

National Park Service  
U.S. Department of the Interior



[Insert Name and Address of  
Regional Office

## NHLPA REPORT COVER SHEET

**Name of Property:** Harbor of Refuge Light

**Address of Property:** Lewes, DE

**Reporting Period:** 2004 - 2006

**Submitted by (printed):** Judith Roales

**Title:** President

Delaware River & Bay Lighthouse Fndt.

**Daytime phone number:** 302-227-2968

**Fax:** \_\_\_\_\_

**E-mail address:** judith@roalesusa.info

**Signature:** *Judith Roales*

**Contact, if different from above:**

**Name:** \_\_\_\_\_

**Daytime phone number:** \_\_\_\_\_

**Fax:** \_\_\_\_\_

**E-mail address:** \_\_\_\_\_

## I. Improvements, Maintenance and Development

(A) *Describe all preservation activities and/or site improvements that have been made to the property since the previous report or to date if this is your first report.*

The Delaware River & Bay Lighthouse Foundation (the Foundation)) began restoration of Harbor of Refuge Lighthouse in August 2002, two years prior to receiving title to it under the terms of the National Historic Lighthouse Preservation Act in November, 2004. During those first two years, Foundation volunteers worked on a variety of restoration projects, including rust abatement, painting of the entire exterior of the structure, and refitting all of the boarded up windows with new Plexiglas panes.

The Foundation formed a separate committee in 2002 to manage restoration activities. In spite of membership changes, the committee continues to function. The committee identifies, prioritizes, plans, and implements the necessary measures to ensure that the structure is repaired and restored in a manner that protects historical integrity while creating a safe environment for the public.

There were no restoration projects in 2005 because of the Foundation's difficulty in obtaining and financing insurance coverage that met the requirements of the Federal Government. These issues were resolved at the end of 2005, and restoration resumed in 2006.

For the past five years, the priority has been to keep the lighthouse accessible via a safe and functional dock. The lower dock has been a continual source of problems, but Tropical Storm Ernesto destroyed the entire dock, leaving only the metal framework useable. Volunteers will be replacing the dock for the fifth time this spring. The steps, railings, and decks require serious maintenance on a regular basis. Dock repairs average \$2000 to \$3000 per incident for replacement materials and rental of the launch needed to reach the light. (Please see Photo #2)

Although maintaining the dock is a constant drain on financial resources, the Foundation continues to work on other projects such as paint removal, general housekeeping, window assessment and Plexiglas replacement, repair of holes and water leaks and repairing the first level floor. (Please see Photos #3 and #4) Current plans call for the replacement of the corroded and ill-fitting steel entry-level door and frame in the near future. (Please see Photo #5) That project is estimated at \$6000 in materials and professional labor. Although the current door is not an original part of the structure, the Foundation will consult with the Delaware State Historic Preservation Office as part of planning the replacement.

If possible within the limited financial resources and volunteer time, the Foundation would also like to repaint the outside of the lighthouse. Although treated for rust and completely repainted in 2005, sever weather conditions make

it necessary to repeat this major maintenance every few years. Each repainting of the exterior of the lighthouse, using volunteer labor, costs about \$5,000 for materials and transportation. (Please see Photo #6)

The integrity of the breakwater wall, which supports the cement collar for the lighthouse, is also a concern. The breakwater continues to deteriorate because of the current and wave action, which have caused displacement of the large granite rocks that make up the breakwater. (Please see Photo #7) The Army Corps of Engineers, which owns the breakwater, has made an assessment of this problem and suggested repair options. However, no work on the breakwater is expected any time soon because of the high cost, which the Corps estimates at as much as \$10 million. A letter explaining the Corps' evaluation of the problem is included in Section IV (B), Threats to the Light Station.

- (B) *Has the cyclical maintenance plan been carried out as described in the application? If "no," please explain what elements of the plan were not completed and why they were not completed.*

Cyclical maintenance has been conducted according to the plan, except during 2005 when all work was suspended pending resolution of insurance issues.

- (C) *If modifications to the Preservation and Maintenance Plan section of your Application are required, please enclose a proposed amendment.*

No modifications to this plan are required.

The Foundation restoration committee is committed to ensuring that no restoration work or improvement implemented at Harbor of Refuge Lighthouse has an adverse impact on the historical integrity of the structure.

The Delaware River & Bay Lighthouse Foundation is a talented and passionate team of volunteers who understand the logistics and challenges of offshore lighthouse preservation. They will not hesitate to bring in more experienced partners whenever a preservation situation arises that calls for expertise not present within the organization. The organization is also aware that if any situation poses questions about appropriate restoration methods at the lighthouse, consultation with Delaware's State Historic Preservation Office is available and required.

## II. Use of Property

- (A) *Describe the use activities that were carried out at the property and any offsite activities that occurred such as library and school programs or fundraisers.*

The Foundation conducts scheduled tours of the lighthouse during the summer tourist season.

Working from prepared scripts which they have personalized, volunteer guides tell visitors about the location of the lighthouse, its history and architecture, the fog signal, the lens, its keepers and their duties. Each tour lasts about two hours, including the boat ride to and from the light. (Please see Photo #8)

Presently, there are only a small number of displays in the lighthouse. The most important of these is the restored and reassembled DCB-36 aerobeacon that was in use in the lighthouse after the original Fresnel lens was removed and before the current Vega VRB-25 optic was installed. (Please see Photo #9)

However, interpretative panels of photos and text on lightweight weatherproof PVC boards are being prepared and will be installed at the lighthouse in time for the 2007 tour season.

- (B) *Of the above, identify which of the use activities were revenue producing.*

Lighthouse tours are intended to produce revenue, but profit is normally non-existent or small due to high transportation expense for the tours. However, during 2006 all tour revenue was profit because the Foundation received funding for the transportation costs as long as tour trips included Delaware Breakwater East End Lighthouse as well as Harbor of Refuge.

The Foundation also generates a small amount of revenue through the sale of merchandise. All other funding is from memberships, donations, and grants.

- (C) *Describe any changes or proposed changes in the use of the property. Please note that in the event proposed changes deviate significantly from what is outlined in the Use Plan of the Application, a draft amendment must be prepared and submitted to NPS for review.*

No changes are proposed in the use of the property. Eight tours are scheduled for 2007, with the hope that the weather will permit at least six.

### III. Financial Statement

- (A) *Provide your organization's most current audited financial statement or financial statement reviewed by a certified public accountant.*

Financial statements are prepared for the Foundation by Progar & Company, P.A., a certified public accounting firm.

Budgets are prepared by the Foundation's treasurer.

These records are included at the end of this section.

- (B) *Were revenue goals achieved by the end of your organization's most recent fiscal year? If "no," explain any impacts this might have on preservation and use activities at the property and how negative impacts were/will be addressed.*

Revenue goals for 2005 were not reached due to the unexpected dramatic increase in insurance premiums and the lack of insurance which resulted in cancellation of the entire 2005 tour season. This issue was resolved at the end of 2005 when insurance was acquired and a special radio telethon was held to raise money for premiums, allowing tours to resume in 2006.

In April, 2005, the Foundation's paid executive director and his assistant resigned to take positions with the American Lighthouse Foundation in Maine. At that time, the Board re-evaluated the need for employees and decided it was not financially feasible to have a paid staff. Since then the Foundation has been operated entirely by volunteers. This required a reduction in the number of planned tours and other events so that the work load could be handled by available volunteers.

The Board revised its financial goals for 2006 to take into account these new conditions and projects planned for the year. The revised goals were achieved.

- (C) *Were there any unanticipated expenses related to the property? If "yes," please explain the nature of the expenses and what if any impact this will have on future preservation and use plans.*

There have been two types of unanticipated expenses that impact restoration and use of the lighthouse.

First, as noted in numerous sections of this report, the cost of insurance increased by more than 400%, bringing the premium to nearly \$7,000/year. This increase resulted in a direct reduction in the amount of money available for routine maintenance and small restoration projects at Harbor of Refuge Lighthouse.

Second, fuel prices spiked sharply in 2006, making transportation to the lighthouse almost prohibitively expensive. Although this cost is currently covered by outside funding, the Board continues to worry about this issue because loss of that funding would definitely jeopardize the financial viability of tours.

It has always been the case that major restoration projects will have to be financed with special fundraising efforts. However, the increased insurance and transportation costs draw time and attention away from those special efforts and make financing for restoration even more difficult.

Current officers of the Foundation are committed to making sure the organization lives within its financial means, has money set aside for insurance premiums each year, and takes an aggressive approach to seeking grants and other funding opportunities.

- (D) *Provide a narrative statement on the disposition of excess income from this property, if applicable.*

There is no excess income.

**Delaware River & Bay Lighthouse Foundation**  
**Profit & Loss**  
January through December 2006

	<u>Jan - Dec 06</u>
<b>Ordinary Income/Expense</b>	
<b>Income</b>	
<b>Contributed support</b>	
Agency (government) grants	3,500.00
Corporate/business grants	690.00
Donated art, etc	1,000.00
<b>Total Contributed support</b>	<u>5,190.00</u>
<b>Earned revenues</b>	
Fundraisers	8,934.00
Interest-savings/short-term inv	81.28
Membership Dues- Business	1,250.00
Membership dues - individuals	3,930.00
Merchandise	3,215.00
Program service fees	204.53
Tour Fees	895.00
<b>Total Earned revenues</b>	<u>18,509.81</u>
<b>Special events</b>	
Special events - non-gift rev	95.00
<b>Total Special events</b>	<u>95.00</u>
<b>Tour reimbursement</b>	<u>3,900.00</u>
<b>Total Income</b>	<u>27,694.81</u>
<b>Gross Profit</b>	27,694.81
<b>Expense</b>	
adjustment	-3.43
<b>Banking Fees</b>	
Credit Card Processing Fees	59.68
Banking Fees - Other	174.05
<b>Total Banking Fees</b>	<u>233.73</u>
<b>Merchandise</b>	1,329.50
<b>Misc expenses</b>	
Advertising expenses	195.00
Insurance - non-employee	9,539.20
Membership dues - organization	398.00
<b>Total Misc expenses</b>	<u>10,132.20</u>
<b>Non-personnel expenses</b>	
Equip rental & maintenance	415.81
Mailing services	40.00
Postage, shipping, delivery	12.30
Printing & copying	43.97
Supplies	176.87
Telephone & telecommunications	1,631.35
Non-personnel expenses - Other	62.39
<b>Total Non-personnel expenses</b>	<u>2,382.69</u>
<b>Occupancy expenses</b>	
Filing Fees	25.00
<b>Total Occupancy expenses</b>	<u>25.00</u>
<b>Other personnel expenses</b>	
Accounting fees	5,922.69
Professional fees - other	74.97
<b>Total Other personnel expenses</b>	<u>5,997.66</u>

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Accrual Basis

**Delaware River & Bay Lighthouse Foundation**  
**Profit & Loss**  
January through December 2006

	<u>Jan - Dec 06</u>
Refund for tours	180.00
Transportation	6,210.00
void	0.00
<b>Total Expense</b>	<u>26,487.35</u>
<b>Net Ordinary Income</b>	<u>1,207.46</u>
<b>Net Income</b>	<u><u>1,207.46</u></u>



**Delaware River & Bay Lighthouse Foundation**  
**Balance Sheet**  
As of February 28, 2007

	<u>Feb 28, 07</u>
<b>ASSETS</b>	
<b>Current Assets</b>	
<b>Checking/Savings</b>	
County Bank Checking	6,784.55
Donation	-185.00
IMMA - County Bank	9,768.40
<b>Total Checking/Savings</b>	<u>16,367.95</u>
<b>Other Current Assets</b>	
Inventory Asset	30.68
<b>Total Other Current Assets</b>	<u>30.68</u>
<b>Total Current Assets</b>	16,398.63
<b>Fixed Assets</b>	
Furniture, fixtures, & equip	5,398.22
<b>Total Fixed Assets</b>	<u>5,398.22</u>
<b>TOTAL ASSETS</b>	<u><b>21,796.85</b></u>
<b>LIABILITIES &amp; EQUITY</b>	
<b>Liabilities</b>	
<b>Current Liabilities</b>	
Accounts Payable	
Accounts payable	74.46
<b>Total Accounts Payable</b>	<u>74.46</u>
<b>Other Current Liabilities</b>	
Payroll Liabilities	2,905.94
<b>Total Other Current Liabilities</b>	<u>2,905.94</u>
<b>Total Current Liabilities</b>	<u>2,980.40</u>
<b>Total Liabilities</b>	2,980.40
<b>Equity</b>	
Opening Bal Equity	-6.00
Unrestrict (retained earnings)	14,313.55
Net Income	4,508.90
<b>Total Equity</b>	<u>18,816.45</u>
<b>TOTAL LIABILITIES &amp; EQUITY</b>	<u><b>21,796.85</b></u>

**Delaware River Bay Lighthouse Foundation, Inc.**  
**Projected Budget: FY 2007**

<b>Income</b>	
Fees From Tours	\$9000
Grants	\$6000
Membership	\$3000
Merchandise	\$2500
Programs	\$200
Cash Donations	\$5000
Interest	\$100
Transportation Reimbursement	\$6000
<b>Total</b>	<b>\$31800</b>
<b>Expenses</b>	
Advertising	\$500
Bank Charges	\$500
Donor Recognition	\$200
Dues/Subscription	\$200
Equipment Rental	\$200
Insurance	\$6300
Merchandise	\$2000
Miscellaneous	\$ 500
Office Supplies	\$200
Postage	\$200
Printing/Reproduction	\$500
Professional Fees (accountant)	\$1000
Program Costs	\$200
Promotional (brochures, etc.)	\$500
Restoration	\$9500
Telephone	\$900
Transportation Launch	\$8000
Website	\$400
<b>Total</b>	<b>\$31800</b>

#### IV. Issues/Impacts or Threats to the Light Station

- (A) *In reference to the use or management of the property, have there been any complaints or violations regarding discrimination? If so, what action has been taken to resolve the matter?*

There have been no complaints regarding discrimination.

Harbor of Refuge Lighthouse is an offshore facility located at a particularly turbulent spot where the Delaware Bay and the Atlantic Ocean meet. It is necessary to use a 65-foot work launch (one of the fleet that supplies ocean freighters in the channel) in order to access the lighthouse. Tour participants must climb up or down (depending on the tide) from the bobbing launch to the lighthouse landing dock via an often-slippery iron ladder with narrow rungs. Such a maneuver is not safe for people with severely-impaired mobility.

However, the Foundation and the launch crew have made extensive efforts to include and assist the elderly and people with lesser handicaps on the tours.

As an alternative to actual tours of the lighthouse, the Foundation offers virtual tours and other educational programs about the lighthouse upon request to special needs groups as well as public programs at state parks, libraries, and similar venues.

- (B) *Have there been or do you anticipate any issues which might conflict with the preservation or use of this property (e.g., adjacent new development, vandalism, or easements)? In responding, please provide appropriate details on the issues and how they were/will be resolved.*

Threats to the preservation and continued use of Harbor of Refuge Lighthouse fall into five categories: storms, vandalism, lack of funding, deterioration of the breakwater upon which it sits, and continued availability and affordability of insurance.

Storms: In its enthusiasm to acquire the lighthouse, the Foundation almost certainly underestimated the severity and constancy of damage from high wind and waves.

For example, the landing dock has been extensively damaged or entirely destroyed by storms five times since the Foundation took over the lighthouse. Last year after the dock was demolished by Tropical Storm Ernesto, the Foundation investigated new construction techniques and new decking materials that could be more durable than treated wood. This year, the deck will be rebuilt with sheets of "Gridwalk Molded Mesh," a non-skid fiberglass composite material used for portable decking. Sheets will be secured to the existing iron frame with fasteners that allow for easy removal so that the deck can be taken up and

stored in the lighthouse during hurricane-like storms and the winter season. Removable steps will also be constructed for the climb from the landing dock to the concrete apron of the lighthouse. Although a removable deck is initially much more expensive than a traditional wooden one, the Foundation hopes that in the long run it will prove to be more long lasting and, therefore, more cost effective and less time consuming to maintain.

With the help of bay pilots and captains of local fishing boats who pass the lighthouse repeatedly in the course of their work, the Foundation keeps track of any other storm damage that endangers the lighthouse -- such as broken windows -- and attempts to make repairs as soon as possible.

Vandalism: While none has yet resulted in serious damage, there have been several incidents of vandalism at the lighthouse.

The most worrisome efforts of vandals are attempts to cut the lock off the lighthouse door and attempts to chisel a U.S. Coast and Geodetic Survey marker out of the concrete apron. (Please see Photo #10) The lighthouse location is remote. It is almost impossible to tell what people are doing there unless you are on the breakwater beside them. So it is possible that vandals could succeed at either of these chores in the future.

Forewarned by such activity, the Foundation has adopted the practice of putting nothing outside the lighthouse to draw the attention of potential vandals unless it is unquestionably out of reach. For example, a cast iron historic marker placed by the State of Delaware is mounted into one of the window wells on an upper level. (Please see Photo #11) While visible from the outside, the location cannot be reached except from inside the lighthouse.

The Foundation is also hoping to create a more secure entryway by replacing the severely corroded main door and iron door frame. However, for both historic accuracy and technical reasons, any new entryway will have to be custom made.

Lack of major funding: A small non-profit organization cannot financially support the long-term preservation and maintenance of an offshore lighthouse with only the dues of its members, income from tours, and occasional donations from local businesses.

As a relatively new organization, the Foundation has not yet been embraced by major grant-making institutions. In addition, as an all-volunteer organization, it lacks the expertise and time for writing proposals and identifying major donors. The organization is beginning to receive small grants regularly from coastal communities and the State of Delaware, but to date most are in the hundreds, not thousands, of dollars. All money raised from dues and these small grants is consumed by the cost of regular maintenance and the cost of being in business, especially insurance.

Since Harbor of Refuge can only be accessed via an industrial launch, the cost of conducting tours is extremely high, and the number of participants is limited to about two dozen people by U.S. Coast Guard regulations regarding the passenger capacity of the launch.

Recent high fuel costs have pushed the tour expense as high as \$800 a trip. However, the Foundation is extremely fortunate to have a partnership with the Delaware River & Bay Authority, a bi-state agency that manages bridges, ferries, and airports along the Delaware. The Foundation provides tours and educational activities for Delaware Breakwater East End Lighthouse which is the Authority's responsibility; and, in exchange, the Authority pays the cost of the launch for any tours which include both Harbor of Refuge and Delaware Breakwater East End lighthouses. With this partnership, tours are financially viable. Without the partnership, tours would do little more than break even at maximum capacity and lose money if undersold.

The Foundation definitely suffers from the fact that it has no land base which is easily accessible and highly visible to remind people of its work and its need for their support.

Deterioration of the breakwater: The U.S. Army Corps of Engineers owns the breakwater on which Harbor of Refuge Lighthouse sits. However, the Corps no longer maintains or repairs the rock wall, which is more than one hundred years old and breaking apart.

In just the few years that the Foundation has maintained the lighthouse, an alarming gap has developed under the concrete apron of the lighthouse. One can stand on the apron and watch stones weighing up to eight tons each shift as waves break onto them. After each major storm, one can mark a dramatic loss of stones at the base of the lighthouse.

In 2004, the Foundation was successful in getting U.S. Sen. Tom Carper interested in the deterioration of the breakwater. Sen. Carper visited the breakwater with engineers from the Corps and convinced them to undertake a side scan sonar survey of the breakwater. The survey was conducted in early 2005. Since then, there has been no movement toward a solution or repair, and damage to the breakwater gets worse with every storm. The Corps' letter describing the damage, possible causes, possible repair options, and their cost is included at the end of this section.

Continued availability and affordability of insurance: In 2005, the Foundation was forced to cancel the entire tour season because it was unable to acquire the necessary insurance. Since then, due in part to the National Park Service's elimination of its requirement for replacement coverage, the Foundation has obtained a policy. However, insurance is the Foundation's largest expense.

It seems reasonable to expect that the Foundation may continue to be able to buy liability insurance to cover its tours. However, with insurance companies abandoning the coastal areas in droves, it is just as reasonable to worry that the Foundation may not be able to continue to find property insurance for an offshore lighthouse. While the Foundation could opt to continue to operate with only liability insurance, this is a matter that may require an additional concession from the Federal Government.

In addition, the requirement by several government agencies, including the U.S. Coast Guard, that they be listed as “also insureds” on policies is simply laughable. Insurance companies refuse to write such insurance; and, truth be told, the requirement is routinely ignored.

- (C) *Have there been any unanticipated impacts or threats to the historic light station (e.g. natural disasters such as flooding, wind damage, pest infestations)? If “yes,” please provide appropriate details about the impact or threat and how it was/will be addressed.*

Please see the answers to (B) above.

**V. Legal Involvements**

- (A) *Are you presently, or at any time during the review period, a part of any legal agreements, such as leases, use permits, or easements, with another party(s) regarding the use, development, or maintenance of the subject property? Please list and submit copies of all such agreements, if not already part of the Application.*

In order to use the National Harbor of Refuge Breakwater as part of its access and tours at Harbor of Refuge Lighthouse, the Foundation has obtained a license from the U.S. Army Corps of Engineers.

While a license was in place as part of the original Application for the lighthouse, upon renewal, the Foundation renegotiated the terms of the license and convinced the Corps to adopt some desirable changes in the language.

A copy of the new license, now expiring in November 2011, is included at the end of this section.

- (B) *Are you presently, or at any time during the review period, involved with any title problems regarding this property? If the answer is "yes," please explain.*

There are no title problems.

- (C) *Are you presently, or at any time during the review period, in violation of any federal, state or local codes, such as building or fire codes? If the answer is "yes," please explain.*

To the best of our knowledge, the Foundation is not in violation of any codes.

## VI. Additional Information

### Off-site programs:

During 2006, 178 people attended eight off-site educational programs conducted by Foundation board member Harry Spencer Jr. Mr. Spencer, the son of a Delaware lighthouse keeper, was born at Liston Range Rear Light Station and raised at Liston Range Front Light Station. His experiences growing up at a lighthouse provide a unique platform for educating the public about keepers' duties, lighthouse equipment, and the history of Delaware lighthouses. Programs have been presented for tourists and campers at Cape Henlopen State Park, at local historical societies, at area senior citizen centers and civic clubs, and in school classrooms. (Please see Photo #12)

More than 130 people participated in four sunset photo cruises sponsored by the Foundation. Each cruise took visitors on a narrated boat tour of Harbor of Refuge Lighthouse, Delaware Breakwater East End Lighthouse, and the Lewes Harbor. This was a highly-successful event that began as only two cruises, but demand was so great that an additional boat had to be added each of the two nights to accommodate everyone who wanted to participate. (Please see Photo #13)

The Foundation also sponsors an AM band, low-frequency radio transmitter broadcasting from the public beach at Lewes, DE. The station provides a brief broadcast about the history and importance of lighthouses in Delaware Bay. Visitors can stop their cars in the public parking area and tune to 1600 AM 24-hours-a-day as they gaze out at Harbor of Refuge Lighthouse. There is no way of knowing how many people have actually listened to the broadcast, although it is potentially tens of thousands.

### People engaged in use of the lighthouse:

During 2006, the Foundation conducted three tours of the Harbor of Refuge Lighthouse, with a total of 70 participants. Two other tours were cancelled after damage to the landing dock. Five other tours to Delaware Breakwater East End Lighthouse, with 191 participants, included a "drive by" for photos and a commentary about the history of Harbor of Refuge Lighthouse.

Since Harbor of Refuge Lighthouse is an offshore light that sits at the turbulent convergence of the Atlantic Ocean and Delaware Bay, conducting tours is an expensive and complicated task. Participants must be taken to the light aboard a heavy-duty launch of the type that supplies freighters in the Delaware channel. Lighter boats and less professional crew cannot be trusted to make the landing or load and unload passengers safely in the rough seas.

The Foundation is fortunate to have forged relationships with the Delaware River and Bay Authority (managers of the Lewes-Cape May Ferry) and Delaware Bay Launch Service Inc. The Authority allows the Foundation to use a pier at the



ferry terminal as the embarkation point for tours, and the Launch Service provides boats to the light. Without these two professional transportation partners, the existing record of total safety could not have been achieved. However, transportation to the light is expensive, costing as much as \$800/trip during the height of gas price increases last summer, and the number of participants on each tour is limited to about 24 by U.S. Coast Guard mandated capacity controls on the launch. Therefore, ticket prices must be high just to cover costs.

Tours are also at the mercy of the weather. Although participants have proven hardy and can endure rain, tours must be cancelled in the event of high seas. (Please see Photo #14) Last year, some tours had to be cancelled or rescheduled several times because of the weather.

In spite of these difficulties, almost all tours during 2006 were sold out. Some prospective tourists had to be turned away last summer and have already made reservations for the 2007 season.

#### People engaged in preservation of the lighthouse:

A core of about 30 volunteers actively participated in preservation and work trips last year. The volunteers contributed a total of more than 1800 hours of work. All nine members of the Board of Directors are among the most faithful and generous in giving their time for preservation, promotion, and public education activities related to the lighthouse. The Foundation has no paid employees. All work of every kind is done by volunteers. This, of course, is a serious limitation of how much can be accomplished.

#### Special events:

The Foundation was instrumental in having Harbor of Refuge Lighthouse designated as an historic landmark by the Delaware Public Archives, and late in 2004 a state historic marker was mounted on the structure. The marker, a handsome cast iron plaque with gold lettering, is Sussex County marker number 189. Text on the plaque gives a brief history of the light and its significance to Delaware. A ceremony to unveil the plaque was held during a Christmas tour of the decorated lighthouse. Russell McCabe, head of the Public Archives, spoke at the event, elaborating on the importance of the lighthouse. (Please see Photo #15)

Each year, the Foundation participates in Coast Day, an annual day-long science fair type event held on the grounds of the University of Delaware College of Marine Studies in Lewes, DE. The Foundation provides an information booth and displays discussing the preservation and history of Harbor of Refuge Lighthouse along with similar information about other lighthouses in Delaware. In 2006, this free event focused entirely on maritime-related subjects drew more than 10,000 visitors, from toddlers to senior citizens. (Please see Photo #16)

The Foundation also participated in Sail Lewes, a two-day celebration of the 375<sup>th</sup> birthday of Lewes, the first city in Delaware. For this event, volunteers manned an information booth on the grounds of the Lewes-Cape May Ferry terminal, within full view of Harbor of Refuge Lighthouse. More than 5,000 people visited the displays. (Please see Photo #17)

Intangible elements:

Tourism is the main industry of Lewes, DE, the city closest to Harbor of Refuge Lighthouse. The nautical history of the town is a vital selling point of tourism marketing. The lighthouse is an important and highly visible part of the town's heritage. Therefore, the fate of the lighthouse concerns residents, and efforts to ensure its preservation are a source of local pride.

It is impossible to measure the increasing public awareness about the fate of Delaware's historic lighthouses or the growing appreciation for their role. However, at the conclusion of every lighthouse tour, participants express extreme pleasure and gratitude that they could actually see the inside of Harbor of Refuge, which was once totally unavailable to them. Many who in the past could only watch and wonder from the deck of the passing ferries have now seen inside the lighthouse for themselves and learned about its role in the area's maritime history. Word of mouth has brought most tour-goers to the trip, so we know thrilled participants are telling their friends about their visit to the lighthouse.

The Foundation also recognizes a growing public awareness of Delaware lighthouses and their plight generally. For example, during 2006, the Foundation was asked to judge a lighthouse art contest at a local elementary school. It also was asked to provide a lighthouse tour especially for winners of an essay contest for middle school students sponsored by the University of Delaware College of Marine Studies. Harbor of Refuge was one of several local lighthouses featured on the annual Delaware Duck Stamp. And, the Foundation is receiving more requests for landside presentations than it is able to handle.

## VII. Photographs

Photographs for this report were provided by Herb von Goerres, Red and Barbara Moulinier, Jon Newsom, and Judith Roales.

- (#1) Covenant V-k. sign: As mentioned in IV (B) of this report, the Foundation has determined that, because of the remote and exposed location of the lighthouse, it is not wise to leave anything that can be stolen or damaged by weather or vandals on the outside of the lighthouse when tours are not in progress. The 18" X 22" sign pictured as Photo #1 is printed on a laminated magnetic material. The sign is stored inside the lighthouse. When Foundation personnel open the lighthouse, raise the American flag, start the generator to power electric lights, and take care of other pre-tour tasks, the sign is placed on the outside of the lighthouse just to the left of the main entryway in the caisson. In addition, the Foundation has another copy of the sign that frequently is included in exhibits and as part of our presence at public events. The required language is also presented on the Foundation's website as part of the information about Harbor of Refuge Lighthouse and as an "Historic Property Notice" on the inside of the Foundation's membership brochure. Copies of the web page and the brochure are included as Photo #1A and Photo #1B.

All other photos, referenced elsewhere in this report, carry cutlines on the photograph.