

8566

8566

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey OFFSHORE HYDROGRAPHY AND OCEANOGRAPHY

Field No. PI-160-1-60 Office No. H-8566

LOCALITY

State CALIFORNIA

General locality EASTERN PACIFIC OCEAN

Locality Off Northern California between

Pigeon Point and Bodega Head

1960

CHIEF OF PARTY

WILLIAM F. DEANE

LIBRARY & ARCHIVES

MAY 1 1961

DATE

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. H-8566

Field No. PI-160-1.60

State California

General locality Off Northern California - Pigeon Point to Bodega Head

Locality See above

Scale 1: 160 000 Date of survey Sept. to October 1960

Instructions dated 19 July 1960; and 11 August 1960

Vessel USC&GS PIONEER

Chief of party William F. Deane

Surveyed by W. F. Deane, C. J. Boyne, V. R. Sobieralski and Junior Officers.

Soundings taken by fathometer, graphic recorder, hand lead, wire 808-type and PDR

Fathograms scaled by Assigned recorders

Fathograms checked by Junior officers

Protracted by J. G. LaBastie and T. E. Krakowski

Soundings penciled by T. E. Krakowski and P. W. Hund, Jr.

Soundings in fathoms XXX feet at MLW MLLW

REMARKS:

Uniform should consider ^{20'} consistency of the present survey to be faulty in command with the development of the river survey. New 1962 work (boat sheet) disposes some 1960 work vicinity of Corbell BK. E.J. 1/19/61

RHC Transfer 1962 work from boat sheet to JTB

DESCRIPTIVE REPORT

to accompany

HYDROGRAPHIC SURVEY H-8566 (PI-160-1-60)

1960

USC&GSS PIONEER

SCALE:- 1: 160 000

CHIEF OF PARTY

WILLIAM F. DEANE
CAPT., C&GS

A. PROJECT

This sheet is a part of Project CS-417, covered under Instructions dated 19 July 1960, and Supplemental Instructions dated 11 August 1960.

B. AREA SURVEYED

The area covered lies in the eastern Pacific Ocean off the coast of California between Pigeon Point and Bodega Head. The survey lies between latitudes 37 degrees 10 minutes North and 38 degrees 20 minutes North, and extends from the 100-fathom curve out (westward) to longitude 124 degrees 30 minutes West. The survey took place between 22 August 1960 and 22 November 1960.

Junction was made with H-5472, 1:20 000, 1932 and H-5473, 1:80 000, 1932-34 to the south. Junction made also with contemporary survey H-8567, 1:160 000, 1960 to the north.

C. SOUNDING VESSEL

All hydrography on this sheet was executed from the Ship PIONEER.

D. SOUNDING EQUIPMENT

Soundings of less than 150 fathoms were recorded on 808-type depth recorder No. 103S. Soundings greater than 150 fathoms were recorded on Precision Depth Recorder No. 110. See the attached abstract of Applied Echo Correctors for Instrumental Corrections. Standard methods were used in determining these corrections.

E. SMOOTH SHEET

The smooth sheet projection was made on a ruling machine in the Washington Office, on 19 August 1960.

F. CONTROL

A-day through L-day hydrography was controlled by EPI Sta-

F. CONTROL (continued)

tion "A" and EPI Station "B". Calibration was designated as D-day and recorded in a Calibration Volume (No. 4)

Both stations were located by geodetic methods using theodolite cuts and measured distances from existing triangulation. EPI-A was installed at Bodega Head and EPI-B was installed at Pigeon Point. A Shoran Station was located at each of the EPI sites for purposes of calibration. Reference is made to EPI Report, CS-417, 1960, previously submitted.

G. SHORELINE

This is an off-shore survey and therefore did not require shoreline delineation.

H. CROSS LINES

Twelve percent cross lines were run. Crossings were acceptable on all cross lines. There are EPI jumps between positions 11F and 15 F, and between 93 F and 94 F, that have not been reconciled.

I. JUNCTIONS

Agreement in depth curves at the junction with both prior surveys, H-5472 and H-5473, is satisfactory. Contemporary survey H-8567 was forwarded before complete smooth sheet comparison could be made.

J. COMPARISON WITH PRIOR SURVEYS

This survey was compared with prior surveys:-

H-4980 A	1929	1:80 000
H-4981	1929	1:80 000
H-4988	1929	1:40 000
H-4993	1929	1:20 000
H-5014	1929	1:120 000
H-5472	1929	1:20 000

The prior surveys show a satisfactory general agreement in depth curves, considering methods of control and sounding.

The bank reported at latitude 37 degrees 51.0 minutes, longitude 123 degrees 51.0 minutes as described by Chart Letter (1946), was investigated. See Pre-Survey Review. The least depth obtained was 1815 fathoms. The bank as reported should be deleted from the chart.

K. COMPARISON WITH THE CHARTS

This survey was compared with the Chart 5402 (Revised 12/21/59) and Chart 5502 (Revised 1/19/59)

K. COMPARISON WITH THE CHARTS (continued)

There is a discrepancy along the 1000-fathom curve at latitude 37 degrees 18 minutes North, longitude 123 degrees 15 minutes West. (Pioneer Sea Valley)

There is a discrepancy in the 100, 200, 300, 400, and 500-fathom curves at latitudes 37 degrees 45 minutes North through 38 degrees North, and along west longitude 138 degrees 28 minutes. (Cordell Bank)

There is also a discrepancy in the 300, 400, and 500-fathom curves at latitude 38 degrees 13.5 minutes North, longitude 123 degrees 30 minutes West.

No new dangers to navigation were found.

L. ADEQUACY OF SURVEY

The sheet is adequate and complete, considering area, depth, and scale.

M. AIDS TO NAVIGATION

There are no aids to navigation on this sheet.

N. STATISTICS

Total number of positions1061
Nautical miles of sounding1659
Total area in square nautical miles3800
Number of oceanographic stations	4
Number of current stations	2
Number of current drogues, plants	2

O. MISCELLANEOUS

Two current drogue plants were made on this survey. See Special Report-Current Drogue Results. A fluxgate magnetometer was towed throughout the work on this sheet. See Magnetometer Report, Project GS-417, 1960.

All data for currents, including the geographic positions for the Roberts Radio Current Stations were forwarded prior to the completion of this smooth sheet and are therefore not plotted on the smooth sheet.

P. RECOMMENDATIONS

None.

Q. REFERENCES TO REPORTS (See Section O)

Special Report - Current Drogue Plant Results, dated 30 November 1960. See Transmittal Letter PI-9-61 dated 15 Feb. 1961.

Special Report - Magnetometer Report. See Transmittal Letter PI-5-61 dated 26 January 1961.

Approved and forwarded
(See Approval Sheet attached)

Respectfully submitted
Paul W. Hund, Jr.
Paul W. Hund, Jr., ENS, C&GS

TIDE NOTE

Soundings were not reduced for tide in depths over 150 fathoms.

The standard automatic gage at the Presidio, San Francisco, was used to furnish tidal control where required. The Presidio Gage is located at latitude 37 degrees 48.4 minutes North, longitude 122 degrees 27.9 minutes West. A time correction of minus 45 minutes was applied. There was no range correction. Hourly heights for September through November were furnished by the Washington Office. The hourly heights were referred to a datum 5.6 feet below MLLW in accordance with letters 2221-277-982p, and 2221-512-982p dated 18 November 1960 and 15 December 1960 respectively. The 120th West time meridian was used.

ADDENDA (Section B6) (To be inserted in each copy of the descriptive reports).

Abstract of Applied Echo Correctors - Velocity Correctors

Echo-sounding equipment: 808-type No. 103 S and PDR No. 110

Hydrographic Sheet H-8566

<u>Depth Range</u>	<u>Correction</u>
0 to 15 fathoms	(plus) 0.0
to 44	0.5
to 85	1.0
to 133	1.5
to 190	2.0
to 290	3.0
to 390	4.0
to 480	5.0
to 570	6.0
to 650	7.0
to 730	8.0
to 810	9.0
to 880	10.0
to 940	11.0
to 1005	12.0
to 1060	13.0
to 1120	14.0
to 1170	15.0
to 1250	16.0
to 1330	18.0
to 1410	20.0
to 1490	22.0
to 1560	24.0
to 1630	26.0
to 1690	28.0
to 1750	30.0
to 1820	32.0
to 1880	34.0
to 1930	36.0
to 1980	38.0
to 2030	40.0
to 2080	42.0
to 2130	44.0

Hydrographic Sheet H-8567

<u>Depth Range</u>	<u>Correction</u>
0 to 19.5 fathoms	
to 52.5	
to 96.5	
to 150	
to 200	
to 300	
to 390	
to 475	
to 565	
to 650	
to 725	
to 800	
to 870	
to 930	
to 985	
to 1040	
to 1095	
to 1150	
to 1240	
to 1325	
to 1405	
to 1480	
to 1555	
to 1620	
to 1685	
to 1745	
to 1810	
to 1870	
to 1925	
to 1975	
to 2030	
to 2080	
to 2140	

Additional Instrumental Corrections - All hydrography, (Both sheets)

Phase Corrections - 808-type No.103 S - Refer to Vol.4, Sheet H-8566

B-scale (minus) -3.5 fms.; C-scale (minus) -9.0 fms.; D-scale -11.0 fms.

Initial Corrections - Scaled from 808 fathograms and entered to nearest 0.5 fathom through range of instrument or to 150 fathoms depth.

Initial Correction - PDR Instrument. A constant 1.0-fathom index correction was applied to all PDR depths to 200 fathoms. Over this depth the correction was ignored.

ABSTRACT OF EPI CORRECTIONS - PROJECT NO. CS-417

Ship PIONEER

1960

Applicable to sheets H-8566 (PI-160-1-60) and H-8567 (PI-160-2-60)

Reference is made to Volume 4, Sheet H-8566. This volume contains all original calibration data and the computations of accepted values used on both sheets of this project.

INSTRUMENTS:	EPI - Set No.	Trans.No.	Ind.No.	Shoran
EPI-A Bodega Head	WZ 2545	57-232	57-228	Trans. 71
		57-225B	104	" 220
				Monitor 76
				" 78
EPI-B Pescadero Point	WZ 2546	57-227	57-224	" 225
			57-229	Trans. 153
				" 81
				Monitor 179
EPI-C Point Viscaïno	(Same as for EPI-B)			" 98

EPI CORRECTIONS USED:	EPI-A	EPI-B	EPI-C
Calibration Dates-			
9/13/60	-5.63		
9/14/60		(-1.20)R	
9/15/60		-5.60	
9/20/60	-5.90	-5.29	
9/21/60	-6.02		
9/27/60	(-11.19)R		
9/28/60		-5.77	
10/6/60	(-19.14)R	-5.72	
10/15/60	(-18.30)R		
10/16/60		-6.90	
10/25/60	-8.11		
10/25/60	-5.42		
10/26/60			-4.85
11/3/60	-6.35		
11/4/60			-2.55
11/7/60	-4.20		
11/14/60	-7.14		
11/15/60			-3.00
11/19/60			-2.64
MEAN CORRECTORS APPLIED	-6.1	-5.9	-3.3

Sheet H-8566, Vols. 1, 2, and 3 - Use only EPI-A and EPI-B.

Sheet H-8567, Vols. 1 and 2 - Use only EPI-A and EPI-C

LIST OF SIGNALS

EPI Station "A" - Bodega Head, California

EPI Station "B" - Pigeon Point, California

Triangulation location data for the above stations
was forwarded by registered mail under Transmittal Letter
PI-3-61 dated 25 January 1961.

APPROVAL SHEET

The sheets and records of this survey have been examined by me and approved. The field work was executed under my daily and personal supervision.

The survey is considered adequate to meet all requirements of our instructions.

William F. Deane

William F. Deane
CAPT, C&GS
Ship PIONEER

GEOGRAPHIC NAMES

Survey No. H-8566

Name on Survey	Source										No.	
	A	B	C	D	E	F	G	H	K			
	<i>On Chart No. 5721</i> <i>On previous survey No.</i> <i>On U. S. quadrangle Maps</i> <i>From local information</i> <i>On local Maps</i> <i>P. O. Guide or Map</i> <i>Rand McNally Atlas</i> <i>U. S. Light List</i> <i>BGN</i>											
<i>Bodega Head (title) ✓</i>												1
<i>Pigeon Point (title) ✓</i>												2
<i>Pioneer Seamount ✓</i>											✓	3
<i>Pioneer Seavulley ✓</i>											✓	4
<i>Cordell Bank ✓</i>												5
												6
												7
												8
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												27

George M. Ball
Geo Names 13 June 1961

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. 8566.....

Records accompanying survey: Smooth sheets ..¹...;

boat sheets ..¹...; sounding vols.⁴.; wire drag vols.;

Descriptive Reports ..¹...; graphic recorder envelopes ..⁹...;

special reports, etc. ..¹ Cahier - EPI Plotting Abstracts.....

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

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

Verification by Total time Date

Reviewed by Time Date

VERIFIER'S REPORT OF HYDROGRAPHIC SURVEY NO. H-8566

The verifier should deal with the present hydrographic survey only, as the reviewer considers its relation to previous surveys and published charts. He should be thoroughly familiar with Chapters 3, 7 and 9 of the Hydrographic Manual.

1. The descriptive report was consulted and appropriate notes were made in soft pencil regarding action taken.
2. Soundings originating with the survey and mentioned in the descriptive report have been verified, including latitude and longitude.
3. All reference to survey sheets mentioned in the descriptive report include the registry number and year.
4. Geographic names of hydrographic features if on sheet are in slanting lettering and of topographic features in vertical lettering.
5. All items affecting the plotting of the survey which are entered in the remarks columns of the sounding records were noted and check marked. In all cases appropriate action was taken.
6. All positions verified instrumentally were check marked in the sounding records.
7. All critical soundings are clear and legible and are a little larger than the adjacent soundings.
8. The metal protractor has been checked within the last three months.
9. The protracting and plotting of all bad crossings were verified.
10. All detached positions locating critical soundings, rocks or buoys were verified.
11. The boat sheet was compared with the smooth sheet.

12. The spacing of soundings as recorded in the records was closely followed.
13. The bottom characteristics were shown on outstanding shoals.
14. The reduction and plotting of doubtful soundings were checked.
15. The transfer of contemporary topographic information was carefully examined.
16. All junctions were transferred and overlapping curves made identical.
17. The notation "JOINS H- (19--)" was added in ink for all contemporary adjoining or overlapping sheets now registered. Those not verified are shown in pencil.
18. The depth curves have been inspected before inking.
19. All triangulation stations and transfer of topographic and hydrographic signals were checked.
20. Heights of rocks were checked against range of tide.
21. Rocks transferred from topographic surveys have a dotted curve where shown thereon. Rocks located accurately by hydrographer are encircled by dotted red curve.
22. Unnecessary pencil notes have been removed.
23. Objects on which signals are located and which fall outside of the low water line have been described on the sheet.
24. The low water line and delineation of shoal areas have been properly shown.
25. Degree and minutes values and symbols have been checked.
26. Questionable soundings have been checked on the fathograms.

27. Source of shoreline and signals (when not given in report).
28. All notes on sheet are in accordance with figure 171 in the Hydrographic Manual.
29. All aids located, with those on contemporary topographic sheets, have been shown on survey.
30. Depth curves were satisfactory except as follows:
31. Sounding line crossings were satisfactory except as follows:
32. Junctions with contemporary surveys were satisfactory except as follows:
33. Condition of sounding records was satisfactory except as follows:
34. The protracting was satisfactory except as follows:
35. The field plotting of soundings was satisfactory except as follows:
36. Notes to reviewer:

Verified by

Date

ABSTRACT FOR SURVEY # 08566

<u>Volume #</u>	<u>Vessel</u>	<u>Block of #s Allocated</u>
1-3 4	Pioneer Bowie	0001-0926 2000-2088

PIONEER

<u>Manual</u>		<u>Automated</u>	
<u>Day</u>	<u>Position #s</u>	<u>Julian Day</u>	<u>Position #s</u>
"A" Day 09/14/60	1-014A	258	0001-0014A
"B" Day 09/15/60	0-096A	259	0015-0101A
"C" Day 09/16/60	0-060	260	0102-0163
"E" Day 09/21/60	3-060	265	0164-0217A
"F" Day 09/22/60	0-098	266	0218-0314A
"G" Day 09/23/60	0-122A	267	0315-0437A
"H" Day 09/24/60	0-135	268	0438-0574A
"J" Day 09/25/60	136-142A	269	0575-0705A
"K" Day 09/26/60	0-111A	270	0706-0821A
"L" Day 09/27/60	0-104	271	0822-0926

BOWIE

"A" Day 06/05/62	1-003	156	2000-2002
"B" Day 06/06/62	1-086	157	2003-2088

CROSS REFERENCE

<u>Volume #</u>	<u>Tape #</u>	<u>Vessel</u>	<u>Position #s</u>
1	Tape #1	Pioneer	0001-0400
2	Tape #1	Pioneer	0401-0897
3	Tape #1	Pioneer	0898-0926
4	Tape #2	Bowie	2000-2088

RHC

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Coast & Surveys~~

August 17, 1961

Division of Charts: R. H. Carstens

Plane of reference approved in
4 volumes of sounding records for

HYDROGRAPHIC SHEET 8566

Locality Pigeon Pt. and Bodega Head, California

Chief of Party: W. F. Deane (1960)
Plane of reference is mean lower low water reading
5.6 ft. on tide staff at San Francisco, California
10.2 ft. below B. M. 173 (1925)

Height of mean high water above plane of reference is: 5.2 ft.

Condition of records satisfactory except as noted below:

Burt W. Wilson
Chief, Tides & Currents Branch

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

NAUTICAL CHARTS BRANCH

SURVEY NO. H-8566

Record of Application to Charts

*Hold application of
cancel BK. Discrepancies
in this case.
to H.C.*

DATE	CHART	CARTOGRAPHER	REMARKS
7/7/61	5402	D.C. Davis	Before After Verification and Review <i>Exam. only. Nothing applied at this time.</i>
12-12-61	5021	h j Keeler	Before After Verification and Review Exam. for critical changes, Appd. ^{with the aid of} thru drug. # 14 chart 5002 ^(see back cover of 28)
4/16/62	5020	H. Radden	Before After Verification and Review <i>Partially applied.</i>
11-30-62	5598	<i>E. M. Brogan</i>	Before After Verification and Review <i>Fully applied</i>
8-21-63	5402	<i>D. G. Westbrook</i>	<i>Part Applied</i> Before After Verification and Review 1962 add'l work <i>No correction</i>
9-21-63	5502	John w Knoop	<i>Part Applied</i> Before After Verification and Review Exam - No Correction 1960 and 62 work
4-2-64	5072 <i>new chart</i>	<i>E. M. Brogan</i>	Before After Verification and Review <i>Partial blank space</i> 1962 add'l work & H-4993 ¹⁹²⁹ used at Caldwell Bank
5-10-90	18686	DM McALINDEN	Before After Verification and Review ADEQUATELY APPLIED CATEGORY I Before After Verification and Review Before After Verification and Review

M-2168-1

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.

Partially Applied - 6/7/61 - Wm Shook - CR 5052

Part applied 6-6-61 Wm Shook ch# 5002 - RKD 6-8-61

Part appl 7-6-61 DLD 5402 ✓

Part. appl. 12-12-61 hjk 5021

Part. Appl'd thru 5021 Drawing #10 3-29-62 H.R.

8566

Diag. Cht. Nos. 5402-2, 5502-2 & 9000-1.

Form 504

U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey **HYDROGRAPHIC**
Field No. ~~BO-100-2-62~~ Office No. **H-8566**

LOCALITY
State **CALIFORNIA**
General locality **COAST OF CALIFORNIA**
Locality **CORDELL BANK**

19 62

CHIEF OF PARTY

F. I. POPPER

LIBRARY & ARCHIVES

DATE **November 1962**

COMM-DC 61300

8566

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. _____
BQ-100-2-62
Field No. ~~XXXXXX~~

State California
General locality Coast of California
Locality Cordell Bank
Scale 1:100,000 Date of survey 6 June 1962
Instructions dated 18 April 1962
Vessel USCGS Ship BOWIE
Chief of party F. X. Popper
Surveyed by F. X. Popper, L. S. Brown
Soundings taken by ~~fathometer~~, graphic recorder, ~~hand level, etc.~~
Fathograms scaled by R. R. P., D. L. D.
Fathograms checked by A. T.
Protracted by Not Applicable
Soundings penciled by Not Applicable
Soundings in fathoms ~~xxx~~ at ~~MLLW~~ MLLW

REMARKS: _____

DESCRIPTIVE REPORT

TO ACCOMPANY

CORDELL BANK SPECIAL PROJECT 11-62

SCALE: 1:100,000

DATE: 1962

USC&GS SHIP BOWIE

F. X. POPPER, COMMANDING

A. PROJECT:

This survey was accomplished in accordance with instructions SP-11-62 dated 18 April 1962.

B. AREA SURVEYED:

This survey covers the area of Cordell Bank. The area is included between Latitude N37° 55' and N38° 05', and Longitude 123° 22.5'W and 123° 35'W.

This project was a resurvey of a small portion of H-8566.

C. SOUNDING VESSEL:

The Ship BOWIE was used for this entire survey.

D. SOUNDING EQUIPMENT:

Soundings were taken simultaneously with a Model 185 EDO and an 808 fathometer.

The 808 fathometer used was No. 57-24 and it is calibrated at 800 fathoms per second.

To obtain the 808 corrections, phase comparisons were observed by taking 10 readings at each change of scale. The 10 observations were then scanned and a mean correction determined. This correction was entered as the Echo Correction.

The EDO correction was obtained by a comparison of simultaneous soundings between the EDO and 808 fathometers.

The velocity corrections were furnished by the Washington Office.

The 808 fathometer was also tested for paper advance, radius of stylus arm and speed of arm and found to be in good order.

E. SMOOTH SHEET:

The project instructions state that no smooth sheet of this field examination will be made.

F. CONTROL:

Shoran was used as the control for the whole survey. The two stations, TOM (2) and REY (2a), were located at Tomales and Point Reyes, California.

In general, the reception of the signals was fair to good but when the swells increased to 6 feet, signal TOM would fade for a few seconds.

Most of the area included in this survey was outside of the 30° arc of inter-section of the two stations.

G. CROSSLINES:

Approximately 18% crosslines were run with very good crossings.

H. COMPARISON WITH PRIOR SURVEYS:

This survey does not check very closely with the soundings of H-8566. The discrepancy at some places was as much as 50 fathoms. The depth curves on this sheet are displaced eastward of the curves on H-8566. The displacement is not constant and in spots the curves are not similar in shape.

I. COMPARISON WITH CHART:

This survey checks reasonably well with chart number 5502.

J. ADEQUACY OF SURVEY:

This survey is deemed adequate for the purpose of resolving the discrepancies between H-8566 and H-4993.

K. STATISTICS:

Number of Positions - - - - - 89
Miles of Sounding Lines - - - - - 62.8 nautical miles
Area- - - - - 100 square miles

L. MISCELLANEOUS:

This survey was completed in a moderate sea. The swells encountered in this survey caused some soundings to be missed.

M. TABULATION OF APPLICABLE DATA:

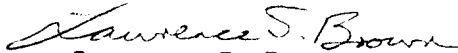
1. Shore Corrections
2. Tide Note
3. Velocity Corrections
4. Fathometer Corrections

Respectfully submitted,



Andrew Tezap
ENS, C&GS
USC&GS Ship BOWIE

Approved and forwarded:



Lawrence S. Brown
LT, C&GS
Cmdg., Ship BOWIE

SHORAN CORRECTIONS

REY 2a	
<u>DISTANCE (S. M.)</u>	<u>CORRECTION</u>
0 - 2.70	/ 0.065
2.71 - 5.30	/ 0.060
5.31 - 8.30	/ 0.055
8.31 - 10.80	/ 0.050
10.81 - 13.70	/ 0.045
13.71 - 16.40	/ 0.040
16.41 - 19.25	/ 0.035
19.26 - 21.90	/ 0.030
21.91 - 24.80	/ 0.025
24.81 - 27.50	/ 0.020
27.51 - 30.30	/ 0.015
30.31 - 33.00	/ 0.010
33.01 - 35.80	/ 0.005
35.81 - 38.50	0.000

TOM 2	
<u>DISTANCE (S. M.)</u>	<u>CORRECTION</u>
0 - 0.60	/ 0.085
0.61 - 3.30	/ 0.080
3.31 - 6.20	/ 0.075
6.21 - 8.90	/ 0.070
8.91 - 11.80	/ 0.065
11.81 - 14.40	/ 0.060
14.41 - 17.20	/ 0.055
17.21 - 20.00	/ 0.050
20.01 - 22.80	/ 0.045
22.81 - 25.50	/ 0.040
25.51 - 28.30	/ 0.035
28.31 - 31.00	/ 0.030
31.01 - 33.80	/ 0.025
33.81 - 36.60	/ 0.020
36.61 - 39.40	/ 0.015

TIDE NOTE

The standard gage at the Presidio in San Francisco was used to obtain tide reducers for this survey. The hourly heights were supplied by the Washington Office and a minus 45 minute time correction was applied to the values.

VELOCITY CORRECTIONS

<u>From</u>	<u>To</u>	<u>Corrections</u>
000 fathoms	22 fathoms	/ .2 fathoms
22 "	36 "	/ .4 "
36 "	51 "	/ .6 "
51 "	67 "	/ .8 "
67 "	84 "	/ 1.0 "
84 "	100 "	/ 1.2 "
100 "	118 "	/ 1.4 "
118 "	148 "	/ 1.6 "
148 "	194 "	/ 2.0 "
194 "	332 "	/ 2.7 "
332 "	438 "	/ 4.0 "
438 "	532 "	/ 5.0 "
532 "	619 "	/ 6.0 "
619 "	833 "	/ 7.0 "
833 "	968 "	/ 10.0 "

FATHOMETER CORRECTIONS

Fathometer #57-24

A Scale	0
B Scale	.8
C Scale	2.7
D Scale	2.8
E Scale	2.6

Neg. Values

The correction for the EDO soundings was obtained by taking simultaneous soundings on the 808 and the EDO fathometers. The comparison was taken on A Scale soundings and found that the correction was zero.

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. 8566 (Work of 1962)

Records accompanying survey: Smooth sheets; boat sheets; sounding vols. 2...; wire drag vols. 1...; Descriptive Reports 1...; graphic recorder envelopes 1...; special reports, etc.

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

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

Verification by Total time Date

Reviewed by Time Date

RHC

TIDE NOTE FOR HYDROGRAPHIC SHEET

February 14, 1963

Nautical Chart Division: R. H. Carstens

Plane of reference approved in
1 volumes of sounding records for

HYDROGRAPHIC SHEET 8566

Locality Cordell Bank, California

Chief of Party: F. X. Popper (1962)

Plane of reference is mean lower low water

ft. on tide staff at

ft. below B. M.

Height of mean high water above plane of reference at the
working grounds is: 5.3 feet.

Condition of records satisfactory except as noted below:



Chief, Tides and Currents Branch

100

TIDE NOTE FOR HYDROGRAPHIC SHEET

May 27, 1963

Nautical Chart Division: R. H. Carstens

Plane of reference approved in
2 volumes of sounding records for

HYDROGRAPHIC SHEET 8566 (Addition^{al} Work)

Locality California Coast - Outside San Francisco Bay

Chief of Party: F. X. Popper (1962)

Plane of reference is mean lower low water

ft. on tide staff at

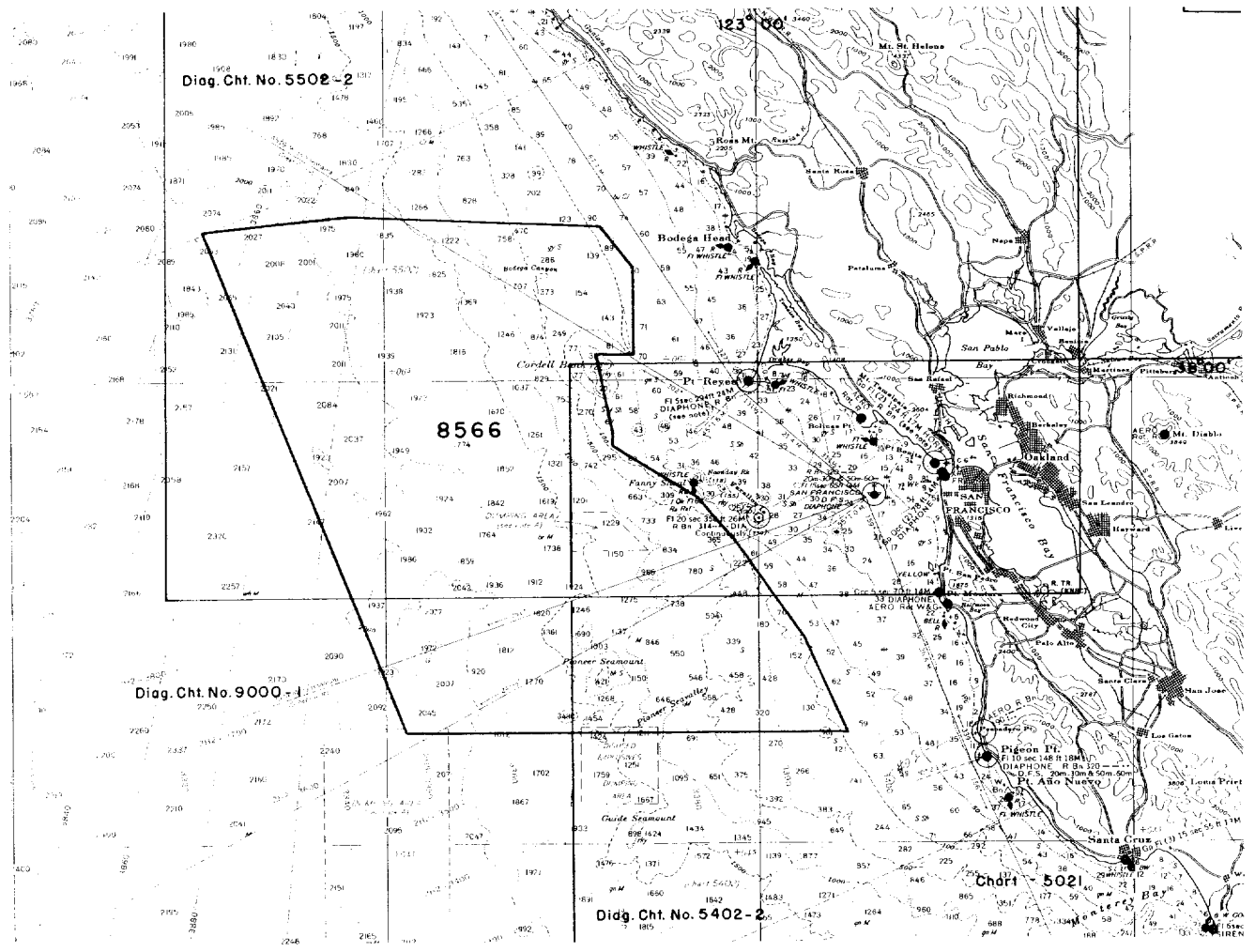
ft. below B. M.

Height of mean high water above plane of reference at the working
grounds is 5.3 feet.

Condition of records satisfactory except as noted below:



Chief, Tides and Currents Branch



Diag. Cht. No. 5502-2

8566

Diag. Cht. No. 9000-1

Diag. Cht. No. 5402-2

Chart 5021

5.8 FT

19-01-RM 180