

## The Lake Room Script

Move in and out of the Lake Room to share information with the visitors. Invite all visitors to join you in the Lake Room to see the fourth-order Fresnel lens. Many visitors will *not* climb the tower, so you will be the *single source* of information. Suggest they read the *room descriptions* posted on the walls in each room. Share the information below and allow for questions. Remind people with tickets to report to the Oil Room at the time of their tour. Begin the Information on the House and the Residents

1. The Lake Room was first built in the 1970's, and was later reconstructed in the early 1990's to look as it does today.
2. The brick walls are the original *outside* walls of the lighthouse that were completed in 1873. The building is 144 years old in 2017.
3. The basket of brick pieces were recently uncovered on the northwest corner of the lighthouse during an archaeological dig done in 2016. They did not find anything of great significance.
4. When the lighthouse is restored back to the early 1900's, in the next 3-5 years, this room will be removed along with the utility room on the south side of the kitchen.
5. The summer kitchen will be restored with a hand water pump in the sink, a coal stove for cooking, and an ice box for food.
6. The *washhouse/privy* was located outside just a few feet from the back door of the lighthouse. It was used by **all** the lighthouse residents until indoor plumbing was installed in 1957. The plan is to eventually rebuild the washhouse/privy and barn. (Show the older picture of the yard with all the buildings on the grounds.)
7. Nine keepers and their families lived in the lighthouse from 1873 until 1944 when the last keeper, Frank Huntington, retired.
8. Share pages from Keeper Shaw's daily journal to show how he made the daily recordings of the weather and his lighthouse chores. He was the keeper from 1901 till 1927, when the road was extended to the lighthouse on the north side along the shore of Lake Erie.
9. By 1948 the road was washed away by the fury of Lake Erie, and had to be rebuilt on the other side of the lighthouse, 21 years after road built.
10. The US Coast Guard took over the lighthouse in 1946. Electricity was installed in the tower, so the keeper was no longer needed to keep the light shining.
11. The lighthouse was vacant for 8 years, from 1948 until 1956, when the Wunch family moved-in. Daughter, Loretta Wunch Brandon, has written a book, Lightkeeper's Legacy, describing life on Presque Isle State Park. The book is for sale in the lighthouse gift shop. (Show a copy).
12. Local families lived in the lighthouse until 1989, after which it became a private residence for Presque Isle State Park employees until 2014.
13. In 2014, the Presque Isle Light Station, a non-profit organization, signed a 35 year lease with the Department of Conservation and Natural Resources (DCNR) and opened the lighthouse

for public tours. The organization needs to raise over two million dollars to restore the house and the grounds to the early 1900's.

14. The "Tight Board" fence installed in May 2017 resembles the fence that surrounded the property of the lighthouse in the early 1900's. It will be painted white once the wood cures. The design of the fence is to keep the sand from encroaching on the lighthouse during storms.
15. The new sidewalk was completed and the flag pole installed in May 2017.
16. Guide visitors to look at the pictures throughout the lighthouse. It will give them an idea of how the lighthouse and grounds looked in the past.
17. Invite visitors to view some of the old and new pictures of the Presque Isle Lighthouse and Presque Isle State Park on the slide presentation on the TV. Each picture has a caption that you can read to the visitors during your talk, if it pertains. Turn the music on for lake shore sounds if you want.
18. Ask visitors to sign the *Guest Register with email address* if they would like to be on the mailing list. *Guest Register book* is in the kitchen. Also offer the cards with our website, Facebook, and Twitter account information.
19. Inform the visitors that the best place to take a picture of the tower is from the north corner of the pavement or on the beach.
20. Hand out the brochure of the three lighthouses; Presque Isle Lighthouse, North Pier Light and the Land Lighthouse. Point out the map on the back of the brochure. (Discuss if there is time.)
21. Tell visitors they can purchase a passport book and access the lighthouse stamps in the Gift Shop. (Show the Passport Book)
22. Tell visitors they can pick up an application in the kitchen for an official PA Lighthouse specialty plate. Volunteers should become familiar with the info on the cover sheet with the application. Lighthouse receives \$13.50 of the \$49.50.

Fourth Order Fresnel Lens (This is the narrative posted on the wall)

1. This unique Fresnel lens (Pronounced Fra-nel) is an original 4<sup>th</sup> order lens from another lighthouse in Michigan.
2. This lens weighs approximately 450 lbs. and is over 100 years old.
3. The arrangement of the prisms (triangular bands of glass) allows the light beam from the one lamp to be refracted (bent) and reflected creating a central beam of light that is cast out horizontally.
4. A Fresnel lens can emit a steady fixed light, as would come from this lens, or it could rotate and produce a flashing light like the one that was in the tower of the Presque Isle Lighthouse.
5. Look carefully around the brass frames where the prisms are held in place by small wooden shims.

6. The white coating on the wood is called “litharge.” Litharge was made-up of mineral oil and lead and used to protect the wooden shims.
7. Augustin-Jean Fresnel designed the first lens in 1823. Fresnel lenses can still be found in many lighthouses and museums today. People climbing the tower will get some of the same information about the Fresnel lens. Here they can actually see the lens.
8. The lenses were made in different sizes referred to as *orders*. This is a 4<sup>th</sup> *order* lens. Originally there were six *orders* with the *first order* lens being the largest and placed mainly in ocean lighthouses. See chart below.
9. Every lens, with a light source, would emit a specific color or flash pattern, distinguishing it from another light. This was called the light’s *characteristic*. The characteristic of the Presque Isle light, in 1901, *was* an alternating red and white flash. Today it is a white flash of *three seconds on* and *three seconds off* as seen from this tower at night.
10. The Fresnel lens in the Presque Isle Lighthouse was a 4<sup>th</sup> order that resembled the lens in the Lake Room, except PILH’s had red panels, as seen in the small picture to the right and it rotated on a pedestal.
11. As the light rotated, there was a flash of white, and 10 seconds later, a flash of red. One revolution was completed in 60 seconds. This pattern continued through the night, so it was given the nickname, *The Flashlight*.
12. The rotations were controlled by a clock work mechanism that was set to operate like one in a grandfather clock.

Fresnel lens as was in the PI Lighthouse.

Fresnel Order by Size	Height	Inside Diameter
First	7' 10"	6' 1"
Second	6' 1"	4' 7"
Third	4' 8"	3' 3"
Third and 1/2	3' 0"	2' 5 1/2"
Fourth	2' 4"	1' 8"
Fifth	1' 8"	1' 3"
Sixth	1' 5"	1' 0"



❖ This beautiful 4<sup>th</sup> order Fresnel lens was constructed with prisms made of acrylic instead of glass and is installed in the tower of Harbor Beach Lighthouse in Michigan in 2015 at the cost of \$60,000.

Our goal is to raise enough money to have a 4<sup>th</sup> order lens, with red panels, made and displayed at the Presque Isle Lighthouse some day!

5/25/17