

**Pre-U.S. Life-Saving Service Era
U.S. Federal Government Assignment of Francis Type Metallic Pulling
Surfboats for Coastal Rescue**

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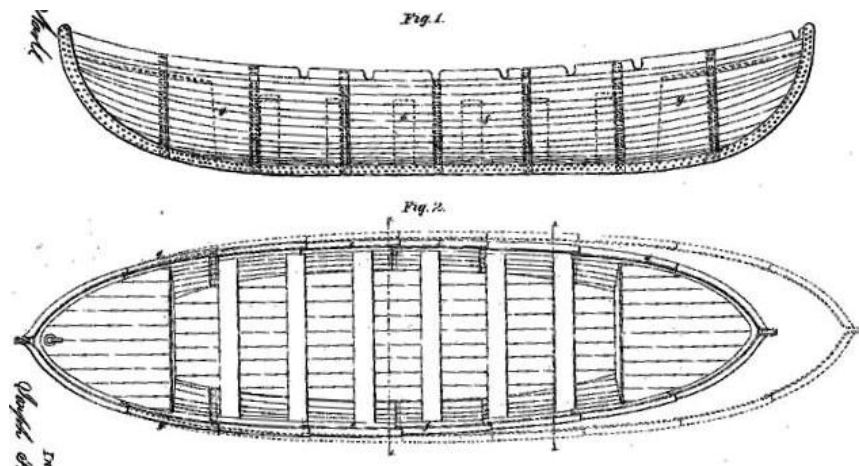
September 2013

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Characteristics: *General:* Neither self-righting or self-bailing; 27ft. overall length, 6ft. 10in. maximum beam, 2ft. 6in. depth amidships, sheer of gunwale 1ft. 6in., sheer of bottom 8in.; 6 thwarts for up to 14 oars rowed in double-banked configuration (some 27ft. double-ended versions were configured for 5 oars rowed in single-banked configuration); no sailing rig; weight approximately 1500lbs. empty/4000lbs. with full outfit of equipment. Oars were 16ft. in length.

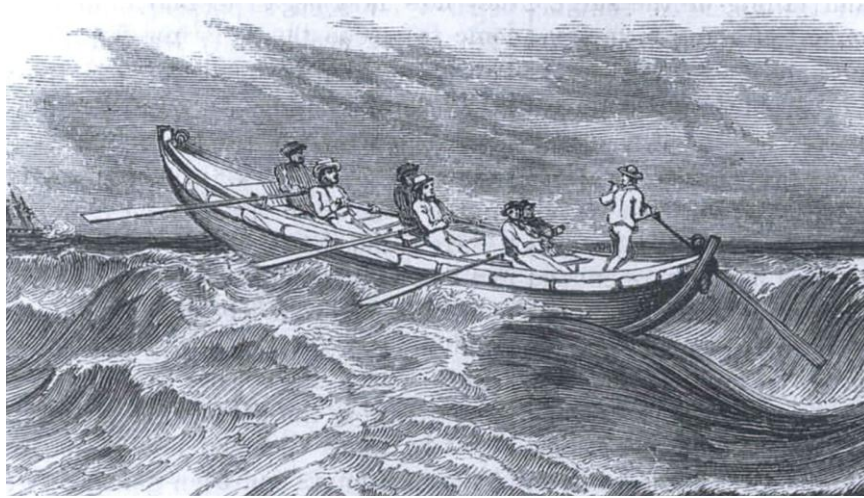
Construction: Two versions, the original and a later modified model, were built. The original model was nearly double-ended but with a slightly squared stern, with bottom and stern of wood planking, and sides of hydraulically-pressed, corrugated galvanized iron, with some having air cases. The later modified model was double-ended, with the hull constructed entirely of corrugated galvanized iron with side and/or end air cases; cork-filled canvas fenders on some boats. All boats were built by Francis at the Novelty Ironworks facility in Brooklyn, NY.

Other: In earlier correspondence, these boats were erroneously referred to as “lifeboats” rather than as surfboats. The original 1848-49 rescue boathouses in New Jersey (14 boathouses total) were equipped with a single surfboat of the original Francis model (having a square stern and sharp bow). The remaining rescue boathouses emplaced in New Jersey and along Long Island, as well as at other locations later in the 1850s were equipped with the later, modified Francis model surfboat (having sharp bow and stern). Both models of the Francis surfboat were very heavy and difficult to manage through the launching process, and typically required a crew of 6-12 persons. If the Francis surfboat was holed in the iron section of the hull, they were nearly impossible to repair given the available metalworking technologies of that time. Iron hull boats, however, were impervious to rot. Flotation was entirely dependent upon the iron hull, iron air chambers, and cork fenders remaining intact. Cedar hull surfboats, by contrast, were lighter, easier to handle, and could be repaired by local artisans, with the boat’s buoyancy being less dependent upon intact air cases and cork fenders. Cedar boats, however, required regular maintenance, which was generally not available in the pre-USLSS era. Nearly all of the early model Francis metallic surfboats assigned to boathouses in New Jersey were requisitioned by the Union Army during the Civil War, and used for amphibious landing operations in the North Carolina Outer Banks region in 1861 and 1862. No detailed drawings or plans of either the early original, or later modified models of the Francis surfboat are known to exist in the available archives.

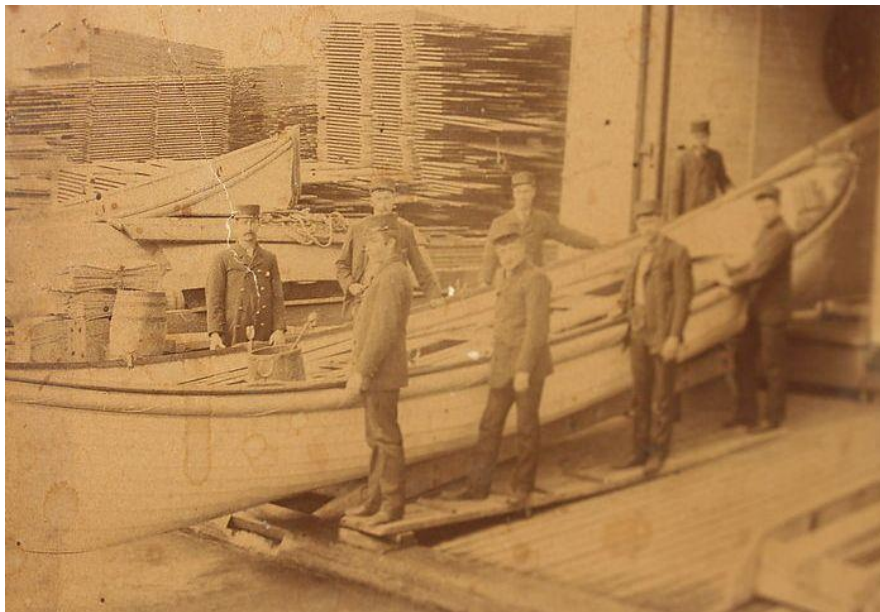


Only known drawing of a Francis type (modified version) metallic surfboat

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(continued)



1850s-period depiction of the modified model Francis metallic surfboat



Only known period photograph of a Francis type (modified version) metallic surfboat,
showing a crew located in the Chicago, IL area
(photograph courtesy of James Claflin)

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(continued)

Assignment Sites for Francis Type Metallic Surfboats, with Dedicated Boathouse

Station No./Location	Station No./Location
New Jersey Coastline (1849-50; all were early, original model Francis surfboats)	
1/Sandy Hook	15/Long Beach
2/Spermaceti Cove	16/Long Beach (8.3 miles south of #15)
3/Atlanticville/Wardell's Beach (Seabright)	17/Tucker's Beach/Short Beach
4/Green's Pond/Long Branch (Monmouth Beach)	18/Brigantine Beach
5/Deal's Beach	19/North Absecon Beach
6/Shark River	20/South Absecon Beach
7/North Side Squan Inlet/Squan Village	21/North Peck's Beach (0.5 miles south of Great Egg Harbor Inlet)
8/South Side Squan Inlet/Squan Beach	22/South Peck's Beach
9/Squan Beach/Maxon's	23/Ludlam's Beach
10/Island Beach/Squan Beach (4 miles south from #9)	24/Cape May Courthouse (4 miles inland from beachfront)
11/Island Beach/Squan Beach (4 miles south from #10)	25/Hereford Inlet
12/Island Beach/Squan Beach (3.5 miles north of Barnegat Inlet)	26/Two Mile Beach (1 mile north of Cold Spring Inlet)
13/Barnegat Inlet	27/East end of Cape May Island
14/Long Beach	28/Cape May Lighthouse
Long Island Coastline (1849-52; all were modified model Francis surfboats)	
1/Coney Island Point	16/Moriches
2/East end of Coney Island/Sheepshead Bay	17/Tanner's Neck
3/Barren Island/Rockaway Inlet	18/Quogue
4/Rockaway Beach	19/Shinnecock
5/West end of Lay Beach (17.75 miles east of Coney Island Point)	20/Southampton
6/East end of Long Beach (Pt. Lookout)	21/Bridgehampton/Mecox
7/Jones Beach	22/Georgica
8/West end of Oak Island (Gilgo)	23/Amagansett
9/East end of Oak Island	24/Napeague Beach
10/Fire Island	25/Ditch Plain
11/Point of Woods	26/Montauk Point (1852)
12/Lone Hill	27/West end Fisher's Island
13/Blue Point	28/Oysterpond, Plum Gut
14/Bellport	29/Eatons Neck
15/Smith's Point	30/Sands Point
New England Sites (all were modified model Francis surfboats)	
31/Watch Hill, RI	Chatham, MA (1853; MHS boathouse)
Gloucester, MA (MHS boathouse)	Monomoy, MA (1853; MHS boathouse)
Cohasset, MA (1853; MHS boathouse)	Nantucket, MA (MHS boathouse)
Scituate, MA (MHS boathouse)	Hyannis, MA (1853; MHS boathouse)
Nauset, MA (MHS boathouse)	

Notes: MHS = Massachusetts Humane Society

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Assignment Sites for Francis Type Metallic Surfboats, with or without a Dedicated Boathouse	
Station No./Location	Station No./Location
Atlantic Ocean and Gulf of Mexico Coastlines (all were modified model Francis surfboats)	
Seal Harbor, ME (1853)	Georgetown, SC (1852)
Southwest Harbor, ME	Savannah, GA (1852)
Millbridge, ME	St. Augustine, FL (1850; had boathouse)
Isle of Shoals, NH	Key West, FL (1850; two surfboats)
Portsmouth Harbor, NH (1851)	St. Marks, FL (1850)
No Man's Land Island, MA (1852)	Pensacola, FL (1850)
Bodie Island, NC (1852)	Galveston, TX (1850)
Ocracoke, NC (1852)	Brazos de Santiago, TX (1850)
Wilmington, NC (1852)	Velasco, TX (1850)
Charleston, SC (1852)	Matagorda, TX (1852)
Great Lakes Region (all were modified model Francis surfboats)	
Lake Ontario	
Oswego, NY (two surfboats)	Rochester, NY
Tibbits Point, NY	Salmon Creek, NY
Big Sandy, NY	Youngstown, NY
Sodus Point, NY	
Lake Erie	
Buffalo, NY	Avon Point, OH
Sturgeon Point, NY	Vermilion, OH
Dunkirk, NY	Huron, OH
Barcelona, NY	Sandusky, OH
Presque Isle Lighthouse, Erie, PA	Marblehead, OH
Conneaut, OH	Put-In-Bay, OH
Fairport, OH	Cunningham's Island (Kelleys Island), OH
Cleveland, OH (1852)	Arrowpoint
Lake Huron	
None	
Lake Michigan	
South Manitou Island Lighthouse, MI (1854)	Chicago Lighthouse, IL (1854; two surfboats)
Manistee, MI	Milwaukee Lighthouse, WI (1854)
Muskegon Lighthouse, MI (1854)	Twin River Lighthouse, WI (1854)
New Buffalo Lighthouse, MI (1854)	Manitowoc Lighthouse, WI (1854)
St. Joseph River Lighthouse, MI	Port Washington Lighthouse, WI (1854)
Kalamazoo Lighthouse, MI (1854)	Waukegan, WI (1854; with collector of customs)
Grand River Lighthouse, MI (1854)	Racine, WI (1854; with collector of customs)
White River, MI	Kenosha, WI (1854; with collector of customs)
South Black River, MI	Washington Harbor, WI
Michigan City Lighthouse, IN (1854)	Sheboygan Lighthouse, WI (1854)
Calumet Harbor Lighthouse, IL (1854)	Baileys Harbor, WI
Lake Superior	
Marquette Lighthouse, WI (1854)	
Pacific Coast (modified model Francis surfboats)	
Cape Disappointment Light Station, Bakers Bay, WA (1854)	

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