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## What We Do

- We are an historic preservation society consisting of a small (paid and unpaid) team with various responsibilities.
- We have relationships and extended resources to recreate supplies, paints, precision parts and mechanisms where manufacturing methods have been lost to the past. In this way, we keep the tower non-automated and authentic to its place in history.
- We network to both provide and receive support from international lighthouse professionals.
- Systematic maintenance, research, and fundraising programs allow us to preserve and protect the most famous historical landmark in Abaco.
- We educate and involve the community in everything we do. As a result, we have developed a trained Bahamian restoration team and developed a successful volunteer program of both youth and adult members.

### **Our Responsibility**

In collaboration with The Bahamas Government and it's departments responsible for navigation aids and historic landmarks, the ERLS have financial and practical oversight of the Elbow Reef Lightstation, inclusive of the lighthouse tower, lighthouse keeper's quarters, outbuildings and wharf.

Our service work promotes the Abacos as a tourist destination. By maintaining the historical heritage of our unique out-island maritime history, we ensure that the Lighthouse is seen as a symbol of national pride throughout The Bahamas and beyond.

#### **Our Values**

As we work to "Keep the Light On" at the most beloved landmark in Abaco, thoughtful restoration processes merge the past and the future. Driven by love for the project, our own actions set into motion a ripple effect, touching lives and becoming a stable beacon for the community and beyond.

### **Our History**

The Bahamas are home to a great number of cultural treasures including eleven imperial lightstations constructed by the British in the nineteenth century. Following Bahamian independence in 1973, oversight of the Bahamian lighthouses passed from the British Imperial Lighthouse Service to the Bahamas Port Department.

Our Government (as other governments around the world) soon realized that technological advancements enabled them to operate these structures remotely and at little cost. The Cay Sal and Gun Cay lighthouses had been decommissioned in the 1930s and between 1973 and 2012, one by one other lighthouses were automated. Left unmanned most of these lightstations have now succumbed to the elements of time and neglect.

Before the Elbow Reef Lighthouse (circa 1864) fell prey to the same fate, a group called the Bahamas Lighthouse Preservation Society formed in 1992 and was allowed to save the lighthouse in Hope Town, as a model for all others. Since that time the group has spearheaded and financed for the government a substantial number of major repairs at the Elbow Reef Lightstation. Due to the small size of the group and the monumental task of saving even one lighthouse, this group was renamed, the Elbow Reef Lighthouse Society (2013) for the primary lighthouse of focus.

Both the Lighthouse and the Keepers Quarters are historic buildings. Architectural Plans were drawn in 1861 and built to spec between 1862-1864.

# State of the Lighthouse Post Dorian Report (October 2019)

This report is presented starting at the top of the Lighttower and working from there downwards and throughout each outbuilding on the station grounds. No building was left untouched by the force and destruction of Hurricane Dorian

## **Existing Status of the Elbow Reef Lighttower**

Structurally the Lighttower appears to be in good condition. Due to high winds, salt and sand, damage was sustained to wooden parts of the structure. Shutters were broken and the interior main entrance doors became unhinged.

## Damage to Exterior of the Lighttower

- The weathervane on the top of the lighthouse no longer spins.
- The tower has been sand blasted and the paint needs to be removed then primed and painted. Prior to repainting, any structural damage needs to be assessed.
- Interior and exterior window shutters need to be repaired. Broken glass panes (6) and wooden shutters (4), barrel bolts and window frames need to repaired for both security and performance. It is imperative that these repairs be done immediately as uncontrolled drafts effect the performance of the mantle's flame.
- The exterior bronze door handle on the gallery landing is broken and the interior handle is missing. These need to be repaired and replaced.
- The semi circular glass in 2 of the tower windows and above the front door frame were blown away and need to be rebuilt and glass replaced.
- Both interior doors at the entrance to the tower were broken off their hinges. The door jams need to be repaired and the doors re-hung.
- The exterior light at entry door is gone and needs replacement.

## Interior of the Tower

The weatherglass at the watch room and upper gallery levels (replacement completed March 2018) suffered no structural damage hence protecting the fresnel lens and mechanism.

- Full inspection of the lens's turning equipment and fuel system need to be performed. All suffered water and salt damage from the broken gallery door. The entire interior of the lantern needs to wiped down to remove all salt residue.
- The Fresnel lenses and prisms coated with salt need to be meticulously cleaned.
- The curtains that protect the Fresnel lens need to be replaced due to rot and salt.
- The brass air vents need to be removed, cleaned, polished and reinstalled in order to be functional; They are currently frozen.
- All brass on the cable weight case needs to be cleaned of rust and polished.

- All pulleys need to be cleaned. In order for the salt and dirt and salt to be removed from the pulley cable and weight tube, all existing grease needs to be removed and new fresh grease applied.
- All moving parts on the cable mechanism need to oiled and rust removed.
- The entire fuel system needs to be evaluated for any leaks and repaired as necessary. All brass needs to be cleaned and polished.
- All iron and other metal items need to be wiped down to inhibit further corrosion.
- The slate floors on the landing below the gallery are broken and are lifting. They need to be replaced for safety and security.
- The stairs are not sound. 4 stair treads need to be replaced because they are broken.

#### Other Buildings around the Tower

- The walls of the Bathroom Building are standing but the roof is gone and needs to be replaced. The doors do not open at present. Further investigation is necessary to assess if repair or replacement is necessary. Interior plumbing will need to be assessed once the doors can be removed.
- The Oil House window shutter is broken and needs replacing.

#### **Keepers' Dwellings**

Principal Keeper's Dwelling received extensive damage both inside and outside to the point that it is not habitable.

#### Exterior

- The roof is damaged; shingles are gone and the roof leaks when it rains. Until the existing shingles are removed it will be impossible to know the extent of the necessary repairs.
- The surrounding porch was destroyed on north side. All roofs, railings and staircase were destroyed and need to be replaced (including guttering for water collection system).
- Water collection system is gone and will need to be re-plumbed to the cisterns.
- 2 exterior doors were blown off their hinges and need to be replaced with door sweeps to keep water out of the house.
- 4 windows were broken when the shutters blew off the windows. These windows will need to be replaced.
- The Hardie-board siding on the bathroom addition is gone and will need to be reapplied with house wrap for protection.

- The concrete pillars and iron "hurricane" hand-railing leading from house to the Lighttower were demolished and need replacement.
  - Electrical wiring needs to assessed both inside and outside.
- The exterior lightning fixtures need to be replaced at front and back doors.
- The hot water heater needs replacement.
- Screen doors for both front and back exterior entrances were destroyed and need replacing.
- Priming and painting of the keepers house and porches is necessary.
- Functioning shutters must be made.

#### Interior

- The interior of the principal keeper's home suffered extensively due to water from roof damage and doors and windows breaking. The keeper and his family have suffered extensive loss of personal items including clothing, furniture and electronics. Internal structural items as well as lost amenities include:
- Drywall damage in both bedrooms—this needs to be removed and insulation and siding must be replaced.
- Loss of 2 beds, refrigerator, stove, chest freezer, washing machine, 3 ceiling fans
- Loss of interior doors: including bathroom, living area and 2 bedroom doors.
- Air conditioning unit destroyed. Duct work will need to be evaluated for mildew and quality due to extensive water damage. Mildew clean up is required.
- Plumbing assessment needed for for leaks and broken pipes in house once power is restored.
- Personal furniture: Loss of couch, chairs, entertainment center, 3 dressers and window treatments.

## Assistant Keeper's Dwellings

This building has already been under renovation since April of 2019. The Society is currently waiting for reimbursement for these repairs in the amount of \$5338.29 plus \$272.12 in VAT. The combined total of the expenses for all the renovations, furniture and refrigerator is \$5610.41.

## Exterior

- The roof is damaged. Shingles are gone and the roof leaks when it rains. The surrounding porch railings and staircase were destroyed. Guttering for the water collection system and minimal decking needs to be replaced.
- The water collection system is gone and will need to be re-plumbed to the cisterns.
- The bathroom addition suffered substantial damage.
- Loss of hot water heater and air conditioning unit.
- Loss of cistern capacity due to concrete damage and loss of covers for cisterns

- Exterior doors and the screen doors for both front and back exterior doors were destroyed.
- Priming and painting the Assistant Keepers house and porches is necessary.
- The concrete pillars and iron "hurricane" hand-railing leading from house to the Lighttower were demolished. Functioning shutters must be made.

#### Interior

- The bathroom suffered substantial interior damage. There was loss of drywall on 2 of the 3 walls. Tile fell off the shower wall and needs to be replaced.
- The plumbing pipe for the toilet broke when tile fell on it; needs repair.
- The bathroom door was destroyed.
- The air conditioning ductwork needs attention.
- Electrical evaluation needs to be done due to a roof leak causing water to run down the interior wall.
- Replace drywall. Repair around the electrical breaker box/ finish trim and paint.
- Install mirror in the bathroom.
- Install 1 propane gas tank for the stove.
- Window treatments needed for the 2 bedrooms.
- Household items need to be procured. These include silverware, glassware, linens. for the beds, towels and dining room chairs.
- The electrical plugs in the master and guest room are burned out.
- The work completed since the last report to the Port Department on 18 July 2019 which has not been expensed to the Port Department includes 2 mattresses.

## Support buildings

Generator House: The Lightstation has a non-functioning generator for auxiliary power.

- A 20KW generator is needed for the Lightstation.
- 1 glass window and 2 doors blew out of this building 3 shutters need replacing.
- Once power has been restored, the water system will need to be checked for leaks.
- New cover for the cistern and cover for pump housing on top of cistern are needed.
- All interior and exterior electrical lighting needs replacing.
- Broken concrete around broken windows and shutters needs repair.
- The building needs to be primed and painted inside and out.

#### Grounds/Quarry

The chain link fence that surrounds the Lightstation and the quarry hole needs to be replaced.

#### Storage Shed next to assistant keepers house

The concrete/native stone building was destroyed with (washer/dryer) contents.

#### Warehouse Building

This building suffered roof, shutter and water damage.

- Parts of the plywood on the roof blew off and needs to repaired then re-shingled.
- The door and shutters was blew off their hinges and need to be replaced.
- Prime and paint the warehouse. Replace interior and exterior lighting due to loss.

#### Flag Pole Stand

• The Flag pole itself was destroyed. Repair broken concrete on flag pole mount.

#### The Lighthouse Gift Shoppe

The building sustained damage due to blown-in door and 2 shutters.

- Roof damage due to loss of shingles. Replace shingles as needed.
- Repair/Replace the door and broken shutters. Make new plexiglass window.
- Replace soffit loss with Hardie-board soffit vents.
- Replace/Repair the Hardie-siding on side of building.
- Replace the broken lattice under porch.
- Repair the hardwood floor that buckled.
- Fabricate a new stand for donation box.
- Check all electrical systems for water damage.
- Check the air conditioning unit for damage or replacement.

#### The Pump House

- Electrical assessment is needed due to flooding in the building due to high water from the sea.
- Front door was destroyed and needs to be replaced. Building needs to be primed and painted inside and out. Roof Damage to be repaired.

#### The Boat Shed

- Boat shed was destroyed and needs to be re-built.
- Keeper Forbes's boat and motor were lost under the boat shed.

#### Lightstation Dock

- The Lightstation dock is gone and the concrete ramp around the the dock shifted
- A new dock is needed immediately for access to the Lightstation and the delivery of supplies including kerosene to the Lightstation.

## Accountability:

Our success story is a direct result of our great team. As historic preservation is our specialty, so is self governing, self funding and getting it done—properly.

## 2014-2019 Major Goals Completed:

- 1. Assed masonry and tower structure with structural engineer specialists.
- 2. Stripped and restored the interior tower walls.
- 3. Repaired and painted the spiral staircase.
- 4. Repaired and restored the curved wooden cabinet in the tower.
- 5. Repaired fence surrounding the Lightstation and build a fence and gate at base of the lighthouse property, near the dock, for increased security and privacy.
- 6. Drew plans, permits granted for dock rebuild in the interest of safe guest access
- 7. Repaired restrooms.
- 8. Built Gift Shoppe on grounds.
- 9. Stripped and repainted Lantern Room.
- 10. Repainted Exterior lantern room.
- 11. Replaced safety netting (partner InCord in Colchester CT).
- 12. Stripped and cleaned Astragals. Created installation guide and for astragals and glass panes.
- 13. Replaced all weatherglass in lantern room.
- 14. Sealed top of lighthouse and repaired rust, repaint.
- 15. Overhauled pressure kerosene system including tank cleaning and valve rebuilds.
- 16. Designed new logo to strengthen visibility of the society's work and ensure our gift shoppe sales will continue to finance our operational budgets.

## Weather Glass Restoration Project.

In 2017, the Elbow Reef Lighthouse Society completed a 5 year project—the largest privately financed restoration effort in our time on any Bahamian lightstation. By replacing all of the diamond pane weather glass and removing rust from all metal components the Cat-5 winds of Hurricane Dorian did not breach the glass to destroy the irreplaceable fresnel lens and its delicate and antique machinery. The restoration work our Society undertook ensured that the Lighttower was saved from destruction.

Elbow Reef Lighthouse Society						
		Weather Glass Project 2015 - 2017	2015	2016	2017	Totals
	Revenue	Weather Glass Replacement	\$66,000.00	\$44,061.00	\$59,814.97	\$169,875.97
	Expense	Weather Glass Replacement	\$47,578.65	\$77,075.82	\$58,153.50	\$182,807.97
Net Surplus (Deficit)		\$18,421.35	-\$33,014.82	\$1,661.47	-\$12,932.00	

# **Snapshot of Activity**

## 2014

- Jan. Inspection of the Lighthouse to create existing conditions report. Abaco Inn ERLS Event: Guest Speaker Cullen Chambers "Challenges and Rewards of Restoring Lighthouses"
- **Jun.** Lighthouse Birthday Festival Celebrating 150 years. World Lighthouse Society and Captain Ian McNaught , Deputy Master of Trinty House Letters commemorating event archived at the HT Museum.

#### 2015

- Jan. Lighthouse Symposium featuring Kathy Flemming of St. Augustine Lighthouse
- Jan Alex Klahm, Metal Architect and lighthouse specialist from St Petersburg, completely restores the top of the Elbow Reef Lighthouse (2 month project)
- Feb. Two members of ERLS Accredited with Oral History Training with Baylor University.
- May Jr. Lighthouse Keepers program launches.
- Jun. HTPS (Children) UP book Published. Doongalik Studios Book Launch. HTPS 'UP themed' dinner event.
- **Jun.** Lighthouse Birthday Festival on Lighthouse grounds Celebrating 151 years.
- **Oct.** Jupiter Inlet Lighthouse adds the UP book to story time events
- Oct. Community Outreach Meet Alex Klahm Inn and Marina Event for community to hear about the repairs needed
- Dec. ERLS Rotary Guest Speakers, Nassau Bahamas
- Dec. Lighthouse Gift Shoppe Opens for business

#### 2016

- Jan. "The Lighthouses of The Bahamas, Their History and Preservation" Our US Liason, Annie Potts, Speaks at the House of Refuge in Stuart, Florida.
- Mar. Just for laughs Comedy Festival
- Aug. Bahamian ERLS Jr. Lighthouse Keeper makes presentation to South Stack Lighthouse, Wales.
- Nov. Jollification Booth, Bahamas National Trust
- 2017
- Jan. Alex Karnes at the Lightstation for work with Jeffery on the mechanizes lens and tanks
- Mar. Diamond Glass arrives at the Lightstation
- **Oct.** Dock Evaluation and Lighthouse visit by James Albury, MP & Parliamentary Secretary Office of The Prime Minister, Hon. Dionsio D'Aguilar, Minister of Tourism.
- Nov. ERLS Team Ceremony to Celebrate installing the last piece of Diamond Glass.
- Nov. Jollification Booth, Bahamas National Trust

#### 2018

- Jan. Candlelight Celebration 70th Anniversary Commemorating 1st time hand cranked Machinery was used
- Feb. Park Fest, Marsh Harbour BNT Business and Cultural Fair
- May Survey of Lighthouse by Atkinson-Noland and Assoc., Inc.
- Quarterly. Hosted Movie Nights, big screen films under the stars

- Dec. Annual Christmas Village
- **Dec.** ERLS makes a reusable shopping bag to protect the environment/promote using non plastic materials.

2019

- **Feb.** Community, Government and Partner Presentation. Guest Speaker, Annie Potts gave an in-depth historical presentation and revealed the full scope of achievement that went into one of the biggest restoration projects undertaken by the ERLS.
- Feb. Firefly Island-wide Community Cleanup Sponsor
- Jul. Public Launch of THE HAND, partnered with local artists at Pete's Pub to cast and design a special limited edition of bronze-casted replicas of our famous 'hand' door handle. 'Repaint Tower Campaign'
- **Oct.** Visit by AMMC and the Smithsonian to view state of the Lightstation and Historic Buildings
- **Nov.** Post Hurricane reorganization and ERLS team mobilization described in Annie Potts radio podcast interview with Light Hearted Radio
- **Nov.** Jollification Booth, Bahamas National Trust

# **Educational Speeches**

# 2011

Dec. Feb.	<i>Blake Library</i> , Stuart, Fl. "The History of the Bahama Lighthouses" <i>Env. Studies Center,</i> Jensen Bch, FL. "The History of the Bahama Lighthouses"
Mar.	Cay Topics, Hope Town- "The History of the Bahama Lighthouses"
Мау	Jupiter Inlet Lighthouse- "Lighthouses Along the Stream"
	Hope Town Primary School- "The Lighthouses of The Bahamas"
	Man O War All Age School- "The Lighthouses of The Bahamas"
Feb.	Okeechobee Public Library (FL)- "The Bahama Lighthouses, Past and Present"
2013	
Мау	Hope Town Primary School- "The History of the Bahama Lighthouses"
Apr.	Jupiter Inlet Lighthouse- "Last Lights- The Challenges and Rewards of Preserving the Lighthouses in The Bahamas"
2015	
Jan. Sept.	Fire Fly & Abaco Inn, Hope Town "SOS- Elbow Reef Lightstation – Past, Present and Future" City of Stuart Commission (FL) - "Stuart Looks UP"
Dec.	Biscayne Bay Yacht Club- "Preserving the Elbow Reef Lightstation"
DEL.	Chamber of Commerce, Nassau, BS- "The Elbow Reef Lightstation Looks UP"
	<b>3</b>
2047	Doongalik Gallery, Nassau, BS- "The Elbow Reef Lightstation Looks UP"
2016	
Jan.	<i>House of Refuge</i> , Stuart, FL- "Elbow Reef Lighthouse Society- Preserving the Elbow Reef Lightstation and the Lighthouses of The Bahamas- Past-Present and Future"
Feb.	<i>House of Refuge Stuart</i> , FL- "Elbow Reef Lighthouse Society- Preserving the Elbow Reef Lightstation and the Lighthouses of The Bahamas- Past-Present and Future" (second talk)
Apr.	<i>Vero Beach Yacht Club</i> , VB, FL- "Elbow Reef Lighthouse Society- Preserving the Elbow Reef Lightstation- Past Present and Future"
2017	
Aug.	<i>Lighthouse Art Center</i> , Jupiter, "Elbow Reef Lighthouse Society- Preserving the Elbow Reef Lightstation- All Pieces Big and Small"
2018	
Nov.	The Villages, FI "Elbow Reef Lightstation and the Lighthouses of The Bahamas
2019	

Feb. Abaco Inn, Elbow Cay, Bahamas, " Elbow Reef Lighthouse Society, Present, Past, and Future"

#### In conclusion

The Elbow Reef Lighthouse Society is a not-for-profit agency with the vision and expertise to facilitate the complete restoration of the Elbow Reef Lighthouse, its keepers' quarters, grounds and outbuildings. We also advocate for its Keepers who live on site and are employed by the Bahamas Port Department.

The local community and its economy are not only dependent on this incredible, iconic and historical "one-of-a-kind in the world" attraction for tourism, but also as a legacy for generations to come.

Performance proven and community driven, we (the ERLS) are working as a beacon of hope for our community and actively seeking the critical funding for this major preservation effort. We can not initiate the necessary repairs underway without additional financial support.

Beyond our own society's responsibility, it is also incumbent upon the nation to see this National Treasure completely restored in the aftermath of Hurricane Dorian.