

## Delaware River & Bay Lighthouse Foundation



# UPDATE

2012—#1 Jan.—March

A professional lampist has made an inspection and issued a condition report for the lens at Delaware Breakwater East End Lighthouse. The study — commissioned by the State of Delaware, Division of Historical and Cultural Affairs, owners of the lighthouse — was conducted by lampist from the Lighthouse & Lens Restoration Corp. in Staten Island, NY. The good news in the lampist's report was that "the lens was found with the glass in excellent condition. There were no missing prisms, no loose prisms, and no major chips or breaks to the prism or lens glass. However, the putty is beginning to fail." He noted some small exceptions to the "excellent" condition and offered recommendations and cost estimates for renewing and painting the putty, replacing some brass bolts that connect the lens to its base, and thoroughly cleaning the lens. Most of the needed work can be done by conservators from Historical and Cultural Affairs and/or Foundation volunteers. Only renewing the putty should be done by a professional, at a cost of about \$2,100 plus launch transportation to the lighthouse, the lampist said. The report notes that the lantern room was dry on the day of the evaluation, but that there is evidence of past water intrusion (as all of us who tend the light know well), probably from aged and rusted windows and damage around the vent ball in the cupola roof. However, the canvas cover that the Foundation had made for the lens several years ago "does protect the lens from above and keeps direct sunlight from hitting the lens in the early morning and late day, which could overheat objects inside the lens, such as the lamp-changer," the report said.

**The sort-of bad news in the lens report** was that the inspection found firm evidence that the 4th order conical lens at Delaware Breakwater East End is not the original 4th order Fresnel lens installed when the lighthouse was built in 1885. There always has been some evidence that this might be the case, but no one was able to find any manufacturer's mark on the lens to answer the question. The lampist, however, who knew what he was looking for and where to look, found the mark. The Fresnel-type lens was made in Sweden by AGA, a company that made acetylene nautical aids. He theorized that the lens was made in the 1920s and perhaps used on a lightship before it was brought to Delaware Breakwater. With that information, Foundation President **Judith Roales** was able to locate keepers' log entries that discuss replacing the original lens with a new one. These entries — which were previously believed to refer to the lens for the light on the west end of the breakwater — now seem to record the installation of the Swedish lens on the evening of April 29, 1939. You can read these entries in the "A Bit of Light" column to the right.

### A Bit of Light...

These entries in the Keeper's Log for Delaware Breakwater East End Lighthouse seem to date the installation of the existing 4th order conical lens as taking place in 1939. J.C. Gray may have been keeper at this time, however, the entries are not signed.

**March 23, 1939** Mr. Miller and Jack Hill took measurements of the lens.

**April 27, 1939** John Wheass (sp) and George Bruen (sp) arrived at 6 o'clock pm to change lens in the tower.

**April 29, 1939** John Wheass and George Bruen put in little generator for tower light. Keeper run engine charging batteries and help Mr. Wheass.

**If you're in Delaware this summer, keep Saturday, August 11, open.** If you're not in Delaware, plan to come. That's when the Foundation will hold the first ever Delaware Lighthouse Festival, a celebration of the First State's historic aids to navigation and of National Lighthouse Day which occurs each year on August 7. The Foundation is fortunate to have the help of the **Delaware River & Bay Authority** and the Authority's event planner **Karen Pugh** of **Life of the Party** in organizing the Festival. Attractions will include displays and information about numerous Delaware lighthouses in booths by participating lighthouse-interested organizations from around the state. There will be several tours of Delaware Breakwater East End

Lighthouse that day (Sign up early, space is limited.), lectures by lighthouse experts, chats with descendants of lighthouse keepers, musical entertainment, special food and drink, activities for kids, lighthouse photography tips by pros, a lighthouse art and photography display, and much, much more. The event will be held on the grounds of the Lewes terminal for the Cape May-Lewes Ferry, with the Delaware River and Bay Authority, operators of the ferry system, as a premier sponsor. Admission to the Festival will be free, but of course there will be plenty of opportunity to spend money that will benefit the Foundation and participating lighthouse-related organizations. Stay tuned for more information in the coming months....and start praying right now for good weather that day.

**Of course, the Foundation needs an extra contingent of volunteers to produce a successful festival.** The Foundation needs volunteers who will work now to help organize and prepare for the event as well as volunteers who will work at booths, on the tours, and with other activities on August 11. If we call you, please say yes. If we don't call you, please call us at 302-644-7046 to let us know you're willing to help with this event. We especially need volunteers to arrange kids activities, to sell ads for a Festival program, and to help generate publicity.

**Dock Fund receives an important grant from the Crystal Trust.** Members who have given the Foundation an email address got this big news in an email blast just before Christmas. But the news is so good that it must be repeated here for members who are not online recipients. In the waning days of December, The **Crystal Trust** made a \$25,000 award to the Foundation for use in construction of the new landing dock at Harbor of Refuge Light Station. The Crystal Trust, based in Montchanin, DE, is a grant-making organization that supports education, family and social services, as well as arts and cultural programs, health and hospitals, conservation, and historic preservation. Funded by **Irene duPont Jr.**, Crystal Trust is one of the largest grant-making foundations in the United States that makes gifts in Delaware. This grant brings DRBLHF close enough to its fundraising goal that we hope to begin serious planning early this spring and construction of the dock during the 2012 season in order to have the light station once again open for preservation activities and public tours by the summer of 2013 at the latest.

**There is a new Foundation presentation available.** "Two million pounds later" tells the story of the recently-completed repairs to the Harbor of Refuge Breakwater wall. Beginning with the history of the original construction of the breakwater between 1897 and 1901, proceeding through damage and repairs over the years, and ending with detailed information and photographs of the 2011 repairs by the **U.S. Army** (see page 4)





The Delaware River & Bay Lighthouse Foundation  
presents the first ever  
**Delaware Lighthouse Festival**  
a celebration of Delaware's historic lighthouses  
and National Lighthouse Day

Come join us for a day of Delaware lighthouse-related exhibits, programs, and activities. There'll be speakers, chats with descendents of former keepers, musical entertainment, food and drink from area restaurants, kids activities, commemorative merchandise sales, raffles for valuable gift certificates, tours of Delaware Breakwater East End Lighthouse, tips on lighthouse photography from a pro, and a lighthouse art and photography show. We're even considering a canoe or kayak race to the East End Lighthouse. And much, much more.

Save the date!

Saturday, August 11, 2012  
10 am to 4 pm

On the Green  
at the Lewes Terminal  
of the Cape May-Lewes Ferry

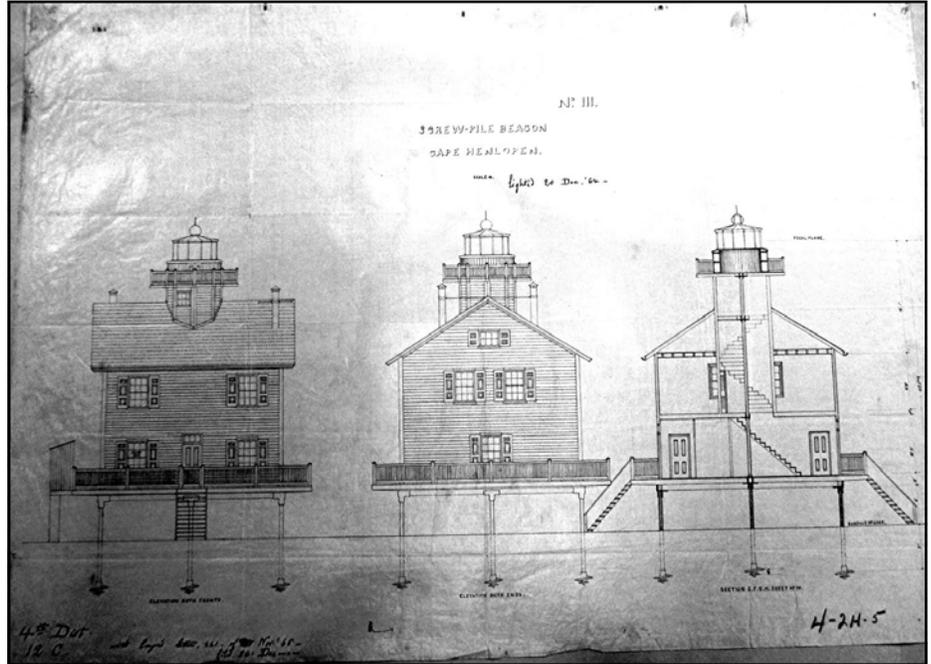
Admission is FREE !

Proceeds will benefit the preservation of Harbor of Refuge Light Station and other Delaware lighthouses.



Corps of Engineers Philadelphia Division, the presentation uses historical and modern photographs to show how the breakwater has fared. The presentation was given for the first time Feb. 10 at an open meeting of the **Overfalls Maritime Museum Foundation** and received rave reviews by the mostly-Lewes-resident audience who expressed lots of surprise at how much they learned about the breakwater that is right in their front yard, but about which they know so little. The breakwater presentation brings the list of available Foundation presentations to four. The others are the most popular show, “240 Years of Delaware Lighthouse History”, as well as “A Virtual Tour of Harbor of Refuge and Delaware Breakwater East End Lighthouses”, and “Sea Glass that Saves Lives”, which is about Delaware lighthouse lenses and lamps. If you’d like a Foundation member to make one of these presentations for your group or school, contact the Foundation at 302-644-7046.

*Historic Photo of the Month*



**Plans for Cape Henlopen Beacon**

National Archives, Manhattan Branch

Not nearly as famous or well known as her historic neighbor the Cape Henlopen Lighthouse, the structure called the Cape Henlopen Beacon was first lighted Dec. 20, 1864 — according to these plans stored in New York City. This was the second “beacon” light built ever farther north of the original Cape Henlopen Lighthouse as the point of the cape continued to grow. To help it survive the changing sands, the beacon house was built on screw-piles reaching more than six feet into the sand. But even this failed to keep it stable, and only 20 years later it was declared unsafe. Plans were to have Delaware Breakwater East End Lighthouse take over the beacon’s duties. But before East End was completed, “the beacon having become unsafe from the undermining of its screw-pile foundation, the light was, on October 1, 1884, discontinued, and the beacon, with the exception of the piles, was removed,” according to the Lighthouse Service annual report for that year. A simple daymark was erected until East End went into service in 1885.

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