

DELAWARE LEHIGH AMATEUR RADIO CLUB Inc.
DECEMBER 2015



W3OK

CORRAL

Club Meeting December 3rd, 7:30PM At the
Bethlehem Township Community Center



SEASON'S GREETINGS

DECEMBER MEETING PROGRAM

Annual Holiday get together

Bring a treat to share.

MINUTES FROM THE NOVEMBER MEETING



A general membership meeting of the Delaware-Lehigh Amateur Radio Club Inc. (the Club) was held on November 5, 2015, at the Bethlehem Township Community Center located in Bethlehem Township, Pennsylvania.

Call to Order: Bill / W3MJ President, called the meeting to order at 1932 hrs.

Pledge of Allegiance: Led by Bill / W3MJ.

Member Happenings: Dave / NB3R related that the PA QSO and the DX WW SSB

results from the Milkhouse were very impressive. He noted the YL participation was exceptional with Anne / KC3EYB, Jo Ann / KC3EZS, Susan / KC3BPS, and Evelyn / W3DOY. Jay / N3OW said the contest station he belongs to scored 4 million points in the CQ WW SSB with 110 countries on 10m, 129 countries on 15m, and 110 countries on 20m. Bill / W3MJ said he worked Gambia on 20m from the Milkhouse.

Approval of the Minutes: Larry / AB3TY asked if there were any additions or corrections to the minutes as they appeared in the last newsletter. Bill / W3MJ asked for a motion to approve the minutes of the last meeting.

Motion: It was moved by Mark / W2MB, second by Dave / NB3R. **Motion carried.**

Treasurer's Report: Mike / KB3LOD presented the Treasurer's Report for September. Bill / W3MJ asked for a motion to accept the report as read.

Motion: It was moved by Chris / NU3L, second by Blair / K3YD. **Motion carried.**

Club Station: Dave / NB3R reported the station was working with no problems. He added that eight new licensees worked the noted PA QSO party. In addition, a 40m Delta loop has been installed at the club station courtesy of Barry / KU3X.

Club Repeater: Mark / W2MB noted that there was a problem on the 6m side which has been corrected. Dave / NB3R noted that an unlicensed person has been using the repeater asking for a radio check. Mike / KB3TEL inquired if there was packet station and was informed that one no longer existed at the club station.

Website: No issues were reported.

Membership Report: Frank / W3WOW announced the following member Tucker Dunham / KD2JPM.

Bill / W3MJ asked for a motion to accept the new member

Motion: It was moved by Jay / N3OW, second by George / N3SQD. The vote was unanimous for approval. **Motion carried.**

Club Badges: Dave / N3EYT said there was a signup sheet for any member in good standing needing one and a nominal charge would apply for replacement of lost badges. Members who requested them at the previous meeting picked up their badges. The next date for badge pickup will be at the December general meeting.

Education Classes: George / N3SQD reported the classes were over for the Fall session. There was a regularly scheduled V.E. session for November 6 and an additional session on November 10 for those attending the classes and anyone wishing to upgrade or take the exams.

Awards: Charlie / W3OPA presented awards not given out at the October meeting. Charlie presented the Gavel Award to Jay / N3OW for his service as President. In addition Charlie presented Jay an award for the 2014 PA QSO party. Charlie also introduced the Club Lifetime Members and their areas of expertise.

T42US: Pete / NL7XM read a message from Jim Millner / WB2REM, director of the U.S. Contingent, thanking the Club for its support and summarized the activities while in Cuba. Stephanie / WX3K related her experiences as a member of the U.S. team.

Club Shirts and Jackets: Mark / W2MB asked for a show of hands of members interested in purchasing shirts and jackets with the Club's logo.

HT Give-Aways: Dave / NB3R related QST magazine has published results of HT testing for spurious emissions in which half of all Baofeng HT tested failed. He proposed the Club cease in its Baofeng HT give away program. Barry / KU3X added that a Chinese Amp is also suspect and before purchasing any equipment look to see if it is type accepted. Barry also suggested that the HT give away program not to be continued with the Baofeng HTs. Pete / NL7XM pointed out that the give away program would not automatically renew. In addition, Pete said that he has purchased an Baofeng HT to give away at the December meeting and that an additional Baofeng HT would not be purchased as originally intended.

2016 ARRL National Parks on the Air: Jay / N3OW said the event will run from January 1 to December 31. The Delaware Water Gap Recreation Area and the Delaware Area Scenic Trail outside of Easton would be ideal for the Club to use for the event. Al / W3CE added that the entire length of the Appalachian Trail is a National Park and there are numerous locales which can be used for the event.

Christmas Party: Bill / W3MJ said the Christmas Party will be held at the December general meeting. Ed / AA3OU noted there was no need for a chairman for the party as members bring whatever dishes they want, either entrée items or desserts.

WXMAS: George / N3SQD reiterated that the WXMAS special event will be held on December 12 and 13 from 9-5.

Ferrite Cores: Bill / K3ANS said he has many ferrite cores for sale.

CLUB BI-LAWS: Bill / W3MJ said the Club's Bi-Laws have not been reviewed since 2008. He asked for volunteers to review and make suggestions. Blair / K3YD, Charlie / W3OPA and George / N3SQD volunteered. Dave / N3EYT also was suggested.

Guests: Tom Julius / KB3YWJ and his son Steve; Jim Fox from the Tech class; and a gentleman who I did not catch his name who enrolled in the Tech class..

Adjournment: There being no further business before the Club, the meeting adjourned the meeting at 2025 hrs.

Respectfully submitted by Larry / AB3TY, Secretary

DECEMBER QUICK CHECK CALENDAR

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
		1	2 DLARC Net (NB3R)	3 DL ARC MEETING 7:30 PM	4 NO VE SESSION	5
6	7	8	9 DLARC Net (W3CE)	10	11	12 WX3MAS
13 WX3MAS	14	15	16 DLARC Net (KC3II)	17 DLARC BOARD MEETING	18	19
20	21	22	23 DLARC Net (N3SQD)	24	25 MERRY CHRISTMAS	26
27	28	29	30 DLARC Net (KB3CTX)	31		

DECEMBER CONTESTING AT THE OK CORRAL

December 5 & 6 – ARRL 160 Meter Contest
 -- TARA RTTY Melee

December 12 & 13 - ARRL 10 Meter Contest
 - - International Naval Contest
 December 19 & 20 – ARRL Rookie Round-up - CW

December 26 & 27 – Stew Murray Top Band Challenge
 – World Wide Iron Ham Contest



VE TEST SESSION

There will not be a test session this month. The next test session will be January 8th at 7 PM at the Northampton County 911 center. Pretest registration is required. Contact George / N3SQD at george@bioserv.com or Al / W3CE at w3ce@arrl.net

CHRISTMAS CITY SPECIAL EVENT STATION

Again this holiday season, the DLARC special event branch, "The Christmas City Station" will be on the air. Over the weekend of December 12th and 13th, 9AM to 6PM daily, from the Milk House with the call of WX3MAS. This our way of celebrating Christmas and wishing other hams around the world a "Merry Christmas" from the twin Christmas Cities of Nazareth and Bethlehem. Jon / NJ3I will again chair this event and is looking for support from the general membership. Operators will be needed man the radios during the on air period. Jon did a good job last year, but volunteers are needed to continue our tradition. Jon also has said that there will be a holiday dinner Saturday evening and left overs for Sunday plus any Christmas goodies you would like to bring. A sign up sheet will be available at the is meeting and also at the December meeting.

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 Tucker Dunham / KD2JPM.

MEMBERSHIP DUES ARE DUE!

It's that time, already! DUES are payable for the calendar year 2016. Here's how easy it is to remit your club DUES and keep your valuable D.L.A.R.C. Membership current. Whether in person or by mail, **CHECKS made payable to the D.L.A.R.C.** are the preferred method of payment to more accurately record your timely renewal. Please ensure that your callsign appears somewhere on the instrument, such as in the memo field. Paying with cash is discouraged, but if you really, *really* have to, kindly make certain you are prepared with the correct sum according to the rate table shown below. Remember, if your DUES are not paid by February 1st, your membership will expire.

2016 DUES Rates / No Changes	
Regular Membership 18-64 years of age:	
Jan. - Dec.	\$17.-
65 and over, or retired from all forms of employment (no age limit)	
Jan. - Dec.	\$12.-
Additional Family member	
each \$3.-	
Associate Individual Membership	
\$10.-	

You are strongly encouraged to MAIL your DUES so that I may conduct the bulk of the record-keeping duties apart from where I believe you deserve the most of my attention. In person at Club Meetings, I'd prefer to answer your questions, address your concerns, and welcome your thoughtful revenue raising and savings ideas. Therefore, it is firmly advocated that DUES correspondence be mailed to:

Michael J. Gower
1511 Shelbourne Drive
Bethlehem, Pa. 18018

Enclosing a S.A.S.E will bring your new membership card back to you immediately if you can't attend the next Meeting where they are routinely distributed. You may write to me anytime with questions regarding DUES, or to discuss issues that you believe are my responsibility at: Treasurer@dlarc.org Include your phone number if you prefer a live reply.

de Mike / KB3LOD, DLARC Treasurer

HARD COPY SUBSCRIPTION

You must sign up if you want a hard copy newsletter subscription. The rate is \$12, this is exclusively for the newsletter only, to cover printing and mailing. The price of maintaining a Bulk Mailing Permit is too expensive to justify with the size of our membership, thus the first class postage requirement. This will squarely cover the cost of paper and printing supplies for 12 issues. To subscribe contact Pete / NL7XM at nl7xm@arrl.net

ANNOUNCEMENT

The DLARC's Membership Chair Person, George / N3SQD is stepping down after many years of handling the position. Frank / W3WOW has volunteered to fill the position. We thank Frank for taking over the position. We thank George for his years of service, which included establishing a data base for the record maintenance, and all the unknown jobs, that nobody knows about but is necessary for the club.

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

NOVEMBER BRAINTEASER ANSWER

The strawberry is unique because its seed are on the outside

Winner – George / N3SQD



DECEMBER BRAINTEASER

Which of the following items does not fit into the group?
Rain Gauge Sail Boat Violin Lectern Umbrella

PEDERSEN RAY PROPAGATION

By Robert Brown / NM7M

Pedersen ray propagation takes place at the transition from one ionospheric region to another, the lowest being between the top of the E-region and the bottom of the F1-region while the highest at the F2-peak which divides the bottom and topsides of the F-region. This form of propagation happens when a ray which came up from below the transition region has been refracted such that it is finally moving parallel to the earth's surface at the ionospheric boundary and continues that way for some distance.

Pedersen ray propagation results in long hops for signals in the HF part of the spectrum but any change or gradient in the electron density in the top of the F-region, an increase or decrease, will refract the signal away from that direction, down to ground or up to Infinity from the F-peak. In practice, this mode is rather unstable and appears briefly (see p. 181 of Davies' recent book for experience on North Atlantic paths.)

Turning to 1.8 MHz signals, something resembling Pedersen ray propagation can take place at the top of the night-time E-region. In case you have missed it, I have written on this topic several times, pointing out that long E-F hops can take place, covering distances up to 3,000 km instead of the more familiar 1,000 km

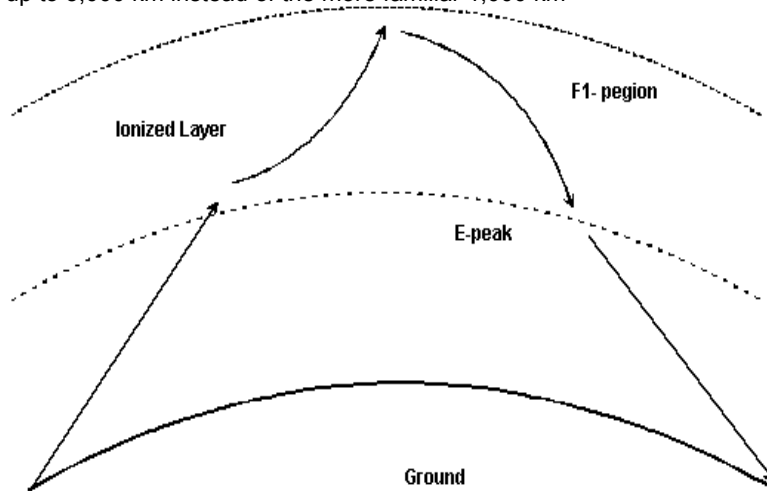


Figure 1

E-hops or 2,000 km F-hops. Such E-F hops are expected on theoretical grounds because of the nature of the electron density distribution, a deep valley above the E-peak developing after sunset. Experimentally, a valley distribution is well-documented and has been seen for years, by incoherent scatter radars from Puerto Rico to Northern Norway, leaving no room for any dispute.

Beyond the theoretical idea, one can explore the computational side of long E-F hops by means of ray-tracing of paths across the ionosphere. Mainframe computer programs developed in Boulder by the Department of Commerce radiophysicists in the 60's and 70's allowed such studies, even including the effects of the earth's magnetic field. Those programs have now been brought down to the PC level in the PropLab Pro program, available for use in amateur circles. (Let me recommend it to you!)

Briefly, such ray-tracings show that E-hops on a path are found at low radiation angles incident on the bottom of the E-region. Then, by advancing the radiation angle in small steps, one finds the E-hops become longer and longer til they go over to E-F modes where the path rises to a peak in the F1-region and then retraces itself down through the E-region to ground:

Finally, at slightly higher radiation angles, signals are propagated by F-hops instead of E- or E-F hops:

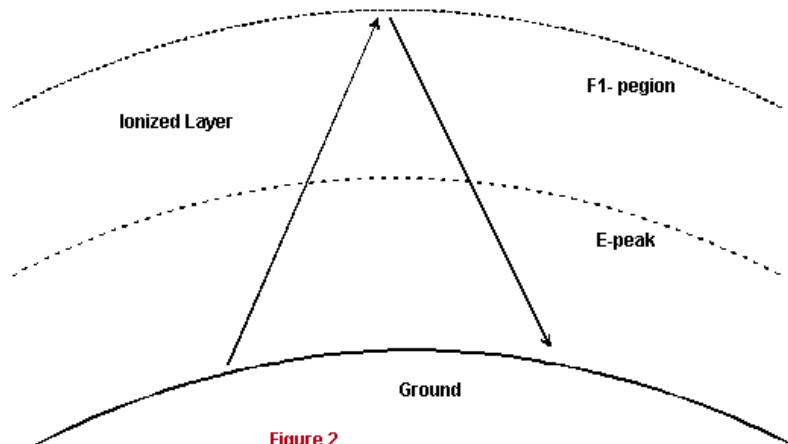


Figure 2

The fact that ray-tracings show 1.8 MHz paths are limited to the lower ionosphere, rising no more than about 200 km instead of to the 300+ km F-peak, stems from a fundamental result of ionospheric theory. Briefly put, only a fraction of the 1.8 MHz operating frequency is effective in carrying Top Band signals obliquely up into the ionosphere. That fraction is found by multiplying the QRG by the cosine of the angle by which the signal goes into the ionospheric region. Thus, for a 30 degree take-off angle, RF approaches the ionospheric layer with a 60 degree angle from the vertical and the effective vertical frequency would be 0.9 MHz.

So signals would peak at an altitude where the local plasma frequency is 0.9 MHz. Of course, that would depend on latitude but would not come close to the height of the F2-peak where plasma frequencies are always greater than 3 MHz, even at solar minimum.

Now everything that I have said above can be verified by using the PropLab Pro program in 2-dimensions. Just pick a path in darkness, start at a low radiation angle, say 10 degrees, and slowly increase the angle, 0.1-0.2 degree at a time. First you will see E-hops, then E-F hops and finally F-hops. Nothing to it!

Those simple paths would apply to Top Band propagation except for the presence of the geomagnetic field. The theory is much more involved now but the results are much the same, at least as far as how high Top Band signals rise in the ionosphere. With PropLab Pro, you can use the same incremental technique and explore paths. I have done it thousands of times!

What you see when you take the program to 3-dimensions is about like before: first, E-hops at low radiation angles, then E-F hops, then either F-hops at a slightly higher angle or a DUCTED PATH, slightly skewed, where the ducting amounts to a string of E-F hops in series. But that is Pandora's Box (in more ways than one) and I will have to stop right here.

This is obviously a complicated matter and I won't belabor the subject further. Simply let me say that HF ideas are quite out of place when it comes to Top Band propagation and a whole new approach is required if you still think that way. But this is not news; it has been around propagation circles for 50 years!

If you're interested in these matters, I have an article in the Spring '98 issue of Communications Quarterly as well as a shorter one in the Top Band Anthology published recently by the Western Washington DX Club. Background material may be found in issues of The DX Magazine, 1996 and onward. I had hoped these ideas, old as they are, would not continue to remain well-kept secrets but that seems to be the case.

Finally, I hope I haven't offended anybody. I didn't invent these ideas; I am the "messenger" and am just trying to tell it like it is, REALLY IS! With that I will hold my peace.

NOVEMBER PROGRAM

"Stealth Antenna" - John Dancey / N3NUE



This program wasn't to show not what is used today for electronic surveillance, but how it was done before there were manufactured surveillance equipment. How it was done in the so-called "ice age", when you had to go to the local hardware store to get your materials and build it yourself. John demonstrated how the cardboard, metallic tape and coax, how he built antennas that satisfied his needs. Although low power, they satisfied his needs. He used his electronic and ham radio to construct the various antennas that he needed for that particular case. This was how the New Jersey State Police handled electronic surveillance.

John finished by saying, these same methods and materials could be used by hikers and campers today to bring lightweight antenna materials with them while enjoying nature. These materials could be easily packed and lightweight to carry. The simplicity of it all, would make you want to try building them yourself.

2015 EMMAUS HALLOWEEN PARADE

de Bob / KE3AW

This year's parade was peaceful, the kind we all enjoy - free of serious problems. Our DLARC hams arrived at our staging area well before 6:15 p.m. and we had plenty of time to relax, converse, and review final details. According to the Morning Call, 26,000 spectators spent the chilly evening at the parade along the 2 1/2 mile parade route.

DLARC members participating in the event were Steve / KB3WYJ, Mark / AK3M, Chris / NU3L, Dave / KA3IWC, Eric / KC3AOK, Larry / AB3TY, Evelyn / W3DOY, Doreen / K3PDL, Jay / N3OW, Joe / AB3OS, Mark / W2MB, Ed / AA3OU, Jo Ann / KC3EZZ, Wendell / KB3UNB, Bob / KE3AW, George / N3SQD, and Doug / N3WGH.

Fortunately, 16 of our 17 hams were warm on that chilly evening. George / N3SQD had the active duties of net control operator requiring him to be outside, operating portable with the Parade Marshal at his side. Doug / KBWGH was home in Emmaus, at the control point, the temporary location of the DLARC's cross-band repeater.

Our VP, Steve / KB3WYH, and Wendell / KB3UNB volunteered to collect our magnetic signs as the parade concluded, a final step making our entire parade experience a smooth operation from start to finish. We ended the evening with our traditional Dutch Treat "Meeting B" after the parade at a local restaurant.

The Emmaus Parade Committee expressed their appreciation for our eyes-and-ears observations and radio reporting of safety and parade flow issues. They did so verbally, as well as with a generous monetary donation to DLARC.

I add my thanks to everyone who participated in this event with respective ham radio responsibilities. A job well done! Let's do it again next year!





THANK YOU FROM T42US

November 5, 2015

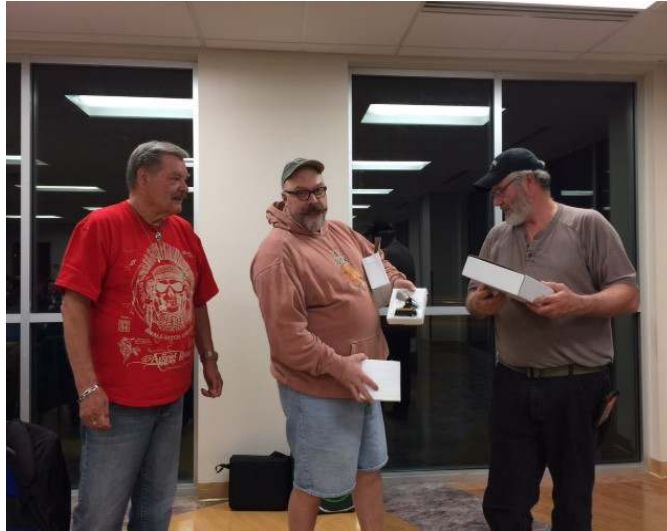
Hi Pete

The t42us team greatly appreciates the support that DLARC gave to our operation. In part, due to your help, it was a great success. We accomplished our goals and possibly set the stage for future operations. Just to summarize, we set up antennas and 3 transmitters along the beach 15 miles out side of Havana. We put on a radio exhibition which was open to the public and which 30 Cuban hams attended. We had a highly successful children demonstration, administered ve examinations in which 7 Cuban ops passed, one with his extra, were interviewed by Radio Havana, was visited by the top minister of communications and Their FCC chief and made 4000 qsos in the contest and 7500 total. Lastly we held a banquet where the ops and their spouses attended.

It couldn't have been more perfect and again we thank you for your help.

73 Jim / WB2REM, T42US Team leader

AWARDS



Jay / N3OW being presented his "Outgoing President" plaque from Charlie / W3OPA. He also received the Norm Zoltak / K3NZ award for the high DLARC score for the 2014 Pennsylvania QSO party, as President Bill / W3MJ watches.

TOWER RAISING AND LAY-OVER SYSTEM FOR SALE

System to raise and lower a Rohn 45 tower that held several very large ham yagi antennas and the ends of many wire antennas. The walking "gin pole" is a horizontal 50 foot section of Rohn 45. One vertical tower was 105 feet long. They were connected with guy wires at three levels, around 100 feet, 70 feet, and 40 feet The two sections are attached to regular Rohn base plates. They are welded together in a 90-degree angle. The walking gin pole functions as a lever to raise and lower the antenna tower. Two 2" square bars about 2 feet long are welded to the plates, and extend a few inches past the plates. Two similar 2" square bars about 2 feet long are in the concrete tower base, and are welded to a fabricated and welded rebar cage inside the concrete base. The two sets of square bars have holes drilled through them and are connected with $\frac{3}{4}$ " bolts, that act as hinges. The first 10-foot section of the horizontal Rohn 45 tower is braced to the first 10-foot section of the vertical Rohn 45 tower with four sections of welded 2" angle irons.

I have another identical Rohn 45 tower installation that is 80 feet tall and has a 40-foot gin pole. It uses the same system. I do not remember what that systems cost. I used salvaged steel, and most of that installation cost was in labor for fabricating and welding.

I would like to sell two of the lay over units, each including the two sections of Rohn 45, two base plates, and angle iron. Preferably, the buyer would buy the system and use it as made.

The winch is a Beebe International W-200-5, 3,000 pound rating. I believe it has a 25:1 gear ratio. It has a removable manual handle. I believe Beebe is no longer manufactured. Ingersoll Rand owned Beebe, but it is out of business. The closest replacement I found is a Thern brand model 482, with a 26:1 gear ratio, 4,000 pound rating, and 300 foot $\frac{1}{4}$ " cable capacity. Grainger sells it for \$1,524, item no. 3DNZ8.

The Beebe winch is connected to a portable Sweeney 5:1 gearbox with a $\frac{3}{4}$ " input and 1" output. It has a 2,000-pound capacity. I cannot find a similar gear box for sale. I called Hydratight, 1-800-569-6807, which is a Sweeney dealer and repair service. They are not familiar with this model. I found no model number on it. The Hydratight representative guessed a new similar gearbox would sell for a few thousand dollars!. I will continue to shop around for more information. I bought it surplus from a machinery dealer, and did not pay new retail price. It cost me \$150 in 1990, so at today's prices it is worth about \$250.

150 feet of $\frac{1}{4}$ " diameter aircraft style galvanized wire rope is wound on the winch. It has a breaking strength of 7,000

pounds. When the tower is laid over, the cable goes to the top end of the gin pole, through a snatch block, and back to the anchor, a steel frame mounted in concrete holding the gearbox. www.Amazon.com sells similar wire rope for \$551.07 for 250 feet, \$0.60 per foot. It is their part number B0038YY358. Prorated, 150 feet would cost \$331, if they sold short lengths.

I power the winch with a Makita 1/2" drill, which is not for sale. You can buy any 1/2" drill. Coupling the drill to the Beebe winch, I use the Sweeney gearbox. It has 3/4" input.

I had a custom "drill bit" made with a 1/4" square coupler that slides over the Sweeney input. It cost me \$25 in 1990. It would probably sell for \$40 today. Coupling the Sweeney gearbox to the Beebe winch I had a custom 1/2" to 3/4" adapter made. It cost me \$10 in 1990. My guess is that it would cost \$20 today. As explained above, the wire rope goes through a snatch box on the "gin pole". I used a B-Special drop side snatch block, model 733-9764. It has an 8,000-pound capacity. I cannot find B-Special listed anywhere. It cost me \$108 in 1990. I did find other brands of similar capacity for about the same price. They are imported, whereas the B-Special was American made, which explains the same price today.

I added an anchor shackle 5/8" screw pin, with a 3/4-ton capacity, to hang the snatch box from the "gin pole". Remember the gin pole is actually Rohn 45 tower. It is worth about \$10. The winch, wire rope, gearbox, couplers, snatch block, and accessories are part of a system, and I want to sell them as a package.

90 feet of the 105 foot Rohn 45 tower and 40 feet of the 50 foot Rohn 45 horizontal tower section (gin pole) have been sold. 70 feet of the 80-foot tower and 30 feet of the 40-foot horizontal section are for sale now.

The 80-foot tower has a 23 foot, 1/2" wall, chrome moly 4130 steel mast, which easily handles three stacked yagis, currently 15 and 10-meter long boom yagis, and a UHF yagi. The same type mast easily held a three element 40 meter Telrex full size yagi and a 5 element Hygain 205CA yagi, on the 105-foot tower, despite hurricane force winds. One of the two masts has been already sold.

I also have another Rohn 45 fold over tower system for sale. I have ceramic insulators, guy anchors, preforms, 1/4" guy wire, turnbuckles, etc. for sale.

I also have several Hygain Ham II and Taittwister rotators and control boxes for sale. I have many parts, hardware, antenna current baluns, 1/4" Dacron rope, pulleys, shackles, etc. for sale. I have thousands of feet of 7/8" diameter Prodelin 50 ohm hard line for sale, \$1.999 per foot. I have many connectors for sale to hard line buyers only. They are hard to find. Some were manufactured by Prodelin. Others were custom manufactured by a local machine shop. Talk to me regarding those details.

If you are interested in the above system, please call me, and make an offer. If you are not interested, please spread the word to other hams. I am downsizing and disposing of my ham contesting and Dxing station. These antennas and towers played fabulously, but I am too old and weak to continue rigging and maintenance. I have other responsibilities that compete with ham radio; so I am inactive on HF.

After posting the above for sale, I had some inquiries that I answered as follows. The additional description might help you understand what is for sale and how it works.

I am selling the winches and gearboxes, but would also like to sell the two units for laying over the towers.

Each unit has two sections of Rohn 45 welded together in an L shape. In turn, the vertical section is attached to the standard Rohn base plate through its tubing. The horizontal section is welded to the base plate. The vertical and horizontal sections are then braced by two angle iron sections as diagonals, welded from section to section, to form a triangle.

Next, I welded two 2" bars horizontally on the base plate, extending about 2" beyond the edge. I inserted two more 2" bars vertically in the concrete base before it set. The vertical bars were in turn welded to an iron rebar cage inside the concrete. I ran thick bolts with washers and nuts through the bars to act as hinges. I added grease fittings to the bars to lubricate the hinges.

When assembled, one tower stood 105 feet tall and the horizontal section of Rohn 45 was 50 feet long. The other similar tower was 80 feet tall with a horizontal section 40 feet long. The 23-foot masts extended about 13 feet out the top, so they could each hold two or three yagis. The horizontal section is known as a walking gin pole. When laid over the 50-foot section stood vertically with the pulley attached and winch cable run through it back to the steel base for the winch. That gave me a 2 : 1 ratio for raising, thus reducing the load in half.

The system works slick with no problems. I can raise and lower the towers with many antennas attached all by myself. The only obstacle is occasionally the moving guy wires at the sides get tangled in nearby brush and tree limbs, which I keep trimmed. It helped to have my loyal wife walk around while the tower was going up and down to watch for any problems.

I lowered the towers so the longest yagi boom rested about a foot above the ground. As a safety measure, I rested the top end of the tower on a scrap piece of short tower. That way I could walk or climb on the tower without fear of it dropping or swaying. Then, I laid extension ladders against the now horizontal mast or tower to work on the rotator, yagi, guys, wiring, etc., near ground level, rather than climbing 100 plus feet into the air. That was great especially in the winter when the wind chill could be near zero degrees.

As an extra safety measure, I also ran an extra cable from the winch end to the now vertical end of the gin pole section of tower, so it was stretched tight when the now horizontal section of tower was at the one-foot level. Thus, when cranking the tower over, I did not have to worry if I lowered it too far and crushed the yagis. The packages that I advertised include the four pieces of Rohn 45.

Separately, I have for sale the 80-foot tower with its 40-foot horizontal sections. That means I have 70 plus 30 feet of Rohn 45 for sale, along with one chrome molybdenum 4130 steel 1/4" wall, 2" OD, 23 foot long masts. I also have two Rohn thrust bearings on the tower. I already sold the 105 foot tower with its 50 foot horizontal section mast, prop pitch rotator, etc.

I also have a Hygain Taittwister rotator on that tower for sale. I have additional Hygain Ham II rotators for sale. Plus, I have many parts left from my multi-multi contest station operation and construction. I am trying to liquidate all, to downsize and simplify my life. If you visit to purchase the tower lay over system, tower sections, mast, etc., I can show you the other

accessories. 73, Bill
William N. Goodman, CPA -- K3ANS
Residence: 765 Young's Hill Road,
Easton, PA 18040-6726
Home telephone: 610-258-5063 Office telephone: 610-253-2745 Fax:
610-253-9773 Cell phone: 484-241-6176
E-Mail: wgoodman@goodmancpa.com or k3ans@arrl.net

HEATHKIT BACK (AGAIN)

Dear Heathkit Insider,

"What I really hope Heathkit will produce," a Silicon Valley colleague recently told me, "is a new radio kit with a beautiful finish, maybe in rosewood." Something great to enjoy building and learn from, and also visually stunning, so he could put it in his living room and keep it forever.

Today, my friend gets his wish.

Exciting news. More on that in a moment.

It's been a while since we wrote to our Heath Insiders. We promised not to clutter your email inbox until we had something to say. Here's a quick summary of what we've quietly been doing at Heathkit during the past year: We assembled a terrific team of very talented, hard-working, inventive people. We acquired another company and merged its management, products, assets, and operations gracefully into Heath Company. We ensured we own every last bit of Heathkit intellectual property, to bring you all the manuals, books, vintage designs, and classic logos you love, unencumbered and in perpetuity. We built a company division and acquired a line of vintage add-on designs to sustain the vintage products so important to many Insiders. We developed and integrated our eBay site, so you can buy or bid on auctioned items. We authored and published a helpful Android software app on Heathkit's GooglePlay site, with more apps to come.

That's a lot, but there's more. We've designed and developed a wide range of entirely new kit products. We authored the manuals for these kits, complete with the beautiful line art you rely on, preserving and respecting our iconic historic Heathkit style. We developed many new inventions and filed patents on them. We relocated Heathkit, and set up a factory, and a warehouse, and offices, in Santa Cruz, California, near Silicon Valley. We built the back office infrastructure, vendor and supply chain relationships, systems, procedures, operations methods, and well-thought-out corporate structure that a manufacturing company needs to support its customers, to allow us to scale instantly the day we resume major kit sales. All this effort enables us to introduce a fleet of new kits and helps ensure Heathkit can grow, prosper, and continue to bring you great new products for a very long time.

As you can see, we've been busy. It takes a lot to bring Heathkit back into the kit business. And we've done it.

We'll have many product announcements coming, but today I want to tell you about our flagship kit.

It's a simple kit—by intent. We feel an enormous responsibility to respect and maintain the incredible legacy of Heathkit. To us this means, bringing you kits you can build yourself, using our historic renowned Heathkit you-can-do-it "We won't let you fail"™ approach, yielding working useful appliances so beautiful you'll be proud to display and use them daily. It also means creating an educational experience that teaches you how they work, and how you can modify or repair what you own.

Further, we feel a very strong commitment to making this experience available to everyone, from 8 to 88 years old.

That's an especially high hurdle. And we've done it. The result is the Explorer Jr.™ It's a simple, beautiful professional-looking little radio. It's a historic design, made new. It comes in several different colors. You build it yourself. Take it anywhere. When you build it and as use it, you'll learn to fall in love with radio, for the first time—or all over again. And it's just the first in a series.

As a Heath Insider, you are special to us. In a few days, we'll connect www.heathkit.com our new website where our new products are listed. But you stayed with us through this process. And we want to thank you. So we are giving you, as an Insider, personal advance notice of the new products and new website through this email, before we tell the general public. We want you to know we appreciate your enthusiasm and respect for the Heathkit name and history.

We know that as an Insider, you want to own the first major kit we've issued in decades. But please also think about this:

Maybe you have a child, or a granddaughter or grandson, who is ready to start their lifelong love for technology, or who will benefit from the enormous self-esteem that comes from accomplishment. They deserve an Explorer Jr too. (Remember to choose the style they'll want most—we have six colors). And then, please think about gently helping them build it. You might remember the parent-and-child graphics on the front of so many Heathkit manuals: We can't count the number of Insiders who fondly remember an adult helping them build their first Heathkit when they were young. What a great way to spend time with someone you care about.

We do not expect initial stock to last long, so please don't wait to visit our site. Also, please be patient while our new major kit, and new website, go from zero to sixty in two seconds. We might have a few bumps in the road as we scale up, and we appreciate in advance your patience. We'll work with you to get everything we can right.

We anticipate 30-day shipping time for this week's orders, and we'll continue to do everything we can to get all kits ordered this Fall to you in time for the holidays. You can see and order the Explorer Jr. at <https://shop.heathkit.com/> now. Please don't wait to be last: We don't want to disappoint anyone, but most of all, we don't want to disappoint our Insiders. Think about whether there's anyone who would love one of these kits as a holiday present. And thanks for your loyalty and patience as we brought back to you Heathkit's incredible legacy of the world's best kits again.

Sincerely,

Andy (President)

and the team at Heathkit

F.Y.I.

The January Program will be " Maple Syrup " – Pete / KC3EVL.

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.

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 (DCS 315) W3OI Repeater.

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 2015 – 2016 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 Bethlehem Township Community Center

TALK IN ON 146.700 (PL 151.4)

THE W3OK TRUSTEE --- Barry Vogt / N3NVA

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