Buffalo Lighthouse
Buffalo Harbor, at confluence of
Buffalo River and Lake Erie
Buffalo
Erie County
New York

HABS No. NY-60

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15-BUFF,
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PHOTOGRAPHS

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WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Buildings Survey
National Park Service
Department of the Interior
Washington, D.C. 20240

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HISTORIC AMERICAN BUILDINGS SURVEY HABS No. NY-60

BUFFALO LIGHTHOUSE

Address: Buffalo Harbor, at confluence of the Buffalo River and Lake Erie, Buffalo, Erie County, New York.

Present Owner and Occupant: U.S. Coast Guard, Buffalo Base.

Present Use: Historical monument.

Brief Statement of Significance: This was the second lighthouse in Buffalo. Its picture is included in the seal of the city of Buffalo symoblizing the city's tradition as an important port on the Great Lakes.

PART I. HISTORICAL INFORMATION

A. Physical History

1. Original and subsequent owners: U.S. Lighthouse Establishment (original owner); U.S. Coast Guard.

2. Date of erection: 1833, or 1828.

3. Builder: Isaac C. or S. Smith - Superintendent of Construction.

4. Original plans, construction, etc.: The following is from People's Magazine, January 11, 1834. Vol. I, No. 22:

"We find in a Buffalo paper a view of the Light House in that town, a copy of which is presented above. The original sketch was furnished by Isaac S. Smith, Esq., the superintendent of the work, who has also given the following account of its construction:

"It is situated on the Molehead, or outer end of the Stone Mole, which projects one thousand five hundred feet from the shore, and on the south protects the harbor from the swell and ice of Lake Erie.

"The base of the Molehead, (in fifteen feet of water,) is of a pentangular form, about one hundred and sixty feet in its greatest diameter. A little above the surface of the water, it forms three-fourths of a circle, as shown by the print, whence it rises by an inclined plane of heavy stones placed on their edges closely in contact with each other, to the horizontal summit twelve feet wide, which surrounds the light house. Connected with the view of the Molehead, we give a short section

of the mole, which in front is a wall of heavy stones, laid in Hydraulic mortar, raised four feet above the water to the tow path or landing, which is twenty-one feet wide, and flagged with very large, thick, flat stones. The wall of the mole laid in mortar, rises perpendicularly twelve feet to the summit; which, like the tow path, is flagged with large flat stone.

"The foundation of the light house is a mass of solid masonry, in Hydraulic lime, thirty feet in diameter, and nine feet deep. The basement of the light house, (forming an oil vault,) commences on the foundation, with a wall seven feet thick, tapering to four feet in the summit of the mole.

"The tower is an octagon constructed of hewn yellowish Limestone, fourty-four feet high, twenty feet in diameter at the base, and twelve feet at the top, under the cornice. The walls are four feet thick at the base, tapering to two feet at the top, having at intervals of about six feet, iron bands in the middle of the wall to prevent the possibility of spreading. On the inside is a spiral or geometrical stone staircase, so constructed that each step has its broad end imbedded in the wall, while its outer end constitutes a section of a central column. The floors and deck are of hewn stone, the doors and scuttles of copper, and the window sashes of wrought iron, so that there is not a particle of wood in or about the building except the boom, of necessity made of wood, which sustains the copper electric conductor.

"The lighting apparatus is in every respect of the most approved and perfect kind.

"The following sailing directions are given for vessels approaching and entering the harbor:

'Whenever vessels find themselves in any position southward of the light house, they must steer directly for it, but in the night should never approach within eighty yards at any time, when it bears northward of east, or northward of west. When it bears east, run for it until within not less than fifty yards, then double the mole head and steer east by south into the harbor, keeping in the middle between the mole and the north pier. A vessel should never be suffered to get so far north in the night, as to bring the light to bear any where southward of east, except when within a quarter of a mile.

'There are sunken rocks about three quarters of a mile about northwest from the light, which can always be avoided in the daytime.'

"The number of passengers who have left Buffalo for the West in steamboats alone, during the season, taking the average to the close, will be from sixty-five to seventy thousand. The amount of tolls on the canal for the year 1829, was twenty-five thousand eight hundred and seventy-three dollars; for 1833, it was seventy thousand dollars."

5. Notes on alterations and additions: Because of the difference in geometry, craftsmanship, and use of materials, it is likely that the section above level number 4 was added after initial construction.

6. Sources of information: Gordon, Thomas F., Gazeteer of the State of New York. Philadelphia: Printed for the author, 1836. (Map of the City of Buffalo, p. 442).

North Carolina State College, School of Design. Report submitted by Joseph V. Morog and Thomas Van Aarle, architectural students, 1960.

Platt, Charles T., Lieutant USN. Report of: Compilation of Public documents and extracts from reports and papers relating to lighthouses, light-vessels, and illuminating apparatus, and to beacons, buoys and fog signals - 1789-1871. U.S. Lighthouse Establishment, p. 151.

Plot Plan, Buffalo Base, U.S. Coast Guard.

Smith, Isaac C. or S., (Superintendent of Construction). New Lighthouse, Buffalo Journal General Advertiser. Vol. XIX, October 16, 1833 - #955.

Rapp, Marvin A., "Port of Buffalo 1825-1850," Niagara Frontier, VI (Spring, 1959). Buffalo: Buffalo Historical Society.

B. Likely Sources Not Yet Investigated: Records of: The 9th Coast Guard District, West Third and Prospect Streets, Cleveland, Ohio.

PART II. ARCHITECTURAL INFORMATION

A. General Statement

1. Architectural character: The construction of this lighthouse consists of no wood except for the boom.

2. Condition of fabric: In need of repair (a campaign of the Buffalo Historical Society is raising funds to repair the lighthouse).

B. Technical Description of Exterior

1. Over-all dimensions: Octagonal base: 7'-7-1/2" each side. Masonry construction 50'-5" high. Metal construction 24'-8". Total height of 75'-1".

2. Foundations: Solid masonry 30' diameter, 9' deep.

3. Wall construction: Hewn limestone, yellowish color.

4. Chimneys: No flue. Metal stack from ground floor to third level is believed to serve to lift oil from vault in base for use in the lamps.

5. Openings:

   a. Doors: One steel plate door at base.

   b. Windows and shutters: Original wrought iron windows; boarded or improvised coverings at present.

C. Technical Description of Interior

1. Floor plans: Octagonal plan in masonry portion with spiral in center; upper portion of steel construction with decagonal plan.

2. Stairways: Units of spiral stair have outside edge embedded in the wall and center points forming a column. Ladders in upper portion are steel welded construction.

3. Flooring: Hewn stone and steel plates.

4. Wall and ceiling finish: Lower portion - stone. Upper portion - steel with wood furring.

5. Doors: All interior doors are hatches; none in place at this time.

6. Lighting: Conduit in upper portion; no evidence of system in original building.

7. Heating: None. (Lighthouse not in use during winter).

C. Site: Molehead (pierhead) at Buffalo Harbor at confluence of Niagara River and Big Buffalo Creek surrounded by buildings of Buffalo Base, U.S. Coast Guard.

Prepared by Joseph V. Morog and Thomas Van Aarle
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School of Design - March 1960