

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

**NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY -- NOMINATION FORM**

FOR FEDERAL PROPERTIES

FOR NPS USE ONLY

RECEIVED

DATE ENTERED

SEE INSTRUCTIONS IN HOW TO COMPLETE NATIONAL REGISTER FORMS
TYPE ALL ENTRIES -- COMPLETE APPLICABLE SECTIONS

1 NAME

HISTORIC Scow Schooner Alma

AND/OR COMMON
Alma

2 LOCATION

STREET & NUMBER Hyde Street Pier

— NOT FOR PUBLICATION
CONGRESSIONAL DISTRICT
Fifth

CITY, TOWN San Francisco

— VICINITY OF

STATE California

CODE
06

COUNTY
San Francisco

CODE
075

3 CLASSIFICATION

CATEGORY	OWNERSHIP	STATUS	PRESENT USE
<input type="checkbox"/> DISTRICT	<input checked="" type="checkbox"/> PUBLIC	<input type="checkbox"/> OCCUPIED	<input type="checkbox"/> AGRICULTURE <input checked="" type="checkbox"/> MUSEUM
<input type="checkbox"/> BUILDING(S)	<input type="checkbox"/> PRIVATE	<input checked="" type="checkbox"/> UNOCCUPIED	<input type="checkbox"/> COMMERCIAL <input type="checkbox"/> PARK
<input checked="" type="checkbox"/> STRUCTURE	<input type="checkbox"/> BOTH	<input type="checkbox"/> WORK IN PROGRESS	<input type="checkbox"/> EDUCATIONAL <input type="checkbox"/> PRIVATE RESIDENCE
<input type="checkbox"/> SITE	PUBLIC ACQUISITION	ACCESSIBLE	<input type="checkbox"/> ENTERTAINMENT <input type="checkbox"/> RELIGIOUS
<input type="checkbox"/> OBJECT	<input type="checkbox"/> IN PROCESS	<input checked="" type="checkbox"/> YES: RESTRICTED	<input checked="" type="checkbox"/> GOVERNMENT <input type="checkbox"/> SCIENTIFIC
	<input type="checkbox"/> BEING CONSIDERED	<input type="checkbox"/> YES: UNRESTRICTED	<input type="checkbox"/> INDUSTRIAL <input type="checkbox"/> TRANSPORTATION
		<input type="checkbox"/> NO	<input type="checkbox"/> MILITARY <input type="checkbox"/> OTHER

4 AGENCY

REGIONAL HEADQUARTERS: (If applicable) National Park Service, Western Region

STREET & NUMBER 450 Golden Gate Avenue, Box 36063

CITY, TOWN San Francisco

— VICINITY OF

STATE
California 94102

5 LOCATION OF LEGAL DESCRIPTION

COURTHOUSE, REGISTRY OF DEEDS, ETC. Annual List of Merchant Vessels of the United States

STREET & NUMBER N/A

CITY, TOWN N/A

STATE
N/A

6 REPRESENTATION IN EXISTING SURVEYS

TITLE National Register of Historic Places

DATE October 10, 1975

FEDERAL STATE COUNTY LOCAL

DEPOSITORY FOR SURVEY RECORDS National Park Service

CITY, TOWN Washington

STATE
D.C.

7 DESCRIPTION

CONDITION		CHECK ONE	CHECK ONE
<input type="checkbox"/> EXCELLENT	<input type="checkbox"/> DETERIORATED	<input type="checkbox"/> UNALTERED	<input type="checkbox"/> ORIGINAL SITE
<input checked="" type="checkbox"/> GOOD	<input type="checkbox"/> RUINS	<input checked="" type="checkbox"/> ALTERED	<input type="checkbox"/> MOVED DATE _____
<input type="checkbox"/> FAIR	<input type="checkbox"/> UNEXPOSED		

DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

The scow schooner Alma, a floating vessel owned and maintained by the National Park Service as part of the collection of the National Maritime Museum, San Francisco, is moored alongside Hyde Street Pier at San Francisco when she is not sailing on the bay or visiting San Francisco Bay, Carquinez Straits, or Sacramento River ports.

Alma as Built and Modified

As built in 1891, Alma was a typical flat-bottomed, square-ended scow 59 feet in length, with a 22.6-foot beam, and a 4-foot depth of hold. Alma's registered tonnage was 41 gross and 39 net. [1] Alma carried two masts, schooner-rigged, with a single main-top-mast. Alma was average in size, but she was unusual in that, unlike many of the scow schooners then built on the bay, she had a cross-planked bottom. This construction, requiring heavier scantlings, may have contributed to her longevity. [2]

Alma's masts and bowsprit were removed in 1918 when she was converted into a barge. Her main hatch was also enlarged at this time. [3] In 1926, she was modified again, becoming an oyster shell dredger. A forty-horsepower gas engine was installed to port of Alma's centerline, driving a single propeller. Eight-foot bulwarks were erected amidships; living quarters with a wheelhouse mounted above were built aft; and a shell pump and washing belt were installed forward. In 1951 Alma's gas engine was replaced by a more powerful diesel, and a matching engine and propeller were added to starboard. Her shell handling equipment was also improved. It was in this configuration that Alma was laid-up in 1957. [4]

Restoration of Alma

Following her acquisition by the State of California in 1959, Alma's dredging machinery and deckhouse were removed. For several years Alma served as a floating work platform for other museum vessels. In 1964 Alma was lifted from the water and placed on the pier to begin restoration. Working from old photos, internal evidence, register information, and the plans of other scow schooners made by the W.P.A. Historic American Merchant Marine Survey, Alma was slowly returned to her original configuration. Portions of scow hulks around the bay were used to replace missing or damaged fittings. Alma's restoration was completed in

SEE CONTINUATION SHEET

8 SIGNIFICANCE

PERIOD	AREAS OF SIGNIFICANCE -- CHECK AND JUSTIFY BELOW			
<input type="checkbox"/> PREHISTORIC	<input type="checkbox"/> ARCHEOLOGY-PREHISTORIC	<input type="checkbox"/> COMMUNITY PLANNING	<input type="checkbox"/> LANDSCAPE ARCHITECTURE	<input type="checkbox"/> RELIGION
<input type="checkbox"/> 1400-1499	<input type="checkbox"/> ARCHEOLOGY-HISTORIC	<input type="checkbox"/> CONSERVATION	<input type="checkbox"/> LAW	<input type="checkbox"/> SCIENCE
<input type="checkbox"/> 1500-1599	<input type="checkbox"/> AGRICULTURE	<input type="checkbox"/> ECONOMICS	<input type="checkbox"/> LITERATURE	<input type="checkbox"/> SCULPTURE
<input type="checkbox"/> 1600-1699	<input checked="" type="checkbox"/> ARCHITECTURE (naval)	<input type="checkbox"/> EDUCATION	<input type="checkbox"/> MILITARY	<input type="checkbox"/> SOCIAL/HUMANITARIAN
<input type="checkbox"/> 1700-1799	<input type="checkbox"/> ART	<input type="checkbox"/> ENGINEERING	<input type="checkbox"/> MUSIC	<input type="checkbox"/> THEATER
<input checked="" type="checkbox"/> 1800-1899	<input type="checkbox"/> COMMERCE	<input type="checkbox"/> EXPLORATION/SETTLEMENT	<input type="checkbox"/> PHILOSOPHY	<input checked="" type="checkbox"/> TRANSPORTATION
<input checked="" type="checkbox"/> 1900-	<input type="checkbox"/> COMMUNICATIONS	<input type="checkbox"/> INDUSTRY	<input type="checkbox"/> POLITICS/GOVERNMENT	<input type="checkbox"/> OTHER (SPECIFY)
		<input type="checkbox"/> INVENTION		

SPECIFIC DATES 1891-1926

BUILDER/ARCHITECT Fred Siemer

STATEMENT OF SIGNIFICANCE

The 1891 scow schooner Alma, a historic vessel moored as part of the collection of the National Maritime Museum, San Francisco, is an excellent example of a once-common, vernacular work-a-day craft found on the major waterways of the United States from Colonial times through the 20th century. While built and operated on San Francisco Bay, Alma is in many ways indistinguishable from scows which were launched and sailed on Chesapeake Bay, the Gulf Coast, the Great Lakes, inland rivers, and other coastal waters of the United States. No scow schooners save Alma are known to survive afloat in the United States. Possessing a high level of integrity, Alma is of exceptional NATIONAL significance as the only American scow schooner surviving as a floating, intact representative of her type.

The preceding statement of significance is based on the more detailed statements which follow.

THE ORIGIN AND DEVELOPMENT OF SCOW SCHOONERS

Flat bottomed sailing craft possess two advantages that have caused them to be used in regions throughout North America since the late eighteenth century. One is that the simplicity of the hull form allows it to be produced quickly and at low cost. The other is that the flat bottom and broad beam permit large cargoes to be carried in shallow waters. This combination of advantages was valuable in every coastal region of North America, as well as many of the inland waterways. Small changes in detail adapted sailing scows to various trades, creating numerous sub-types. Designs varied widely, as builders applied individual inspiration to their work. [1]

The scow hull form was well known in Europe before becoming popular in America early in the eighteenth century. In the American Colonies they were known as flats, or radeux, and occasionally as gondalows. Because of their peculiar advantages, both the British and the Colonials built armed scows on Lake Champlain in 1776. [2]

SEE CONTINUATION SHEET

9 MAJOR BIBLIOGRAPHICAL REFERENCES

SEE CONTINUATION SHEET

10 GEOGRAPHICAL DATA

ACREAGE OF NOMINATED PROPERTY .1

UTM REFERENCES

A	1 0	5 5,0 98 0	4,1 8,4 6,4 0
	ZONE	EASTING	NORTHING
C			

B			
	ZONE	EASTING	NORTHING
D			

VERBAL BOUNDARY DESCRIPTION

All of that area encompassed within the extreme registered dimensions of the vessel; viz. 59.0 x 22.6 feet.

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE	CODE	COUNTY	CODE
STATE	CODE	COUNTY	CODE

11 FORM PREPARED BY

NAME / TITLE

James P. Delgado, Acting Maritime Historian and Kevin J. Foster, Historian

ORGANIZATION

National Park Service

DATE

July 1, 1987

STREET & NUMBER

P.O. Box 37127

TELEPHONE

(415) 556-9827

CITY OR TOWN

Washington

STATE

D.C. 20013-7127

12 CERTIFICATION OF NOMINATION

STATE HISTORIC PRESERVATION OFFICER RECOMMENDATION

YES

NO

NONE

STATE HISTORIC PRESERVATION OFFICER SIGNATURE

In compliance with Executive Order 11593, I hereby nominate this property to the National Register, certifying that the State Historic Preservation Officer has been allowed 90 days in which to present the nomination to the State Review Board and to evaluate its significance. The evaluated level of significance is National State Local.

FEDERAL REPRESENTATIVE SIGNATURE

TITLE

DATE

FOR NPS USE ONLY

I HEREBY CERTIFY THAT THIS PROPERTY IS INCLUDED IN THE NATIONAL REGISTER

DATE

DIRECTOR, OFFICE OF ARCHEOLOGY AND HISTORIC PRESERVATION

ATTEST:

DATE

KEEPER OF THE NATIONAL REGISTER

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

**NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY -- NOMINATION FORM**

FOR NPS USE ONLY
RECEIVED
DATE ENTERED

CONTINUATION SHEET

ITEM NUMBER 7 PAGE 2

1968, and she was returned to the water. Since then she has been maintained in an historic fashion, with in-kind replacement of materials in the manner of her original construction. While externally retaining her historic "as-built" appearance, Alma retains a diesel engine and a propeller for operating on the bay. [5]

FOOTNOTES

- 1
Annual List of Merchant Vessels of the United States....
(Washington, D.C.: Government Printing Office, 1900) p. 10.
- 2
Roger Olmsted, "The Square-Toed Packets of San Francisco Bay," California Historical Society Quarterly, LI (1) Spring 1971, pp. 36-39; Stephen E. Levingston, Historic Ships of San Francisco (San Francisco: Chronicle Books, 1984) p.70.
- 3
Barbara Fetesoff, "San Francisco's Alma," The Woodenboat I (3) April 1980, pp. 10-12; Peter J. Gambetta Oral History Interview by Barbara Fetesoff, January 1, 1975, Transcript pp. 7-11, pass; and Annual List of Merchant Vessels of the United States.... (Washington, D.C.: Government Printing Office, 1931) pp. 212-213.
- 4
Gambetta and Fetesoff, 1975, pp. 8-22.
- 5
Fetesoff, 1980, pp. 14-16 and Levingston pp. 69-70, 72-77.

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

FOR NPS USE ONLY
RECEIVED
DATE ENTERED

**NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY -- NOMINATION FORM**

CONTINUATION SHEET

ITEM NUMBER 8 PAGE 2

Most scows were built upside down to simplify construction. Planks were laid athwartships over multiple keelsons, rather than parallel to the centerline, as in round-bottom hull construction. After planking of the sides and bottom, the hull was turned over and completed. A few localities developed types that had lengthwise planking, but this was more costly and required that the scow be built right side up. [3]

The earliest American sailing scows carried a single, loose-footed spritsail, as was common in Europe. Later there were scows rigged as schooners, ketches, brigs, and even full-rigged ships; but simple sloop and schooner rigs predominated. [4]

During the 1800s, scow sloops and schooners developed further and spread to the farthest settlements on the American continent. In Maine they were known as "square-toed frigates"; in Massachusetts they were called "granite sloops"; in Georgia, "rice flats"; and in Texas, "buttheaders". In California they were simply "scow schooners." Built in great numbers to carry men and materials to and from the gold fields, these vessels played an important role in the development of California during the flood of immigration occasioned by the discovery of gold in 1848. [5]

After the Gold Rush, scow schooners continued to flourish. By 1880 there were approximately 250 sailing scows in San Francisco Bay. They ranged in size from scow sloops under forty feet long, up to a few monsters of nearly ninety feet. [6] Scows were the predominant work-a-day craft on San Francisco Bay, carrying produce, firewood, shells, bricks, and other bulk cargoes on the shallow waters of the bay between a variety of ports. Until the advent of major roads and freighting facilities on land in the first decades of the 20th century, scow schooners on San Francisco Bay, as was the case elsewhere in the country, carried the bulk of goods now transported by trucks.

Construction and Career of Alma

Alma was built in 1891 by Fred Siemer, a German immigrant, behind his house near Hunters Point, on San Francisco Bay. In addition to Alma, which was named for his granddaughter, Siemer built one other scow schooner, Adelia. Both were built for Siemer's son-in-law, James Peterson. [7]

SEE CONTINUATION SHEET

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

**NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY -- NOMINATION FORM**

FOR NPS USE ONLY

RECEIVED

DATE ENTERED

CONTINUATION SHEET

ITEM NUMBER 8 PAGE 3

Until July, 1918, Alma hauled freight for Peterson under sail. Then, along with Peterson's other five scows, she was converted to a barge. [8] Alma continued to work as a barge until 1926, when she was sold to Frank Resech, of Petaluma, who modified her for use as an oyster shell dredger. A forty-horsepower gas engine and a shell pump and washing belt were installed forward. Oyster shells were dredged from shoals on the Bay, washed, and deposited in the hold for the trip to Petaluma's chicken ranches, where they were incorporated into chicken feed, thus providing calcium and promoting hard egg shells. [9]

Mr. and Mrs. Resech lived aboard until 1944, when Alma was sold to Peter J. Gambetta. Mr. Gambetta kept Alma dredging shells, improving her machinery in 1951. The 1951 modifications allowed Alma to continue working until 1957, thus becoming the last San Francisco scow schooner in operation. In that year, however, Alma was laid up on the Alviso mudflats, where she stayed until August, 1959, when she was sold once again. [10]

Alma's new owner, the California State Division of Beaches and Parks, pulled her off the mudflats and towed her to the San Francisco Maritime State Historic Park. Her dredging machinery and deckhouse were removed and for several years Alma served as a floating work platform for other museum vessels. In 1964 Alma's restoration was commenced. Initial restoration was completed in 1968 and she was returned to the water. The following year Alma received a new suit of sails and began the program to interpret the history of working sail that continues to the present. [11]

FOOTNOTES

1

Howard Irving Chapelle, American Small Sailing Craft: Their Design, Development, and Construction (New York: W.W. Norton & Co., 1951) pp. 45-46, 50, and 51.

2

Howard Irving Chapelle, The History of the American Sailing Navy: The Ships and their Development (New York: Bonanza Books, 1949) pp. 104 and 105; Chapelle, American Small Sailing Craft, pp. 29, and 32; Rusty Fleetwood, Tidecraft: the Boats of Lower South Carolina and Georgia (Savannah, Georgia: Coastal Heritage Society, 1982) pp. 49-50, and 87.

SEE CONTINUATION SHEET

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

**NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY -- NOMINATION FORM**

FOR NPS USE ONLY

RECEIVED

DATE ENTERED

CONTINUATION SHEET

ITEM NUMBER 8 PAGE 4

3
Chapelle, American Small Sailing Craft, pp. 51-53. Barbara Fetesoff, "San Francisco's Alma," The Woodenboat, Vol. 1, No. 3, April, 1980, p. 10; Roger Olmsted, "The Square-Toed Packets of San Francisco Bay," California Historical Quarterly, L1 (1) Spring 1971, pp. 36,38.

4
Chapelle, American Small Sailing Craft, pp. 29, 32-33, 76, and 78; Chapelle, History of American Sailing Ships, p. 104.

5
Chapelle, American Small Sailing Craft, pp. 45-46, 29, 32, 332-336. Fleetwood, Tidecraft, p.87; Stephen E. Levingston, Historic Ships of San Francisco (San Francisco: Chronicle Books, 1984) p.70.

6
Anita V. Mozely, "Scow Schooners of San Francisco Bay," Sea Letter, V (1) Dec. 1967, p.1. Fetesoff, "San Francisco's Alma," p. 9.

7
Fetesoff, pp. 10-11; Mozely, pp. 2-3; and Olmsted, "Square-Toed Packets," p. 41.

8
Fetesoff, pp. 10-11; and Peter J. Gambetta Oral History Interview by Barbara Fetesoff, January 1, 1975, Transcript in the collection of the National Maritime Museum, San Francisco, p. 9.

9
Fetesoff, pp. 10-12; and Gambetta and Fetesoff, pp. 7-11.

10
Gambetta and Fetesoff, pp. 8-22.

11
Fetesoff, "San Francisco's Alma," pp. 14-16; and Levingston, Historic Ships of San Francisco, pp. 69-70, 72-77.

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

**NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY -- NOMINATION FORM**

FOR NPS USE ONLY

RECEIVED

DATE ENTERED

CONTINUATION SHEET

ITEM NUMBER 9 PAGE 2

SOURCES

- Chapelle, Howard I., American Small Sailing Craft. New York: W.W. Norton, 1951.
- Chapelle, Howard I., The History of American Sailing Ships. New York: Bonanza Books, 1949
- DeGroot and Vorstman, Sailing Ship Prints by the Dutch Masters from the Sixteenth to the Nineteenth Century. New York: The Viking Press, 1960.
- Fetesoff, Barbara, "San Francisco's Alma," The Woodenboat I (3) April 1980.
- Fleetwood, Rusty, Tidecraft: The Boats of Lower South Carolina and Georgia. Savannah, Georgia: Coastal Heritage Society, 1982.
- Gambetta, Peter J., Oral History Interview by Barbara Fetesoff, January 1, 1975, National Maritime Museum, San Francisco.
- Lankford, Ben, "The Rig of a Scow Schooner," Nautical Research Journal XII (3).
- Levingston, Stephen E., The Historic Ships of San Francisco. San Francisco: Chronicle Books, 1984.
- Mozely, Anita V., "Scow Schooners of San Francisco Bay," Sea Letter V (1) December 1967.
- Olmsted, Roger, "The Square-Toed Packets of San Francisco Bay," California Historical Society Quarterly LI (1) Spring 1972.
- Thirty-Second Annual List of Merchant Vessels of the United States..... Washington, D.C.: Government Printing Office, 1900.
- Zuihhoek, Arne, "De Amerikaanse Schouw, ca. 1850-1910," Spiegel Der Zeilvaart VI (25) December 1980.

Golden Gate NRA - U.S. Department of the Interior, National Park Service - Photo by Richard Frear







Golden Gate NRA - U.S. Department of the Interior, National Park Service - Photo by Richard Frear



SCOW SCHOONER ALMA (1971-72)
Golden Gate NRA, San Francisco, CA
Photo by National Maritime Museum

PARTICULARS

LENGTH EXTREME (RIG)	86'-0"
LENGTH ON DECK (TO OUTSIDE OF COVERING BOARD, P/A)	81'-4"
LENGTH WATER LINE (APPROXIMATE)	80'-6"
BEAM MOULDED	33'-3 1/2"
BEAM EXTREME (TO OUTSIDE OF RUB RAILS)	33'-8 1/2"
DEPTH AT SIDE (MINIMUM, FROM BASE LINE TO TOP OF DECK)	5'-5"

INDEX TO SHEETS

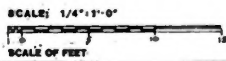
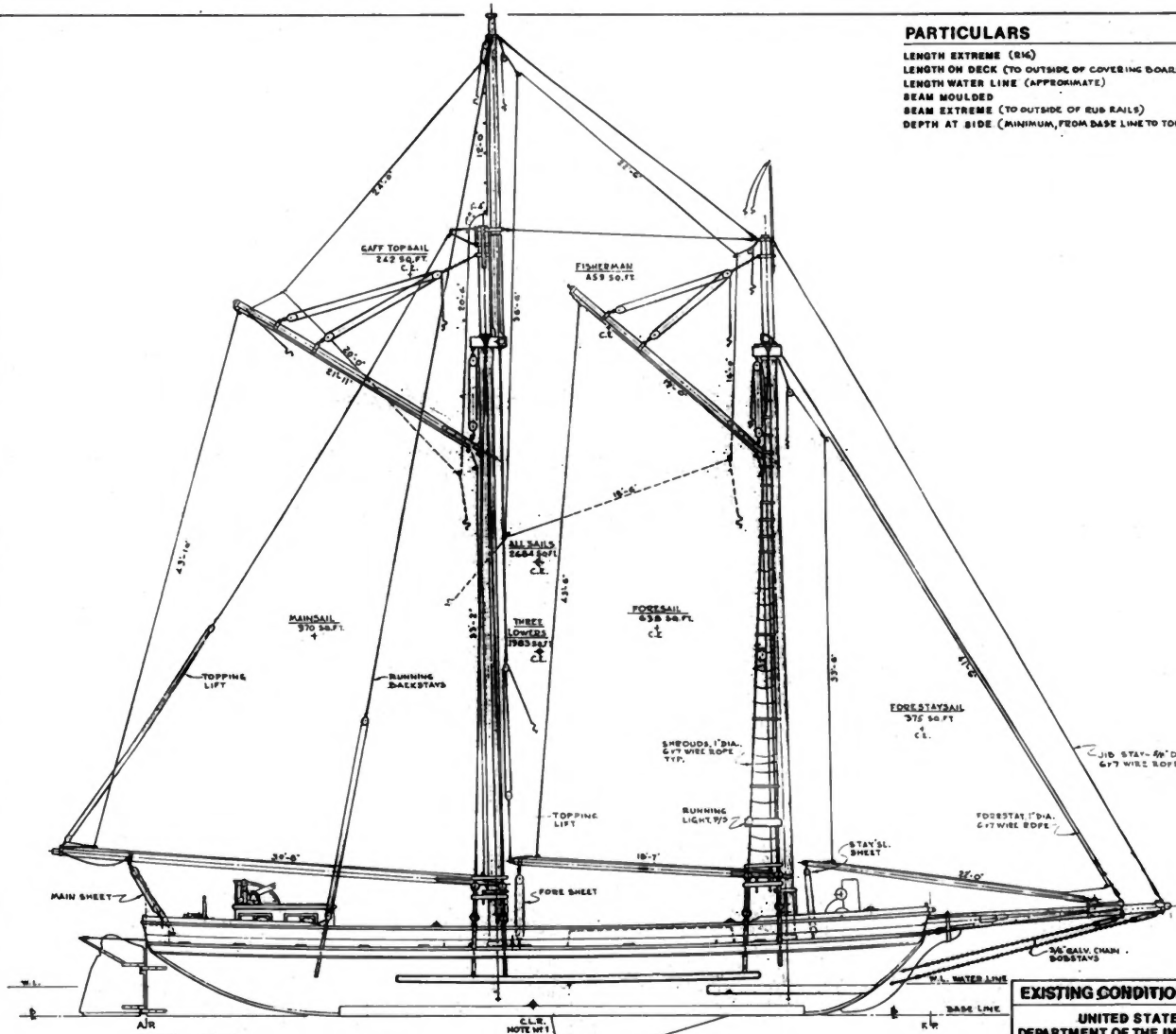
SHEET NO. 1 OF 8	SAIL PLAN
2 OF 8	DECK PLAN AND OUTBOARD PROFILE
3 OF 8	PLAN OF HOLD AND INBOARD PROFILE
4 OF 8	CROSS SECTIONS
5 OF 8	MECHANICAL AND ELECTRICAL SYSTEMS

NOTES-

1. AREA OF THE C. L. R. (CENTER OF LATERAL RESISTANCE) DOES NOT INCLUDE BUDDER.
2. PRESENT BAKE OF MASTS- MAINMAST: 1"-12", FOREMAST: 1"-45".
3. DRAFT WITH 12.5 SHORT TONS OF BALLAST, SEE SHEET 3 OF 8.
- NOTE NO. 4: A.P. 2'-48" F.P. 6'-3 3/4" DRAFT WITHOUT BALLAST: A.P. 2'-19" F.P. 1'-10 1/2"

ABBREVIATIONS & SYMBOLS

WOOD IN CROSS-SECTION	
WOOD IN LONGITUDINAL SECTION	
B.L. - BASE LINE	FWD - FORWARD
C.B. - CENTER BOARD	P/S - PORT & STARBOARD
C.E. - CENTER OF EFFORT	SQ.FT. - SQUARE FEET
CL - CENTER LINE	TYP. - TYPICAL
ELECT. - ELECTRIC	W.L. - WATER LINE
GALV. - GALVANIZED	O.D. - OUTSIDE DIAMETER



SAIL PLAN

SCALE OF FEET

EXISTING CONDITION DWGS.
 UNITED STATES
 DEPARTMENT OF THE INTERIOR
 NATIONAL PARK SERVICE

DESIGNED BY: E. B. YONG
 DRAWN BY: S. B. HICKLER
 CHECKED BY: T. BARRATT
 DATE: FEB., 1905

SUB SHEET NO. _____
SAIL PLAN
 OF
SCOW SCHOONER 'ALMA'
 EXISTING CONDITION DRAWINGS
 SAN FRANCISCO MARITIME M.H.P.
 DRAWING NO. **841**
60153
 PVL. SHEET NO. **3**
 OF **8**