

Replica Fresnel Lens to Be Exhibited in Museum

The magnificent third order Fresnel lens that has been absent from the Cape St. George Light for 66 years is about to return!

Dan Spinella of Artworks Florida is hard at work directing the design and construction of a replica of our lens, which will be displayed in the Keeper's House Museum. We expect that the new lens exhibit will be installed in Spring of 2016.

Dan reports that the 149 prisms have been crafted, and that the components of the brass frame have been cut and sent to a sub-contractor for polishing. When all the pieces have been returned to his shop, he will perform a test assembly to make sure that all the parts fit together. Then the pieces will be shipped here for final assembly on site.

We have also ordered a reproduction lamp which is being built by lampist Kurt Fosburg in Michigan.

Our lens is very similar to the fixed white third order lens that Artworks Florida recently constructed and installed at the Buffalo Lighthouse in New York. View a video and photographs of the Buffalo installation at this link: <https://www.facebook.com/pages/Artworks-Florida/366538040079163>.

Artworks Florida was established in 1992 to aid in the restoration of the first order classic Fresnel lens in the St. Augustine Lighthouse.

During the following years, Artworks Florida was involved in the restoration of several classic Fresnel lens at the Ponce Inlet Lighthouse, and numerous other Fresnel lens restorations around the country. In 2003 the company began design and production of full scale reproduction lenses. These lenses are used as interpretive exhibits in museums, and as private aids to navigation in many lighthouses around the country.

Fresnel lens replicas are manufactured by importing CAD drawings and 3D computer models to generate files for machining and waterjet cutting of the brass framework. The prisms are manufactured from acrylic material, which has a better light transmission percentage than glass and holds up well to sunlight and harsh coastal environments. The prisms are tinted to match the greenish hue of historic Fresnel lens prisms.

The naval brass frames are water jet cut and machined according to the computer model, sanded and polished to a mirror finish. The optical elements are set and glazed into the brass framework. The manufacturing technique replicates the process used to produce the historic lenses made in the 1800's.

Stay tuned for updates on the progress of the lens manufacturing process, and plans for introducing our fabulous new exhibit to our members!

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