

FE 33

**F00033**

NOAA FORM 76-35A	
U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SURVEY	
DESCRIPTIVE REPORT (HYDROGRAPHIC)	
Type of Survey	Field Examination
Field No.	
Office No.	F00033
LOCALITY	
State	California
General Locality	San Francisco Bay
Locality	South Channel, Submarine Net
1942	
CHIEF OF PARTY L.D. Graham	
LIBRARY & ARCHIVES	
DATE	1942

**F00033**

☆ U.S. GOV. PRINTING OFFICE: 1976-669-441

NOTE: A new system for registering Field Examinations (FE's) was established in 1980. All FE's are now consecutively numbered as shown hereon. The date in the new format is the actual date of survey. This material was previously registered as: FE No.3 1942

**FE 3  
1942**

U. S. COAST & GEODETIC SURVEY

LIBRARY AND ARCHIVES

MAR 18 1942

Acc. No. \_\_\_\_\_

Form 504  
Ed. June, 1928

**DEPARTMENT OF COMMERCE**

U. S. COAST AND GEODETIC SURVEY

L. O. Colbert., Director

State: California

**DESCRIPTIVE REPORT**

Topographic } SPECIAL SURVEY FOR  
Hydrographic } Sheet No. NAVY

LOCALITY

South Channel, Submarine Net

San Francisco Bay

19 42

CHIEF OF PARTY

L. D. Graham

**FE 3  
1942**

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

REG. NO.

HYDROGRAPHIC TITLE SHEET

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. \_\_\_\_\_

REGISTER NO.

State California

General locality Entrance to San Francisco Bay, California.

Locality South Channel through Submarine Net.

Scale 1 to 2500 Date of survey February 19, 1942

Vessel "PIONEER" Launch No. 80

Chief of Party L. D. Graham

Surveyed by Frank G. Johnson

Protracted by Frank G. Johnson

Soundings penciled by Robert W. Lowe

Soundings in ~~fathoms~~ feet \_\_\_\_\_

Plane of reference Mean Lower Low Water

Subdivision of wire dragged areas by \_\_\_\_\_

Inked by \_\_\_\_\_

Verified by In office by A. R. Starni

Instructions dated \_\_\_\_\_, 19\_\_\_\_

Remarks: No instructions received. Survey was made at the request  
of the Navy Department in letter of February 16, 1942

DESCRIPTIVE REPORT TO ACCOMPANY  
HYDROGRAPHIC SHEET FIELD - SOUTH CHANNEL THROUGH SUBMARINE NET.  
SPECIAL SURVEY FOR NAVY DEPARTMENT  
ENTRANCE TO SAN FRANCISCO BAY, CALIFORNIA.

1942

U.S.C. & G.S.S. PIONEER

L. D. GRAHAM, COMMANDING

INSTRUCTIONS: No written instructions were received for this survey.

The work was executed for the Navy Department at the written request of the Commanding Officer, Navy Net Depot, Tiburon, California. The letter covering this request was dated February 16, 1942, reference NT4-10HI-2, serial number 320, and was addressed to the Inspector, Coast and Geodetic Survey, San Francisco, California.

A survey with closely spaced lines was desired of the narrow channel for small boats at the San Francisco terminus of the net section. This channel is 35 meters wide and is between the bulkhead at the San Francisco Yacht Club and the south anchor of the main net. A small net is stretched across this channel.

SURVEY METHODS: The hydrographic survey was made on the same sheet used for topography and the location of the control points on a scale of 1 ; 2500. The shore line features and platform at south anchor of net is shown in black lines. For the main control four previously established triangulation stations were used and are shown on the sheet. The topography was executed by Ensign Ernst E. Stohsner.

The hydrography was done with the Ship PIONEER'S launch No. 80 using the Portable Depth Recorder Type No. 808, C&GS No. 59. Soundings were recorded at 5 second intervals and sometimes less to show abrupt changes. A bar check was taken before and after the days work with bar set at 6 foot intervals down to 42 and 48 ft. The initial was set with the bar at 5 feet and the readings recorded from the fathogram alongside the correct depths as shown by the bar. From the bar checks, a correction curve was made to be applied to the depths indicated on the fathogram.

The sounding lines were run in an east - west direction parallel to the axis of the channel except for a few lines which were run fan like in and out of the channel. The lines extend from the vicinity of the east side of the entrance to the San Francisco Yacht Club to about 340 meters <sup>west</sup> of the net entrance. The lines were spaced as closely as practical without actually setting ranges and it was necessary to run the sounding lines against the current at a slow speed. With the control signals so close and with such a large scale survey it would be practically impossible to obtain good sextant angles unless the speed was reduced.

DISCREPANCIES: None.

TIDAL DATA: The tide station at Fort Point, (Golden Gate) San Francisco, California was used for tidal reductions. In order to have the information available immediately, the tide staff was read every 15 minutes during the time the survey was being executed.

<u>STATISTICS:</u>	Statute miles			
Volume	Day	of Sounding lines.	Number of Soundings	Number of Positions.
1	"a"	3.75	669	63

Respectfully submitted,

  
Frank G. Johnson,  
Lieutenant, C&GS.

Approved & Forwarded.

  
L. D. Graham,  
Lieut. Commander, C&GS.  
Commanding Ship PIONEER.

POST-OFFICE ADDRESS: P. O. Box 1197, Oakland, Calif.

TELEGRAPH ADDRESS:

C  
O  
P  
Y

EXPRESS ADDRESS:

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

February 24, 1942.

To: The Commanding Officer,  
Naval Net Depot,  
Tiburon, Calif.

From: U. S. Coast & Geodetic Survey,  
Processing Office,  
Oakland, Calif.

Subject: Hydrographic Survey, San Francisco Bay.

The enclosed tracing covers a hydrographic survey made by a field party from the Ship PIONEER on February 19, 1942, as per your request.

The soundings were made by fathometer and the fathograms were checked for the shoalest soundings. Only part of the soundings taken have been shown on the tracing. The 12 foot depth curve has been shown as a dotted line. The narrowest part of the channel is to the south-east of the net platform where the 12 foot curve extends farthest off shore. There is a critical sounding of 13 feet - circled with dots - 15 meters south-east of the small house on the net platform.

The sounding lines were run mostly in a east-west direction and the fathograms indicate that the ledge rock extending out from the seawall is very irregular on its outer face.

(Signed) L. D. Graham, Lieut. Commdr.  
Commanding Ship PIONEER.

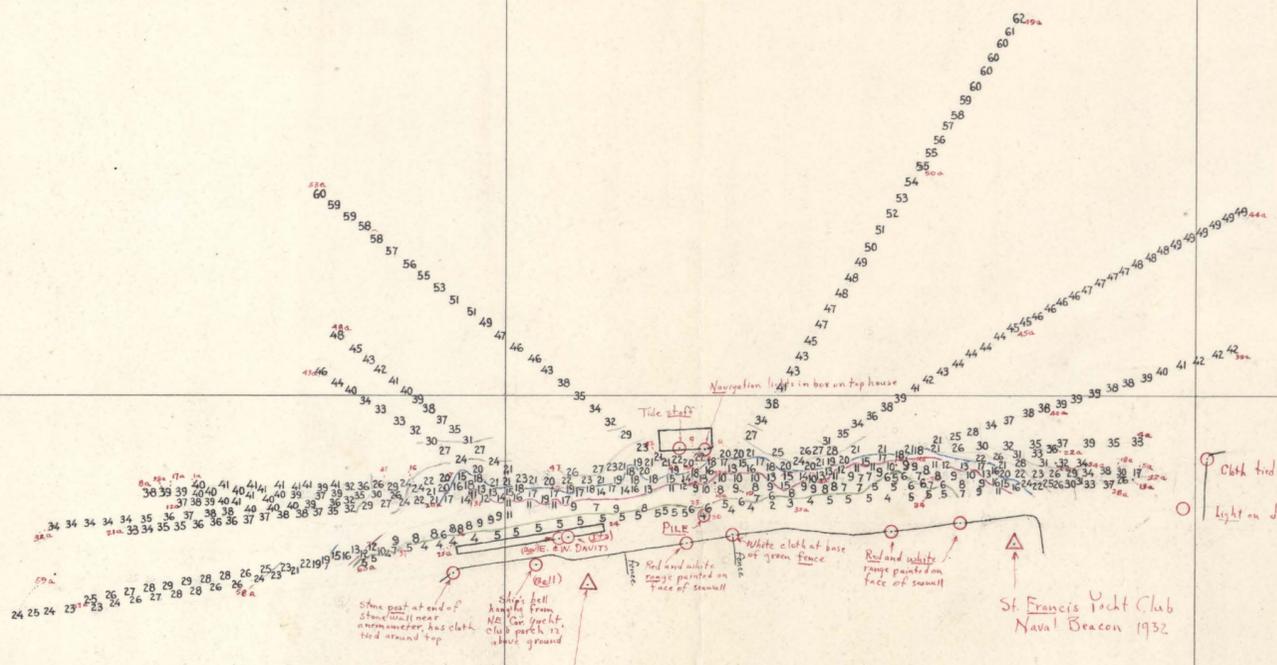
*L. D. Graham*  
Officer in Charge,  
Oakland Processing Office.

122° 27'00" 26'45" 122° 26'30" 26'15" 122° 26'00"

F.E. 3, 1942

37°48'30"

37°48'15"



Clk hind on case block at high water line  
 light on dolphin (not strong position)

△  
 Fine Arts Bldg. Dome

△  
 P.G. & E. Co. Chim. 1925  
 (Near Fort Mason and large gas tank)

No. 23  
 Hydrographic Sheet: 1:2500  
 Scale: Initials Date  
 Projection by: S.B.G. 2-17-42  
 Projection verified by: R.M.L.  
 Triangulation stations plotted by: S.B.G.  
 Triangulation stations verified by: R.M.L.  
 Topographic stations transferred by: Located on sheet by:  
 Topographic stations verified by: E.E.S.  
 Hydrographic stations plotted by: H.D.R.  
 Hydrographic stations verified by: