

# PONCE DE LEON INLET LIGHT STATION

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FROM THE EXECUTIVE DIRECTOR **EVENTS** CALENDAR REGIONAL HISTORY Buoys at THE INLET FEATURE ARTICLE **Buoys**: **SIGNPOSTS** OF THE SEA IO OBJECT OF THE **QUARTER** II **EDUCATION** News 12 VOLUNTEER **News** 13 THANK YOU & Wish List LIGHTHOUSES OF THE WORLD **ODAWARA** CHOCHIN LIGHTHOUSE GIFT SHOP **FEATURES** 

n August 7, the Ponce Inlet Lighthouse, in honor of National Lighthouse Day, celebrated the creation of the United States Lighthouse Service. It was 220 years ago on August 7, 1789, that the first Congress of the United States, in an effort to protect the sailors and cargo of the growing nation, created the first public works act and formed the United States Lighthouse Service. The following is a portion of the original language from Section 1 of the Act for the Establishment and Support of Lighthouses, Beacons, Buoys, and Public Piers:

"Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That all expenses which shall accrue from and after the fifteenth day of August one thousand seven hundred and eighty-nine, in the necessary support, maintenance and repairs of all lighthouses, beacons, buoys and public piers erected, placed, or sunk before the passing of this act, at the entrance of, or within any bay, inlet, harbor, or port of the United States, for rendering the navigation thereof easy and safe, shall be defrayed out of the Treasury of the United States"

The origin of National Lighthouse Day began when Senator John H. Chafee (Rhode Island) sponsored a joint resolution that was introduced to Congress on April 28, 1988 designating the day of August 7, 1989 as "National Lighthouse Day." The summary of the resolution stated, "Designates August 7, 1989, as National Lighthouse Day and calls for lighthouse grounds, where feasible, to be open to the public." The resolution passed through the Senate on July 26th and through the House (sponsored by Representative William J. Hughes, New Jersey) on October 21st. President Ronald Reagan signed the Bill into public law on November 5, 1988.

The Ponce Inlet Lighthouse celebrated

the anniversary of this historic act by providing visitors guided tours of the museum, fun interactive workshops, and a Canaveral Lens Maintenance demonstration. We are thankful for the generosity of the many volunteers who made this day possible.

We are also pleased to announce the opening of the Minor Aids to Navigation Exhibit. Located on the gallery deck of the Ayres Davies lens exhibit building, this exciting exhibit addresses the evolution of minor aids to navigation and their role in maritime history. In addition to interpretive text panels, the exhibit includes numerous pieces drawn from the museum's extensive collection of historic and modern navigational aids. Items on display include post lanterns, ship lanterns, and hand lanterns, a wide assortment of river and buoy lights, and several examples of modern-day beacons currently used in lighthouses and buoys. We invite all members to visit us in the near future to see this exciting new exhibit.

The Preservation Association has continued its ongoing effort to restore the historic keepers' dwellings through the summer months. Suffering from significant mortar deterioration, the east wall of the First Assistant Keeper's was fully restored in June. Old crumbling mortar was removed, fractured bricks were replaced or refaced, and new mortar installed. The restored east wall is but one part of the Association's overall restoration plan for the historic structure. Future work will include re-pointing the south wall, restoring interior plaster work, and repairing the dwelling's damaged fireplaces.

The Association would like to thank all its members for their continued support.

Respectfully,

Executive Director

The Ponce de Leon Inlet Lighthouse Preservation Association is dedicated to the preservation and dissemination of the maritime and social history of the Ponce de Leon Inlet Light Station.

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Subscription is a benefit of membership in the Association. The Light Station welcomes letters and comments from our readers.

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Wednesday Fund Committee Meetings

Oct. 19, 2009 Board of Trustees and

Monday Annual Membership Meeting

Nov. 16, 2009 Board of Trustees Meeting Monday

Dec. 21, 2009 Board of Trustees Meeting Monday

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## LIGHTHOUSE EVENTS OCTOBER-DECEMBER 2009

## OCT 2 (FRI)

I:00 PM - 2:00 PM

## Canaveral Lens Demonstration

Meet the old-time lighthouse keepers in the Lens Exhibit Building. Learn about the Cape Canaveral 1st Order Fresnel Lens and the maintenance that had to be done every week. Demonstration is included with the price of regular admission. No advance reservations are required.

# OCT 15-18

(Thu-Sun)

DAILY 12:00 PM - 2:00 PM

## BIKETOBERFEST

Examine and discuss historic artifacts, listen to an old time Crystal Radio from the top of the Lighthouse, and chat with the Keeper in his office. All activities are included with the price of regular admission. No advance reservations are required.

# OCT 18-24

(SUN-SAT)

## Ponce Inlet Resident APPRECIATION WEEK

The Ponce Inlet Lighthouse will open to all Ponce Inlet residents free of charge from October 18th through the 24th in appreciation of their continued support. Participate in behind the scenes tours, visit the Lantern Room, and enjoy family-oriented activities.

# Nov 12.

(Thu)

10:00 AM - 4:00 PM

## Homeschool Day

Attend educational workshops specifically designed for homeschoolers. Special online pricing and reservations will be available starting October 6, 2009. Contact Program Manager Bob Callister by phone at 386-761-1821 ext. 18 or via email at bobcallister@ponceinlet.org for more details and to be added to the homeschool distribution list.

# Nov 27

(Fri)

10:00 AM - 2:00 PM

## THANKSGIVING GIFTS

Enjoy family-oriented activities, live demonstrations, and kids' crafts. All activities are included with the price of regular admission. No advance reservations are required.

# **DEC 29**

(Tue)

IO:00 AM - 2:00 PM

## Early New Year's Celebration

Enjoy family-oriented activities, live demonstrations, and kids' crafts. All activities are included with the price of regular admission. No advance reservations are required.

## NORMAL HOURS OF OPERATION

SEPTEMBER 8, 2009-May 30, 2010

Open daily from 10:00 a.m. until 6:00 p.m. (last admission at 5:00 p.m.)

## Special Hours of Operation

NOVEMBER 26, 2009 NOVEMBER 27-28, 2009

Closed for Thanksgiving Holiday

Thanksgiving Holiday Weekend Extended Hours Open 10:00 a.m.-7:00 p.m. (last adm. 6:00 p.m.)

DECEMBER 24, 2009

**DECEMBER 28, 2009** 

Early Close for Holiday

Open 10:00 a.m.-4:00 p.m. (last adm. 3:00 p.m.) Closed for Holiday

**DECEMBER 25, 2009** DECEMBER 26-27, 2009

Christmas Holiday Extended Hours

Open 10:00 a.m.-7:00 p.m. (last adm. 6:00 p.m.) Resume normal hours of operation

## Newsletter Contributing Writers

Mike Bennett Ellen Henry

**Bob Callister** Tom Zane

Ed Gunn

# BUOYS AT THE INLET

Were placed in the first buoys were placed in Mosquito (Ponce) Inlet. In a March 11, 1871, letter to the Chairman of the Light House Board, the Inspector for District 6 reported that an iron can buoy was located at the Inlet's entrance, a red spar buoy on the bar, and another red spar buoy inside the channel. The letter also reported that a local pilot for the Inlet had complained about these buoys and asked for a new channel to be marked.

Later that same month, the District 6 Inspector, while having the channel sounded, encountered the same pilot who claimed he was now satisfied with the current buoyage. The Inspector found that the Inlet had shifted and that the south breakers were breaking on the center of the sandbar near the mouth of the Inlet. He decided to place another spar buoy at this location.

It must have been difficult to keep buoys at this remote location, as evidenced by a short letter to the Chairman of the Light House Board on May 6, 1876, reporting on a disaster of March 7th. The schooner Catherine Thomas of New Bedford had grounded on the bar at Mosquito as a result of there being no buoys to guide the vessel.

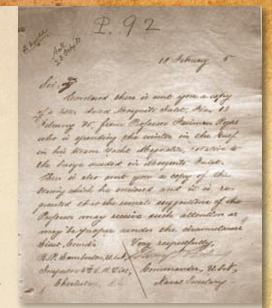
On May 18, 1883, the District Inspector wrote to the Light House Board. He reported that Mosquito Inlet needed to be examined after every gale due to constant shifting of the bar and inlet. He reported that the position of the buoys had remained fixed and that they should remain in their current position to help the local pilots. The Inspector made it clear that no mariner should attempt the Inlet without the aid of one of these local pilots. He also remarked that when the canals linking inland waterways from St. Augustine to the Halifax River were completed, there would be far fewer vessels attempting to enter the Inlet. He suggested that some local person or company (such as the fish fertilizer factory located at Mosquito Inlet) should be paid to shift the buoys as needed.

The Sixth District Inspector was once again at Mosquito Inlet in June when he replaced the iron can buoy and added two small buoys at the request of the Inlet's pilot. The master of a local fishing steamer had been given permission to shift the buoys as needed.

An interesting letter dated February 11, 1885, appears in the Light House Board's records. The Chairman of the Light House Board wrote to the Inspector saying:

"Enclosed there is sent you a copy of a letter dated Mosquito Inlet, Fla., 13 February '85, from Professor Fairman Rogers who is spending the winter in the Gulf in his steam yacht Magnolia, relative to the buoys needed in Mosquito Inlet. There is also sent you a copy of the tracing which he enclosed and it is requested that the several suggestions of the Professor may receive such attention as may be proper under the circumstances."

Rogers' letter and the accompanying drawing no longer exist in the records, but the idea of the Board taking so seriously the



Fairman Rogers Letter

request of a yachtsman raised the question of Fairman Rogers' identity. Who was this man? Why was he able to capture the attention of the Light House Board?

Fairman Rogers was born in 1833 in Philadelphia. He graduated from the University of Pennsylvania in 1853 and taught civil engineering there for nearly 20 years. He served in the Union Cavalry in the Civil War, and was a distinguished horseman who authored a manual on coaching. His expertise in driving a four-in-hand coach was captured by artist Thomas Eakins in a painting known as A May Morning in the Park. As part of his civil engineering work, Rogers was a volunteer officer with the Army Corps of Engineers and completed an 1862 survey of the Potomac River. As an engineer, a yachtsman, and a man wellknown in society, his comments on buoyage of Mosquito Inlet would have indeed caused the men of the Light House Board to take notice and perhaps even comply.

Over the years, the problem of keeping up with the shifting sands of Mosquito Inlet continued to plague the Sixth Light House District's Inspector. The cost of sending a tender to visit the Inlet after every storm was prohibitive, and the small and erratic sums of money granted to local persons to watch over the buoys were not enough to ensure regular care. In May of 1896, the government finally agreed that a Buoy Master for the Inlet should be hired.

Roderick Douglass, a local man who also served as the Inlet's pilot, was selected for the job. Mr. Douglass served as Buoy Master until October 1897 when he was hired on as the Mosquito Inlet Light Station's First Assistant Keeper. Although making a salary of \$540 per year, Roderick Douglass did not remain in his keeper's position for long. A letter dated May 28, 1898 authorized



EARLY PHOTO OF MOSQUITO INLET



Members of Pacetti family on River shore C. 1900

his transfer back to his former position as Mosquito Inlet's Buoy Master at a pay rate of \$20 per month.

The number of buoys in and around Mosquito Inlet gradually increased over the years from the three known buoys in 1871, to 8-10 buoys in the 1920s, and perhaps even more by the 1940s. Although a 1904 letter confirms the addition of two buoys to mark the inside channel, the specific number and types of buoys that have been used in the inlet over the years remain a mystery.

The July 26, 1906 death of Buoy Master Roderick Douglass once again left the government in need of a reliable man to care for the Inlet's buoyage. Douglass had left behind a son, Donald, who was only 14. Despite his lack of education and intelligence (according to the rather cold appraisal of the District Inspector), young Donald Douglass had the skill and determination to look after the buoys on his own for nearly six months after his father's death. The Inspector arranged for him to receive a payment of \$50 for his efforts and claimed that a "competent" buoy master would soon be hired.

The next document in our archives concerning buoys at Mosquito Inlet was written to Principal Keeper John Lindquist in November, 1906. Written by the District Inspector, the letter stated that Mr. Lindquist could appoint "Mr. Pacetti" as Buoy Master for a sum of \$15 per month. Exactly which member of the Pacetti family was chosen to fill this position was not specified.

By 1916, a man named W. W. Wheldon was serving as laborer-in-charge of buoys at Mosquito Inlet. Mr. Wheldon, like many early 20th century Americans, could not swim. He drowned one day while tending his buoys. It was a fate not uncommon among buoy tenders of the time. Shortly after Mr. Wheldon's demise, the Lighthouse Service chose to turn responsibility for Mosquito Inlet's buoys over to the Light Station keepers instead of hiring a new Buoy Master. Each



PONCE INLET WITH LIGHTHOUSE AND JETTIES

keeper was given a pay raise to compensate for the additional duties.

No mention of these new duties is made in the Station's logbooks until 1924, when Principal Keeper Charles Sisson wrote that on July 17 he sounded the bar and painted the turn buoy. On the 18th, he relieved (took out of service) the turn buoy and painted some "spare" (or perhaps spar) buoys. From then on, sounding the bar, relieving, scraping and painting buoys, repositioning buoys, and chasing down buoys that had escaped their moorings appear as regular duties in the keepers' logs. In the latter months of 1924, a buoy log with more detailed entries

concerning buoy-related duties was begun and kept until December 1943. The buoy log reveals that not only did the keepers care for the aids to navigation, but they also piloted vessels over the bar when required.

Many pages and entries are missing from the buoy log, so our knowledge of activities and changes in buoyage is incomplete. It is clear, however, that the keepers spent many hours servicing buoys, relocating them, chasing the escapees, and

replacing lost chains, sinkers, and shackles. At some point in the late 1930s, a whistle buoy was added just outside the entrance to Ponce (Mosquito) Inlet. This buoy, whose sound was activated by the motion of the waves, was affectionately known by residents as "Moaning Minnie."

When the Coast Guard took over all aids to navigation in 1938, a new Coast Guard station opened on the south side of Ponce Inlet. The care of buoys in the Inlet still fell under the direction of the Officer-in-Charge of the Light Station, and the men who filled the Light Station's barracks were

often involved in buoy-related duties. The buoy log ends in December 1943, coinciding with the transfer of Edward L. Meyer, the last civilian Principal Keeper and the first Coast Guard Officer-in-Charge at the Lighthouse. Following his departure, buoy activities continued to be made by personnel from the Light Station and were recorded in the Station logs.

The Station's logs from 1945 are missing, and at some point during that year, the men at the Light Station stopped servicing the Ponce Inlet buoys. At the conclusion of World War II, the Light Station was no longer used as a barracks, and many duties of the

Coast Guard were carried out by the staff at the Coast Guard Station rather than by the few men remaining at the Lighthouse.

Today, the entrance to Ponce Inlet is marked by two lighted bell buoys and four lighted buoys. Inside the entrance are unlighted 5th class foam buoys, lighted dayboards, and various other aidstonavigation. These buoys are serviced and maintained by the Coast Guard's Aids to Navigation Team (or ATON) which operates out of the

station on the south side of the Inlet. If a boat runs aground, the ATON unit will investigate and change the existing buoyage if necessary. The Corps of Engineers inspects and sounds the Inlet several times annually.

The Inlet continues to shift and change, even though a jetty system has stabilized this movement to some degree. The Inlet is still dangerous and waves often reach 20 feet in rough weather. The Coast Guard often escorts boats attempting to traverse the inlet in inclement conditions and even shuts the inlet down to all boat traffic in extreme weather.



Professor Fairman Rogers

# BUOYS: SIGNPOSTS OF THE SEA

Both side lines you see ahead, Port your helm and show your red, Green to green and red to red, Perfect safety Go ahead!

If on your starboard red appear, It's your duty to keep clear, To act as judgment thinks it proper, To port- or starboard- back- or stop her.

Published in the 1909 journal The Mother's Book, the Sailor's Rules of the Road served as a simple means for remembering the basic rules related to the proper use of buoys, channel markers, and running lights along the nation's waterways. Based upon a standardized system of buoyage known as the Lateral Aids to Navigation System, The Sailor's Rules and other nautical mantras like "Red Right Return" remain as popular with professional mariners and recreational boaters today as they were more than a century ago.

Immensely important to nautical safety but often overlooked by historians and lighthouse aficionados; the humble buoy has a long and distinguished history dating back to the earliest days of maritime commerce. Although undoubtedly used by many of the world's ancient seafaring cultures, the first recorded use of a buoy can be found in the 12th century Spanish publication La Compasso de Navigare.

Published around 1250 AD, this unique book provided mariners with navigational data related to the Mediterranean coastline, the Straits of Gibraltar, and Northern Africa. The first of its kind to be produced, La Compasso de Navigare included information related to a system of buoys along the Guadalquivir River which led from the Atlantic Ocean to the port city of Seville in southern Spain.

The Spanish were by no means alone in their quest to ensure the continued safety of their fleet. Founded in the 12th century, the Hanseatic League was a powerful alliance of northern maritime cities that wielded considerable economic and political power. Originally consisting of only a handful of Germanic ports on the Baltic Sea, membership in the League steadily rose to more than sixty coastal communities including the wealthy cities of Amsterdam, Lüebric, and Hamburg. Commonly referred to as the Hanse (German for guild or association), the League's influence continued to grow through the 14th century.

Like all seafaring cultures, the Hanse

recognized the importance of maintaining safe waterways. Prolific builders of navigational aids, the League worked diligently to ensure that their sea lanes were the safest in the world. In 1323 the League established a system of floating buoys along the Vliestroom seaway and throughout

the shallow Zuider Zee to assist merchantmen as they made their way to and from the busy port cities of Amsterdam and Kampen. Consisting primarily of iron bound wooden casks and broom shaped markers, these early buoys remained the primary responsibility of port authorities.

Although considered one of the 15th century's most influential powers, the Age of Discovery initiated a period of steep decline for the League. Slow to respond to advancements in naval architecture and unable to compete with Europe's emerging nation states, the Hanse could only watch as they were left astern of the growing maritime industries of Portugal, England, and other European powers.

Separated from mainland Europe by the North Sea, the rulers of medieval Britain knew that their nation's future lay closely tied to the sea. Prolific exporters of raw materials and manufactured goods, heavily laden merchantmen became a common sight in English harbors. Varying in size and importance, these port facilities were generally managed by townships or maritime guilds. They were often accessed by rivers and channels that wove their way through treacherous shoals. Mariners who were unfamiliar with the area frequently employed the services of local pilots to guide them safely to the wharf.

Concerned with the danger of inexperienced pilots navigating the Thames River, a mariners' guild by the name of "The Fellowship of the Most Glorious and Undivided Trinity and of Saint Clement" or "The Trinity House" petitioned the British Crown for the authority to regulate London's maritime commerce. Granted by King Henry VIII in 1514, the approved royal charter identified Trinity House as the primary organization responsible for the relief, increase, and augmentation of shipping in the English realm. Duties of the guild included the regulation and supervision of river pilots, the development and enforcement of safe navigation practices, and the ongoing safety and security of Britain's domestic maritime interests.

Blessed with the sovereign's support, the power and influence of Trinity House grew to include the procurement of naval stores and provisions for the Royal Navy, the construction of naval vessels at the Royal Boat Yard, and the writing of laws governing the industry. By the mid-16th Century, the

authority and power of Trinity House had become so extensive that rarely could a matter of maritime interest be found over which the organization did not have control.

Like her father, Queen Elizabeth I looked to the master seamen of Trinity House for guidance in most naval matters.

Renewed by the Queen in 1558, the guild's duties came to include the establishment of a relief fund to assist mariners in distress, the procurement and inspection of naval ships, and the licensing of all pilots and ship masters plying the waters of the British Isles.

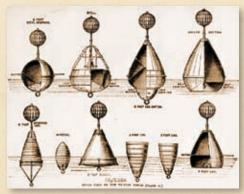
Working under a royal

CHARTER, THE TRINITY HOUSE

WAS ALLOWED TO FLY ITS OWN

FNSIGN

The signing of the Seamarks Act of 1566 expanded the sweeping authority of Trinity House even further by granting it the right to "set up beacons, marks and signs for the sea whereby dangers could



Trinity House used a variety of buoys, several of which are shown here.



Chart of the River Thames dating from 1790. Notice how the chart shows several buoys being used to mark the channels.



A SAILING AUXILIARY TRAMP STEAMER, WITH LIGHTERS ALONGSIDE, AT A BUOY OFF GREENWICH.

be avoided and escaped and ships could better come into their ports without peril." Known commonly as aids to navigation, these beacons, marks, and signs included a system of buoys and channel markers that mariners employed while navigating the treacherous waters of the British Isles. In 1836, responsibility for the procurement, construction, and operation of all lighthouses in English waters was added to Trinity House's growing list of maritime duties.

Founded by the British in the 17th and 18th centuries, the economic interests of Colonial America were closely tied to the sea. Like England, the Colonies relied heavily upon maritime commerce to transport a wide variety of products including raw materials, naval stores, and agricultural goods. The need to maintain safe sea lanes could not be ignored.

Consisting primarily of lighthouses, day beacons, post lanterns, and buoys, colonial-era aids were commissioned and maintained not by the British government but by the individual colony, city, port, or merchant group that they served. Generally located in or around America's busiest ports of call, aids to navigation were rarely found in isolated locations where the local citizenry were unwilling to fund such costly projects.

Funds were generally raised for the erection, maintenance, and operation of navigational aids through local port fees. Boston Light, for example, received its funding from the collection of cargo taxes. Large vessels entering or exiting the harbor were required to pay one penny per ton of cargo, smaller coastal vessels were charged

two shillings per ton, and fishing vessels and small vessels transporting lumber and other building materials locally paid even less with an annual tax of only five shillings per year.

Buoys were rarely used in the American colonies. The only exceptions were a series of cask buoys along the Delaware River, recorded in 1767; and a number of spar buoys in Boston Harbor. Rarely mentioned in navigational lists of the time, colonialera aids were typically modeled after the outdated wooden cask design used by the Hanseatic League over three centuries earlier. Difficult to see, poorly placed, and rarely maintained, colonial aids to navigation were often criticized for their ineffectiveness and lack of standardization from one port to the next.

The conclusion of the American and ratification Revolution of the Constitution ushered in a new era for maritime safety along the Atlantic seaboard. Commonly referred to as the "Father of the Constitution", statesman James Madison actively promoted the federalization of America's aids to navigation and the establishment of a cargo tax to raise funds "necessary for the support of lighthouse, hospitals for disabled seaman, and other establishments incident to commerce." James Jackson of Georgia concurred, adding that the tax be applied towards "the support of lighthouses and beacons for purposes of navigation ... so as to encourage American shipping." Others in Congress agreed.

Signed into law by the First Congress, the Lighthouse Act of 1889 established federal control over all aids to navigation within American waters. Modeled loosely after Trinity House, the United States Light House Establishment (USLHE) was created to build, maintain, and operate the nation's network of navigational aids.

Starting with twelve colonial-era lighthouses and an unknown quantity of buoys, the number of navigational aids employed along America's waterways slowly grew during the thirty-year tenure of the Fifth Auditor of the Treasury, Stephen Pleasanton. Considered a consummate government bureaucrat and notorious spendthrift, Pleasanton made it all but impossible for the Light House Establishment to build an aid to navigation system equal to the demands of America's growing maritime industry.

Unlike lighthouses, buoys received very little attention from lighthouse officials during the Establishment's first fifty years of existence. Instead of doing the work itself, the USLHE chose to outsource the responsibility to the civilian sector. Operating out of small sailing vessels

that limited both the size of buoys and the accuracy of their placement, private contractors were regularly criticized by the maritime community. Of the approximate 77 buoys that did exist by 1810, the majority were either of the old wooden cask design or simple wooden bundles held together with an iron band. Difficult to see and lacking any semblance of standardization, these early buoys proved to be of limited use to local pilots and a hazard to mariners who were unfamiliar with the area.

The Light House Establishment continued to languish under Pleasanton who was highly criticized for his use of technology that was decades behind that of Europe. Spar buoys entered service in US waters in the early 1800s. Little more than a long wooden pole weighted at one end to help it stand upright in the water, the inexpensive nature of the spar buoy met the Fifth Auditor's fiscally conservative criteria perfectly despite its questionable performance. By 1850, nearly 1,000 were in use along America's waterways.

Realizing the nation's aids to navigation system fell well short of the maritime industry's needs under the Fifth Auditor, Congress created the Lighthouse Board in 1852 to oversee ongoing maritime safety operations. Comprised of nine maritime experts drawn from both the armed services and civilian sector, the Lighthouse Board effected rapid changes in the quality, design,



Fresnel lens have appeared on minor aids to navigation for more than a century, this 200 mm lens was once installed on a navigation buoy.

and effectiveness of aids to navigation used in American waters. Unlike Pleasanton, the Board encouraged innovation, ingenuity, and the use of cutting edge technology in lighthouse and buoy development.

Under the Board's mandate to "discharge all administrative duties of said office relating to the construction, inspection, illumination, superintendence of lighthouses, light vessels, beacons, buoys, seamarks, and their appendages," the number and quality of America's aids to navigation increased dramatically. Totaling less than 1,500 in 1855, the number of buoys rose to over 3,300 by 1880, and to more than 4,800 by 1900. Major advancements were also made in the quality, visibility, and placement of buoys along the nation's inland waterways and coastlines.

At the recommendation of Secretary of the Treasury Robert L. Walker, the United States in 1848 began moving toward a universal system of buoyage that would eliminate the random design, placement, and color schemes that had infuriated the maritime community for centuries. Passed by an Act of Congress in 1850, the mandate prescribed that all buoys "should be colored and numbered so that in entering from seaward red buoys with even numbers should be on the starboard or right hand; black (later green) buoys with odd numbers on the port or left hand, buoys with red and black horizontal stripes should indicate shoals with channel on either side; and buoys in channel ways should be colored with black and white perpendicular stripes."

Although numerous types of buoys were employed by the USLHE, most were used to identify navigable channels, mark underwater hazards and wreck sites, or to communicate important information to passing mariners. Buoys were classified according to size and placement. First-class buoys were primarily located at the entrances to harbors or wherever large highly visible buoys were needed. Second-class buoys, which were smaller, marked rivers and secondary harbor entrances. Third-class buoys, the smallest of the three, marked areas where deep drafted vessels could not go.

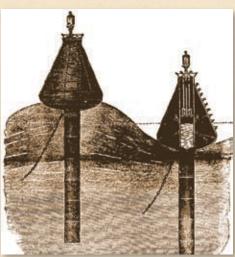
Relying solely on sailing vessels prior to 1850, the Lighthouse Establishment's ability to service its growing number of buoys was greatly improved with the purchase of the agency's first steam-driven tender, the USLHT *Shubrick*, in 1857. Collectively known as the "Black Hulled Fleet" due to the color of their hulls, steam powered tenders possessed many advantages over their slower and far more cumbersome



Commissioned in 1857, the USLHT Shubrick was the Lighthouse Establishment's first steam powered tender. It saw service on the West Coast.



BELL BUOYS, MOORING CHAINS, AND WEIGHTS ("ROCKS") PILED ON THE DECK OF THE USLHT Oak.



Invented by John Courtenay in 1875, the Courtenay Whistle Buoy could be heard from more than ten miles away



The buoy tender USLHT *Lily* was the first steam tender designed specifically for river service. She served on the Mississippi from 1875 until her sinking in 1911.

wind-driven predecessors including an open deck, crane, and plenty of room for buoys of all shapes and sizes.

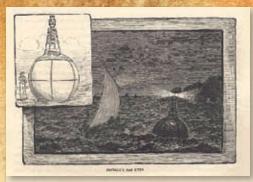
In addition to converting to the Lateral Aids to Navigation System, the Lighthouse Board also invested in a program to replace its outdated buoys. Beginning in 1900, the Light House Establishment began the arduous task of replacing many of its antiquated wooden aids with buoys of modern design including "nuns" (conical shaped buoys), "cans" (cylindrical shaped buoys), spheres, pillars, and spars. Although some were still made of wood, others were constructed of riveted plate iron and compartmentalized to reduce the likelihood of sinking. The combination of the adoption of the Lateral System and improvements in buoy design helped propel the United States' Aids to Navigation System into the modern era.

Audible buoys were added to the nation's growing inventory of navigational aids with the introduction of Henry Brown's wave activated Bell Buoy in 1855, John Courtenay's ear-splitting Whistle Buoy in 1875, the Submarine Bell Buoy in 1906, and the Gong Buoy in 1923. Typically located in areas plagued by heavy fog, audible buoys were frequently used to mark harbor entrances, dangerous shoals, or other navigational hazards.

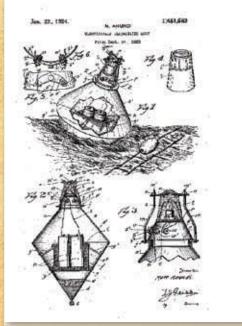
Great strides were also made in the development of illuminated buoys in the late 1800s. Initially utilizing unreliable oil lamps similar to the types that were commonly found in lighthouses, illuminated buoys experienced a technologic leap with the introduction of the acetylene-powered Foster Buoy in 1887. Prone to rolling in rough seas, the limited success of the Foster was soon eclipsed by far more sophisticated models including the self-pressurized Willson Calcium Carbide Buoy and the Pintsch Naphtha Buoy which was later converted to acetylene gas.

Produced by the Safety Car and Electric Company of New York, the Pintsch Buoy contained a 6 to 8 foot long cylinder that held up to 12 months worth of fuel. Although reliable, compressed gas buoys posed a significant danger to the men who worked on them. In 1910, an exploding Pintsch Buoy killed a machinist serving on the USLHT *Amaranth* while the tender was tied up to the Lighthouse Depot's dock.

Occurring just after the technician had completed a pressure test, the force of the explosion was so great that it drove the bottom of the buoy through the dock and the top of the buoy through the roof of the lamp shop. The deadly incident was unfortunately not an isolated occurrence and work on pressurized gas buoys



First introduced in 1883, the Pintsch Gas Buoy featured one of the first compressed gas lanterns to be used on minor navigational aids.



Invented by Matt Anundiin 1923, this early electric buoy featured a battery powered lamp.

remained one the Lighthouse Service's most dangerous tasks until these were replaced by electric lamps in the early 20th century.

Just as the turn of the century marked a period of great advancement in buoy technology, the increasingly complicated nature of managing the nation's growing number of navigational aids initiated a period of great administrative change within the lighthouse community. In 1910, Congress disbanded the Lighthouse Board and replaced it with the Bureau of Lighthouses. Commonly referred to as the Lighthouse Service, the Bureau flourished under the capable leadership of George Putnam who served as the agency's Commissioner from 1910 until his retirement in 1935.

During his 25 years as Commissioner of Lighthouses, Putnam spent considerable time reorganizing the infrastructure of the nation's aids to navigation system. Previously managed by private contractors, the Lighthouse Service assumed responsibility for all river aids shortly after its inception. Although performing the work itself when



COAST GUARDSMEN CLEAN A COLLECTION OF IRON BARREL BUOYS IN THE 1940S.



Measuring 40 feet high and 40 feet wide, a Large Navigational Buoy (LNB) can possess many features including a light, fog horn, radar reflector, and weather monitoring equipment.

possible, local lamp lighters were hired on a part-time basis to tend to buoys and beacons that were located along the most isolated sections of river. By 1939, over 29,000 buoys and channel markers were employed in US waters.

In addition to expanding its administrative role, the Lighthouse Service continued its ongoing mission to advance buoy technology with the introduction of several new designs including the first electrically lit buoy in 1888, the automatically occulting light in 1917, and the Gong Buoy in 1922. Introduced for the first time in 1935, battery-powered lighting gradually replaced the older and far more dangerous

acetylene lamps. The transition to battery power was completed in the 1960s.

BELL BUOYS STILL SERVE

AS AUDIBLE AIDS TO NAVIGATION TO THIS DAY.

Transferred to the US Coast Guard with the dissolution of the Lighthouse Service in 1939, American aids to navigation continued to develop through the following decades until the nation





A member of the "Black Hulled Fleet", The U.S. Coast Guard Tender *Juniper* performs maintenance on two navigational buoys.



A HUGE NAVIGATIONAL BUOY AND SPAR BUOY AWAIT RELOCATION FOLLOWING SHIFT IN THE CHANNEL.

possessed a system that was second to none. Advancements under the Coast Guard included a variety of navigational buoys utilizing radio waves, radar waves, and microwaves. One experimental buoy, nicknamed *Ensign Peaceful Atom*, featured a nuclear generator as its primary power

source. Although touted as the first in the next generation of modern buoys, *Ensign Peaceful Atom* proved a dismal failure and public relations nightmare. It was quietly removed from Baltimore Harbor in 1966.

In the early 1970s, the Coast Guard developed the Large Navigational Buoy or LNB as a replacement for lightships. Measuring 40 feet high and just as wide, these impressive buoys were operated electronically and featured a

7,500 candlepower xenon gas light that could be seen at a distance of 10 miles away and a foghorn with an audible range of over 3 miles. Important modern innovations also included the use of plastic, foam, solar panels, and light emitting diodes (LEDs).

Developed by the Gilman Corporation,



An ATON Coast Guardsman performs maintenance on



SPAR BUOYS COME IN MANY SHAPES AND SIZES.

the use of ionomer foam in buoy construction began in the late 1980s with the Coast Guard's search for a material superior to either steel or plastic. Made of DuPont Surlyn and Exxon Iotek ionomer resins, these durable foam buoys have lived up to their description by the US Coast Guard as "indestructible, unsinkable, and stronger than steel". COMMON Coated in smooth durable plastic available in a wide variety of colors, ionomer buoys have replace both



MARKERS ARE SIGHTS ALONG THE NATION'S MANY INLAND

steel and plastic as the buoy material of choice in many of the world's maritime nations.

In 1980, the United States joined 50 other nations by adopting the International Association of Lighthouse Authorities (IALA) Maritime Buoyage System. Similar to the Lateral System, the IALA-B (also known as the U.S. Aids to Navigation System) applies to all fixed and floating marks which indicate the side and centerlines of navigable channels, natural dangers, wrecks, underwater obstructions, regulated navigation areas, and other important features. Most lighted and unlighted beacons other than lighthouses, sector lights, range lights, and lightships are included in the system.

Although modern navigational technology such as the Global Positioning System (GPS) may have turned many of

5' x 9' **lonomer Foam** Buoy "IDx37" Sch. 40 8"x8.625"x.50"

THE COAST IS PHASING OUT ITS OLD STEEL BUOYS AND REPLACING THEM WITH FOAM BUOYS LIKE THE ONE DIAGRAMMED ABOVE AND PICTURED BELOW.



the nation's historic aids to navigation into towering relics, buoys remain as important today as they were in centuries past. Professional mariners and recreational boaters still scan the horizon in search of a twinkling light of red, green, or white, and tilt their heads towards the sound of a ringing bell, shrill whistle, or melodious fog horn. For as long as men and women ply the waves, the buoy will undoubtedly continue to guide them safely home.

## The Bell Buoy By Rudyard Kipling

I dip and I surge and I swing, In the rip of the racing tide, By the gates of doom I sing, On the horns of death I ride. A ship-length overside, Between the course and the sand, Fretted and bound I bide, Peril whereof I cry. Would I change with my brother a league inland? (Shoal! 'Ware shoal!) Not I!

This quarter's object is not an object at all but is, rather, a collection of objects. The museum has long had a group of lanterns and small navigational beacons that have been in storage. We are proud to announce that these are now on display in an exhibit called Minor Lights. Located on the balcony of the Lens Exhibit Building, over 30 examples of buoy lanterns, small beacons for lighthouses, ship and hand lanterns, and post lanterns can now be seen together for the very first time. This new exhibit shows how Fresnel lens technology was adapted not just for large lighthouse beacons, but for smaller lenses and lanterns as well. There are examples of small beacons made of individually cast prisms, mold-made lenses, and modern beacons with acrylic Fresnel panels. Each group of lights contains

Post lanterns were developed as navigational markers for small harbors,

unique and often rare examples.

channels, and other close-to-shore areas. Some of these had fuel reservoirs that allowed 8 days of continuous service. Our collection includes a rare United States Lighthouse Establishment Post Lantern B. Made before 1910, this lantern is unusual because it is nickel plated to help reduce corrosion.

Another Lighthouse Service artifact is a general utility hand lantern marked USLHE on its globe. Produced in about 1900 by the C.T. Ham Company, this was a popular and inexpensive tin lantern that would have been supplied to lighthouse keepers for use in their dwellings and around the lighthouse grounds. The smallest hand lantern in the exhibit was used at the Light Station shortly after World War II by Officer-in-Charge Charner Smith. This tiny lantern has a red lens on one side and a green lens on the other and could have been used in the bow of a small boat.











The buoy and channel marker lenses on display include a number of fascinating examples made in different parts of the world. There are several clear, mold-made lenses that were made

in America by Corning Glass Company. One of these still retains its top, complete with a bird spike to prevent nesting. (See page 7)A rare river lantern was used by the Lighthouse Establishment and has a "viewing port." This little window in the central lens allowed the keeper to see inside. If the interior candle had burned down below the focal plane, it would have to be replaced by the light attendant. There is also a pair of small buoy lenses made by Sweden's AGA Company shortly after 1921. The individually cast prisms and lenses for these were made in Germany by the Wilhelm Weule Company.

Lastly, a grouping of small lighthouse optics is on view. These were electrically

powered, some would have rotated to produce flash characteristic. Their lenses are acrylic. Several were used at the top of our tower between 1982 and the installation of our restored third order lens in 2004.



Most notable is a rotating 250 mm beacon that served here from 1989 until its circuitry was destroyed by lightning in 1996.

## EDUCATION NEWS

s many of our readers know, the Preservation Association has been actively engaged in expanding its educational offerings to local schools, youth-oriented groups, and civic organizations. Considerable time has been spent these past few years in the ongoing development of educational outreach programs and on-site workshops which will be made available to all local school groups free of charge.

The Association will be reintroducing many of these programs to Volusia County teachers during a series of meetings scheduled from August through October. The presentations will include information related to the history of the Ponce Inlet Light Station as well as the Preservation Association's current educational program options which include:

## Option 1: Guided Tours of Light Station

Bring your class to the lighthouse for a guided tour of the historic grounds and buildings.

## Option 2: Guided Tour Plus Workshop

When scheduling your on-site tour, you may also select from a list of available workshops, including: Science of Light, Artifact Box, Keeper's Jobs, Archaeology Dig, The Open Boat, Chip Log, Radio Beacon, Compass Reading and Lighthouse Poetry.

# Option 3: Online Lesson Plans and Pre/Post-Visit Activities

Individuals wishing to access lighthouse related lesson plans and pre/post visit activities may do so online at www.ponceinlet.org. Developed by



state certified teachers, online lessons and activities may be accessed under the "Educational Resources" tab in the main menu bar. Available resources include: *History for Students, Pre-Visit Activities*, *Post-Visit Activities*, and a wide variety of lesson plans in PDF format that may be downloaded for use in a classroom setting.

# Option 4: Educational Outreach Programs

The Association has developed a number of Outreach Programs designed for students of all ages. Educational Outreach programs include:

• <u>Lighthouse Power Point Presentations</u>
Presented by a costumed lighthouse keeper, power point presentations include: *What is a Lighthouse?*, *Lighthouse Shapes and Sizes*, and *Living at the Lighthouse*.



## Education News, cont'd.



- <u>U.S.L.H.E. Traveling Library Box</u> Modeled after the historic mobile libraries that were once delivered to light stations around the country, this reproduction wooden box contains numerous lighthouse themed fiction and nonfiction books, videos/DVDs, lesson plans, and other educational activities. Books are carefully chosen to ensure that each library contains books appropriate for students of varying ability. The Library Box may be scheduled in conjunction with the Keeper in the Classroom program.
- <u>Keeper in the Classroom</u> Students are visited by one of the Association's "Old Lighthouse Keepers" who, dressed in a lighthouse keeper's uniform, discusses the purpose, construction, and characteristics of lighthouses, their unique role in maritime history, and what it was like to live at an isolated light station during the turn-of-the-century. Additional activities may include a 20-minute introductory video and student activity.
- "The Open Boat" Living History Workshop Designed specifically for middle and high school students who have read Stephen Crane's acclaimed short story "The Open Boat", this unique living history program provides students with the opportunity to talk with Edward Murphy, Captain of the ill-fated filibustering tug, Commodore. Students will interact with one of the Association's costumed volunteers who will lead a fascinating discussion addressing filibustering expeditions to Cuba, author Stephen Crane, and Captain Murphy's hair raising experience following the sinking of the Commodore on January 1st, 1897.

Teachers interested in more information about any of the above programs may contact Bob Callister via email at bobcallister@ponceinlet.org, or by phone at 386-761-1821 ext.18.

## Volunteer News

In an effort to escape the tropical heat and humidity so typical of Florida during the summer months, volunteers opted to conduct many of the Association's scheduled workshops in the air conditioned comfort of the gift shop, lens building, and keepers' dwellings.

Included in these scheduled activities were five Cape Canaveral Lens Maintenance Demonstrations. Conducted by volunteers John Mann, Art Hahn and Gerry Harris, visitors were given the opportunity to observe the white-uniformed gentlemen as they performed the tedious yet necessary maintenance procedures that constituted a part of a historic lighthouse keeper's weekly tasks. Fortunately for them (and for our visitors) the lens maintenance was held in the Lens Museum rather than the lighthouse where the temperature of the lens room often reaches well above 100°F. All we can say is "Thank goodness for air conditioning!"

On Saturday, August 1st, attendees of the American Horn Quartet Workshop performed a 45 minute concert for an enthusiastic Lighthouse audience. Comprised of both professional and amateur French horn musicians, this musical aggregation amazed the audience with several wonderful pieces outside of the gift shop despite the day's sweltering heat.

The museum experienced record breaking attendance during National Lighthouse Day on Friday, August 7th. Designated by Congress in 1989, National Lighthouse Day celebrates the anniversary of the 1789 Act that led to the creation of the U.S. Light Houses Establishment and established Federal control over all aids to navigation in U.S. waters. Attended by over 530 visitors between the hours of 10:00 and 2:00, the day's events included numerous activities presented by ten of the Association's dedicated volunteers.

Our thanks go out to Carroll and Jo Anne Hamilton, Tommy Campbell, Mariann Elkowitz, Charlene McLaughlin, Kristi Drumheller, Blake Derr, Adrian Geary, Al Sepa and Gerry Harris for spending the better part of their day at the lighthouse and making it memorable for our visitors.

In addition to the event's guest-oriented activities, we had the added pleasure of hosting a remote broadcast by WSBB (AM 1230 - New Smyrna Beach). Morning radio personality and station owner Skip Diegel promoted the Lighthouse while interviewing Programs Manager Bob Callister, Executive Director Ed Gunn, and Volunteers Tommy Campbell, and Gladys and Earl Davis. It was a wonderful opportunity for this local treasure to be promoted, as such, on a local radio station.

Anyone who is interested in educating the public about the unique maritime and social history of the Ponce Inlet Lighthouse is encouraged to join our dedicated "family" of volunteers by contacting Program Manager Bob Callister at 386-761-1821 or via email at bobcallister@ponceinlet.org. Snow-birds are always welcome!



THE AMERICAN HORN QUARTET



Board Members Gladys and Earl Davis talk with Skip Diegel of WSBB



## THANK YOU & WISH LIST

e have received a number of outstanding artifact donations over the past quarter. Thanks go to Ann Caneer, Earl Davis, Lonnie Arnold, and to docent John Mann for various books, tools, oil lamps, and a barometer. Jan Ingrahm donated a 19th century ship's bell which was retrieved many years ago by her husband, Glenn, from the *Commodore* shipwreck. Marion M. and Jacques N. Jacobsen, Jr., have made a number of important donations this quarter including an early 20th century regulation lighthouse keeper's uniform hat, a lighthouse keeper's



soft work hat, and a rare World War I vintage lighthouse keeper's collar tab. The Jacobsens also donated two extremely rare Seminole-War-era military items – an army belt buckle and an infantry hat insignia. They also donated a Civil War Union Army belt buckle, artillery hat insignia, and an infantry hat insignia. These are all such welcome additions to our collection. Thank you all!

Our wish list always includes lighthouse-related artifacts and antiques, as well as any 19th and early 20th century clothing, personal objects, and home furnishings. We are particularly interested in late 19th century parlor chairs, and art work from the same period. We would also like to acquire artifacts and documents related to early aviation in the Daytona Beach area.





Lighthouses of the World

# Odawara Chochin Lighthouse

hile researching lighthouses

W in Japan for the Lighthouses of the World project, some unusual features were discovered. Several of the lighthouses, in addition to their beacons, have a powerful stationary searchlight which is used to illuminate a dangerous obstruction offshore. Some

of the towers are built in the shape of a large garden lantern, a pagoda, a smaller hand or hanging lantern, a lily or a rocket. One of these unusual lighthouses is on Sagami Bay southeast of Tokyo.

The lighthouse is at the end of the main breakwater protecting the small harbor of Odawara on the northwest shore of Sagami Bay. It is in the shape of a *chochin*, which is a traditional paper

lantern. The 39 foot tall concrete tower is painted white with black bands at the top and bottom and seven fine gray horizontal lines; there's also a metal "hanger" at the top. The kanji lettering is the name of the town.

Chochin, widely used during the

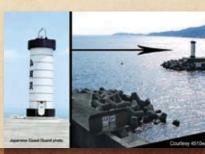
Edo period (1603-1869), is a portable light that uses a candle as a light source. Japanese paper is applied to a spiral-shaped coil of finely split bamboo, and rings are fitted to the top and bottom of the Chochin so it can be collapsed and folded flat. The person who originated the

lamp design lived in Odawara, and that is why they are called "Odawara Chochin".

An Odawara Chochin has three distinguishing features. It is so small and light that it can be collapsed and put in the bosom of a kimono. It is durable and can be used in rain, mist, or other bad weather. And it was believed to protect people against evil spirits. This

protection is possible because some of the materials for the Chochin are obtained from a holy mountain (Saijoji Temple, Mt. Daiyu) where, according to a legend, a goblin named Tengu lives who is said to be untroubled by evil sprits.

During the Edo period, because of lower levels of artificial light, the night-time was darker than it is today, and people had to travel on foot. Odawara Chochin was both useful to light the way and psychologically reassuring to protect against evil spirits. For these reasons it was widely used, particularly by travelers, from the beginning of the 18th century.



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Ponce Inlet Lighthouse

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## GIFT SHOP

N ow is the perfect time to get an early start on all of your holiday shopping needs. Avoid the rush by purchasing your gifts at the Ponce Inlet Lighthouse. The Ponce de Leon Inlet Lighthouse Gift Shop specializes in unique lighthouse and nautical themed gifts for men, women, and children of all ages.

Our wide selection of merchandise includes clothing, house wares, toys, jewelry, and collectibles. Don't forget our affordable lighthouse memberships and memorial bricks which make wonderful gifts as well. Customers may purchase items in the gift shop or online at www. poncelighthousestore.org. Orders may also be taken by phone at (386) 761-1821 ext. 21. Cash and credit cards are accepted. Happy Holidays!

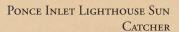
Please contact our Gift Shop Manager Connie Bach at connie@ponceinlet.org for more information regarding these and other gift products. Usual UPS rates and a \$4.00 shipping and handling fee apply to all orders.



PONCE INLET LIGHTHOUSE BALL CAP OUR NEWEST, LOW PROFILE. MESH BACKED TRUCKER HAT HAS PONCE INLET LIGHTHOUSE Logo embroidered on THE FRONT. AVAILABLE IN 4 COLORS; BLACK, NAVY, RED AND LIGHT BLUE ITEM #: 3197 PRICE: \$9.99



#### Ponce Inlet Lighthouse Aussie Hat EMBROIDERED AUSSIE HAT W/ ADJUSTABLE CHIN STRAP. Men and Women will love this 100% cotton Aussie Hat featuring "Property of Ponce Inlet Lighthouse" and "1887" embroidered on the front. Perfect for hot, sunny, or windy days at the beach. Available in Blue/Khaki, Olive/Blue, and Khaki/ Blue. One size fits all. Ітем #: 4138 Price: \$13.99



Brighten up any window and bring a LITTLE BIT OF PONCE INLET INTO YOUR HOME WITH THIS BEAUTIFUL HAND PAINTED "STAINED-GLASS" HANGING SUN CATCHER FEATURING THE Ponce de Leon Inlet Lighthouse. ITEM#: 0310 PRICE: \$21.99



## Ponce Inlet Lighthouse Рното Frame

This beautifully detailed Polystone photo frame featuring THE PONCE INLET LIGHTHOUSE HOLDS A STANDARD 3.5" X 5' PHOTOGRAPH. THE PERFECT GIFT FOR LIGHTHOUSE LOVERS AND THOSE WISHING TO DISPLAY THEIR FAVORITE VACATION PHOTO IN A UNIQUE AND INTERESTING WAY FRAME dimensions measure 6" x 7" ITEM #: 4722 PRICE: \$11.99



## LIGHTHOUSE JUMP Rope with Pouch

This 9" Jump Rope FEATURING WOODEN HANDLES AND A HANDY CARRYING POUCH EMBOSSED WITH THE LIGHTHOUSE'S HISTORIC LANDMARK LOGO WILL PROVIDE HOURS OF FUN EXERCISE FOR CHILDREN OF ALL AGES. INCLUDES A 20-PAGE HANDROOK FILLED WITH POPULAR JUMP ROPE RHYMES AND GAMES. ITEM #: 3335 PRICE: \$10.99



## "If Life is a journey... the Beach should be the DESTINATION" SIGN

The perfect towel for lighthouse enthusiasts. Proudly proclaim your love for our Nation's RICH MARITIME HISTORY WITH THIS BEAUTIFUL TOWEL MEASURING 30" X 60". IMAGE DEPICTS THE LIGHTHOUSES OF THE AMERICA'S EAST COAST INCLUDING PONCE INLET, CAPE CANAVERAL, AND MANY MORE.

ITEM #: 2932 PRICE: \$9.99



#### WINE BOTTLE BOAT

DISPLAY YOUR FAVORITE BOTTLE OF WINE WITH THIS UNIQUE WIRE BOAT BOTTLE CADDY WITH HANDLE. MEASURES 12" x 9" ITEM #: 0223 PRICE: \$10.99



#### LIGHTHOUSE MARBLES

REVISIT ONE OF AMERICA'S GREAT CHILDHOOD PASTIMES WITH THIS WONDERFUL SET OF 64 MARBLES, TWO SHOOTERS, AND DRAWSTRING BAG STAMPED WITH THE LIGHTHOUSE'S HISTORIC LOGO. COMES WITH BEGINNER'S HANDBOOK EXPLAINING THE RULES OF THE GAME AND MARBLE SHOOTING TECHNIQUES.

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#### SEMAPHORE FLAG GAME

Spell your name with "Flags that talk" This fun, EDUCATIONAL GAME FEATURES FLAGS FOR EACH LETTER OF THE ALPHABET AND A STRING FOR HANGING THEM TOGETHER. Iтем #: 0048 Price: \$12.99

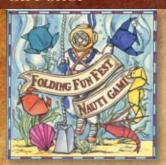


## PONCE INLET LIGHTHOUSE PUZZLE THIS 24 PIECE PUZZLE FEATURING

THE PONCE INLET LIGHTHOUSE, NELLY THE LIGHTHOUSE CAT, AND SEA CREATURES IS THE PERFECT GIFT FOR CHILDREN 5 AND UP. FINISHED PUZZLE MEASURES 10"X14". ITEM #: 3554 PRICE: \$4.99



## GIFT SHOP



## NAUTICAL

ORIGAMI SET This beautiful striped TOTE WITH MAGNETIC CLOSURE IS PERFECT FOR TRAVEL, BEACH, OR BOAT. MADE OF NATURAL STRAW AND LINED WITH MATCHING STRIPED FABRIC. ZIPPERED INNER COMPARTMENT KEEPS YOUR CELL PHONE, COSMETICS, AND CAR KEYS SECURE.

Measures 15" x 5" x 11" AVAILABLE IN RED/NATURAL, BLACK/NATURAL, & NAVY/NATURAL. Please specify desired color when ordering. ITEM #: 0685 PRICE: \$19.99

## PONCE INLET Lighthouse COASTER SET

AVOID DAMAGING WATER STAINS ON YOUR FURNITURE WITH THIS BEAUTIFUL SET OF 4 COASTERS FEATURING ORIGINAL ARTWORK OF THE PONCE

INLET LIGHTHOUSE BY RENOWNED ARTIST DONNA ELIAS. A TRULY AN ABSORBING GIFT FOR LIGHTHOUSE LOVERS EVERYWHERE.

ITEM #: 4220 PRICE: \$20.99



# Lighthouses

## Lighthouses FROM MAINE TO FLORIDA

THE PERFECT COFFEE TABLE BOOK. LIGHTHOUSES FROM Maine to Florida IS A PHOTOGRAPHIC JOURNEY ALONG THE ATLANTIC SEABOARD. THIS BREATHTAKING COLLECTION OF 200

IMAGES CAPTURES THE ALLURING MOODS AND CHARMING SETTINGS OF OUR HISTORIC EAST COAST LIGHTHOUSES. BOOK MEASURES II 1/4 x 8 1/2" ITEM #: 0841 PRICE: \$34.99

3RD ORDER CLAMSHELL LENS MODEL

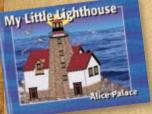
LIGHTHOUSE. INCLUDES A WOODEN BASE, ILLUMINATED

This replica of a 3rd order clamshell lens

BY HARBOUR LIGHTS IS MODELED AFTER THE MAGNIFICENT LENS FROM THE POINT VICENTE

POST, AND A/C ADAPTER. MEASURES 7 1/2" X 5"

Iтем #: 3884 Price: \$99.00



### My LITTLE LIGHTHOUSE

A GREAT CHILDREN'S вертіме ѕтокувоок, Му LITTLE LIGHTHOUSE IS THE STORY OF MARVIN, A LITTLE BOY WHO DREAMS OF BECOMING A LIGHTHOUSE KEEPER.

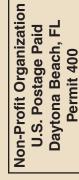
FISH, SAILOR, AND MUCH, MUCH MORE. FEATURING THE ART AND TEXT BY ALICE PALACE, THIS HARDCOVER BOOK MEASURES II 1/4" x 8". ITEM #: 3202 PRICE: \$17.00



Your favorite PUZZLE LOVER WILL ENJOY THIS 550PC, 24"XI8" PUZZLE

FEATURING ORIGINAL ARTWORK OF DONNA ELIAS. IMAGE DEPICTS FLORIDA'S HISTORIC BEACONS INCLUDING THE PONCE INLET LIGHTHOUSE.

ITEM #: 2799 PRICE: \$17.99



PONCE DE LEON INLET LIGHTHOUSE PRESERVATION ASSOCIATION, INC.

4931 South Peninsula Drive

PONCE INLET, FLORIDA 32127



Puzzle



This 7" tall resin replica of Ponce Inlet LIGHTHOUSE FEATURES AN ILLUMINATED LANTERN ROOM THAT CAN BE TURNED ON AND OFF WITH FLIP OF THE SWITCH. THE PERFECT GIFT FOR LIGHTHOUSE LOVERS EVERYWHERE.



#### LET YOUR LIGHT SHINE

One of our bestselling children's books, Let your Light Shine! Tells the heartwarming story of how a little LIGHTHOUSE HAD THE POWER TO HELP OTHERS EVEN THOUGH IT WAS SMALL. THIS WONDERFUL TALE TEACHES CHILDREN HOW A SIMPLE ACT OF KINDNESS HAS THE POWER TO BRIGHTEN OTHER PEOPLE'S LIVES. THE LIGHTHOUSE FEATURES LIGHT AND SOUND AT THE

ITEM #: 3333 PRICE: \$12.99



# LIGHTHOUSE COFFEE

KEEP YOUR FAVORITE BEVERAGE WARM IN THIS BRICK COLORED, MICROWAVE SAFE, 140Z MUG FEATURING THE PONCE INLET LIGHTHOUSE'S HISTORIC LANDMARK LOGO. ITEM #: 4241 PRICE: \$7.99

The Ponce de Leon Inlet Lighthouse Gift Shop specializes in unique lighthouse and nautical themed gifts for people of all ages. Our wide selection includes clothing, house wares, toys, and collectibles including a wide selection of Harbour Lights and other miniatures. Customers may also shop online at www. PonceLighthouseStore.org, and place orders by phone at (386) 761-1821 ext. 21.

Please contact the Gift Shop at (386) 761-1821 or via email at connie@ponceinlet.org for more information. Usual UPS shipping charges and a \$4.00 handling fee apply to all orders.

