

The QUARAE



RAE to Participate in Lighthouse Contests!



The RAE this month will be participating in the National Lighthouse-Lightship Weekend and the International Lighthouse-Lightship Weekend. Our goal is to get 4 of the Erie Lighthouses on the air. If you would like to setup a portable/mobile station, please contact Doug AD4UL.

Here is some information about the



- **National Lighthouse-Lightship Weekend**
 - **Dates: 0001 hrs UTC on August 4, 2007, through 2359 hrs UTC on August 5, 2007**

Web Site:

<http://arlhs.com/NLLW-2007-guidelines.html>

International Lighthouse-Lightship Weekend

- **August 18th-19th**

Essentially, the purpose of the ILLW is to, first, promote awareness of lighthouses and lightships; second, to encourage their preservation and restoration; third, to promote amateur radio; and, fourth, to foster International goodwill. Unlike the NLLW, the ILLW is NOT a contest. The emphasis is on having FUN! There is no scoring; logs are optional; operate as much as you like, using whatever bands and modes you like.

Visit <http://www.illw.org> for more info.



August 2007
Vol. 6 Issue 8

Club Repeaters

- **Erie**
146.610–
PL 186.2
- **Waterford**
146.820–
PL 186.2

Club Website:
www.raerie.org

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Just a Reminder ...RAE Meeting this Thursday

The Radio Association of Erie meeting will be held on **Thursday August 2nd** at 7 PM at the RAE Clubhouse at 3940 WAGNER RD in McKean.

Program: Slide Show of 61 Repeater Move

2007 Officers and Contacts

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Ron Seyboldt, WB3DOM
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Board Members

Matt Fuller, KB3CAT
Jeremy Lobaugh, KB3BAM
Bill Marshall, KB3JSN
Dianne Miller, K3LD

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ARES/RACES E.C.

Dave Wellman, WX3E
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Calendar of Events

Thursday August 2nd- General Membership Meeting

Time: 7pm

Location: RAE Clubhouse
3940 Wagner Road - Off Of Bargain RD

Thursday - August 28th- Board of Directors Meeting

Time: 7 pm

Location: RAE Clubhouse
3940 Wagner Road - Off Of Bargain RD

Public Service

The next public service event is the Carving Place Triathlon on Saturday September 8th at Presque Isle State Park.



If you would like to help out, for this last event of the year, please be make sure to sign up at the August club meeting or Contact Doug AD4UL at 453-2915 or e-mail ad4ul@arri.net



Minutes

Radio Association of Erie
General Membership Meeting
July 5, 2007

The meeting was called to order by KE3V at 7:06 pm.

Board members present: KE3V, N3ZNP, N3NKV, N3NKV, KB3CAT, and KB3BAM

Board members not present: KD3D, WB3DOM, KB3JSN, K3LD

Guests: None

Upgrades: None

Silent Keys: Al Yacobozzi N3NHX

Secretary's report: N3NKV asked for a motion to accept the minutes of the June meeting as a printed in the QUA-RAE. Motion to approve made by KB3CAT. Seconded by N3LBI. Motion carried.

Treasurer's report: KE3V provided the treasurer's report.

Board of Directors report: N3NKV provided the board report. Topics discussed included: repeater problems, discussion about investments, insurance, field day overview.

Membership: KE3V reported no change.

Repeater: N3NKV reported that the board is planning on meeting with the repeater committee to discuss repeater problems and to come up with a plan for next month. KE3V will contact N3SRD and N3APP. N3NKV provided updates about 82 and 61. There are no changes with 61. 82 is still running 4 watts off the exciter. The link radio power supply at 82 is inoperable. It is running off the main power supply.

ARES/Skywarn: KB3CAT mentioned that the various roles in Skywarn have been broken up between 4 different people – KB3CAT, KB3DUO,

KB3CAA, and KB3NAT.

Public Service: AD4UL mentioned that the next event is the Caring Place Triathlon in September.

Lighthouse Events: AD4UL noted that the lighthouse events will be held the first and third weekends in August.

Field day: AD4UL mentioned that the results were sent via the listserv.

Education: KE3V mentioned that technician classes with K3UFG will be starting next week.

Old business:

Kanzius Cancer Research Project: It was tabled from the June meeting. KB3CAT made a motion that the club start a collection for the Kanzius Cancer Research Project. Seconded by N3LBI. Motion Carried.

Stairs: N3ZNP reported that KB3JZL measured the stairs up for materials tonight.

Pump: N3ZNP reported that there are problems with the water pumps pressure switch.

Picnic: KE3V asked if anyone present was interested in the picnic on July 22nd. Due to a lack of interest, the picnic has been postponed. N3NKV said he would send a posting on the listserv informing everyone that the picnic has been postponed.

New Business:

N3NKV asked the members present if they knew of anyone who was not receiving the QUARAE or was not on the listserv.

Continued on Page 4

Minutes Continued

50/50 Winner: N3LBI \$8.50. \$8.50 donated to the club

Motion to adjourn made by N3LBI. Seconded by KB3CAT. Meeting Adjourned at 7:30 pm.

Program: N3BXL- W3GV Packet cluster updates and Soundcard Packet.

Respectfully Submitted.

John Lis N3NKV
Radio Association of Erie
Secretary

The PL259.. A Tale of Woe

I'm one of those guys who buys premium silver plated PL259s and pays upwards of \$5 a piece for them. While some amateurs might believe that my connector phobia borders on Barnum's "A sucker is born every minute", I think not, and I'll tell you why.

It is my humble opinion the single most prevalent problem amateurs face is caused by the ubiquitous PL259. They typically are poorly or incorrectly soldered (if at all), the coax preparation is almost never done properly, and the material making up cheap PL259s easily corrodes or rusts adding insult to an already terse situation. These situations result in blaming all matter of station equipment and antennas rather than the real culprit; the PL259. So this treatise is an attempt to address the situation by making a few pertinent suggestions. First, there are a few do's and don'ts which need to be discussed aside from the quality issue of cheap PL259s.

Never, ever use a soldering gun! Soldering guns have very little thermal mass and as soon as you touch the tip to a cold connector what little latent heat there is, is drawn away. While you're waiting for the material to get hot enough to melt the solder, the core is slowly but surely being damaged beyond use. Proper soldering of PL259s requires two soldering irons (more on this later).

Never, ever cut coax with wire cutters! Doing so distorts the core and the center conductor making installation of the PL259 body rather difficult. If you don't have a proper cable cutter, a heavy-duty box cutter with

a new blade is your best bet. Lay the coax on a scrap chunk of lumber and tap the box cutter through the coax with a small hammer. The cut needs to be clean and even.

Always use a coax cutting tool to prepare the coax for the PL259! The Cablematic® Division of Ripley Tools Corporation make the UT8000, a special coax cutter specifically for RG8U and RG213.



(<http://www.ripley-tools.com>). The "First Cut" end cuts the coax outer jacket, shield, and core, but not the center conductor. The center conductor is cut to the exact length needed, 5/8".

Incidentally, the center conductor **SHOULD NOT** stick out of the end of the PL259 once it is installed, but just shy of the end (see picture below). This is the correct length! The "Second Cut" end of the tool removes just the outer jacket to the correct length, 5/8". Other companies make coax prep tools, but this one is the best. I've had mine 25 years and it has saved me countless hours in the mean time.

This article is a reprint from e-ham.net and was written by Alan Applegate, KØBG

The PL259.. A Tale of Woe continued



Always use good quality solder! I prefer Kesters 60/40 multicore because I know of its quality. That cheap stuff you buy from Radio Shack or Wal-Mart is not the solder of champions. I prefer the small .081 size but the .105 is okay too. Larger sizes tend to have too much rosin so I don't use them.

Now let's talk about the soldering irons. Two, count them two, are required. I use a Weller pencil type to solder the center conductor which incidentally should be soldered first. If you use good PL259s as I suggest, this operation takes about 10 to 15 seconds. Enough solder should be used to close the connector tip entirely to aid in keeping out moisture. I use a modified 80 watt Weller SP80 iron to solder the body of the PL259. Big, ugly, but lots of latent heat to get the job done quickly! Its round tip is slightly flattened so it just fits into the groove of the PL259. I clamp the iron in the vise and rotate the work, not the



other way around.

So we've got our coax prepped, our irons hot, and it's time to screw on the PL259. Remember slide the outer threaded barrel on to the coax first. I digress. All too often I have seen amateurs cut the jacket away to the point the shield shows after assembly. This IS NOT the proper way. If you follow the cutting table listed in the ARRL Handbook, the jacket stripping length is too short, and on some PL259s, the jacket bottoms out before the core is snug against the back of the tip. Further, the jacket could cause contamination of the solder thus impeding its flow. Both good reasons for purchasing a proper stripping tool.

Make sure you put the threaded barrel over the coax and in the correct direction! Then carefully slide the PL259 body over the end of the coax and screw it down over the jacket. A small pair of channel lock pliers works well for this purpose. Once resistance is felt stop threading. And speaking of resistance, once you get connectors screwed on both ends is a good time to use your DVM or VOM to check for shorts between the center and shield.

With the center conductor should be just below the notch in the tip of the PL259, solder the tips with the small pencil iron and let them cool before soldering the shield. Again, enough solder should be used to close the end of the tip. Avoid slopping solder on the outside of the center pins.

Next solder the shields. If the soldering iron tip is well tinned, about 6 to 10 seconds later the barrel will be hot enough to accept solder. The solder should be applied just at the edge of each hole so it flows into the shield. Enough solder should be applied to just close the hole. Use too much and it could flow to the tip and cause a short. This operation should take about 20 seconds and requires both hands; one to apply the solder and the other to rotate the coax. Now you know why I clamp the iron in a vise. Once soldering is complete, it's time to recheck for shorts and continuity.

There! You have my secret.

Alan Applegate, KØBG

W3GV Repeater Move .. The Saga

On Sunday July 16th, various hams throughout the area were wondering what happened to the melodious tones and wave files of the TCX-150 controller on the 61 machine. They would key up and get a carrier but no courtesy tone. Around 1:30 pm that day, N3APP, N3SRD, N3NKV, and KE3V fired the backup W3GV 146.61 repeater from its new location at St. Vincent's Health Center. For those that don't know the Spectrum's background, the Spectrum is a 30-year old plain Jane repeater that the club has kept in storage for many years. During that first week at Saint Vincent's, there was a lot more activity on the repeater than in past. There was even talk of the early 90s "Hair Net". For the next week, the old spectrum ran flawlessly. Lakeshore coverage was amazing even with a poorly matched antenna. Handheld Stations were making it into the repeater from North East and mobiles could hit it south of I-90. The repeater committee was so impressed by the coverage that they decided to move forward with plans to move the Motorola Micor repeater to St. Vincent's.

On Saturday July 21st, a work crew met to take on the challenge of moving the new cabinet up the narrow stairs along with installing antennas and coax. Those helping out in this project were WB3DOM, N3NKV, KB3NAT, KB3CAT, KB3BAM, and N3SRD. The cabinet went up easier than expected. But, it had to taken apart piece by piece. After six hours of hard work, the cabinet was assembled and ready for the Micor and the antenna/coax crew got their work done up on the roof. Later that evening N3APP and N3SRD tuned the Micor receiver up a bit and started to dismantle the Micor for the move. After 4 hours of work on Sunday to reassembly 61 at St. Vincent's, N3APP, N3SRD, and KB3BAM had the Micor repeater back online along with the TCX-150 Controller around 2 pm.

As of the writing of this article, the repeater is up and operational. But a few things need to be installed, replaced, etc., etc. As time goes one, the repeater will get better. Presently autopatch is not available on the repeater. Linking capabilities to 82 are also inoperative.

If you have any questions about the repeaters, please feel free to e-mail Steve N3SRD or Lee N3APP.



**A big thanks goes out to all those who helped
make this move a success !**



**A slide show from the repeater move will be
presented at the
August club meeting along with video footage!**

Repeater Move Pictures



The new Micor cabinet (Left)
Old Equipment Rack (Right) with Monitor, Spec-
trum Repeater, Voter and Packet Station



The antenna won't fit in the elevator
with the stretcher.



Looking North



Looking East

Radio Association of Erie
P.O. Box 844
Erie, Pa 16512

Swap & Shop

Wanted:

30-40 feet of tower in good condition. Contact Joe Lis N3MLX at 825-5565 or via e-mail n3mlx@adelphia.net

For Sale:

AL-811 Amplifier. For price information contact Bruce K3BDQ at gilsonbruce@hotmail.com

The RAE needs your old computer!

The RAE is in need of at least 1 or 2 Pentium II machines running with a 300 mhz processor or greater. These computers are needed to replace the two that are used for logging and other ham radio applications. By going to faster machines, we will be able to network the machines in the future.

**WE DO NOT NEED THE MONITOR—
JUST THE CPU!!!**

For More Information Contact John N3NKV
At jjlis@adelphia.net

