



PONCE DE LEON INLET LIGHT STATION

4931 South Peninsula Drive • Ponce Inlet, Florida 32127
www.ponceinlet.org • www.poncelighthousestore.org
(386) 761-1821 • lighthouse@ponceinlet.org

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PHOTO COURTESY OF
RON CHRISTOPHER

Members and Friends,

The year 2012 marks the 125th anniversary of the Ponce de Leon Inlet Lighthouse! Looking back at the history of the Light Station, I cannot help but marvel at the many changes that have occurred during that time. Completed in 1887, the Ponce Inlet Lighthouse has weathered much over the past one and a quarter centuries. From the tower's lofty perch, Lighthouse keepers have watched the Halifax River region grow from one of Northeast Florida's most isolated and sparsely populated regions into one of the state's most popular places to live and play.

Built by master carpenters and masons, the Lighthouse has survived countless threats to its existence including violent storms, the harsh coastal environment, technological advancements, and development. Most of all, the facility has endured years of neglect and social apathy. Saved by a group of concerned citizens who would later found the Ponce de Leon Inlet Lighthouse Preservation Association, the historic beacon continues its original mission to guide mariners at sea.

As I reflect on the Light Station's venerable past, I am filled with a sense of profound admiration for those who came before me. If not for the Preservation Association's founding members this National Historic Landmark may not exist today. Thanks to their hard work, commitment, blood, sweat, and tears, this once dilapidated facility was transformed into one of the nation's best preserved and most complete light stations.

That a fledging non-profit could achieve all that it did without significant funding from the local, state, or federal government is nothing short of amazing.

I credit many of these achievements to the dedicated leadership of my predecessor Ann Caneer. Serving as Executive Director from 1985 through 2008, Ann's vision helped steer the Association in its ongoing mission to preserve and disseminate the maritime and social history of the Ponce Inlet Light Station. It is to Ms. Caneer that I dedicate this issue of the quarterly newsletter with warm wishes and great appreciation.

Committed to the task of promoting public awareness and appreciation for the unique maritime and social history of the Ponce Inlet Light Station, the Preservation Association endeavors to provide an enriching educational experience for all Lighthouse visitors. Museum exhibits are regularly updated and new educational programs developed. We are pleased to announce that the Ponce Inlet Lighthouse website has undergone a recent redesign. Originally launched in 2004, the old website was outdated and lacked many features and applications commonly found online today. I encourage all readers to explore the new and improved websites in the coming weeks. Be sure to join our growing social network by "liking us" on Facebook and Twitter.

For the Board of Trustees, Advisory Board Members, and staff, I would like to thank those who contributed to the annual fundraiser and to all members for your continued support. Without you none of the Association's achievements would be possible.

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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The Light Station is published quarterly by the Ponce de Leon Inlet Lighthouse Preservation Association, Inc.

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

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- Jan. 16, 2012 Board of Trustees and
MONDAY Quarterly Membership Meeting
 - Feb. 20, 2012 Board of Trustees Meeting
MONDAY
 - Mar. 19, 2012 Board of Trustees Meeting
MONDAY
- ALL MEETINGS ARE HELD IN THE GIFT SHOP CONFERENCE ROOM.

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LIGHTHOUSE EVENTS JANUARY–MARCH 2012

**JAN 8,
FEB 5,
MAR 4 (SUN)**
1:30 – 2:30 PM

**JAN 14
(SAT)**
10:00 AM – 2:00 PM

**JAN 27
(FRI)**
6:00 – 8:30 PM

**FEB 24
(FRI)**
10:00 AM – 3:00 PM

**MAR 3
(SAT)**
10:00 AM – 2:00 PM

**MAR 9 – 11
& 16 – 17**
12:00 – 2:00 PM

**MAR 31
(SAT)**
10:00 AM – 2:00 PM

CLIMB TO THE MOON EVENT CALENDAR

JAN 8 (SUN)
4:15 – 6:15 PM

FEB 7 (TUE)
4:45 – 6:45 PM

MAR 8 (THU)
5:30 – 7:30 PM

ECHO RANGERS PROGRAM

Offered in cooperation with Volusia County, this special program is offered free of charge to all participants with pre-registration through Volusia County's ECHO Ranger Program.

Contact Programs Manager Bob Callister online at bobcallister@ponceinlet.org for more information.

GIRL SCOUT DAY

Calling all Girl Scouts! Come and enjoy the Lighthouse and museum while working on requirements for the Lighthouse Brownie Try-It Badge, Junior Lighthouse Badge, or Lighthouse Interest Project. Advanced registration is required. Tickets may be purchased online at www.poncelighthousestore.org.

MUSEUM AT NIGHT

Experience the Ponce Inlet Lighthouse at night when the beacon's light is shining bright! Tour the tower and grounds, enjoy family-oriented activities, and experience what it may have been like to man the lighthouse at night from a keeper's perspective. All activities are included with the cost of regular admission, no advanced registration required.

BEACH RACING DAY

Examine historic beach racing cars and talk with former drivers, owners and mechanics from the early days of stock car racing! Take photographs and get autographs from racing pioneers. All activities are included with the cost of regular admission, no advanced registration required.

ANTIQUE AUTO EXHIBIT

Come on out and enjoy this unique auto show developed in partnership with the Volusia Region of the Antique Auto Club of America. Enjoy the Lighthouse and marvel at beautifully maintained and lovingly restored cars from bygone times. All activities are included with the cost of regular admission, no advanced registration required.

BIKE WEEK

Tour the historic Ponce de Leon Inlet Light Station, examine artifacts, and learn about Crystal Radios. All activities are included with the cost of regular admission, no advanced registration required.

FLORIDA HERITAGE DAY

Celebrate Florida Heritage Day with a visit to the Ponce de Leon Inlet Light Station. Enjoy family-oriented activities and tour the historic Meyer/Davis House (located two blocks from the Lighthouse). All activities are included with the cost of regular admission, no advanced registration required.

2011–2012 HOURS OF OPERATION

NORMAL HOURS OF OPERATION

SEP 6, 2011 – MAY 27, 2012 Open daily from 10:00 a.m. until 6:00 p.m. (last adm. at 5:00 p.m.)
MAY 28 – SEP 3, 2012 Open daily from 10:00 a.m. until 9:00 p.m. (last adm. at 8:00 p.m.)

SPECIAL HOURS OF OPERATION

JAN 27, 2012 (FRI) Open 10:00 a.m. until 8:30 p.m. (last adm. at 7:30 p.m.)

RACE WEEK EXTENDED HOURS OF OPERATION

FEB 17–18, 24–25, 2012 Open 10:00 a.m. until 7:00 p.m. (last adm. at 6:00 p.m.)
(FRI & SAT)

FEB 27 – 29, 2012 Open 10:00 a.m. until 7:00 p.m. (last adm. at 6:00 p.m.)
(MON – WED)

BIKE WEEK EXTENDED HOURS OF OPERATION

MAR 15–17, 2012 Open 10:00 a.m. until 7:00 p.m. (last adm. at 6:00 p.m.)

LIGHTHOUSES AND THE GREAT SHAKE OF 1886: PART I

It began quietly enough. Disturbances in South Carolina's Abbeville County during the spring of 1886 sounded as if artillery were being detonated underground. Slight tremors of the earth were felt in the Charleston area in June of 1886. Two months later, a moderate tremor was felt by the lighthouse keeper at the Waackaack Light Station on New York Bay in New Jersey. The date was August 10, 1886, and the time was 2:10 pm. The event lasted less than a minute and was accompanied by a low, rumbling noise.

On August 23, the keeper at New Jersey's Absecon Light Station recorded in a memorandum some strange events in the sky. *"First seen, 7:50 p.m., as a bright light in the northern horizon; 8:30 p.m., brilliant taking the form of an arc; 10 p.m. auroral arc first seen, altitude 10 degrees above horizon; dark clouds below arc extending from northwest to northeast; 11:05 p.m., brilliant streamers shooting up from north to northeast; 12:15 a.m., 24th, aurora obscured by high fog from east. 8:10 p.m., several flashes of lightning seen in eastern horizon; 9 p.m., very brilliant meteor shooting from east to northern horizon; 11:05 p.m., one from north to northwest; 11:30 p.m., one from north to west; 12 p.m. one from north to northwest; 12:15 a.m., 25th, high fog from east."*

If those were not signs of something to come, other warnings followed a few days later when the village of Summerville, South Carolina, was shaken by a tremor on the morning of August 24. On August 27, Summerville again experienced a moderate earthquake at 1:30 am. Another and stronger event followed at 8:30 am. To the north in Maryland, the keeper at the Solomon's Lump Light Station on the east side of the Chesapeake Bay recorded two silent earthquake tremors on August 29, one at 9:50 pm followed by the second at 10:05 pm. His house shook and the windows rattled.

The main event soon followed on Tuesday, August 31, 1886, when the Great Charleston Earthquake rocked the east

coast at 9:51 pm, creating shocks that were felt from Toronto to Key West. It was estimated to have been a 7.3 magnitude quake on the modern Richter scale, with an intensity of X on the Modified Mercalli scale which ranges from I (barely felt) through XII (total destruction). This was possibly the most powerful earthquake ever to strike east of the Mississippi River. It hit the village of Summerville full force, leaving every house uninhabitable. Virtually every building in the nearby city of Charleston was damaged or destroyed, and hundreds of people were killed or injured. Some victims were so panic-stricken that they committed suicide or died of fright. Most residents were left homeless. Aftershocks continued for months after the August 31 quake. The frequency of these gradually declined, but seismic activity in the Charleston and Summerville areas has continued to be reported up to the present day.

In the preface of his book *City of Heroes*, Richard N. Côté writes:

Ten seconds after it started, at 9:51 pm, Charleston was in chaos. Within forty-five seconds, most of the damage was done. Within minutes the entire population...save for the dead, injured, or those too infirm to move, had fled into the streets. Within a few days after the first shock, at least 40,000 of the city's 60,145 residents were sleeping in the streets and public parks every night.

The United States Lighthouse Establishment had a strong presence in the city which was the administrative center for the Establishment's Sixth District. There was a supply depot at Castle Pinckney in Charleston Harbor as well as offices in Charleston itself for the Sixth District Inspector, Engineer, and other staff. After the quake, communications were disrupted for a few days. On September 3, the Sixth District clerk, L. D. Mills, was able to send a telegram to the Chairman of the Light-House Board in Washington, DC. *"Office badly wrecked and unsafe...no information received as yet from Light Stations."* But lighthouse officials did not

have long to wait. Another telegram sent on the same day by Mills to the Board reported that the Charleston Lighthouse on Morris Island had sustained serious damage but was operational as was the light at Cape Romain. The lens at Bulls Bay had been thrown off its pedestal and the



WAACKAACK REAR RANGE LIGHTHOUSE, 1894 TOWER



ABSECON LIGHT STATION, C. 1900



DAMAGED WAREHOUSE IN CHARLESTON



CHARLESTON'S HIBERNUM HALL



157 TRADD STREET, CHARLESTON



HOUSE IN SUMMERVILLE



HENRY BROWN, MASTER OF THE *WISTARIA*, HOUSED EARTHQUAKE VICTIMS ABOARD THE TENDER.



CAPT. HENRY BROWN WITH CREW OF LIGHTHOUSE TENDER *WISTARIA*

District Engineer had given instructions to replace it. Mills also reported that the tender *Wistaria* was in port but was undamaged.

News of the Charleston quake spread across the world, and on September 3, 1886, England's Queen Victoria sent this telegram to Grover Cleveland, the President of the United States:

I desire to express my profound sympathy with the sufferers by the late earthquakes, and await with anxiety fuller intelligence, which I hope may show the effects to have been less disastrous than reported.

THE QUEEN

The Light-House Establishment had moved quickly to bring help to displaced residents of Charleston. According to a lengthy October 4th report made by Sixth District Inspector B. P. Lamberton, Henry Brown, master of the lighthouse tender *Wistaria*, felt the violent shaking of the August 31st quake and left the ship to see what had happened. He found the streets filled with terrified men, women, and children. The city was shrouded in a ghostly haze created by the dust from pulverized masonry, and the smell of sulphur fumes released from underground was everywhere. Fires were beginning to rage, and the traumatized survivors were in a state of heightened terror from the continuing aftershocks. Brown offered shelter to as many as could get on board the *Wistaria*. Another tender, the *Pharos*,



LIGHTHOUSE TENDER PHAROS, USED FOR HOUSING EARTHQUAKE SURVIVORS.

was also in port for repairs at Samuel J. Pregnall & Bros. Shipyard and was likewise made available as an emergency shelter for the homeless.

Regarding the Light-House Board's other property, the Lighthouse Depot at Castle Pinckney was reported to be in good order although some minor repairs were eventually made in the keeper's dwelling. These were not identified as having been caused by the earthquake. However, the District Inspector's and Engineer's offices in Charleston were in a shattered and unsafe building, and both the Engineer and Inspector risked their lives to recover and remove records.

In an October 9, 1886, report from James F. Gregory, Engineer for the Fifth and Sixth Districts, to the Chairman of the Light-House Board, Gregory wrote that the earthquake shock on the night of August 31, "greatly injured the building in which this office was located. The office was unusable, and the building's janitor had been killed by falling walls. The front and rear walls of the house being unsafe, authority was asked and obtained from the Light-House Board to rent office rooms at a cost not to exceed \$25 per month. Suitable rooms were secured for that price on Southern Wharf, and the office furniture and records moved to them early in the month."

The year 1886, with the Charleston quake and its aftershocks, was such a rich one for earthquakes that the United States Light-House Board published descriptions of damage to lighthouses as an appendix to the *Annual Report to the Secretary of the Treasury, Fiscal Year Ended June 20, 1886*. Seismic activity was so widespread that the appendix began with information for lighthouse keepers on how best to report the details of such events which, hopefully, most keepers had already recorded in their log books. These instructions had already appeared as a circular issued by the United

>> CONTINUED ON PAGE 6

States Geological Survey in which it asked observers for specific kinds of information as to the effects of earthquakes. The circular was sent to lighthouse keepers throughout the affected regions of the east coast by mid-September, 1886.

Circular No. 2

Department of the Interior,
United States Geological Survey
Washington, D.C., September 10, 1886

The following list of questions has been prepared for distribution among those who may have volunteered their services in collecting information of the occurrence of earthquake shocks.

Immediately upon the occurrence of a shock, it is desired that the observer will collect such information as will enable him to answer the questions here propounded, and transmit his answers without delay to the Division of Volcanic Geology, United States Geological Survey, Washington, D.C.

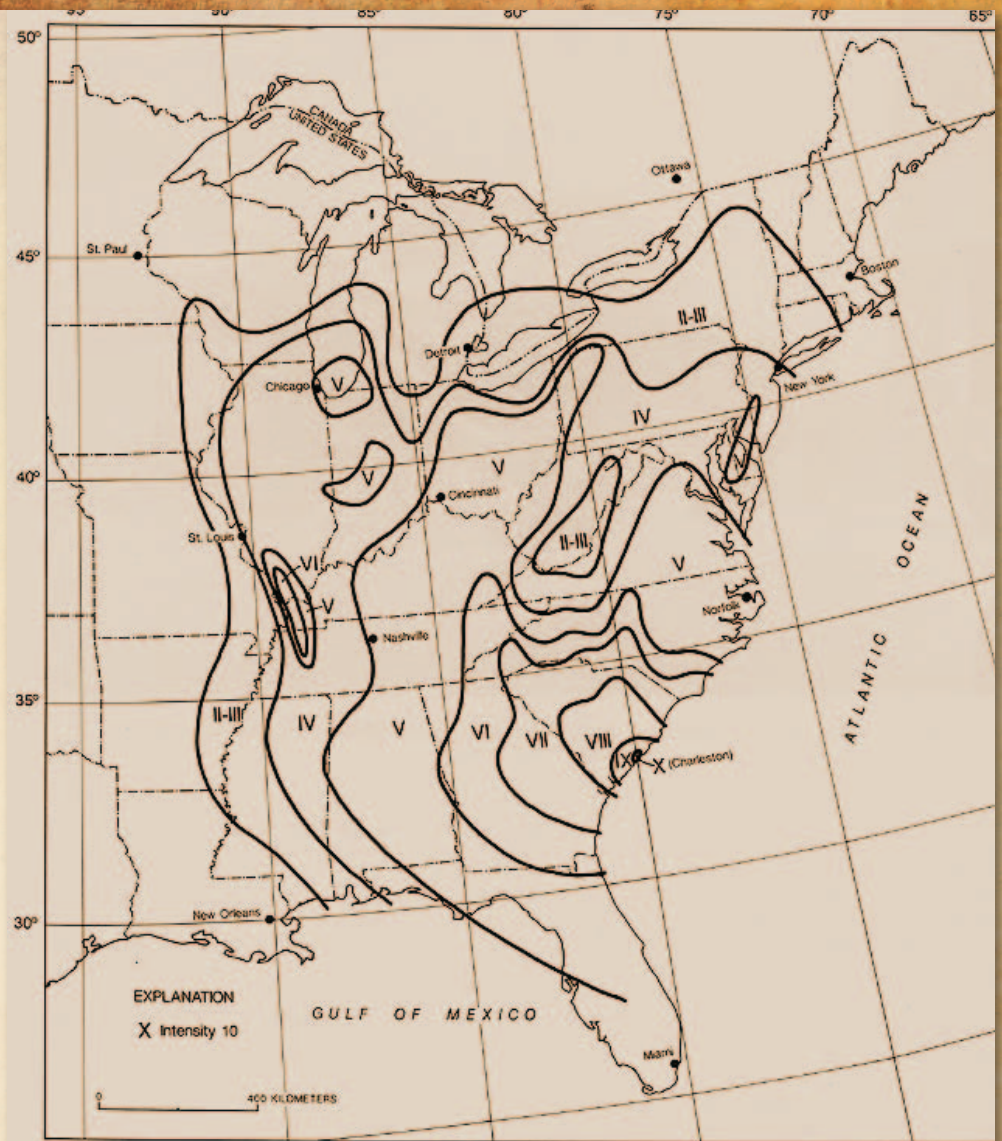
If any other trustworthy information relating to the subject should be in his possession, it is requested that he will communicate it at the same time. It is extremely desirable that the nearest possible approximation should be made to the exact time of the occurrence, and this should be the first care of the observer who may feel the shock. If the only time-piece at hand is an ordinarily good watch or house clock, it would be advisable to compare it with standard time at the earliest practicable moment, which can now be done at most railway stations.

Please keep this list of questions where it can be referred to at all times. Whenever a shock occurs, please write answers to the questions upon a separate sheet, sign it, and mail it in the addressed envelope sent herewith.

J.W. Powell,
Director

[Write on one side only of this paper. Date your communication, give year, post office address, and then write "Answers to Circular No. 2." State the observer's situation (whether in a house or out of doors, up stairs or down, sitting, standing, walking, reading, etc.); also, if possible, the character of the ground, whether solid rock, clay, sand, or loam. Then answer the following questions, referring to them by number only.]

1. State whether an earthquake was felt recently at your place, naming place of observation. [Negative answers to this will be of great interest from any points within the disturbed area, and



ISOSEISMAL DAMAGE MAP SHOWS THE LEVEL OF DESTRUCTION OF THE 1886 QUAKE.

- especially from points near its limits.]
2. At what time or times, giving hour, minute, and second of standard time, was it felt? [When this can be accurately given, it is of the greatest importance. Be careful to state whether it is standard (railway) time or local time; whether the watch or clock was compared with some standard clock at a railway station or elsewhere, when, what the error was, and whether you corrected your observation by this comparison or not.]
 3. How long did the perceptible motion continue?
 4. Was it accompanied by any unusual noise? If so, describe it.
 5. Was more than one shock felt? If so, how many?
 6. Which of the following measures of intensity would best describe what happened in your vicinity?
 - No. 1. *Very light* - Noticed by a few persons; not generally felt.

- No. 2. *Light* - Felt by the majority of persons; rattling windows and crockery.
- No. 3. *Moderate* - Sufficient to set suspended objects, chandeliers, etc., swinging, or to overthrow light objects.
- No. 4. *Strong* - Sufficient to crack plaster in houses, or to throw down some bricks from chimneys.
- No. 5. *Severe* - Overthrowing chimneys and injuring the walls of houses.
- No. 6. *Destructive* - Causing widespread devastation.
7. Do you know of any cause other than an earthquake for what was observed? Give also any further particulars of interest, stating whether they are from observation or from hearsay. For instance, whether the shock seemed like a tremor or jar or an undulatory movement, and whether it seemed to come horizontally or vertically. If a chandelier was noticed to swing, describe it and state direction and amount of swing. If pictures swing,



CHARLESTON MAIN LIGHT

state direction of wall, and whether pictures on other walls at right angles to the first were also put in motion. If doors were closed, or opened by the shock, state the direction of the wall in which they are set. If a clock was stopped, give the time it indicated (and anything known as to how fast or how slow it was), its position, the direction in which it was facing, and the length of the pendulum. If any changes occurred in the ground, such as depressions or elevations of the surface, fissures, emissions of water or sand, describe them fully. Mention any unusual condition of the atmosphere; any strange effects on animals (it is often said that they will feel the first tremors of a shock before people notice it at all); character of damage to buildings, general direction in which walls, chimneys, etc., were overthrown. Springs, rivers, and walls are often noticeably affected by even slight shocks, and information in regard to such changes will be valuable.

Question number 2 asks that the time of the earthquake be given in "standard time." For most of human history, time-keeping was based on the position of the sun in the sky, with midday being indicated when the sun was at its highest point. The problem was that it could be noon in one town but could appear to be before or after noon in other towns relatively close by. This method of time-keeping was sufficient for slow-moving agricultural societies but with the development of train travel, the invention of the telegraph, and the literal speeding up of life in the nineteenth century, a precisely coordinated and standardized way of keeping time was needed.

In the United States, an 1853 railway incident in Rhode Island helped galvanize the movement to establish this kind of standardized time. Two railway trains on

the same track and traveling towards each other collided, resulting in the deaths of 14 passengers and serious injury to 30 or 40 more. The conductors of each train had different times set on their watches, resulting in both trains using the same track at the same time. This was not the first such occurrence, and the New York Daily Times article about the Pawtucket crash began, "*Disagreeable necessity obliges us to shock the sensibilities of our readers, by the recital of another terrible calamity from a collision of Railway trains.*"

A committee of railway companies was formed to agree on train scheduling, and a variety of solutions were examined. During the negotiations a surprising number of dissenters around the country expressed their resentments concerning the perceived governmental interference with their personal experience of time. On November 17, 1883, an article in the *Sentinel* newspaper of Indianapolis protested standardized time, stating that citizens would be forced to "*Eat sleep work...and marry by railroad time.*"

Those who objected to standardized time for the railroads lost their battle. Standard Railway Time was introduced at noon on November 18, 1883 and was maintained voluntarily until it was incorporated into federal law in 1918. This system was based on four continental US time zones, each measuring 15 degrees of longitude. (A fifth time zone was added in Canada.)

Despite this standardization of time, it took years for every small town and remote locality to accept the new regulation. Lighthouses were often and famously located in remote places, and keepers would have to travel to the nearest railway station to find the difference between Railway Time and their local clocks. Once this was known, question number 2 on the earthquake survey could be most accurately answered.

Appendix No. 3 of the Light-House Board's 1886 annual report to the Secretary of the Treasury was entitled *Report Showing the Effects of the Earthquakes of 1886 Upon Certain United States Light-Stations, Compiled from the Reports of the Light-Keepers*. This appendix was added to the completed Annual Report for

1886 as ordered in a session of the Light-House Board held on September 24, 1886. Reports that came in from all affected lighthouses were included. The individual accounts were condensed and arranged in order by location as given in the Light Lists, beginning with the First District. Each report indicated the height of the tower. This height was not the total height of the structure but the measurement from the base of the tower to the focal plane of the lantern.

Naturally, lighthouses in the vicinity of Charleston had the most serious damage. At Cape Romain Light Station, keeper John Robertson was sick in bed with malaria. He noticed, as did the keeper at the Absecon Lighthouse, that on the night of August 31 an unusual show of meteors appeared in the clear sky. At 9:50 pm,

he heard a low rumbling noise in a west-southwest direction.



CAPE ROMAIN LIGHTHOUSES C. 1900

"The noise grew louder and louder, sounding something like a battery of artillery or a troop of cavalry crossing a long bridge. In less than a minute came the shocks,

the first one lasting about two minutes, the next one about as long, with about two minutes interval. Shocks only a little less severe than the first two were felt at intervals during the night. The shocks did the tower no injury, but its vibration was great. Everything on the shelves of the tower was thrown down, the doors of the machinery-case were burst open, and a trap-door that leaned back at an angle of nearly 45 degrees was torn down. The revolving machinery stopped only during the two heavy shocks, but went regularly afterwards. Nothing happened to the tower or the lantern to prevent a proper illumination of the station. All of the shocks seemed to be of a quick rotary motion. The clocks were all stopped in both tower and dwellings. Everything, such as vases and crockery, was thrown down and broken. It seemed a miracle that the tower and dwellings are now standing with little or no damage done to either, with the exception of a chimney thrown down and others cracked. The plastering in the dwellings is more or less cracked, and that is all the damage that has been done." A letter of September 8, 1886, from the Sixth District's Assistant Engineer B. B. Smith to James Gregory, Fifth and Sixth District Engineer, identified the damage at Cape Romain to include one

downed chimney on the assistant's dwelling and another badly damaged, the dwelling itself was leaning, and its plaster was badly cracked.

The Cape Romain keeper remarked at how horrible and unnatural this event seemed, and he noted that about a thousand cranes that were nesting nearby began to fly about, making a "fearful noise." Many of those who experienced the earthquake reported strong sensations of nausea and panic.

Events at the Charleston Light Station (Morris Island) were also dramatic. The first shock came at 9:53 pm. The keeper was on his way from his dwelling to the

tower when the quake hit and the earth moved with a tearing and jerking motion and a deep, rumbling noise. According to the Light-House Board report, *"the tower shook and trembled terribly. The wire net about the lantern and the other iron-work made a great noise, as if ready to tumble down. The first shock lasted about thirty seconds. The second shock succeeded the first not over two minutes. The tower made apparently the same movements as it did during the first shock. The second shock was not quite as severe as the first one. After the second shock he (the keeper) went up 150 feet, into the lantern of the tower. When the third shock occurred its force was such as to almost prevent him from standing on his feet. The lens swung from southeast to northwest back and forward about three or four times in a second. After the third shock there were several moderate ones. He had counted eighteen up to the evening of September 1."* The keeper also reported shocks on October 22 at 5:25 am and 2:45 pm, and on January 4, 1887, earth tremors and rumbling passed under the light station at 8:45 am.

At Fort Sumter, the light station clocks stopped on August 31st at 9:50 pm, sun time. After that, time could not be recorded for the shocks that continued through the night. The keeper described some particularly strong aftershocks on September 21. A chimney was overthrown and the frame houses were badly shaken. These aftershocks continued to be felt all through the region during the months of October, November, and December, with notable events on October 22 at 5:20 am and 2:44 pm, and on November 5th at 12:30 pm when the house shook and the

earth made a growling sound. Another set of aftershocks reported by area lighthouse keepers came on the evening of January 10, 1887, from the Cape Romain, Charleston, and Fort Sumter Light Stations. More tremors came through the area on March 4. J. J. O'Hagan, the keeper at Sullivan's Island, reported shocks and rumbling noises on February 10, March 4, and March 17th. The March 17th event was also felt on the Rattlesnake Shoal Light Vessel.



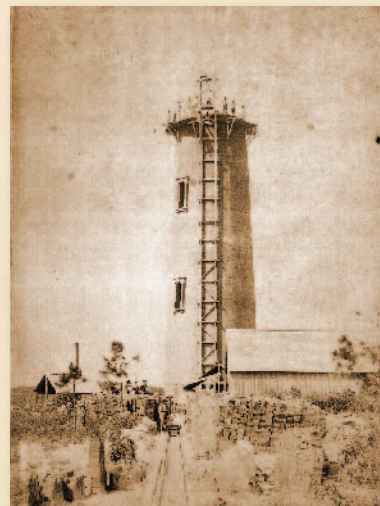
1891 DRAWING FT. SUMTER
UNMANNED LIGHT

From the Georgetown (South Carolina) Light Station, Acting Keeper Daniel Knight wrote that the first shock was felt at 9:57 pm, sun time. He thought he heard thunder but there was no sign of a storm and he realized the

sound was coming from underground. He felt eight or more shocks that night, and the first tremor stopped the clock. The arches were shaken off the chimney of the keeper's dwelling. The center plate and bolt of the lighthouse lens were damaged and the lamp inside the lens capsized. The keeper was credited with keeping the lens from falling and for immediately restoring the light. On September 8th, He wrote to Assistant Engineer B. B. Smith about his temporary repair of the lens. *"Respectfull (sic) Sir; I have the Illuminating Apparatus blocked up on the Pedestal to level it and wire guys to steady it and it is burning very well but it will need to be repaired."*

Shocks continued to be felt at this station all through September with a reportable event on September 27th at 5:05 pm, sun time. On October 22 he experienced two shocks - one at 5:30 am, and one at 2:49 pm. He reported yet another on October 30 at 3:48 am, another on November 5th at 12:29 pm sun time, and another on November 7th. Knight heard a rumbling noise on November 29th at 3:33 pm sun time, but this was not accompanied by a tremor. On January 4, 1887, a light undulation and rumbling noise were experienced at 6:51 am sun time.

From Hunting Island, the keeper reported that the August 31st quake was first felt at 9:50 pm, local time, and the first tremor stopped the clock. Perceptible motion continued for about 4 minutes. He did not hear anything unusual, as the accustomed sounds of the sea drowned out all other noises. The first shock was so strong that every item in the dwelling moved, and the clocks stopped in both the tower and dwelling. A bucket of water kept in the tower was emptied by the violent shaking, and the keeper wrote that *"I expected to have seen the Tower topple over..."* The two assistant keepers were in the tower during the first shock and reported that they were unable to stand without holding on to something. One man was actually on the balcony during the shock and *"he was thrown from the dome to the balcony railing back and forth until he was obliged to hold onto the railing for support."* The keeper also reported the tremor on the morning of October 22. He remarked that the dwelling was so well built and with such a solid foundation that there was no damage to the structure as a result of the seismic activity - not even the plaster was cracked.



PONCE DE LEON INLET LIGHTHOUSE UNDER
CONSTRUCTION

Charles Anderson, Keeper at the Parris Island Light Station, reported that the August 31st shocks began at 9:27 pm sun time. There was a noise like thunder and 7 or 8 shocks followed. He wrote, *"I was in the house sitting down reading when the first shock came and when I heard the noise I thought the light was coming down and I ran out to see about it. The cows were bellowing before the shock came. The atmosphere was very close and calm."*

Anderson later reported another event on November 5 at 11:58 am.

Felt as far away as New York and Florida, damages stemming from the Great Charleston Earthquake were not limited to South Carolina alone. In the April, 2012 edition of the Ponce de Leon Light Station quarterly newsletter, we will examine how this seismic event affected other lighthouses along the Atlantic coast from New York to Florida in Part II of *Lighthouses and the Great Shake of 1886*.

On November 3, 2011, the Ponce Inlet Lighthouse hosted its sixth annual Home-School Day. Attended by students and parents from across the state, this unique program provides home-school students with the opportunity to participate in hands-on activities and workshops related to lighthouse and maritime history. Past topics have included domestic life at the lighthouse, keeper's duties, navigation, archaeology, museum operations, and more.

Presented by Lighthouse volunteers John Mann, Allen Bestwick, Ken Marshall, Gerry Harris, Hal Cokash, Art Hahn, Bobby Emery, Sue Marshall, Jean Konover, & Paul Milward along with Programs Manager Bob Callister, this year's workshops examined communication technology and systems using flags, telegraph signals, radio waves, voice, and light.



Flag Communication Workshop:

Presented by Lighthouse volunteer Ken Marshall, this hands-on activity addressed a variety of visual communication systems including Wig-Wag Flags, Semaphore Flags, Signal Flags, and Weather Flags. After learning the advantages, disadvantages, and basic signaling skills of each flag system, students were given the opportunity to test their new-found knowledge by



sending messages to each other across the yard.

Telegraph Communications Workshop:

Presented by Lighthouse volunteer Gerry Harris, home-school students learned the science and methodology of wired telegraph communications during this informative workshop. Participating in small groups, attendees were shown how information could be transmitted over a wire using a variety of ciphers including railroad code, international code, and telephone



code. In addition to the wired telegraph, students were also shown how messages could be sent using a heliograph and signal lamp.

Wireless Communication:

Developed and presented by longtime radio enthusiast and Lighthouse volunteer Allen Bestwick, the Wireless Communication workshop gave students the opportunity to learn about wireless communications from the museum's leading authority on early communication systems. This presentation addressed the science of radio waves and how codes were developed to transmit information between two locations. Students learned the basics of Morse code and tested their knowledge by sending messages with oscillators made by Allen himself.

Voice Communication:



The fourth and final workshop of Home-School Day was presented by Lighthouse volunteer Paul Milward. An avid ham-radio operator, Paul discussed common forms of voice communications with the students after watching a twelve-minute video that traced the history of radio from the turn-of-the-century through the present-day. Following the lecture, students were shown how their voices modulate using a voice scope and how crystal radios convert radio waves to sound waves without using electrical power of any kind.

Everyone who attended the Lighthouse's Sixth Annual Home School Day enjoyed themselves. Students and parents expressed their appreciation for workshops and praised the volunteers for their extensive knowledge and all their hard work. The Lighthouse would like to thank its dedicated volunteer corps for making this annual event such an overwhelming success.

Individuals interested in becoming Lighthouse Volunteers are encouraged to contact Program Manager Bob Callister by phone at (386) 761-1821 ext. 18, or via email at bobcallister@ponceinlet.org for more information.

CORREGIDOR ISLAND LIGHTHOUSE

Constructed by the Spanish over 150 years ago, the Corregidor Island Lighthouse is located on the summit of an extinct volcano at the mouth of Manila Bay. Completed in 1853, the original Corregidor Lighthouse stood 639 feet above sea level and featured a white flashing light that was visible from more than twenty miles away. Featuring a sixty-foot circular stone tower rising up from the center of an octagonal stone dwelling, the lighthouse was not only one of the Philippines' oldest, but one of its most unusual as well.

Taking nearly seven years to construct, a notice to mariners was released on January 18, 1853, announcing that the second order Fresnel lens atop the Corregidor Island Lighthouse would be activated along with a fourth order Fresnel lens in the newly erected tower on nearby Cabello Island on February 1, 1853. Together, the two beacons would help ships safely navigate the narrow channels of Boca Chica and Boca Grande that linked Manila Bay to the open sea.

In 1897, the tower's aging second order lens was replaced with a more efficient lens of the same size. Lit for the first time on August 1, 1897, the new apparatus exhibited an alternating red and white light that flashed every ten seconds. Unlike the original 1853 lens, the new optic was visible 36 miles away in clear weather.

In 1908, Corregidor became a U.S. military installation and was designated Fort Mills as part of the harbor defense system of Manila Bay. Tunnels were dug through the mountain, port facilities



were constructed, barracks and service buildings were erected, and coastal defense guns were installed in fortified positions around the island. By 1930, the remote island of Corregidor had been transformed into one of the Pacific's most heavily defended fortresses.

The Corregidor Lighthouse continued to operate as an active aid to navigation under the United States from 1898 until December 8, 1941, the day that the Japanese invaded the Philippines. From that point on, the lighthouse was used to aid in the arrival of submarines carrying much needed war supplies. As American and allied troops withdrew from the advancing Japanese forces, the strategic importance of Corregidor could not be ignored. Frequent raids by Japanese bombers reduced much of the island's above-ground structures to rubble. By year's end, the Lighthouse atop Corregidor lay in ruin.

After the war, what little remained of the original 1853 lighthouse lay overgrown and forgotten. In 1950, the ruins were demolished to make way for a new lighthouse. Although built of stones salvaged from the 1853 ruins and featuring an architectural design that closely resembled that of the original lighthouse, the new tower was not intended to serve as an exact replica.

The present-day lighthouse features an octagonal tower topped with a lantern room housing a modern solar powered beacon, and a twelve-sided single story base that serves as the facility's gift shop and main entrance. The Lighthouse remains an active aid to navigation and is one of the island's most popular tourist destinations.



THANK YOU & WISH LIST

This quarter we would like to thank Julie Davis for donations of kitchenware, antique bottles, and photographs. Jacques and Marion Jacobsen have again gifted us with early Coast Guard insignia, a lifeboat ensign or flag, and a Coast Guard uniform jacket.

The museum is currently seeking donations of late 19th or early 20th century parlor furniture and rugs, plus clothing and personal items from the same time frame. The education program is in need of a working player piano and a CD player (single rather than multiple CDs).



JOIN THE PONCE DE LEON INLET LIGHTHOUSE PRESERVATION ASSOCIATION

A GENERAL ANNUAL MEMBERSHIP INCLUDES:

- Free admission to the museum and lighthouse during regular hours of operation
- 10 percent discount in the museum gift shop and online store
- One subscription to The Light Station quarterly newsletter
- Invitations to special events
- Volunteer opportunities

MEMBERSHIP CATEGORIES:

General \$20

- The benefits listed above for one individual

Senior \$10

- All privileges of General Membership for one individual 62 years or older

Student \$10

- All privileges of General Membership for one individual 12 years or older with a valid student identification

Family \$40

- All privileges of General Membership for the immediate family
- Immediate family is limited to one or two adults and your children under age 18. Grandchildren are not eligible.
- You will be issued one membership card for each parent, and each card will list the names of your children.
- Child under 12 must be accompanied by an adult

2nd Assistant Keeper \$100

- All privileges of General or Family Membership
- Recognition of your membership in the quarterly newsletters' 2nd Assistant Keeper List

1st Assistant Keeper \$200

- All privileges of 2nd Assistant Membership
- Two gift General Memberships
- Recognition of your support in the quarterly newsletters' 1st Assistant Keeper List

Principal Keeper \$500

- All privileges of 1st Assistant Membership
- A personalized guided tour of the Light Station
- Recognition of your support in the quarterly newsletters' Principal Keeper List

Corporate Lampist \$500

- All privileges of General or Family Membership for up to five company principals
- A personalized guided tour of the Light Station
- Use of the Light Station's conference room for one meeting.
- Recognition of your companies support in the quarterly newsletters' Corporate Lampist List

FLORIDA DEPT. OF AGRICULTURE AND CONSUMER SERVICES CHARITABLE ORGANIZATION NUMBER AND DISCLAIMER:

Registration #: CH137

A COPY OF THE OFFICIAL REGISTRATION AND FINANCIAL INFORMATION MAY BE OBTAINED FROM THE DIVISION OF CONSUMER SERVICES BY CALLING TOLL-FREE (800-435-7352) WITHIN THE STATE. REGISTRATION DOES NOT IMPLY ENDORSEMENT, APPROVAL, OR RECOMMENDATION BY THE STATE.



Please complete the entire form to enroll, or join online at www.poncelighthousestore.org.

Select type of membership:

- General \$20
- Senior \$10
- Student (submit copy of ID) \$10
- Family \$40

- Gift Membership From: _____
- Renewal

- 2nd Assistant Keeper \$100
- 1st Assistant Keeper \$200
- Principal Keeper \$500
- Corporate Lampist \$500

Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ ZIP: _____

Phone: () - _____

E-mail: _____

Office use only	
Begins _____	Ends _____

For family memberships, list spouse/partner and all immediate children under eighteen years of age:

Spouse/Partner: _____

Children: _____

(List any additional names on a separate sheet.)

We will contact 1st Assistant Keeper, Principal Keeper or Corporate Lampist members to obtain gift membership and company principal information.

Membership enclosed: \$ _____

Donation enclosed: \$ _____

Total enclosed: \$ _____

Please charge my: (check one)

Visa MasterCard 3-Digit Security Code: _____

CC#: _____

Exp. Date: _____

Signature: _____

Or, make check payable to:

Ponce Inlet Lighthouse
4931 S. Peninsula Dr., Ponce Inlet, FL 32127

Thank You for Your Generous Support!



BAMBOO WIND CHIMES

RELAX TO THE SOOTHING SOUNDS OF NATURE WITH THIS CUSTOM SET OF BAMBOO WIND CHIMES. FEATURING FLORIDA'S TALLEST LIGHTHOUSE, THESE ONE OF A KIND WIND CHIMES WERE DESIGNED SPECIFICALLY FOR THE PONCE INLET LIGHT HOUSE PRESERVATION ASSOCIATION AND MEASURE 23" LONG.

ITEM #: 2954
PRICE: 12.99



LONG SLEEVE T-SHIRT AND STOCKING CAP

KEEP WARM DURING THE COOLER MONTHS WITH THIS CUSTOM MADE PONCE INLET LIGHTHOUSE LONG SLEEVE T-SHIRT WITH MATCHING STOCKING CAP. AVAILABLE IN BLACK/GREY OR PINK/WHITE WITH WHITE LETTERING. PLEASE INDICATE DESIRED COLOR AND SIZE WHEN ORDERING.

ITEM #: 0251 (BLACK), 0200 (PINK)
PRICE: 19.99 (S-XL) 21.99 (XXL)

HARBOUR LIGHTS STATUE

MANUFACTURED BY "HARBOUR LIGHTS", THIS BEAUTIFUL REPLICA OF THE PONCE INLET LIGHT STATION IS ONE OF THE MUSEUM'S MOST POPULAR LIGHTHOUSE MODELS. MADE FROM HIGH STRENGTH MOLDED RESIN, THIS UNIQUE STATUE STANDS 6" X 6".

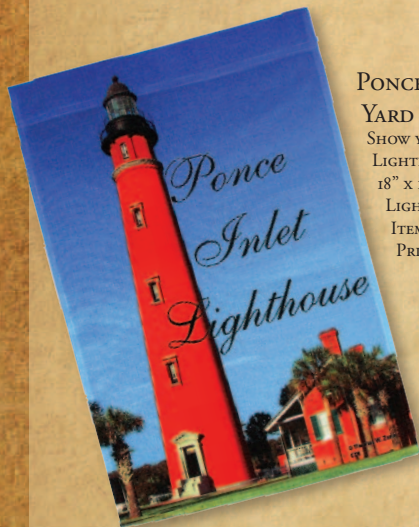
ITEM #: 0105
PRICE: \$56.00



**PONCE DE LEON INLET LIGHTHOUSE
PRESERVATION ASSOCIATION, INC.**

4931 SOUTH PENINSULA DRIVE
PONCE INLET, FLORIDA 32127
(386) 761-1821
WWW.PONCEINLET.ORG

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PONCE INLET LIGHTHOUSE

YARD FLAG

SHOW YOU LOVE FOR THE PONCE INLET LIGHTHOUSE WITH THIS CUSTOM-MADE 18" X 12" MINI YARD FLAG DEPICTING THE LIGHTHOUSE ON A BLUE BACKGROUND.

ITEM #: 0668
PRICE: \$11.99



PONCE INLET LIGHTHOUSE NIGHTLIGHT

LIGHT UP THE NIGHT WITH THIS CUSTOM, HAND-PAINTED GLASS NIGHTLIGHT FEATURING THE PONCE DE LEON INLET LIGHTHOUSE. CAN BE PLUGGED INTO ANY STANDARD ELECTRICAL SOCKET AND TURNED ON AND OFF WITH THE PUSH OF A TOGGLE SWITCH.

ITEM #: 0307
PRICE: \$19.99

DIVING HELMET CLOCK

STAY ON TIME WITH THIS BEAUTIFUL TIMEPIECE MODELED AFTER AN ANTIQUE DIVING HELMET. CONSTRUCTED OF SOLID COPPER AND BRASS, THIS REPLICA HELMET STANDS 8" TALL AND FEATURES AN ATTRACTIVE CLOCK FACE.

ITEM #: 3961
PRICE: \$99.99

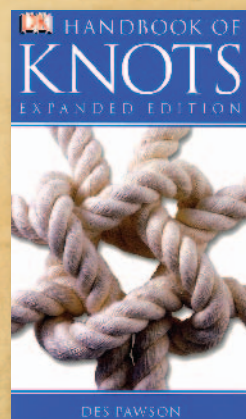


**THE HANDBOOK OF KNOTS
(EXPANDED EDITION)**

LEARN EVERYTHING YOU NEED TO KNOW ABOUT KNOT TYING. FEATURED KNOTS COME WITH CLEAR INSTRUCTIONS AND STEP-BY-STEP PHOTOGRAPHS.

FROM FISHING TO CAMPING, SAILING TO MOUNTAINEERING, THIS HANDY GUIDE WILL SHOW YOU WHICH KNOT TO USE AND HOW TO USE IT.

ITEM #: 0193
PRICE: \$17.00



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.

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 cmaroney@ponceinlet.org for more information. Usual UPS shipping charges and a \$4.00 handling fee apply to all orders.



**PONCE INLET LIGHTHOUSE
MEMBERSHIP COUPON**

**20% OFF ANY
SINGLE ITEM**

Limit one coupon per member. Coupon may not be used in conjunction with any other discount. Proof of membership must be shown at time of purchase. Not valid for purchase of Memorial Bricks.
Good from January 1, 2012, through March 31, 2012.