The W3OK Corral is published monthly and is the Official Publication of the
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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.

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