To: Ken Hinshaw From: Bill Peake

Subject: Lighthouse Doors

August 26, 2012

Premise

Doors are an integral part of the character of a building. They help define its architecture. Preserving doors and door hardware should be given high priority during lighthouse restoration.

Description

There are 20 locations that have or may have had doors. This includes walk-in closets. These 20 locations are listed in Table 1 and are shown as letters A-T on floor plans. Only the trap door to the lantern is omitted. Room names in Table 1 are from the floor plans.

Currently 8 of these 20 locations have doors. There are 5 doors stored in the cellar. All stored doors fit specific locations within the lighthouse. Of the remaining 7 locations, some clearly had doors in the past as evidenced by existing hinges or keepers or door jamb mortise cuts.

Veva Larson, who lived in the lighthouse from 1953 to 1956, verified that doors were hung at both ends of the Living Room and Parlor (Locations A, H, D and I). She did not recall having a Dutch door in the Kitchen. She will look through her personal photo collection for pictures of the lighthouse interior.

Doors and door hardware are in very good condition. It is likely doors have been repaired, restored or replaced over the years. This review did not attempt to identify the age of individual doors which might be possible from close inspection of door joinery. For example, Reference 1 states that exposed tenon-ends indicate pre- Civil War door construction. Note: an April 25, 2009 email from Paul Finnegan states that the museum funded restoration of front and rear doors.

Door and jamb dimensions are listed in Table 1. Dimensions are not uniform which apparently was normal for the mid 1800's. This fact would have restricted the movement of doors to different locations within the lighthouse. A few door sizes are described in Jerry McCaffery's book, The New England Plan, Appendix F, which approximately match sizes shown in Table 1.

Door style is apparently Greek Revival as described in References 1 and 2. Greek Revival is indicated by (1) the date of lighthouse construction (1853-1854), (2) door heights generally near 7 ft and (3) door style which is typically 4 panels with the top panels taller than bottom. The exception to Greek Revival are the 2 upstairs closet doors which are plank style. Perhaps this is due to their non-uniform height.

Greek Revival style of architecture is also evident in the construction of the front porch which has a pediment, pilasters and lintel with dentil moulding. Pilaster design is similar to a Greek Revival house photo found on the internet (http://historicbuildingsct.com). Untypically, the front porch exterior door is not located in the front of the porch, but on the right or south side due to prevailing northwest winds.

When the lighthouse was originally built there was no front porch. Because the front porch was added later the door from the front porch to the front hallway was originally an exterior door. This door has glass panels not typical of an interior door.

The rear door has glass panels and a glass lite and mutin. The rear door style is plain compared to the front porch entry.

A Dutch door is stored in the cellar and has the same paint color as the Kitchen. [The Dutch door style came to America from Holland when the Dutch were settling New York and New Jersey in the late 1700's.] Panels on the door are very plain and all 5 panels are the same size, unlike the Greek Revival door style. Reference 1 indicates that 5 equal sized paneled doors were used 1900-1930. This is confirmed by the Pt. Sur Headkeeper's house constructed in 1902. Upstairs doors there are also 5 paneled.

The Dutch door hardware is modern, with no obvious marks for a rim lock. Of course, the rear of the lighthouse underwent a number of changes over the years. This door is unusual and worth researching so as to determine if its use coincides with the lighthouse restoration timeframe.

Nearly all doors have (or had) rim locks which were popular in early to mid 1800's construction. Door hardware is listed in Table 2. Hardware materials include brass or bronze and cast iron or steel. No attempt was made to distinguish between the metals. All hinges are butt type, with some of earlier construction where the pin is cast within the hinge and not removable. Extra door hardware, including 3 rim locks, is also stored in the cellar.

References (from the internet)

- 1. Harvie Jones,: 'Doors and Hardware', Handbook for Owners of Alabama's Historic Houses, Alabama Historical Commission, 2001
- 2. Steve Hendricks, 'Point of Entry: An Overview of Historic Doors', Traditional Building, September/October 1999

Recommendations

- 1. Obtain an expert review of this report for accuracy and completeness (architect?). Check doors and hardware for consistency and appropriateness with lighthouse interpretation themes and restoration timeframe.
- 2. Continue to restore all door hardware including spares in the cellar. Continue to leave door hardware unpainted or with a clear coat to show the metal used.
 - 2.1. Create a rim lock display of the lock mechanism if appropriate for lighthouse interpretation. Research the manufacturer of lighthouse rim locks.
- 3. Remove hardware on or near doors that are not consistent with the restoration time frame. These detract from the look and feel of an historic building.
 - 3.1. Remove exterior door alarm contacts. Suggest replacing current alarm system with an alternative that does not require door contacts and can be removed from visitors' sight when the lighthouse is open.
 - 3.2. Remove one of the two latches on the front exterior door, as two are not needed. Better yet, replace both latches with an antique.
 - 3.3. Install matching door knobs and rosettes on the front porch exterior door, as the exterior styles don't match with the interior door knob and rosette. The exterior knob and rosette may be newer.
 - 3.4. Adjacent to the rear exterior door is a floodlight, motion detector and alarm. Remove the floodlight and motion detector from the building. If they are necessary consider installing on the ground. Consider new location for alarm, perhaps in the closet so it's not visible to visitors. Rethink the need for exterior lighting doesn't the lighthouse close before dusk?
- 4. Install missing keeper on the bathroom door jamb.
- 5. Rehang the 5 doors stored in the cellar so the building has more of a feel of a true historic house. These doors, when left open, will not impede visitor flow.
 - 5.1. Rehang the door (X) in Living Room (Location A).
 - 5.2. Rehang the door (W) in Living Room (Location D). To fully open the door the wall light switch would need to be moved.
 - 5.3. If the timeframe is appropriate: rehang the Dutch door (Y & Z) in the Kitchen (Location E). Replace the modern door knobs to match restoration timeframe if appropriate. This will partially cover the cabinet but adds much character to the house as it is an unusual door style. There is a wall alarm that would also need to be moved.
 - 5.4. Rehang the door (V) in the Parlor (Location I). This door, as originally installed, would block entry to the Bath Hall from the Kitchen when it is fully open. Suggest rehanging the door so it swings against the opposite wall.
 - 5.5. Rehang the door (U) in the War Room (Location P).

Table 1. Door and door jamb dimensions and door styles.

Location	From Room	To Room	Door Hung	Door Heigh t (in.)	Door Width (in.)	Door Thickne ss (in.)	Jamb Height (in.)	Jamb Width (in.)	Jamb Thickne ss (in.)	Door Style
А	Living Room	Front Hall	stored				84 3/8	32 1/4	1 1/4	
			Stored				04 3/0	32 1/4	1 1/4	One of Desired at the Affect and a good at an
В	Living Room	West Closet	yes	82 5/8	32	1 1/4				Greek Revival style, 4 flat raised panels, top panels taller than bottom, no moulding
С	Living Room	East Closet	yes	82 5/8	30	1 3/16				Greek Revival style, 4 flat raised panels, top panels taller than bottom, no moulding
D	Living Room	Kitchen	stored				84	32	1 3/8	
Е	Kitchen	Back Porch	stored				84 1/2	30	1 1/4	
F	Kitchen	Bath Hall	no				78	31	1 11/16	
G	Bath	Bath Hall	yes	77 1/4	29 1/8	3/4				Plank style, mortise and tenon vertical boards, 2 battens and a brace
Н	Parlor	Front Hall	no				84 1/4	32 1/4	1 1/4	
I	Parlor	Bath Hall	stored				80 1/2	32	1 1/4	
J	Parlor	Closet	no				84 1/2	28 1/2	1 1/4	
K	Front Porch	Outside	yes	87 1/2	35 5/8	1 11/16				Half glass with 1 flat panel, quarter round moulding on glass and panel, Greek Revival pilasters, lintel with dentil moulding
L	Front Hall	Front Porch	yes	86 1/8	39 3/4	1 7/16				6 panel with glass; each of the 2 glass panels have 1 mutin, panels are raised and flat and with contoured moulding on outer door surface, no moulding on inside door surface
М	Front Hall	Stairs	no				87 1/4	33 3/4	1 3/8	
N	Back Porch	Outside	yes	79 5/8	33 3/4	1 11/16				3 panel with glass; glass panel with mutins dividing glass into 6, flat panels with contoured moulding, glass lite with 1 mutin
0	Back Porch	Cellar	no				54	41 1/2		
Р	War Room	Upstairs Hall	stored				78	30 1/4	1 3/8	

	War									Plank style, mortise and tenon vertical boards,
Q	Room	Closet	yes	69 1/4	29 1/4	11/16				2 battens and a brace
		Upstairs								
R	Lookout	Hall	no				68 5/8	28	1 5/16	
		Upstairs								
S	Bedroom	Hall	stored				78	30	1 5/16	
Т	Bedroom	Closet	yes	71 3/4	28 3/8	11/16				Plank style, mortise and tenon vertical boards, 2 battens and a brace
U	stored			77 1/2	30	1 1/4				Greek Revival style, 4 panels, top panels taller than bottom, top panels flat with quarter round moulding, bottom panels flat and raised without moulding
V	stored			80	31 1/2	1 1/2				Greek Revival style, 4 flat raised panels, top panels taller than bottom, all panels with contoured moulding
W	stored			83	31 3/4	1 1/4				Greek Revival style, 4 flat raised panels, top panels taller than bottom, all panels without moulding
Х	stored			83	31 7/8	1 1/4				Greek Revival style, 4 flat raised panels, top panels taller than bottom, all panels without moulding
Υ	stored			44 1/4	28 3/4	1 3/8				Dutch door top half, 3 flat panels, contoured moulding
Z	stored			38 1/4	28 3/4	1 3/8				Dutch door bottom half, 2 flat panels, contoured moulding

Notes:

1. Room names and Locations are shown on floor plans

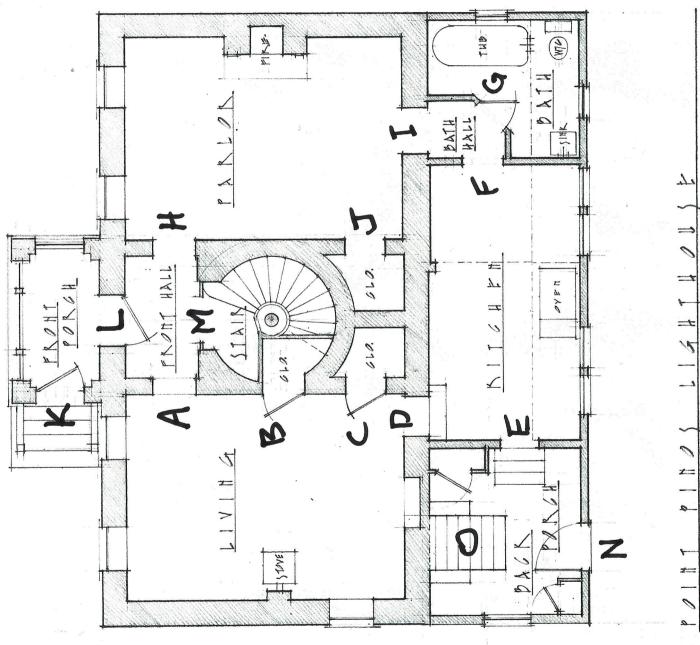
Table 2. Door hardware and notes

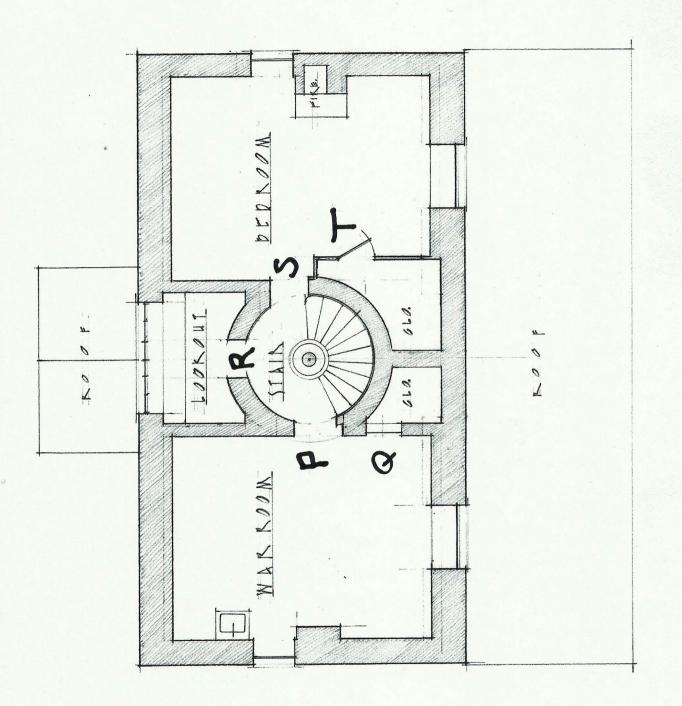
Location	Lock	Other Door Hardware	Notes
Α	none	brass 3" H x 3" W butt hinges, lift off	hinges are wrong
В	brass 4 1/2" H x 3 3/4" W vertical rim lock body, rosette, keeper, white porcelain knobs	cast iron 3" H x 3" W butt hinges, lift off	
С	brass 4 1/2" H x 3 3/4" W vertical rim lock body, keeper, white porcelain knobs, with cast iron rosette	cast iron 3" H x 3" W butt hinges, lift off	
D	brass 4 1/2" H keeper	none	Originally door to outside?
E	none	none	Originally door to outside?
F	none	none	
G	brass 3 3/4" H x 3 1/4" W rim lock body, knobs, inside barrel slide bolt latch	cast iron 2" H x 2 3/8" W butt hinges, ball finial	missing keeper
Н	none	none	
	brass 4 1/2" H keeper	cast iron 3" H x 3" W butt hinges	Originally was a window
J	none	none	
K	brass 4 1/2" H x 3 3/4" W vertical rim lock body, rosettes, keeper, knobs	cast iron 4" H x 4" W butt hinges	door knobs and rosettes don't match
L	brass 4 1/2" H x 3 3/4" W vertical rim lock body, keeper, rosette, white porcelain knobs	brass 4" H x 4" W butt hinges, ball finial	
М	none	none	
N	cast iron 3 3/4" H x 3 1/4" W rim lock body, keeper, white porcelain knobs, brass rosette	brass 4" H x 4" W butt hinges, ball finial	
0	none	top pin hinges	bottom pin hinges may be below floor
Р	none	none	
Q	cast iron spring loaded cabinet latch	cast iron 2 1/2" H x 2" W butt hinges, ball finial	right side 52 1/2" H
R	none	none	

S	none	cast iron 3" H x 3" W butt hinges	
Т	cast iron spring loaded cabinet latch	cast iron 2 1/2" H x 2" W hinges, ball finial	right side 61 3/4" H
U	none	none	fits Locations P and S
V	brass 4 1/2" H x 3 3/4" W vertical rim lock body, keyhole cover, white porcelain knobs	cast iron 3" H x 3" W hinges	fits Location I
W	brass 4 1/2" H x 3 3/4" W vertical rim lock body, keyhole cover, white porcelain knobs	cast iron 3 1/2" H x 3 1/2" W hinges	fits Location D
Х	brass 4 1/2" H x 3 3/4" W vertical rim lock body, keyhole cover, white porcelain knobs	cast iron 2 7/8" H x 3" W hinges, lift off	fits Location A
Υ	none	cast iron 3 1/2" H x 3 1/2" W hinges, barrel slide bolt to lower door half	fits Location E
Z	steel door knob set	cast iron 3" H x 3" W hinges	fits Location E

Notes:

- 2. Locations are shown on floor plans
- 3. Material type is estimated. Gray colored hardware is listed as cast iron but could be steel. Yellow or brown hardware is listed as brass but could be bronze. Some hardware was painted and the material type is a guess.





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Typical Interior Door

Front Exterior Door

Front Porch Interior Door







Rear Exterior Door Dutch Door Spare Hardware