

# 6320

(CONTAINS WIRE DRAG)

U. S. COAST & GEODETIC SURVEY  
LIBRARY AND ARCHIVES

DEC 29 1938

Acc. No.

(CONT. WIRE DRAG)

# 6320

Form 504  
Rev. April 1935

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

**DESCRIPTIVE REPORT**

*WIRE DRAG*  
*Topographic*  
*Hydrographic* } Sheet No. I-1938

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State California

LOCALITY  
Northern California Coast  
Vicinity  
2 1/2 miles south of Table Bluff

Lighthouse to Entrance Humboldt  
Bay Entrance to Humboldt Bay Entrance

---

1938

CHIEF OF PARTY

F. H. Hardy

U. S. GOVERNMENT PRINTING OFFICE

18

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

WIRE DRAG  
~~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. I-1938

(Contains

REGISTER NO. H 6320 W.D.)

State California

General locality Northern California Coast

Locality Vicinity of  
~~2 1/2 miles south of Table Bluff Lighthouse to~~  
~~Entrance Humboldt Bay Entrance~~

Scale 1:10,000 Date of survey July 29-30, 1938

Chartered Launches FLORENCE and VIRGINIA I and Ship

Vessel GUIDE'S Starboard Motorsailer.

Chief of Party F. H. Hardy

Surveyed by Walter J. Chovan

Protracted by Walter J. Chovan, H. S. Littlefair and F. L. Johnson.

Soundings penciled by Walter J. Chovan

Soundings in fathoms ~~feet~~ feet Drag depth in feet

Plane of reference M. L. L. W.

Subdivision of wire dragged areas by Walter J. Chovan

Inked by F. L. Johnson

Verified by Kenneth S. Ulm. *L. Ed. Stigman*

Instructions dated May 31, 1934, May 2, 1935 & March 6, 1937

Remarks: Dual control wire drag

Positions by visual fixes

DESCRIPTIVE REPORT  
to accompany  
WIRE DRAG SHEET FIELD NO. 1-1938  
Project HT-206  
Coast of California  
U.S.C. & G.S.S. GUIDE  
1938

INSTRUCTIONS: Director's instructions dated May 31, 1934 and ✓  
supplemental instructions dated May 2, 1936 and March 6, 1937.

CHARACTER AND LIMITS OF WORK: This sheet includes the area from ✓  
2 1/2 miles south of Table Bluff Lighthouse to the entrance of ✓  
Humboldt Bay, and approximately 1/2 mile offshore to 2 miles off-  
shore.

The area of the work on this sheet is 9 square statute miles. ✓

The scale of this sheet is 1:10,000. ✓

The position interval was usually five minutes with supple- ✓  
mental positions at radical changes in course and speed.

The effective depth is from 28 to 59 feet. ✓

CONTROL AND DATUM: This sheet is on the Final Adjusted North  
American Datum of 1927. Topographic signals were taken from Topo-  
graphic Sheets (field letters "T" and "U").  
r 6616 a + b

HYDROGRAPHY: A half day of hydrography was done by Ship GUIDE'S ✓  
starboard launch, from the South Jetty, at entrance to Humboldt ✓  
Bay to Table Bluff Lighthouse, and plotted on this sheet.

DATES OF SURVEY: Two days wire drag work was done on this sheet ✓  
on July 29 and July 30, 1938.

One days hydrography was done on this sheet on May 9, 1938. ✓

TIDAL REDUCERS: Tidal reducers for this sheet were obtained from ✓  
the portable automatic tide gages at Eureka, North Jetty.

For further information on this subject see Season's Tidal ✓  
Report.

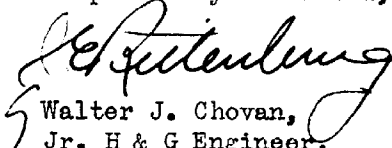
JUNCTIONS: The drag strip on the south end of this sheet is ✓  
continued from Wire Drag Sheet No. 2-1938. The drag strip on the ✓  
north was dragged as far as the signals on the sheet per-  
mitted.

The overlap of drag strips at the beginning and ending of strips on this sheet are good.

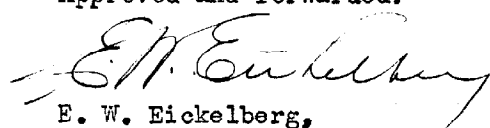
GROUNDINGS: There are no groundings on this sheet.

PERSONNEL AND LAUNCHES: Lieutenant (j.g.) Walter J. Chovan was in charge of this work, also in charge of the Guide Launch (Chartered Launch FLORENCE). Lieutenant (j.g.) Harry F. Garber was in charge of the end launch (Chartered Launch VIRGINIA I).

Respectfully submitted,

  
Walter J. Chovan,  
Jr. H & G Engineer,  
C. & G. Survey.

Approved and forwarded:

  
E. W. Eickelberg,  
Chief of Party, C. & G. S.,  
Commanding Ship GUIDE from October 3, 1938;  
Preceded by Captain F. H. Hardy from 6-15-38 to 10-3-38;  
Preceded by Comdr. O. W. Swainson from 5-1-38 to 6-15-38.

STATISTICS  
to accompany  
WIRE DRAG SHEET FIELD NO. 1  
1938

Date 1938	Day Letter	Vol.	Statute Miles	Positions	Drag Length Feet	Tender Soundings	Positions
July 29	A	1	1.5	27	10,000	---	---
" 30	B	1	6.8	117	10,000	---	---
TOTALS			8.3	144		---	---

HYDROGRAPHY.

Date 1938	Day Letter	Statute Miles	Positions	Soundings
May 9	A	14.0	109	429 hand lead

Area is 9 square statute miles.

Shelter Cove tides were used for reducers for work south of False Cape with no corrections for time or heights. For work north of False Cape when records at Humboldt Bay were incomplete or missing a correction of plus fifteen minutes was applied with no corrections for heights, in accordance with Director's letter dated October 26, 1938.

San Francisco tides were used for reducers on May 29th and October 7th to 18th inclusive, when records from Humboldt Bay and Shelter Cove were incomplete or not available. A Correction in time of minus 0.46 hours to high water, minus 0.14 to low water and a range factor of 1.12 to staff readings was applied. These factors reduce tides at San Francisco to Shelter Cove as of simultaneous comparison between these stations determined in 1936.

Hourly heights were tabulated for only the hours of those days on which work was done. High and low waters were not tabulated. Nor were simultaneous comparisons made between North Jetty, Humboldt Bay and Shelter Cove; as previous comparisons in 1937 were made from a better series of observations.

Respectfully submitted,

Walter J. Chovan,  
Jr. H & G Engineer,  
C. & G. Survey.

Approved and forwarded:

E. W. Eickelberg,  
Chief of Party, C. & G. S.,  
Commanding Ship GUIDE from October 3, 1938;  
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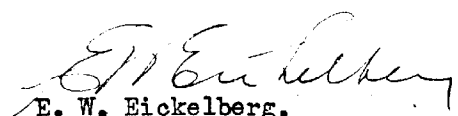
STATEMENT  
to accompany  
WIRE DRAG SHEET FIELD NO. 1  
1938

The plotting and protracting of buoy positions was done by F. L. Johnson and H. S. Littlefair, and verified by Lieutenant (j.g.) Walter J. Chovan.

The plotting of hydrographic positions was done by Lieutenant (j.g.) Walter J. Chovan.

The drag areas were subdivided by Lieutenant (j.g.) Walter J. Chovan and inked by F. L. Johnson.

The completed smooth sheet has been inspected and is approved.

  
E. W. Eickelberg,  
Chief of Party, C. & G. S.,  
Commanding Ship GUIDE from October 3, 1938;  
Preceded by Captain F. H. Hardy from 6-15-38 to 10-3-38;  
Preceded by Comdr. O. W. Swainson from 5-1-38 to 6-15-38.

LIST OF SIGNALS FOR WIRE DRAG SHEET NO. 1-1938.

Triangulation Stations.

Salt River, 1928 SALT  
Table Bluff Highest Wireless Tower, 1928 TABLE  
Mound U. S. E. 1911-19  
Log U. S. E. 1911-19

FROM TOPO SHEETS T & U, 1937-38.

DAY	FLIP	DAWN	TEL
SMO	TRI	SMALL	CLAM
KEY	BAN	ROD	NEW
DUCK	TAW	DISC	SIGN
TEX	LIT	CROSS	JACK
MILK	WAT	CAT	TOM
RAT	GUARD	TOWER	LOOK (Located in records of Sheet 41-37-38)



Field Records Section (Charts).

**H6320** Contains W.D.  
HYDROGRAPHIC SHEET NO. ....

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

	<i>WIRE DRAG</i>	<i>HYDROGRAPHY</i>
Number of positions on sheet	...144	107
Number of positions checked	.....8	5
Number of positions revised	.....0	1
Number of soundings recorded	.....9	429
Number of soundings revised	.....0	
Number of signals erroneously <i>Soundings erroneously spaced</i> plotted or transferred	None.	{ 4 118 (plotted in 6ths of fathoms 2 in depths over 7 fathoms)

Date: *FEB. 15, 1939*

Verification by *H.F. STEGMAN*

Time: *18 1/2 hours*

Review by *J.A. Mc Cormick, Feb. 16, 1939*

Time: 5 hr.

HYDROGRAPHIC SURVEY NO. H6320 <sup>(Contains</sup> W.D.)

Smooth Sheet Yes

Boat Shoet Two

Records; Sounding 2 Vols., Wire Drag 2 Vols., Bomb     Vols.

Descriptive Report Yes

Title Sheet Yes

List of Signals D.R.

Landmarks for Charts (Form 567) None

Statistics Yes

Approved by Chief of Party Yes

Recoverable Station Cards (Form 524) None

Special Chart for Lighthouse Service ---  
(Circular Nov.30, 1933)

Hydrography: Total Days 3 ; Last Date July 30, 1938

Remarks \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Remarks.

Decisions

	Remarks.	Decisions
1		See 407 242
2		See 406 242
3	<i>Referred to in tidal date - off limit of sheet</i>	
4	<i>Location of tide gage - off limit of sheet</i>	See 408 241
5		see 407 242
6		
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M 234		

GEOGRAPHIC NAMES  
 Survey No. **H6320**  
 W. D.

Name on Survey	Source of Name										
	A.	B.	C.	D.	E.	F.	G.	H.	K.		
✓ <u>Humboldt Bay</u>	✓										1
✓ <u>Table Bluff</u>	✓										2
Shelter Cove	✓										3
Eureka	✓										4
✓ <u>South spit</u>	✓										5
											6
											7
											8
											9
											10
											11
											12
											13
											14
											15
											16
											17
											18
											19
											20
											21
											22
Names underlined in red to be inked on H6320											23
✓ <u>HE</u>											24
1/11/39											25
											26
											27

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 6320 (1938) FIELD NO. 1

Vicinity of Table Bluff to Humboldt Bay, Northern California Coast,  
California.

Surveyed in July 1938, Scale 1:10,000

Instructions dated May 31, 1934; May 2, 1935 and March 6, 1937  
(GUIDE)

Wire Drag.  
Hand Lead Soundings.

Dual control.  
3 Point fixes on shore signals.

Chief of Party - F. H. Hardy.  
Surveyed by - W. J. Chovan.  
Protracted by - W. J. Chovan, H. S. Littlefair, F. L. Johnson.  
Subdivision of wire dragged areas by - W. J. Chovan.  
Soundings penciled by - W. J. Chovan.  
Inked by - F. L. Johnson and H. F. Stegman.  
Verified by - H. F. Stegman.

1. Shoreline and Signals.

Shoreline originates with T-4512 (1929) and T-4514 (1929).  
Topographic signals are from T-6616 a & b (1937). Hydrographic  
signal "Look" in lat. 40° 45.9', long. 124° 13.9' is identical  
with signal "See" on H-6415 (1937-38). The location cuts are  
recorded in the sounding volumes for that survey.

2. Junctions with Contemporary Surveys.

The junction on the south with H-6321 (1938) W.D. is satis-  
factory. No wire drag surveys have been made on the north.

3. Results of Survey.

a. Shoals discovered and clearance depths obtained.

The drag did not ground during the course of the survey.  
Four lines of soundings were run and are in good agree-  
ment with H-4999 (1929) and H-5001 (1929) within whose  
limits they fall. They should be used to supplement the  
1929 surveys in future charting.

b. Splits and insufficient overlaps.

There are no splits or insufficient overlaps.

4. Comparison with Latest Hydrographic Surveys.

H-4999 (1929), H-5001 (1929), H-6415 (1937-38), H-6416 (1938).

The hydrographic surveys show depths ranging from 7 to 15 fathoms  
in the area covered by the drag with effective depths of 28 to  
59 feet. The average distance of the drag off bottom was approxi-  
mately 20 feet. There are no conflicts.

5. Comparison with Chart 5602 (New Print dated Nov. 5, 1938).

There are no conflicts between charted depths and effective drag depths.

6. General Conformity with Hydrographic Manual and S.P. 118.

- a. The drag volumes are neat and legible.
- b. The descriptive report is satisfactory.
- c. The field plotting was excellent.
- d. Effective depths could have been 10 to 15 feet deeper (see par. 4, this review) but are accepted as satisfactory.

7. Compliance with Instructions for the Project.

The survey satisfies the instructions for the project.

8. Additional Field Work Recommended.

No additional work is recommended.

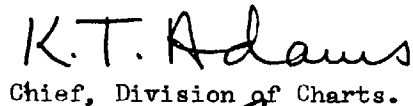
9. Reviewed by - J. A. Mc Cormick, Feb. 16, 1938.

Inspected by - E. P. Ellis.

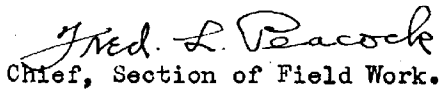
Examined and approved:



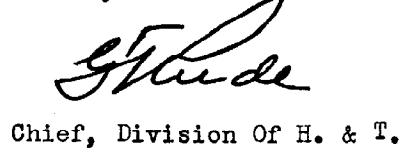
T. B. Redd,  
Chief, Section of Field Records.



Chief, Division of Charts.



Chief, Section of Field Work.



Chief, Division Of H. & T.

## Verification Report on H-6320 (1938)

### 1. Condition of Records.

The records are neat and legible, and conform to the requirements of the Hydrographic and Wire Drag Manuals.

### 2. Shoreline and Signals.

Signals originate with Topo sheets T and U (field letters)

1937-38.

T-6616 a & b

See par. 1,  
review.

The shoreline was penciled in the field, and verified and inked in the office. It originates with T-4512, and T-4514, 1929.

### 3. Depth Curves.

The 5 fathom curve can be completely drawn, within the area covered by hydrography on this sheet.

### 4. Junctions.

Hydrography on

This sheet covers a small portion of the areas of H-4999 (1929) and H-5001 (1929). The soundings on these two sheets, in the common area, were in good agreement with those of H-6320.

### 5. Field Plotting

The field plotting was neatly done. However, in penciling soundings of 7 fathoms or greater, the fraction was penciled in sixths rather than in quarters.

Several small changes in the shoreline, were made by the verifier. It is believed that these errors were caused by distortion in the print furnished to the field party.

Submitted by,

H. F. Stegman

Feb. 15, 1939



TIDE NOTE FOR HYDROGRAPHIC SHEET

Division of Hydrography and Topography:

January 28, 1939.

✓ Division of Charts: Attention: Mr. E. P. Ellis

Plane of reference  
~~Tide-Reducers-are~~ approved in  
 4 volumes of sounding/records for  
 and wire drag

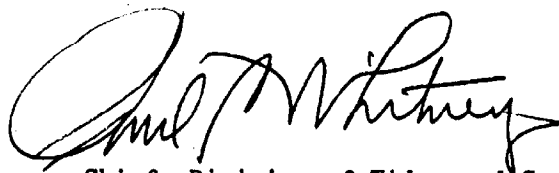
HYDROGRAPHIC SHEET 6320

Locality Vicinity of Table Bluff Lighthouse to entrance of Humboldt Bay,  
 Northern California Coast.

Chief of Party: F. H. Hardy in 1938  
 Plane of reference is mean lower low water reading  
 2.0 ft. on tide staff at North Jetty  
 11.5 ft. below B.M. 1

Height of mean high water above plane of reference is 5.8 feet.

Condition of records satisfactory except as noted below:



Chief, Division of Tides and Currents.

# MEMORANDUM

## IMMEDIATE ATTENTION

SURVEY DESCRIPTIVE REPORT <del>PHOTOSTAT OF</del>	}	No. H-6320 <del>No. T</del>	(Contains W.D.)	}	received Dec. 29 1938 registered Jan 4, 1939 verified reviewed approved
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This is forwarded in order that your attention may be directed to the matters as indicated below. Please initial in column 3 as an acknowledgement that your attention has been thus directed. The complete original records are available if desired. If you cannot give this your immediate attention, please initial, note, and forward to the next section marked, calling for the records at your convenience.

ROUTE		Initial	Attention called to
20			
22			
24			
25			
26			
30			
40			
62			
63			
82			
83			
88			
90			

RETURN TO

82	T. B. Reed
----	------------

✓ JBR

applied to chart 5832  
applied to chart 5602

Sept. 29, 1939

Oct. 9, 1939

G.K.S.

J.G.L.