

# FE108

Diagram No. 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. .... B0-1152.....  
Office No..... FE-108.....

### LOCALITY

State ..... California.....  
General Locality ... Suisun Bay.....  
Locality ..... Reserve Fleet Anchorage.....

1952

CHIEF OF PARTY  
Robert A. Marshall

### LIBRARY & ARCHIVES

DATE ..... November 12, 1952.....

☆ 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.5 1952

FE108



# FENo.5 1952

FE-108

Diag. Cht. No. 5530-5

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

## DESCRIPTIVE REPORT

Type of Survey HYDROGRAPHIC

Field No. B0-1152 Office No. F. E. No. 5,  
1952.

### LOCALITY

State CALIFORNIA

General locality SUISUN BAY

Locality RESERVE FLEET ANCHORAGE

1952

CHIEF OF PARTY

Robert A. Marshall

LIBRARY & ARCHIVES

DATE NOV 12 1952

B-1870-1 (1)

FENo.5  
1952



DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

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.

REGISTER No. FE No. 5,1952

Field No. BO-1152

State CALIFORNIA

General locality SUISUN BAY

Locality RESERVE FLEET ANCHORAGE

Scale 1 : 10,000 Date of survey 5 August 1952

Instructions dated Director's Letter 22/MEK, S-2-BO,  
dated 23 July 1952

Vessel USC&GS Ship BOWIE

Chief of party Robert A. Marshall

Surveyed by Robert A. Marshall

Soundings taken by fathometer, ~~depth recorder, and lead, etc.~~

Fathograms scaled by G. E. LaRoche

Fathograms checked by F. W. Lingenfelter

Protracted by Robert A. Marshall

Soundings penciled by Robert A. Marshall

Soundings in ~~xxxxxx~~ feet at ~~xxxx~~ MLLW and are true depths

REMARKS:

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## DESCRIPTIVE NOTES

to accompany

Hydrographic Survey No. ~~FE~~ FE No 5, 1952

(Field No. B0-1152)

Suisun Bay  
Scale 1:10,000  
Ship BOWIE

Reserve Fleet Anchorage  
5 August 1952  
Robert A. Marshall  
Chief of Party

PROJECT:

The hydrographic survey was conducted in accordance with the Director's Instructions dated 23 July 1952, Reference No. 22/MEK, S-2-B0, and supplemental instructions from the Supervisor, Western District, San Francisco, relative to additional hydrography requested by the U. S. Maritime Commission, San Francisco, in order that a large vessel may be safely maneuvered and anchored in vicinity of the reserve fleet anchorage in Suisun Bay. | FE-4, 1952  
| FE 5, 1952

SURVEY LIMITS AND DATES:

The survey consists of various hydrographic lines run in vicinity of the vessels anchored in the reserve fleet area in Suisun Bay.

Appended to this report is a blue print copy of a tracing made of the boat sheet.

Hydrography was done on 5 August 1952.

VESSELS AND EQUIPMENT:

All hydrography was done with a 45-foot Maritime Patrol Boat, "PF-61", using an 808 fathometer No. S-111. This vessel based at the U. S. Maritime facility, located approximately 1 mile northeast of Benicia.

CONTROL:

Control was furnished by triangulation, "Geographic Positions of Triangulation Stations, California, Zone VII", and from Topographic Sheets T-7136 and T-7137 (Year 1949).



Descriptive Notes to Accompany  
Hydrographic Survey No. ~~KFE552~~ Field No. BO-1152: (Continued)

SURVEY METHODS:

Standard methods were used in conducting this survey /  
as prescribed in the Hydrographic Manual.

RESULTS:

No comparison was made with the 1949 surveys.

The results of this survey were adequate for determining  
a safe anchorage for the SS MONTEREY, an exceptionally deep-  
draft vessel.

TIDE AND VELOCITY CORRECTIONS:

Tide corrections were obtained from staff readings at  
the standard tide gage, Benicia, California, Latitude  $38^{\circ}$   
 $02'60''$ , Longitude  $122^{\circ} 08'07''$ , in operation at this time.  
The tide staff readings were recorded in form 277, which  
accompanies the records for this survey. MLLW corresponds  
to 4.6 feet on the staff at Benicia, according to records  
on board the Ship BOWIE. The tides were plotted on coord-  
inate paper and corrections taken directly from the curve.  
This contains all the tidal data for this survey.

The bar check observations indicate that the velocity  
correction is zero for all soundings.

*Robert A. Marshall*  
Robert A. Marshall  
Comdr. USC&GS



STATISTICS

Hydrographic Survey No. ~~#~~ FE 5, 1952

(Field No. BO-1152)

<u>DAY</u>	<u>VOL. NO.</u>	<u>DATE</u>	<u>NO. POSITIONS</u>	<u>STATUTE MILES</u>
a (red)	1	5 August 1952	62	11.2



Hydrographic Survey No. ~~F~~ FEN 05, 1952

(Field No. BO-1152)

LIST OF SIGNALS

<u>Name Used in Hydrographic Survey</u>	<u>Origin of Station</u>
ANT	BENICIA WATER TANK NEAR ARSENNAL, 1949
BAN	Topographic Sheet T-7137
CAM	" " T-7137
DER	" " T-7136
DIA	" " T-7137
EKE	" " T-7137
FAR	BENICIA FLAT TOP WATER TANK, 1949
FOR	Topographic Sheet T-7136
GAB	" " T-7136
GOODYEAR	GOODYEAR, 1864-78
ITH	Topographic Sheet T-7137
MANX	BENICIA LARGE WATER TANK, 1949
MOC	BULLS HEAD POINT MOCOCO FERTILIZER CO. STACK, 1922, 1939
RYER	RYER ISLAND STACK ON GROUNDED SHIP, 1949
SEM	Topographic Sheet T-7136
SOS	" " T-7136
STA	CONCRETE STACK AT OLD SMELTER, 1949
TOP	Topographic Sheet T-7136
WER	CLOCK TOWER FLAGSTAFF, 1909



# TIDE NOTE FOR HYDROGRAPHIC SHEET

~~XXXXXXXXXXXXXXXXXXXX~~  
~~Division of Coastal Surveys~~

19 November 1952

Division of Charts: R. H. Carstens <sup>671</sup>

Plane of reference approved in 1  
volumes of sounding records for

~~HYDROGRAPHIC SHEET~~  
~~XXXXXXXXXXXX~~

FE No. 5 1952

Locality ~~Var~~quinez Strait, Suisun Bay, California

Chief of Party: R. A. Marshall in 1952  
Plane of reference is mean lower low water, reading  
4.6 ft. on tide staff at Benicia (Arsenal Dock)  
45.4 ft. below B. M. 8 (1936)

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

Condition of records satisfactory except as noted below:

*E. C. McKay*  
Section of Tides

Chief, Division of Tides and Currents.

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. F. E. No. 5, 1952

Records accompanying survey:

Boat sheets <sup>1</sup>...; sounding vols. <sup>1</sup>...; wire drag vols. ....;  
 bomb vols. ....; graphic recorder rolls <sup>1</sup> Env. ....;  
 special reports, etc. <sup>1</sup> Descriptive Report;.....  
 .....

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

Number of positions on sheet	.....	62
Number of positions checked	.....	12
Number of positions revised	.....	4
Number of soundings revised (refers to depth only)	.....	2
Number of soundings erroneously spaced	.....	0
Number of signals erroneously plotted or transferred	.....	0
Topographic details	Time	.....
Junctions	Time	.....
Verification of soundings from graphic record	Time	..... 1/2

Verification by *Lu Jeskind* ..... Total time .. 12 ..... Date 5-25-53

Reviewed by *Lu Jeskind* ..... Time .. 5 ..... Date 5-26-53

REVIEW OF F.E. 5, 1952

Ship BOWIE

R. A. Marshall, Commanding

The field examination was made at the request of the U.S. Maritime Commission who wished to know the depth of water in the vicinity of the reserve fleet anchorage in Suisun Bay, California. The authority for the field examination is given in the Descriptive Report.

The field examination in addition to accomplishing the above mentioned purpose also found a safe anchorage for the S.S. MONTEREY, an exceptionally deep draft vessel. The field examination is plotted on the attached section of the boat sheet.

A comparison between H-7786 (1949) and the field examination shows that the bottom has deepened from 2-6 ft., as for example, in lat.  $38^{\circ} 02.86'$ , long.  $122^{\circ} 07.08'$ , where a depth of 37 ft. on the field examination falls in prior depths of 31-32 ft.

The field examination was applied to chart 5534, dated 9-1-52, prior to verification and review. The charted information is correct, except in the vicinity of lat.  $38^{\circ} 04.45'$ , long.  $122^{\circ} 05.95'$ , where the charted 7-ft. sounding and the 12- and 18-ft. curves should be replotted because of the revision in the location of sounding line 47-48a (red) on the field examination during verification and review.

The Descriptive Report adequately covers all other matters pertaining to the examination. No further discussion is considered necessary.

I. M. Zeskind  
5-26-53

Inspected by: R. H. Carstens

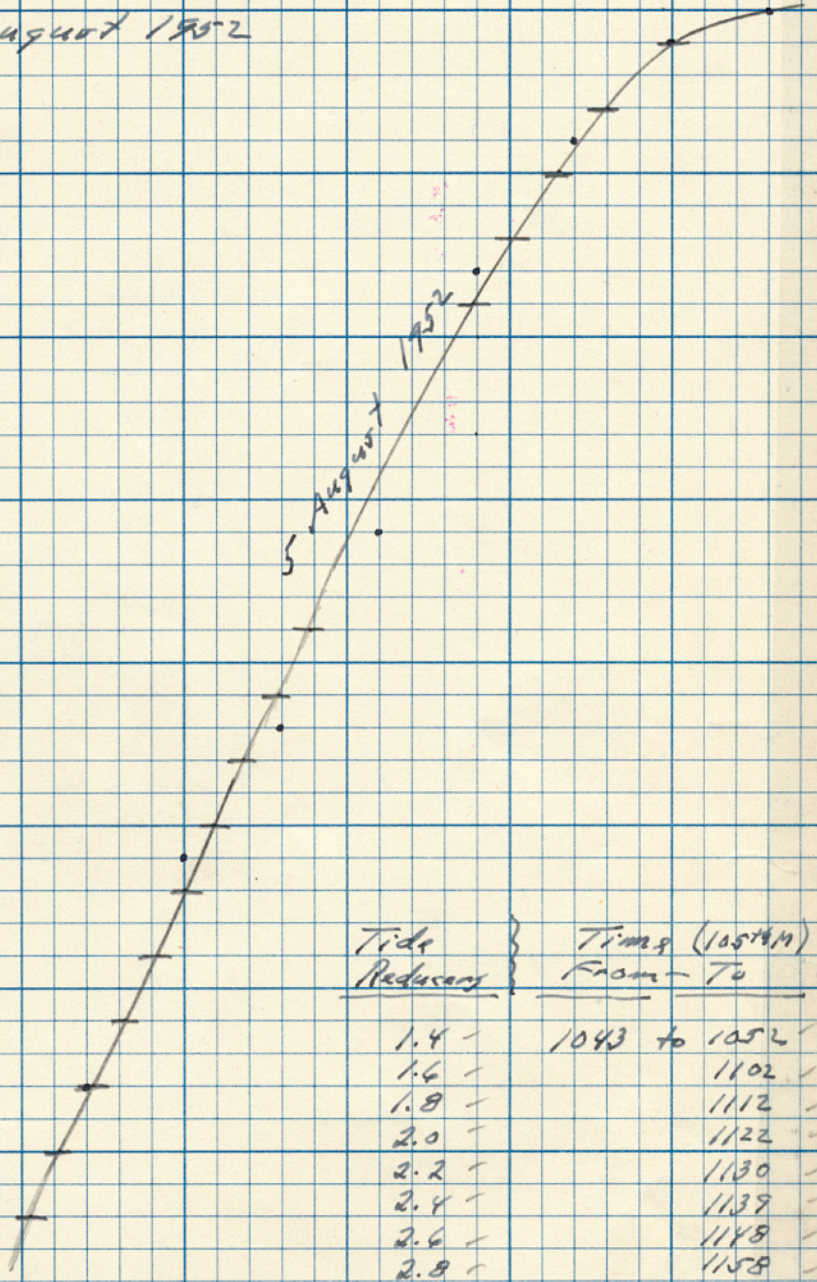


Tide Curve  
 Benicia, Calif  
 (from Staff Reading)

FE 5, 1952

5 August 1952

Tide Above MLLW at Benicia (Feet)



Tide Readings	Time (1952 M.)	
	From	To
1.4	1043	1052
1.6		1102
1.8		1112
2.0		1122
2.2		1130
2.4		1139
2.6		1148
2.8		1158
3.0		1209

4.2	1258	1310
4.4		1325
4.6		1340
4.8		1400

9 Pacific Daylight Sav. Time (1952 M.) 10 11 12 13 14 P.M.



07'

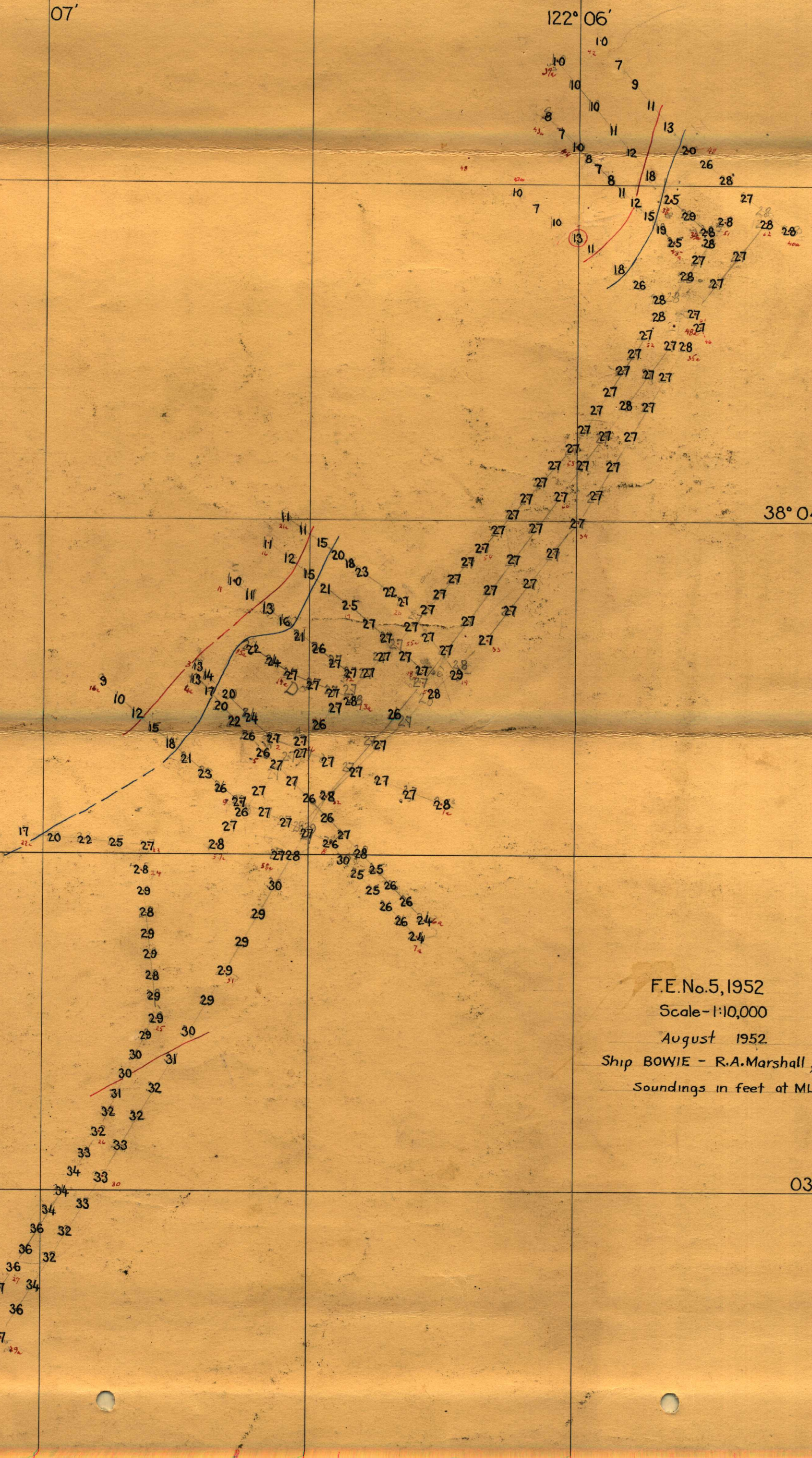
122° 06'

38° 04'

38° 04'

03'

03'



F.E.No.5,1952  
 Scale-1:10,000  
 August 1952  
 Ship BOWIE - R.A.Marshall, Comdg  
 Soundings in feet at MLLW



122°-07'00"

06'-30"

06'-00"

04'-30"

04'-30"

04'-00"

04'-00"

38°-03'-30"

38°-03'-30"

03'-00"

03'-00"

02'-30"

122°-07'-00"

06'-30"

06'-00"

02'-30"

*Revised  
see B.S.*

*Previously submitted  
as Chart Letter 673 (1952)*

**FE 5, 1952**

U.S. Coast and Geodetic Survey  
R. F. A. Studas, Director  
Reserve Fleet Anchorage  
Suisun Bay, California  
Date 5 August 1952  
Soundings in Feet at MLLW  
Scale 1:10000  
Surveyed by U.S. CoGS Ship *BOWIE*  
Soundings subject to verification  
by Washington Office  
Scale in Yards

