



Untold Story of the Diamond — Page 6

Moving History at Old Baldy — Page 10

Lighthouse Updates — Page 14-15

# LIGHTHOUSE NEWS

DEDICATED TO THE

UNITED STATES LIGHTHOUSE ESTABLISHMENT

Volume XV Number 2

Spring 2009

## Bodie Island Lighthouse to be Fully Restored

By Cheryl Shelton-Roberts

“Back in the day,” as today’s kids say, the Outer Banks Lighthouse Society (OBLHS) was begun to help obtain restoration funds for the 1872 Bodie Island Lighthouse (BILH). Over the years, we’ve watched the National Park Service (NPS) volunteer program end and the door closed to visitors, poor quality work to the tower and windows executed by contractors hired by the U.S. Coast Guard, huge chunks of ironwork from the collar atop the brick tower fall to the ground, a barrier fence built around the lighthouse to limit how close visitors can get to the lighthouse, cables put in place to literally hold the lantern room in place, chicken wire wrapped around the ironwork to prevent it from breaking and endangering anyone at ground level below, and window after window crack because the ironwork is pulling every part of the lighthouse out-of-round due to elements seeping into the historic fabric and causing a myriad of problems. Year after year our members have worked to alert our representatives of a national treasure literally falling to pieces on their watch. Year after year some of these same representatives failed to get funds for restoration. Then along came some sensible and caring representatives who wanted to put America back in shape and restore our priceless artifacts including the Bodie Island Lighthouse. We salute some of our reps for hanging in there to see the lighthouse

*Continued on page 2*



*From a distance, the Bodie Island Lighthouse looks like it is healthy. However, a closer look reveals its many ills in reality: cracked storm panes due to ironwork that is failing and pulling the lantern room out-of-round; cables hold the canopy of the lantern room in place so it won't blow off in high winds; chicken wire encases the cracked and broken iron collar that sits on the brick tower, a point of greatest stress for any lighthouse that has endured harsh elements for over 130 years. Help is arriving for this historic lighthouse in the form of restoration funds that will put it back into the peak of health.*

Photo courtesy of Diana Chappell

# Bodie Island Lighthouse

*Continued from page 1*

is taken care of including Senator Richard Burr, Rep. Howard Coble (6th District), Rep. Brad Miller (13th District). Special recognition is due Representative David Price (4th District) and his staff that kept Bett Padgett, OBLHS president, apprised of progress in funding, Price kept special watch on earmarked funding and made sure BILH was kept in queue.

Doug Stover, Cape Hatteras National Seashore Cultural Resources Specialist, has worked diligently to promote the restoration project for more than eight years and to keep Bodie Island at the forefront of the park's priorities. Recently Doug made sure that BILH was included on the Register of Historic Places, and the reply he received from the committee was, "This light station not only deserves to be on the National Register of Historic Places but also deserves the title 'National Historic Landmark.'" This lighthouse was the one mariners didn't want to miss if traveling south—to do so and fail to swing seaward meant sure disaster 40 miles ahead on Diamond Shoals. Missing the BILH's beacon meant joining the annals of the Graveyard of the Atlantic. The lighthouse was built during the Golden Age of lighthouse building and embodies the entire history of the U.S. Lighthouse Service with three different lights on this site. For a five-mile stretch, all U.S. Coast Survey markers survive and have been located; this characteristic alone makes the site one-of-a-kind in the country. It still stands after only band-aid work since the keepers and their families left in 1940 and the USCG took over the Lighthouse Service. Budget constraints on an already-stretched coast guard starved the light station of needed repairs; once the National Park Service took ownership of the tower July 13, 2000, and permanent stewardship of the lens April 25, 2005, funds have continued to be more difficult to procure. Thanks to OBLHS members' vigil to keep this light station one of the park's focal points, President Obama's Omnibus Bill and stimulus plan has provided monies for both the tower and lens. Additionally, two historic structures, the Bodie Island Life-Saving and Coast Guard Stations, are being relocated from punishing ocean elements to the entrance of the light station by August.

Diana Chappell, OBLHS treasurer, and I accompanied Doug for a "last climb" recently and we took pictures of the "Before" conditions. As the restoration is documented, we shall keep members up-to-date on

each phase of the process via our website <http://www.outerbankslighthousesociety.org> so you can get a look at the "After" makeover.

Currently the only details available about the restoration until a contractor is chosen is in a park press release (see following). Although recycling of the iron spiral stairs at Cape Hatteras Lighthouse this winter was successful, only individual stair treads and bracing will be needed at Bodie Island. Once the company to restore the first order Fresnel lens is chosen, one of only a few remaining in its original tower and still operating, the clock starts ticking. Eight weeks has been scheduled to get the lens disassembled, treated, and stored and ready to return to the lantern room after tower restoration. After the contractors begin the brick and iron work refurbishment, approximately 18 months will bring that phase to an end. One of the goals is to open the tower for climbing to 32 visitors per hour. Stress factors and a narrow passage near the top of the stairs are considerations. And the wait is worth it—that is one of the most beautiful views I've ever seen from a lighthouse catwalk. The view is virtually uninterrupted by 21st century objects. All you can see are ocean, sound, estuaries, spits of islands surrounding the site, and thousands of acres of pure Outer Banks.

## NPS Outer Banks Group Receives Funding for Bodie Island Lighthouse and Fort Raleigh National Historic Site Renovations

The Outer Banks Group announces the receipt of funding, from the 2009 Omnibus Budget bill approved by Congress and signed by President Obama, for restoring the Bodie Island Lighthouse and renovating facilities at Fort Raleigh National Historic Site. These projects are being funded through the Line Item Construction process within the National Park Service (NPS).

Funding for the Bodie Island Lighthouse was requested in 2006 and again 2007, but was not included in the NPS budget until this year. The lighthouse and oil house will undergo a significant



restoration that will address structural and safety issues. Most notably, restoration efforts will repair or replace corroded metal features around the gallery and lantern decks, repair and strengthen the stairs, repair masonry and stone, and rehabilitate portions of the floor, windows, and framing, upgrade electrical systems and ensure lightning protection. The project will likely begin this August and last approximately 18 months during which time the Bodie Island Lighthouse Visitor Center and bookstore will be open. In addition to restoring the lighthouse, the lens will undergo restoration offsite and re-installed when the lighthouse renovations are completed. At the end of the project, the lighthouse should be open to the public for climbing and tours.

Funding was also provided to renovate the Visitor Center, Headquarters, and The Lost Colony Activities Building located at Fort Raleigh National Historic Site. Renovation will include repair of interior and exterior structural damage, removal of asbestos tile and insulation, replacement of ventilation and HVAC systems, and removal of mold and mildew. The project will begin in late summer 2009 and last approximately 12-14 months. Temporary facilities will be established onsite to serve as office space, visitor center, and bookstore. Fort Raleigh National Historic Site will remain open during the construction.

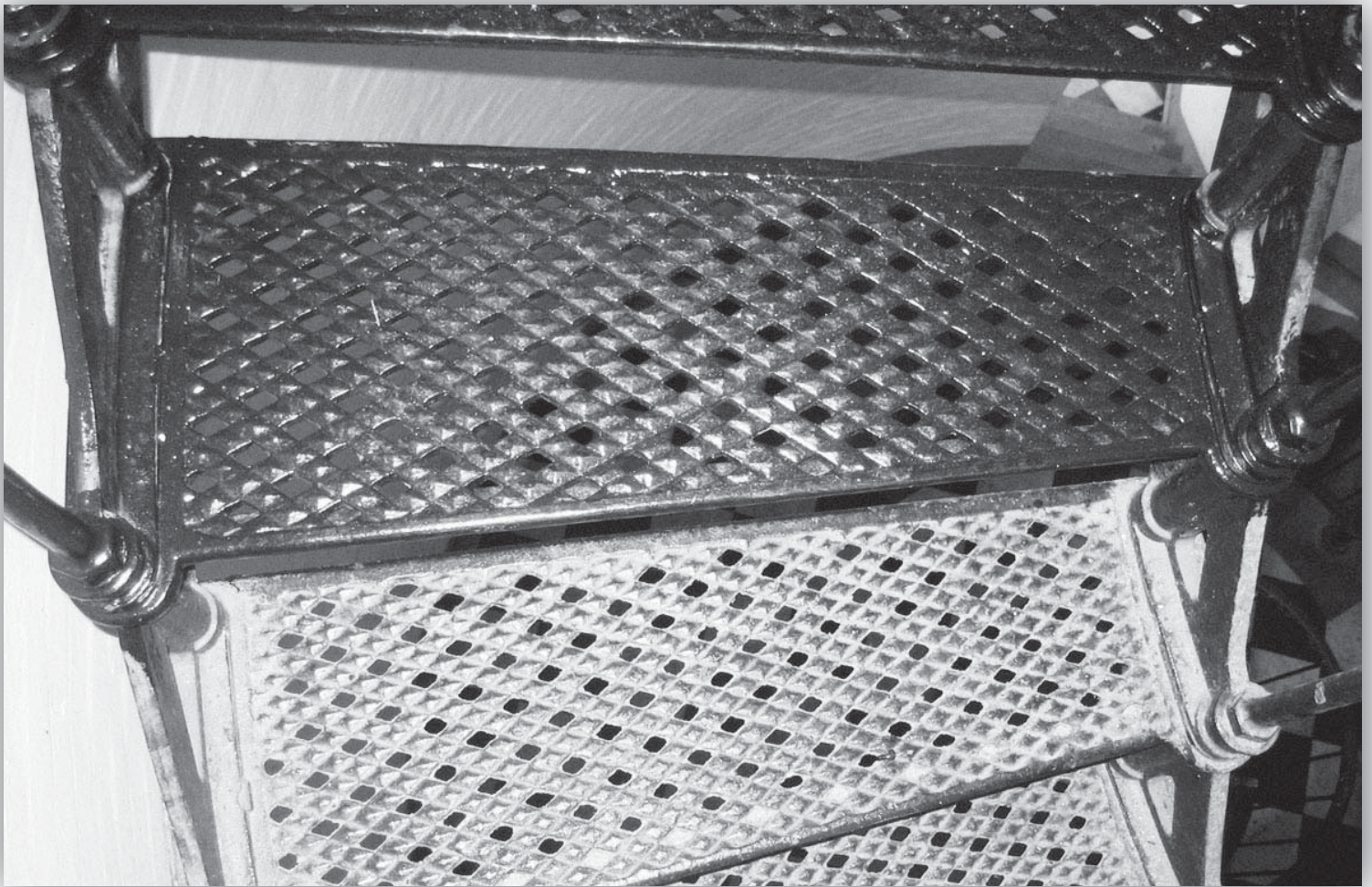
Photos courtesy of Diana Chappell



*Near the top of the Bodie Island Lighthouse, two of the windows say it all. A great deal of damage has occurred inside the tower due to quick-fix work to seal out wind and rain. Budget restraints have hobbled both the U.S. Coast Guard and National Park Service where serious repairs have been needed. Funding is now in place, and when restoration is complete, each window will be returned to its original appearance complete with a new window, sill, and framework repointed (mortar) brick.*







*In the photo above, one of the iron treads that has been reproduced is shown. Of the total 214 steps that comprise the entire system, a few dozen have been identified in need of replacement. Instead of supporting the stairs from above and below to remove a section of steps, a new way of handling stair tread replacement has been used. Additionally, heavy duty bracing for the entire sweep of stairs will be put in place during the restoration process. The park's goal is to open the tower to climbers in order for them to enjoy the panoramic view of this historic site. For lighthouse enthusiasts or the casual visitor looking for a memorable experience, Bodie Island Lighthouse will join the ranks of the great Cape Hatteras and Currituck Beach Lighthouses that are open to visitors.*



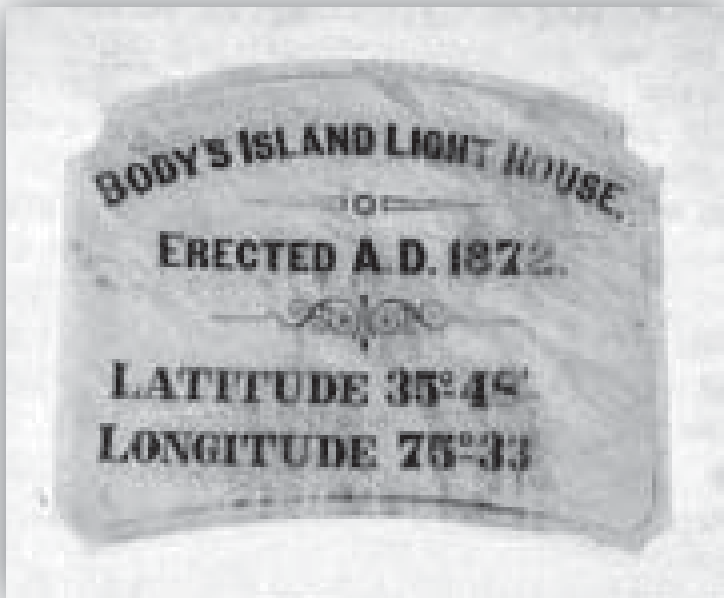
## Keeper's Son Painted the Bodie Island Lighthouse 1934

*In 1934, Keeper Vernon Gaskill Sr.'s son, John, then 18 years old, painted the lighthouse. He was suspended by ropes and pulleys from the railing outside the lantern room. To paint under the iron decks, he used planks inserted into the round openings of the brackets and painted while supported only by the board 150' in the air and holding on against the whipping winds. Today, John is back greeting visitors at the keepers' quarters as a volunteer every Tuesday and Thursday (at left). He has written an autobiography John Gaskill Remembers. Drop by to visit the keeper's son, a rare opportunity to meet a descendant of a U.S. Lighthouse Service keeper.*

Photo courtesy of Diana Chappell



# Bodie Island Lighthouse Awaits Restoration



*Above left is the third Bodie Island Lighthouse. Completed in 1872 by the Light-House Board, its construction was supervised by Dexter Stetson who had already successfully overseen the building of the Cape Hatteras Lighthouse 40 miles to the south. Its daymark was applied in 1873, designed by West Point Army Corps of Engineers Peter C. Hains. Over 135 years have passed since it first exhibited its light from a first order Fresnel lens (above) that was recently inspected by Cultural Resources Specialist Doug Stover. The lens will be removed, taken to ground level for treatment, and then replaced following complete restoration to the tower. The park will maintain the light as an active aid to navigation. Renovation will be applied to all parts of the lighthouse including the marble plaque that bears its name and vital statistics. Note the original spelling "Body's." In official U.S. Lighthouse Service records, the name has several different spellings, sometimes all within the same document.*

Lighthouse photo courtesy of Virginia Chadwick Howell

# The Untold Story of the Lightship *Diamond*



Seventeen-year-old Rozzell Finley, radio operator 3rd class, was on board the lightship *Diamond*, also known as *LV 71* (light vessel), and anchored off Diamond Shoals at Cape Hatteras. He alone could use the telegraph key to send a warning message that fateful August afternoon in 1918. As navy personnel, he was working on the lightship while the U.S. Lighthouse Service was under naval supervision during a state of war.

A menacing German U-boat, the *U-352*, slinked along one of the enemy's favorite areas off Cape Hatteras—their success in sinking Allied ships along the East Coast of North Carolina lured them back to the site. German submarines hunted Allied shipping vessels to sink them and further interrupt supplies reaching our troops in Europe. *U-352* had been unlucky so far with no kills as far north as Nova Scotia, so its captain headed it south to Cape Hatteras. Thanks to this young radio operator's flawlessly following the orders of his First Mate, the U-boat's luck would turn from bad to worse that day. The young radio operator has remained just another nameless and faceless hero in American history until recently.

The German sub spotted the *LV 71* and considered taking aim but turned away to hunt a merchantman passing nearby. The sub's captain knew there was a radio on board the lightship, so he sent a radio message to the lightship's captain cautioning him not to broadcast a warning. Should *LV 71* choose to do so, the *U-352* would destroy it with their six-inch-deck gun. Translated, the Germans would sink the lightship. First Mate Walter Barnett was in charge since his captain was on shore leave, prepared to make a difficult decision. He ordered young Rozzell to send a warning—only seconds elapsed before the sub shot away its radio antenna. The next order was to abandon the lightship; the crew was able to scramble into the whaleboat and pull away as more shells splashed in the water about them.

Unknown to either the lightship or the sub captain, there was a convoy of 28 Allied ships, according to Outer Banks historian David Stick, headed towards Cape Hatteras; they were perfect targets for the sub. Because of Rozzell's broadcast notwithstanding a death threat, the convoy headed for the safety of Cape Lookout Bight 40 miles south and the harbor at Beaufort nearby. As *LV 71*'s crew watched their lightship become another statistic of the Graveyard of the Atlantic, they continued a seven-hour row to reach shore, according to Rozzell. There was great angst on the part of the lightship crew as they witnessed a third explosion cut the lightship in half. After reaching the beach, they walked five miles to the life-saving station.

The details of the event appeared in a letter Rozzell Finley wrote to his mother August 14, 1918, after the Navy lifted a blackout on the news. The letter was subsequently published in his hometown newspaper in Santa Fe, New Mexico, and has been preserved by his grandnephew, Henry Finley of Kentucky.

## *And here's "the heart" of the story:*

Elizabeth Ireland contacted OBLHS president Bett Padgett recently to relate a story about a treasure she found nested inside an antique she inherited from her grandmother, Beulah Ireland. The antique had been given to Beth a few years ago following Grandmother Beulah's death, but it had lingered in

*Continued on page 8*



Newspaper article  
is from the 1918  
*Santa Fe Daily New Mexican*,  
courtesy of Henry Finley,  
Rozzell Finley's grandnephew.



*Beulah Ireland waited for her betrothed to return from WW I. Intentionally misinformed by another young man interested in Beulah, her protective brothers kept her from seeing Finley after he returned home from war. She left behind clues for her granddaughter, Elizabeth Ireland, to discover bidden in an antique ceramic chicken to tell "the rest of the story." It seems she reached from the past to get due recognition for young Finley because of his brave act under fire during WW I. In this picture, she is holding Beth's father.*

Photos are courtesy of Elizabeth Ireland

## SCOTT BOY TELLS OF U-BOAT ATTACK

Rozzell Finley, in Letter, Describes  
Sinking of His Ship By a  
Submarine.

When the U. S. Lightship "Diamond" was sunk by a German submarine off Cape Hatteras, August 6, the wireless operator of the ship was Rozzell Finley, son of Mr. and Mrs. Jos. Finley.

Finley enlisted in the navy, April 23, 1917, and was trained at Portsmouth. He is now a second class operator.

The ship's crew of twelve men escaped to the shore in a life-boat after Finley had sent the distress signal. His letter to his mother follows:

August 14, 1918.

Dear Mother:

In, out, and everywhere is the way I've been the last few days and weeks. I guess you were worried a little after hearing that the "Diamond" had gone down and not hearing from me but it was not my fault because after we landed they would not let us say or write any thing until the Navy Department had all the news there was. I am now transferred back to the Yard and glad of it. I will tell you the story as near as I can remember it.

On the afternoon of August 6, 1918, we were all standing around talking not thinking of a submarine at all, when out of the water there came a shot, we could not tell where it came from. It dropped about fifty yards from a steamer that was bound South. She was about a mile off our stern. The submarine fired several more shots at her before we saw it; she was about five miles to the South west of us. It kept up the firing for about twenty minutes before hitting the steamer. The first shot hit about midships and set her afire and by that time the crew had left her and were headed for us, but no sooner had the submarine seen them headed for us they fired at them in the small boat and made them take another course. The submarine only took about five minutes to get a range on us and they opened fire, the first shot going high, the

them headed for us they fired at them in the small boat and made them take another course. The submarine only took about five minutes to get a range on us and they opened fire, the first shot going high, the next two hit the wireless but not before I had our distress signal out and an answer from it. The order was then given to abandoned ship which we did without a second bidding, and made for shore as hard as we could pull but it seemed that the submarine was not satisfied with sinking a steamer and light ship so she fired on us in the life boats but thanks to the sea for being a little rough she could not hit us for we were going up and down like a cork on a pond. She gave it up and went after another steamer that had seen her and turned around and went back the way she came, but that was too late, the submarine being a faster boat and could shoot from a distance of five miles. She must have overtaken her, for we heard about twenty shots and she came back headed for

South. We went for shore which was eighteen miles, and it took us seven hours hard pulling to make it. Then we had to walk about five miles on the beach before getting to the life guard station. It is kind of funny to see a ship sink and know you were on her not fifteen minutes but it is a little funnier to hear six inch shells bursting and throwing water all around you, and the submarine about a mile off and coming closer all the time, but I am glad that I have had the experience, being the way it all came. But no more of it for me if I can help it. I lost everything that I owned—all my clothes and everything, and it is going to take quite a little time to get a full bag again, but I think I can make out all right. I am at the Navy Yard radio station now having a regular watch and certainly glad to be here. No, I was not wounded. No more than a good scare and a little nervous, but that is all gone now. Give the kids my love and tell them that "Uncle Bucket" has something on the rest of the boys that left from home or on their old Daddy either. Write soon and do not worry, for there is nothing to worry about, also tell Offutt that I wrote him a letter but it sunk.

BROTHER.

How much damage is done to your vehicles because of holes in the roads?



storage until the busy Beth could claim it. Inside one chest of drawers was a ceramic chicken. Within that chicken was a newspaper article related by Rozzelle Finley and a locket with his picture.

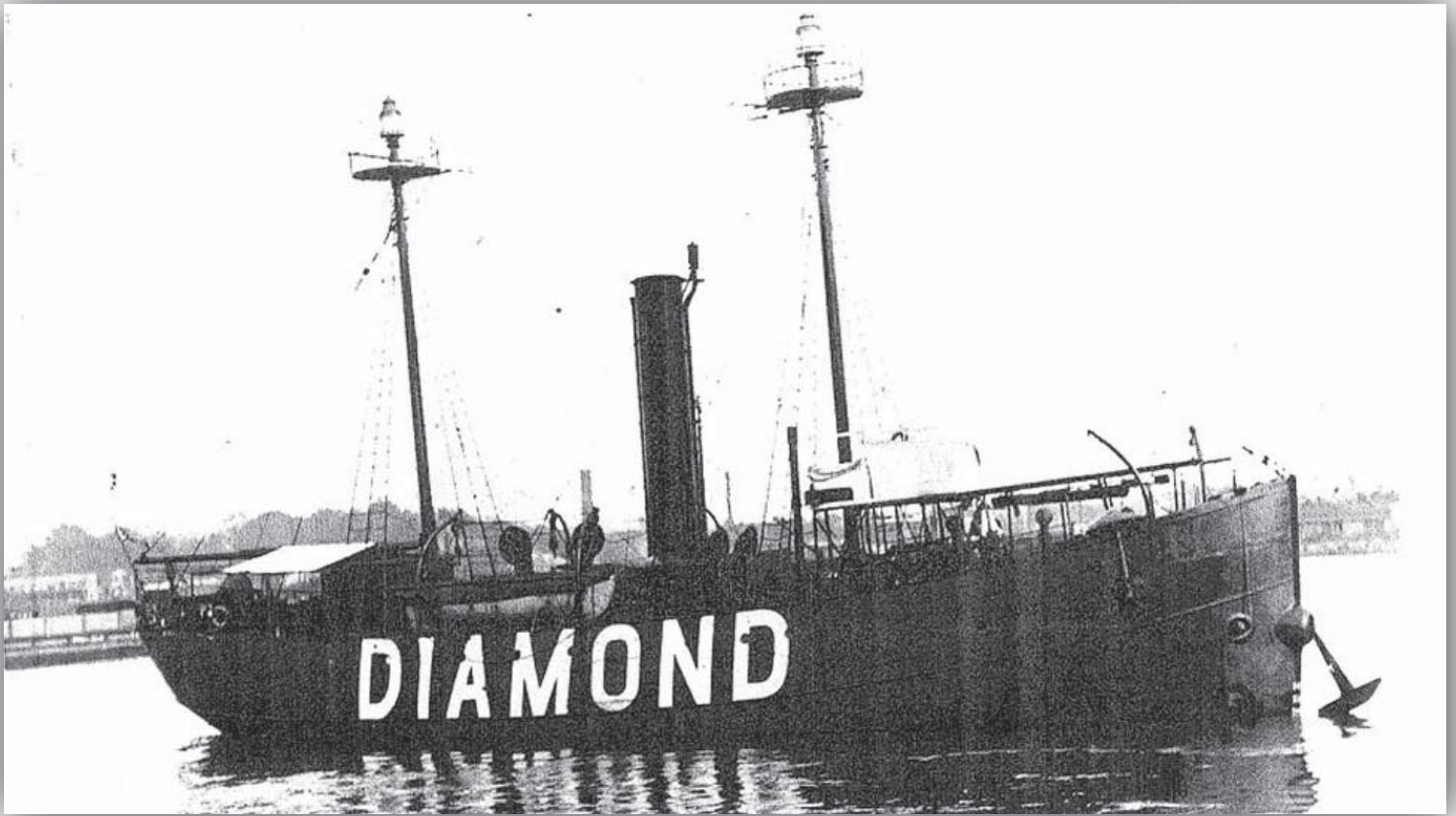
Beulah grew up in Georgetown, Kentucky, during the early 1900s. She fell in love with Rozzell Finley and he with her. WW I took him away to service, but he committed his loyalty to his beautiful Beulah and asked her to wait for him. It all looked like a perfect match with their promising future betrothed to one another; however, during Rozzelle's absence, one of his friends revealed his attraction to Beulah, asking her to marry him. This "friend" told Beulah's four protective brothers that Rozzell had been unfaithful to her with other women while he was serving in the war. It was a lie; however, during 1918 "times were different and there was a certain honor in families and her brothers forbade Beulah from having anything to do with Mr. Finley," Beth Ireland said.

Young Beulah was heartbroken—it took some time to recover and marry another man, not the deceptive one, we are glad to learn.

Rozzell returned home after service and tried to see Beulah to keep his promise of marriage. Her brothers shunned him; the disappointed suitor left the country and embarked on a world tour to let his heart heal. Out of sight, yes, but never out of mind, evidently. Beulah never forgot him and told her family, even her husband, about the man she didn't marry.

Beth felt closer to her grandmother and how she must have felt about a lost love and her sustained loyalty to young Rozzell, as represented in the hidden locket. Now we know the name and face of our young radio operator aboard the Diamond and about his act of valor. Rozzell Finley had courage and heart.

*Information courtesy of Elizabeth Ireland and Rozzelle Finley's grandnephew, Mr. Henry Finley.*



*Diamond Shoals Lightship No. 71 was also known as the Diamond or LV 71. It became a victim of the German U-352 in August 1918. After its radio operator broadcast the presence of the enemy submarine, the U-boat destroyed the lightship. During a state of war, the U.S. Lighthouse Service and all aids to navigation were put within the Navy Department. First Mate Walter Barnett had told his wife not to worry about him because the enemy submarines needed the lightship as much as Allied Power ships. However, disobedience of the German captain's orders to remain reticent on the U-boat's presence, the lightship was destroyed after its crew escaped. The incident reached worldwide news. Germany's success interrupting Allied shipping would bring them back in "wolf packs" during WW II.*

U.S. Coast Guard photo from the author's collection



# Dedication of St. George Island Lighthouse



*Cape St. George Lighthouse is the lighthouse Phoenix of 2009. After its collapse on the beach in Florida, St. George Lighthouse Association President Dennis Barnell literally picked up and stored the bricks in his garage. Volunteers cleaned mortar off thousands of the old bricks. Above are Neil Hurley (right), author and Florida Lighthouse Association Historian, and Bill Schneider, a huge lighthouse enthusiast who travels all over the country to visit lighthouses. Originally built in 1852, this unique idea of recycling historic fabric into a rebuilt tower qualifies for these two to honorably earn the certification of "being green." This appears to be the trend today in lighthouse restoration as seen in the recycled ironwork at Cape Hatteras this winter melted down at a North Carolina foundry, repoured into "new" steps, and re-installed. State-of-the-art materials are emerging each year for historic renovation and will be used for Bodie Island Lighthouse over the coming two years. OBLHS members have asked for an update on the relocation of this adored light, and it is good news to report its completion.*

Photograph courtesy of Bill Schneider

By William Schneider

At 8AM on April 4th, 2009, it was clear and sunny along the Gulf of Mexico in Florida's Panhandle. My destination was St. George Island to be present at the dedication of the Cape St. George Lighthouse. Traveling across the five-mile causeway from Eastpoint the 72-foot tower can be easily seen as it is taller than every other edifice except the water tower.

At 9 AM folks began setting up various displays in anticipation of a ten o'clock saxophone solo followed by an armed forces honor guard and Coast Guard jet flyover. Neil Hurley, author and Florida Lighthouse Association Historian, arrived from Chesapeake, Virginia, to deliver the keynote address. He held the attention of hundreds when recounting the histories of the three previous lighthouses, which had all been situated on Little St. George Island several miles west. An anecdote he related was about St. George Lighthouse Association President Dennis Barnell storing the third tower's bricks in his garage for many months after its collapse in October 2005.

Following a French horn performance from the lantern room, the tower was opened for climbing in groups of eight. All 92 southern yellow pine steps have a brass plaque affixed with a number and patron (\$250). A seven step metal ladder bolted to the tower allows access to the lantern room through a narrow aperture. Accomplishing that, climbers are urged to sit on the floor and swing their legs horizontally to complete the trek—and get a great view!





# Moving History At Old Baldy

By Ann Mills, Executive Director Old Baldy Foundation and Keeper Old Baldy Lighthouse

It's 6:30 pm and I have been sitting in the back of a 26 ft. box truck for over 9 hours with two other people. The weather is lousy, approximately 42 degrees and pouring down rain. I look around at the 29 wooden crates stacked in the truck, four of which we packed today, and realize we have 25 more to pack in the next two days. Why are we working out of the back of a box truck on a chilly February day? Why is it taking so long and why are we taking such care in the packing of these crates? It is *what* we are packing that is so rare, fragile and important to history that causes us to go to such great lengths.

Nick Johnston from Lighthouse Lamp Shop, his wife Debra and I, Ann Mills Executive Director of the Old Baldy Foundation, are packing up an Order One Fresnel Lens that once shined brightly atop the Cape Fear Lighthouse on Bald Head Island. The lens was built in 1902 in France and made a brief appearance at the World's Fair in St. Louis in 1903 before making the journey to Bald Head Island. It was placed in the Cape Fear Lighthouse in August 1903 where it warned mariners of the Frying Pan Shoals until 1958. When the lighthouse was blown up, and replaced by the Oak Island Lighthouse, the lens was removed and transported to Wilmington, NC where it changed hands at least once. It came to rest on top of a brick tower in front of an antique dealers shop on Oleander Drive. Over the years prisms and entire frames were sold to collectors until it was offered for sale to the Old Baldy Foundation in late 2007.

That's where Nick, Deb and I come in. We arrived in Wilmington on Saturday morning February 27, 2009 with the truck, 29 wooden crates and lots of packing material. The first order of business was to set up a workshop in the box truck complete with lights, tables, tools, conservation materials and a lap top computer.

Twelve lower catadioptric (also fondly called cats) frames and one bulls eye frame were located in a very crowded garage with the majority of the frames in the attic above the garage. The other 16 frames were in a dilapidated, unheated house close by. The first order of business was to get the 11 cats safely out of the attic. Nick built a saw horse and rigged up a block and tackle above the small opening in the attic. Inspection of the cats revealed that the putty holding some the prisms in place was dry and falling out. Moving the frames down the flimsy pull down attic stairs had to been done very carefully to insure none of the prisms slipped out



*Silhouetted, Nick Johnston prepared to crate one of the bull's-eye panels from the 1903 Cape Fear Lighthouse first order Fresnel lens. He and three others were moving the remains of the lens from the mainland back to its home on Bald Head Island. Nick, partner Deb Johnston, and Joe Cocking formed the Lighthouse Lamp Shop, Inc. and specialize in restoring Fresnel lenses all over the country. The lens was obtained by the Old Baldy Foundation from the Labriola family and will be restored for display at Old Baldy Lighthouse. The lens and ruins of the tall skeleton tower are all that remain of the Cape Fear Light that was purposely destroyed in September 1958 by the U.S. Coast Guard when the light's duty was taken up by the new Oak Island Lighthouse across the Cape Fear River.*

and landed on the concrete garage floor. The block and tackle insured that if Nick slipped on the stairs or dropped the frame, Deb his wife and counter weight on the other end of the rope, could lower the frame safely to the ground. It took over 4 hours to move all the frames out of the garage and into the truck.

Next, each frame was inspected and documented. I was the note taker and needed a quick lesson in terminology and frame identification. One inspection entry reads like this: LC 8-9, R5-Corner shard: glued, top edge lateral fracture 2 1/2" long, inside edge: cone 1 1/4" long 2" from center, cone 5" from center 1/4 long"—Translated, the first part identifies the frame as a Lower Cat #8-9. The second part identifies the prism in the frame as the 5th from the top on the right side. The rest is the condition of the prism. A shard is like a chip on the edge of the glass. Cone is short for impact cone which is a circular break in the glass caused by an impact. In this case the lower cat frames were outside on a brick pedestal for years. The owner took them



down once he realized that passers by were taking pot shots at the glass. A fracture is a long thin line in the glass indicating the glass is broken but not separated. Impact cones can lead to a fracture. Of course none of this is good for the beautiful glass prisms. My favorite entries read like this: LC 8-9, R7- Perfect.

After the inspection and lots of photos the frame was ready for some basic conservation work. The frame and prisms were quickly dusted and wiped clean. The original putty that held the prisms in the frame for over one hundred years was understandably old and dry and in some cases cracked or missing. To stabilize the putty special glue was painted on the remaining putty. If the prisms were loose they were shimmed with small pieces of wood or in some cases they need some plastic foam stuck between the glass and the brass frame. This extra work will keep the glass prisms from rubbing on the frame, causing more damage to the glass, during the moving process.

Once all this was accomplished it was time to wrap each panel. We used sheets of foam and lots of shrink wrap. Lots of tape, foam and shirk wrap later the frame was ready for the wooden crate. Each frame was carefully laid in the appropriate sized crate lined with Styrofoam. Last the lid was screwed on and the frame identification number was written on the crate side and lid.

When you handle an object as much as we did these frames they start to tell you their story and what they have been through. When you look closely you can tell the difference between the original putty and newer putty. You can tell how the frame has been handled and how the prisms have been cut. We knew that over the years several of the prisms had been removed and sold but we discovered that some of the prisms were not in their original location in the frame. We suspect they had been rearranged within the frame because some of the putty was newer and not as cleanly applied as the original. We discovered the frames were soldered with silver and in at least one instance had been twisted causing a slight "tear" in the metal at the corner of the frame. With more inspection, later in the preservation process, I am sure the prisms and frames will reveal more secrets from the past.

After a long, cold and wet three days in the back of a truck with lots of lifting and moving crates we finished the packing with a sense of accomplishment. We hugged and took pictures of each other putting in the last screw in the last crate. As my husband, Gary, drove off with the box truck and all 29 crates secure in the back, I had a strong feeling of being a part of history. Ironically we had just saved the light that had in turn saved the lives of sailors and ships for over 50 years. We had just saved a piece of the rich maritime

history of the Cape Fear region. It didn't seem to matter that my back was aching, my fingers stiff and bloody. I felt great and it was extremely moving.



*Deb Johnston treated a catadioptric lens panel from the Cape Fear Lighthouse (1903) before it was placed in storage. Fresnel lens expert Thomas A. Tag estimated the cost of this lens around the turn of the century would have been \$12,500.*



*At right, Ann Mills of Old Baldy Foundation (OBF) worked with Nick Johnston and Maria Labriola Sharpe to crate panels of Fresnel lens prisms and move them to Bald Head Island. It's a homecoming for this lens. After the tower was destroyed in 1958, the U.S. Coast Guard sold the lens to Labriola's Antiques on the mainland. Individual prisms were sold as souvenirs for decades while the lens lingered in a yard out in the open. OBF worked for years to rescue the rest of the priceless crown glass prisms and sponsor its restoration. Ms. Sharpe helped OBF obtain the lens instead of putting it up for sale on E-Bay.*

All photos in this article courtesy of Ann Mills



# A Five-Minute History Course

By Cheryl Shelton-Roberts

In recent years, I've been focusing on 19th century West Point graduates and have met some of the most interesting characters in American history. Two of my "lighthouse friends" are Sandra MacLean Clunies and Candace Clifford who do a great deal of research at the National Archives. Both are generous in sharing interesting finds with me, and together, we have been putting builders' faces on many American lights. In addition to the nightly marathons of reading history, I have gained deeper understanding into our maritime history. Unintentionally, I have become a sort of source of information for inquisitive people. Like last December, a New York editor sought me out to answer a question. It is a pleasure to share information with others, but this is perhaps one of my greatest challenges—someone who is not familiar with lighthouses asks me a question that is seemingly simple to him/her, but how do I explain something that involves two centuries of history?

**Consider his question—how would you answer this:**

*"What was a man named Bache of the Coast Survey doing in Philadelphia buying ironwork? Coast Survey was mapping the coasts, right? What does he need with ironwork?"*

I considered that this writer might be looking into what looked like a scam even a case of federal funds misuse. No, there's really not a mystery here. Mr. Bache was an agent representing the U.S. Coast Survey in 1854 to buy ironwork for lighthouses since the Coast Survey had long been involved in lighthouse work. The Bache family would take volumes alone to cover, but more on this later. Let's get back to some details leading up to that significant year, 1854, in U.S. Lighthouse Service history and why our Mr. Bache was purchasing ironwork.

Stephen Pleasonton, fifth auditor of the Department of the Treasury, took over lighthouse responsibilities in 1822. He had won the honorable position not because of his knowledge of lighthouses but because of his heroic actions during the War of 1812 in saving important national documents from the torches of approaching British soldiers (Washington, D.C. 1814). Because of his lack of knowledge in building lighthouses, Pleasonton relied on a former ship's captain, Winslow Lewis, for advice on the selection of sites on which to build lighthouses. Lewis had contracts for supplying the lighting apparatuses for every American lighthouse. This supply/demand situation was indeed a lucrative business for Mr. Lewis; although his system was less than half of the cost of a Fresnel lens, it was a chandelier-type collection of oil lamps backed by silver parabolic reflectors. Frequently keepers struggled with fitful wicks, smoke-filled lantern rooms, sooty windows

and lamp chimneys, and thin silver coatings on reflectors that washed off readily. Since the light is the entire purpose for a lighthouse, the U.S. Lighthouse Service was hailed as the worst in the world in 1845.

As early as 1837, Congress had been hearing loud complaints from mariners. Europe had been using the new Fresnel lens, eponymous for its inventor, Augustin Fresnel, for over a decade. The Fresnel lens was heralded as the best optic ever invented for intensifying a beacon's seaward reach but it cost approximately \$6,500 as opposed to about \$3,500 for Lewis's system. Despite reports that in just one year the Fresnel would pay for itself in saved fuel cost due to the rising price of whale oil, Pleasonton resisted the investment. Congress was angered and looked to the newly authorized Board of Navy Commissioners for answers.

The history of the Navy Commissioners reaches back to 1807 when President Thomas Jefferson created the agency and appointed Secretary of War, Henry Dearborn, as director. Dearborn built Shell Castle Island (near Ocracoke) and the 1803 Cape Hatteras Lighthouses as well as executing many light apparatus contracts for new towers. Dearborn had been President Washington's assistant Quartermaster during the Revolutionary War; Washington had always held lighthouses as part of his vision to help populate and develop economically the interior of the U.S. (from correspondence between Washington and Hamilton circa 1790). Immediately a tradition was set to hire military leaders, scientists, and emerging engineers to execute lighthouse design and construction.

So, here's the crux of the answer to this question about our Mr. Bache: Navy Commissioners were also part of the old "Survey of the Coast," as the agency was then called, and renamed "U.S. Coast Survey" in 1836. When Congress called on them to survey future lighthouse sites, the group responded admirably and even cancelled 35 sites on Pleasonton's list to be built as recommended by Winslow Lewis. Bodie Island Lighthouse survived the cut and was built 10 years later; unfortunately, Pleasonton wouldn't fund a foundation for the tower; thus, it leaned and failed. Note that by 1859 when the second Bodie Island Lighthouse was completed by Corps of Topographers Lorenzo Sitgreaves that the business of lighthouse surveys and construction were being shared with the U.S. Coast Survey and had been since 1847. These Coast Survey and "Topogs" were usually blazing trails to the West or exploring mountain ranges and fending off agitated native Americans; however, due to their expertise in surveying, they were subsequently assigned by the government to explore lighthouse sites, and to design and construct them. They worked alongside their upper classmates from West Point.





*President Abraham Lincoln signs the charter of the National Academy of Sciences in 1863. Joseph Henry is third from left in this 1924 painting by Albert Herter, and the most famous American scientist of the 19th century, was instrumental in the Academy's establishment. To Henry's left is his closest friend and director of the Coast Survey, A.D. Bache. To his right is Stephen Douglas. At this time the Topographical Engineers merged with the Army Corps of Engineers. All these men had influence on keeping the U.S. Lighthouse Service at the forefront of technology and created the best American light system in history.*

That name, "Bache," is a familiar one. In 1845, Coast Survey Navy Lieutenant Richard Bache accompanied Thornton Jenkins to Europe to study the lighting system there. Note that Bache's brother was Alexander Dallas (A.D.) Bache, Superintendent of the Coast Survey. It is worthwhile here to note that the three Bache brothers, together with their first cousin Hartman Bache, were all great-grandsons of Benjamin Franklin. All were brilliant and served as leaders within the Bureau of Topographical Engineers. Coast surveying was risky business; unfortunately, Commander George Mifflin Bache, A.D. Bache's brother, perished in a gale off Cape Hatteras, September 8, 1846, and Richard Bache drowned on the West Coast while surveying a site at Pt. St. George in 1850—one of the most dangerous coastal lighthouse sites in the world.

The interweaving of these men's expertise and their involvement in the history of the U.S. Lighthouse Service is fascinating. Many of these brilliant and experienced men who were involved in the "lighthouse community" not only worked together but also were blood/marriage related. A.D. Bache led the Coast Survey and was one of America's leading scientists; moreover, when he teamed up with dear friend Joseph Henry, first Secretary of the Smithsonian Institute (1846) and father of the National Weather Service, they were unbeatable in getting Congressional funding for their various projects. As a founding member in 1852, Henry would go on to become Chairman of the Light-House Board from 1873 to 1878 upon his death.

Bache and Henry had nominated one other for these heralded positions and later joined as the two civilian scientists of both the provisional Light-House Board in 1851 and the official board established in 1852 (sponsored by President Millard Fillmore) when Pleasonton was dismissed and the U.S. Lighthouse Service entered a new era. Its leaders kept the service on the leading edge of technology. Incidentally, Bache and Henry also served together on the National Academy of Sciences when

President Lincoln established the organization in 1863. We can now see how involved the Coast Survey was with the U.S. Lighthouse Service along with the Topographers, which joined with the Army Corps of Engineers in 1863. These groups blended skills to choose lighthouse sites, complete construction, and advocate the use of Fresnel lenses. The National Mapping Program of the U.S. Geological Survey (USGS) is the descendent of the Corps of Topographical Engineers, formed in 1838 to map the western lands of the then conterminous United States. Topogs and Coast Survey employees were the same group; topographers joined the Army Corps of Engineers (ACOE) in 1863 and the Coast Survey became the USGS in 1879. Top graduates of West Point were assigned to the ACOE while the second tier of graduates joined the Corps of Topographers. In reality, both groups were equally skilled surveyors, engineers, and military leaders.

While our Mr. Bache bought ironwork in 1854, the date became a landmark year for the U.S. Lighthouse Service. After the showdown in 1851 between Congress and Pleasonton, the Light-House Board was established. One of the first orders of business was to install Fresnel lenses in all American towers. Dozens of new lighthouse sites were chosen and construction began on both coasts and the Great Lakes. For about five years, the Board experimented with heightening old towers to raise the focal plane of newly installed Fresnel lenses—like that at Cape Hatteras when it was raised from 95 feet to 150 feet.

The Light-House Board's distinguished members determined that a new genre of towers was needed. Topographers participated in construction of taller lighthouses, merging its group with the new breed of engineers graduating from West Point beginning in the late 1840s. Engineers with familiar names we associate with Civil War fame including Meade, Ledbetter, Lee, Whiting, and Hains, joined efforts with the Coast Survey to lead America into a new age of safer shipping due to superior American lighthouses.





# LIGHTHOUSE UPDATE

*Updates on the area lighthouse events & schedules*

By Bett Padgett, OBLHS President

Vol. XV no. 2 Spring 2009



**Currituck Beach Lighthouse** is owned by the Outer Banks Conservationists, Inc. The lighthouse and museum/shop reopened early in April and received widespread visitation. The many hours of work on the grounds by Luis and board members has paid off with compliments from visitors. The Currituck Beach Lighthouse and Museum Shop are open daily in season 9a.m. until 5p.m. During the summer the lighthouse will remain open on Thursdays until 8pm. Visit <http://www.currituckbeachlight.com/> for more information. They have been interviewing potential interns for the summer post. OBC and CBLH offers to a Currituck County high school student every year an opportunity to gain work experience by working as a docent as well as helping the keepers with administrative projects. In the past interns have helped on emergency planning, Haunted Village (CBLH's Halloween event) organizing, and with help finding primary resources about the construction of the lighthouse's foundation. Keepers Luis Garcia and Meghan Agresto along with their two young sons, Paolo and Benicio are expecting an addition to the family---two new chickens!

**Roanoke Marshes Lighthouse** (reproduction), located in Manteo, is an exterior reproduction of an 1877 screwpile light that was originally at the southern entrance of the Croatan Sound to the Pamlico Sound located near Wanchese. The Lighthouse reproduction is located on Manteo's charming waterfront near the Maritime Museum which are both operated by the Roanoke Island Festival Park. It is open daily free of charge from 9-5 year-round.

**Cape Hatteras National Seashore** and its park visitor centers are open year-round, 9-6 mid June through Labor Day and 9- 5 the rest of the year. For more information call (252) 441-5711. The Park received monies this year for many projects including restoration of Bodie Island Lighthouse and Keepers' quarters and Ocracoke Lighthouse and Keepers' quarters.

**Bodie Island Lighthouse** grounds are open year-round. \$3.09 million dollars was awarded in the 2009 omnibus budget and monies have been received for the restoration of the tower and original 1872 first order Fresnel Lens. The light in the tower will be extinguished mid-June and will remain dark until the complete restoration takes place. It is estimated that the work will begin this summer and will take 1 ½ years to complete. During this time the area around the tower will be roped off. A new Bodie Island Wildlife Observation Deck will be built to replace the existing wildlife observation. A boardwalk from the bathhouse to the observation area will be built as well as an observation tower.

**Bodie Island Coast Guard Station and Life-Saving Station** are located on the ocean side of Highway 12. They will be relocated across the street into the area of the Bodie Island Lighthouse and will be used for interpretive purposes and a museum. Clearing of the land will take place in May-June and the buildings will be situated by August 1st.

**Cape Hatteras Lighthouse** is open for climbing from 9 a.m. to 4:30 p.m.; hours extend to 5:30 p.m. beginning June 7, 2009 through Labor Day. Cape Hatteras offers full moonlight tours during the summer, so check their website to learn more about this. The lighthouse will remain open through Columbus Day, Monday, October 12. Tickets are required. For information about climbing visit: <http://www.nps.gov/caha/planyourvisit/climbing-the-cape-hatteras-lighthouse.htm> Cape Hatteras Lighthouse received a face-lift---a new set of stairs during the winter, a new roof on the oil house and Keepers' quarters. All structures were repainted as well.

**Little Kinnakeet Life-Saving Station** All exterior work has been completed. All buildings will be painted in the fall; monies for the restoration of the interior is pending.

**Oregon Inlet Life-Saving Station** is owned by the NC Aquarium and is being renovated. Pilings have been replaced and is now graced with a new roof and cedar siding. The modern dormitory has been demolished.

**Ocracoke Lighthouse** is benefiting from the 2009 omnibus budget! Brickwork inside will be repointed, the stairs will be refinished and painted, windows and door replaced and the lens will be restored. The roof of the Keepers' quarters was replaced with a red tin roof (same as the original). The boardwalk will be rerouted to continue straight to the lighthouse.

**Chicamacomico Life-Saving Station** is located in Rodanthe, just north of the Cape Hatteras Lighthouse at milepost 39.5. The historic site reopened April 13 - November 27 from 9 a.m - 5 p.m. Monday-Friday, closed weekends. The weekly life-saving beach apparatus drill on Thursdays--one of only 2 in the U.S.-- and other programs are led by Historic Site Manager James Charlet and Site Operations





# LIGHTHOUSE UPDATE

## *Updates on the area lighthouse events & schedules*

Manager Linda Molloy. See first-hand the area where Nights in Rodanthe was filmed in which James and Linda were actors! Check their website: [www.chicamacomico.net](http://www.chicamacomico.net) for more information and new summer programs.

**Graveyard of the Atlantic Museum** is located at the end of Hwy 12 on Hatteras Island near the ferry landing and is now owned and operated by the state of North Carolina. They are open Monday-Friday, 10-4 and closed on weekends (and observe state holidays). Visitation is free but donations are appreciated.

**Cape Lookout Lighthouse is part of the Cape Lookout National Seashore. Park headquarters and the visitor center are located on Harkers Island featuring comprehensive displays** and a discovery room for young visitors. Please visit <http://www.nps.gov/cal/> for more information about visiting. The Keepers' Quarters Museum and facilities at the Lighthouse (Visitor Center, Keepers' Quarters Museum, and bathrooms) the facilities at Portsmouth Island village at the northernmost end of the park are open from April-November. Park headquarters at Harkers Island is open every day 9 a.m. – 5 p.m. except Christmas and New Year's days. The grounds are open year-round. AN EXCITING EVENT this year is the 150th anniversary of the lighting of Cape Lookout Lighthouse. Special activities will take place October 10 and also November 1. OBLHS will join the Friends of Cape Lookout National Seashore in this grand celebration.

**Oak Island Lighthouse** is owned by the Town of Caswell Beach with ongoing cooperative efforts with the Friends of Oak Island Lighthouse (FOIL). FOIL will continue to conduct tours to the top year-round with at least 2 weeks' notice. A request to climb can be made from their web site ([www.oakislandlighthouse.org](http://www.oakislandlighthouse.org)). Public weekly tours to the second level (12 steps up) are available every Wednesday and Saturday beginning May 27 through September 9. No reservations are required on the regular tour days. Children must be 7 years- old to climb.

**Price Creek Front Range Light** (1850 ruins) is not open for public visitation but you can get a good look at this pre-Civil War tower, the only river light still in its original locations, from the Southport-Ft. Fisher ferry.

**Old Baldy Lighthouse & Smith Island** The Old Baldy Foundation (OBF) owns, maintains and staffs this historic lighthouse. Expanded Summer Hours at Old Baldy Lighthouse between Memorial Day, May 25, 2009, and Labor Day September 7, 2009: Monday - Saturday 9 a.m. - 5 p.m. and Sunday 11 a.m. to 5 p.m. New admission fees: Adults (13 and over) \$5; Youth (3-12 years) \$3; Infant (2 and under) Free. Frequent visitors to the lighthouse should ask about the Friends of the Lighthouse Family Pass. For one year families can climb limitless for just \$100.00.

**EVENT TO PLAN FOR:** The Old Baldy Lighthouse will celebrate National Lighthouse Day with a pirate invasion the weekend of July 31-August 2, 2009. Weekend events begin at the Old Baldy Lighthouse on Friday at 1 pm. Families can join an island-wide treasure hunt, watch the pirates pitch their camp, go to Pirate School or shop at the Pirate Boutique. This is a weekend PROMISED to be entertaining, educational and fun for all participants! All proceeds benefit the Old Baldy Foundation. Visit [www.oldbaldy.org](http://www.oldbaldy.org) for more pirate weekend information or call 910-457-7481. Read about the recent acquisition of the First Order Fresnel Lens from the Cape Fear Lighthouse (1903) and its saga of restoration and preservation on Bald Head Island!

**Roanoke River Lighthouse** (reproduction) Roanoke River Lighthouse (reproduction) is located on the town of Plymouth's beautiful waterfront about halfway between the northern and southern Outer Banks. Look for signs on Hwy 64 for the waterfront lighthouse! Hours are from 11:00 AM – 3:00 PM Tuesday –Saturday and by appointment. Call 252-217-2204 or write [info@roanoakeriverlighthouse.org](mailto:info@roanoakeriverlighthouse.org) for more information. :

Visit <http://www.roanoakeriverlighthouse.org/> The Museum and lighthouse has received a grant to landscape the area around the lighthouse. There will be better access to the lighthouse and better lighting. The Four Gables Bed and Breakfast has loaned period furniture in the lighthouse. The lighthouse has been receiving widespread publicity as it is the 'gateway' to other lighthouses along the Outer Banks.

**SAVE THE DATE for the Keepers' Weekend, October 9<sup>th</sup> -11<sup>th</sup>!** We are so happy to help Cape Lookout celebrate its 150<sup>th</sup> anniversary. *Our annual auction and raffle drawing will be held on Friday this year.* Wonderful information tours and visits are planned for the NC aquarium, Fort Macon, The NC Maritime Museum, and Black Beard's Museum. There will be many activities planned for this event. Phone Richard Meissner (252) 728-3242 or (252) 728-2250, ext. 3008 for information.

**General correspondence** to OBLHS should be addressed to P.O. Box 1005, Morehead City, NC 28557 **Membership correspondence** and donations: Bob DaVia, OBLHS Membership Chair, P.O. Box 2141, Winterville, NC 28590 Donations and Membership can also be obtained online at <http://www.outerbankslighthousesociety.org/join-reg-form-intro> through Pay Pal. Also, visit our Keepers' Store while you are there! We have a number of new items coming online soon! Do you have a new email address? Please send it to [info@outerbankslighthousesociety.org](mailto:info@outerbankslighthousesociety.org) and please update your information when using your return envelope. Check the date on your address label to determine your renewal date.

# Repairs Under Way at the Oregon Inlet Life-Saving Station



The ultimate fate of the Oregon Inlet Life-Saving Station is still uncertain. Presently, it is under the care of the North Carolina Aquariums Division and is undergoing stabilization work. It has been nearly over swept by blowing sand and aged by time and the elements. To have been long neglected, it is in relatively sound shape and is now sealed tight against its worst enemies: weather and vandals. The nine-month project to stabilize the historic building is estimated at \$700,000 and will take about a year. The effect of a new Oregon Inlet bridge on this station's location is unknown; it might have to be relocated after the new bridge is constructed, which is nothing new to this old veteran. This is currently its fourth site since it began as a life-saving station in 1883 due to the southward migration of the inlet.

## LIGHTHOUSE NEWS OFFICIAL PUBLICATION OF THE OUTER BANKS LIGHTHOUSE SOCIETY

### PURPOSE OF THE OUTER BANKS LIGHTHOUSE SOCIETY

The purpose of the Outer Banks Lighthouse Society is to aid in the preservation of the lighthouses of the area and to work with the National Park Service and other agencies, both government and non-profit groups, to achieve the safe keeping of the buildings, artifacts and records of the U.S. Lighthouse Service.

**The Lighthouse News is the official publication of the Outer Banks Lighthouse Society.**

Editor – Cheryl Shelton-Roberts, Design-Bruce Roberts

©2009 All material is copyrighted and cannot be used or borrowed without prior written permission from the editor.

Email: [lhsociety2@outer-banks.com](mailto:lhsociety2@outer-banks.com) or [info@outerbankslighthousesociety.org](mailto:info@outerbankslighthousesociety.org) or write OBLHS P.O. Box 1005 Morehead City, NC 28557

### Please Check the Expiration Date on your Mailing Label! Subscribe or Renew your Membership

**\$10.00 Student Membership • \$25 Individual Membership  
\$35 Family Membership • \$20 Senior Membership (60+)  
\$30 Senior Family**

**Please make checks payable to OBLHS. Thank You**

**You will receive a brochure on NC lighthouses,  
logo sticker, newsletter, and membership card.**

The society operates on modest membership fees and occasional donations. If you would like to renew your membership and/or make a donation, please mail your *membership* correspondence to:

OBLHS Membership Director Bob DaVia  
P.O. Box 2141  
Winterville, NC 28590

*General correspondence:*

OBLHS  
P.O. Box 1005  
Morehead City, NC 28557

Name

Address

City, State,

Zip +4 code

Phone

Email

Gift for

Recipient's address

Email