

FE 135

FE 135

Diagram No. 5402-2,5502-2,5530-5

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.	FE-135
LOCALITY	
State	California
General Locality	San Francisco
Locality	North Pier, Golden Gate
	Bridge
	1956
	CHIEF OF PARTY C.A. Schanck
LIBRARY & ARCHIVES	
DATE	March 16, 1956

☆ 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 shown in the new format is the actual date of survey. This material was previously registered as; FE No.1. 1956

839

FENo. 1 1956

FE-135

Diag. Cht. Nos. 5402-2, 5502-2, & 5530-5.

Form 504

U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

SPECIAL
~~COAST AND GEODETIC SURVEY~~
DESCRIPTIVE REPORT

Type of Survey TAGLINE (HAND LEAD)

Field No. - Office No. -

LOCALITY

State California

General locality San Francisco

Locality North Pier, Golden Gate Bridge

19 56

CHIEF OF PARTY

Charles A. Schanck

LIBRARY & ARCHIVES

MAR 16 1956

DATE

COMM-DC 61300

FENo. 1 1956

SPECIAL REPORT
TAGLINE SURVEY

VICINITY OF NORTH PIER OF GOLDEN GATE BRIDGE

INSTRUCTIONS:

The work covered by this report was done in accordance with oral instructions from the San Francisco District Officer.

PURPOSE AND SCOPE:

The purpose of the survey was to check possible erosive action in the vicinity of the north pier of Golden Gate Bridge. The work consisted of taking soundings at the same 31 points where similar soundings were taken by a party from the Ship BOWIE in 1953. (See Descriptive Report, Special Survey, Vicinity of North Pier of Golden Gate Bridge, dated 19 August 1953, by Commander E.B. Latham). Soundings were taken at two points near the foot of the pier that were not included in the 1953 work.

CHRONOLOGY:

The method of procedure was discussed with interested members of the Golden Gate Bridge and Highway District on 6 February 1956. The necessary equipment was assembled and a skiff rigged for the work on 7 February. The soundings were taken on 8 February. On the morning of 9 February one sounding which was missed the previous day was taken and four soundings that appeared doubtful were retaken for verification or disapproval.

EQUIPMENT AND METHODS:

The same control stations, equipment and methods were used in the 1956 survey that were used in 1953. All soundings were taken with a hand lead marked in feet. The skiff was rigged with a hook $2\frac{1}{2}$ feet above water over the starboard gunwale at the forward thwart. The tagline was passed through this ring and the soundings taken directly under it. A slightly different method of recording the fixes was used in the 1956 survey. For example: B-0; L (for leadline) -100; A-250. At this fix a 250 foot cable was used. The zero mark of the cable was at station B. The 250 mark was at station A. The sounding was taken at a point 100 feet from B and 150 feet from A. By using this method one 275 foot cable marked at each 25 foot interval can be used for the entire survey.

Soundings were reduced to MLLW from tide staff readings of the Fort Point tide station, observed concurrently with the soundings. The value 2.0 feet was used as MLLW on the staff.

J.H.2

DISCUSSION OF RESULTS:

The survey is considered adequate for the intended purpose. It has no charting value. A comparison with the 1953 survey indicates changes of as much as 4 feet with a tendency toward filling to the westward of the pier, and a less pronounced tendency toward scouring off the south face. It would not be surprising if this tendency was reversed at the next survey. The survey should allay any fears of serious erosion in the vicinity of the pier.

PERSONNEL:

Only one member of the BOWIE's personnel, Boatswain Vierra assisted on both the 1953 and 1956 surveys. The same personnel of the Golden Gate Bridge District assisted on both surveys. The advise and assistance of these men should be very helpful on repeat surveys.

RECORDS:

Forwarded with this report is one tracing and print of the finished survey; one volume of soundings; one sketch book containing tide staff readings; and one sheet of tide reducers.

A copy of this report and a print of the finished survey will be furnished by the BOWIE to the Golden Gate Bridge District and to the San Francisco District Officer.

Respectfully submitted:



Charles A. Schanck
Commander, C&GS
Commanding Officer
USC&GSS BOWIE

RHC

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Coastal Surveys:~~

9 April 1956

Division of Charts: R. H. Carstens

Plane of reference approved in
1 volume~~s~~ of sounding records for F.E. No. 1 1956

HYDROGRAPHIC SHEET

Locality San Francisco, Calif.

Chief of Party: C. A. Schank in 1956
Plane of reference is mean lower low water, reading
2.0 ft. on tide staff at Presidio
13.5 ft. below B. M. 180 (1936)

Height of mean high water above plane of reference is 5.1 feet.

Condition of records satisfactory except as noted below:



Branch
Chief, ~~Division of~~ Tides ~~and Currents~~

GEOGRAPHIC NAMES

Survey No. **F. E. No. 1**
(1956)

Name on Survey											
	A	B	C	D	E	F	G	H	K		
											1
											2
											3
											4
											5
											6
											7
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											27

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. F.E.No. 1 (1956)

Records accompanying survey:

Boat sheets; sounding vols. 1.....; wire drag vols.;
 bomb vols.; graphic recorder rolls;
 special reports, etc. 1-Special report, 1-tracing of Survey, 1-Copy of
 Survey, 1-Sheet of Tide Reducers, & 1-Sketch Book.....

The following statistics will be submitted with the cartographer's report on the sheet:

Number of positions on sheet	.....	33
Number of positions checked	.....	12
Number of positions revised	.....	0
Number of soundings revised (refers to depth only)	.....	0
Number of soundings erroneously spaced	.....	0
Number of signals erroneously plotted or transferred	.....	0
Topographic details	Time	.....0
Junctions	Time	.....0
Verification of soundings from graphic record	Time	.....0

Verification by *H. B. Jeske* Total time 3 Date 7-2-56
 Reviewed by *H. B. Jeske* Time 2 Date 7-2-56

Review of F. E. No. 1, 1956

The field examination was accomplished in accordance with oral instructions from the San Francisco District Officer

The purpose of the survey was to check possible erosive action in the vicinity of the north pier of the Golden Gate Bridge.

A comparison of F. E. No. 6, 1953 with the present field examination shows differences in depths of as much as 4 ft. Depths westward of the pier have decreased while those off the south face of the pier have increased since the 1953 field examination. The hydrographer states "It would not be surprising if this tendency was reversed in the next survey. The survey should allay any fears of serious erosion in the vicinity of the pier". In comparing the 1953 work with that of 1956, it was noted that a difference in depth of approximately 10 ft. exists at A=75', B=125'. It is believed that the 1953 work is too deep. However, future hydrographic examinations of the area should determine the correct depth here.

The depths obtained by the field examination are shown on the attached tracing.

No information affecting the charts was revealed by the present investigation.

The Descriptive Report covers all important matters pertaining to the field examination.

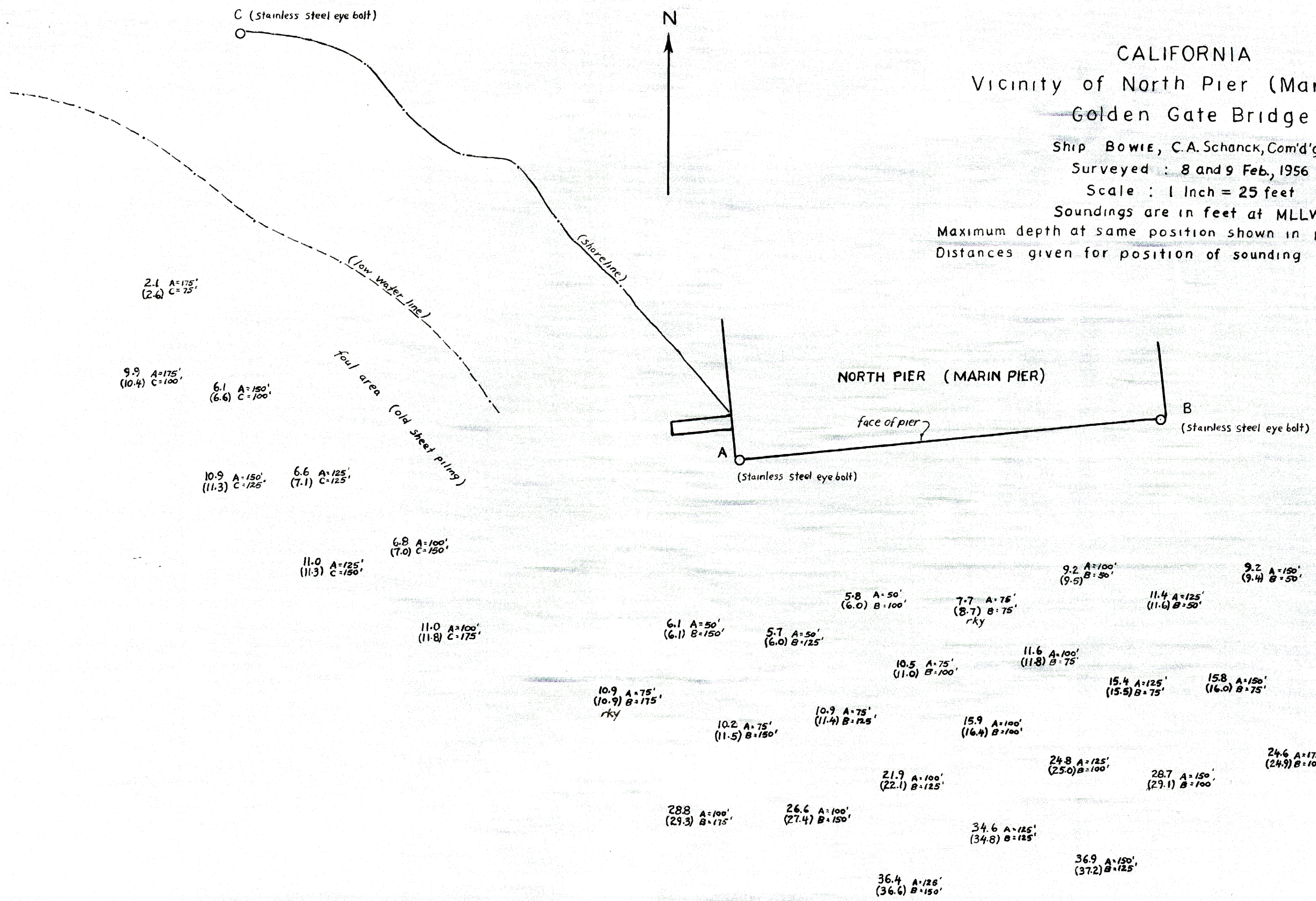
No further discussion is considered necessary.

Reviewed by - I. M. Zeskind 7-2-56
Inspected by - R. H. Carstens

CALIFORNIA
Vicinity of North Pier (Marin Pier)
Golden Gate Bridge

Ship BOWIE, C.A. Schanck, Com'd'g
Surveyed : 8 and 9 Feb., 1956
Scale : 1 Inch = 25 feet
Soundings are in feet at MLLW

Maximum depth at same position shown in parenthesis
Distances given for position of sounding from signals



8 Feb, 1956

- 53 to 1004

52	1011 -
51	1017 -
50	1025 -
49	1033 -
48	1040 -
47	1046 -
46	1052 -
45	1057 -
44	1103 -
43	1108 -
42	1113 -
41	1119 -
40	1125 -
39	1131 -
38	1136 -
37	1141 -
36	1147 -
35	1152 -
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12	1317	1322 -
11		1327 -
10		1333 -
09		1340 -
08		1348 -
07		1357 -
06		1408 -
05		1418 -
04		1427 -
03		1434 -
02		1444 -
01		1454 -
00		1505 -

9 Feb. 1956

- 5.2	1035 to 1042 ✓
- 5.1	1051 ✓
- 5.0	1057 ✓
- 4.9	1104 ✓

09:30 10:00 10:30 11:00 11:30 12:00 12:30 13:00 13:30 14:00 14:30 15:00

5

4

3

2

1

0

9 Feb 56

8 Feb 56

FORT POINT TIDE STAFF DATA FOR SPECIAL TAGLINE SURVEY, GOLDEN GATE, NORTH BRIDGE PIER, KAM

122° 30'

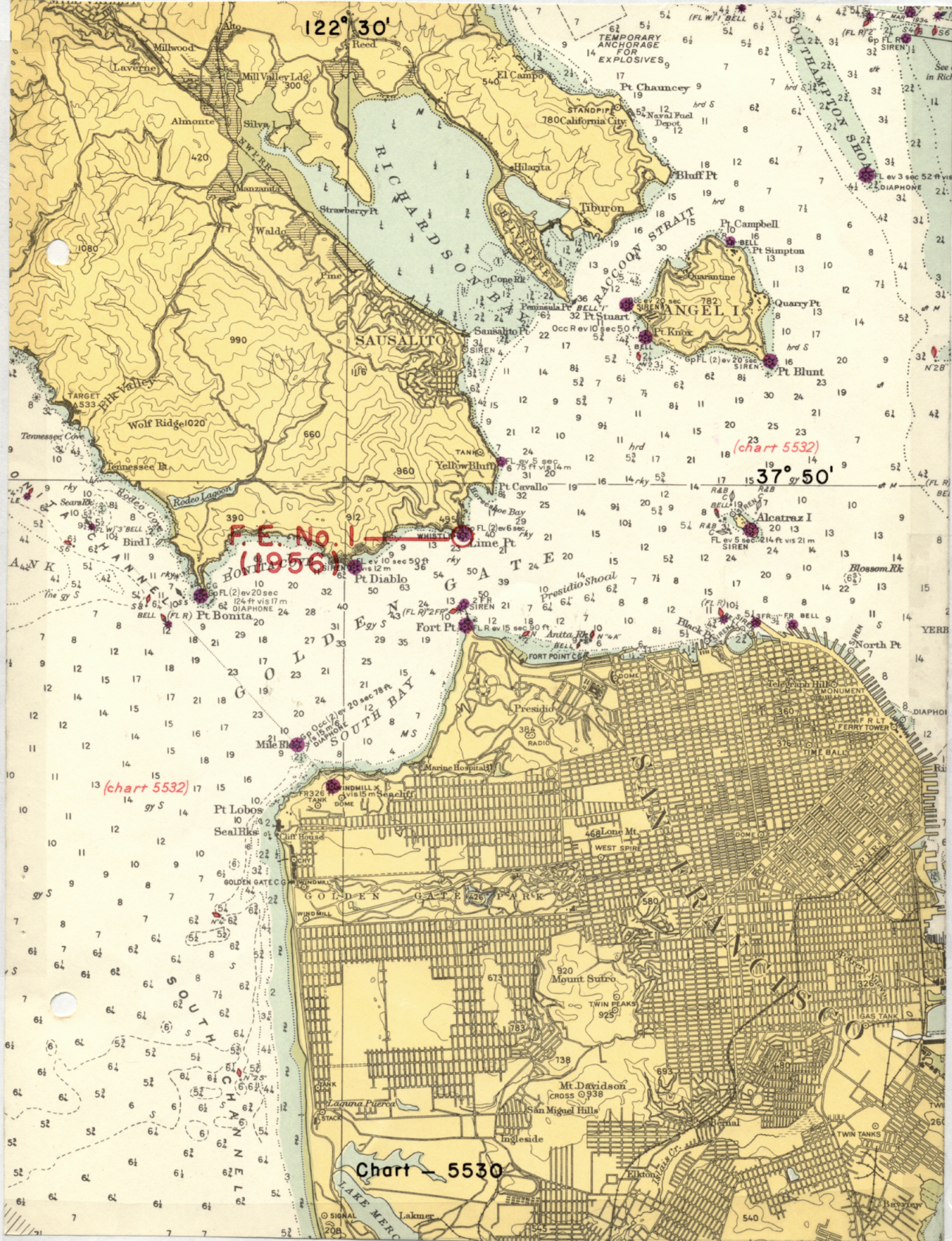
37° 50'

F. E. No. 1
(1956)

(chart 5532)

(chart 5532)

Chart - 5530



NAUTICAL CHARTS BRANCH

SURVEY NO. F.E. No. 1, (1956)

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
6/7/56	5535	H. Mac Ewen	<i>Examined - nothing applied.</i> Before After Verification and Review
7/18/56	5535	H. W. Burgoyne	<i>Exam - No Correction</i> Before After Verification and Review
6 Sept 56	5532	H. Mac Ewen	<i>Examined - nothing applied.</i> Before After Verification and Review
			Before After Verification and Review
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			Before After Verification and Review
			Before After Verification and Review

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

Chart 5532 (recounts) Sam. 3/23/56 No correction.