

# 6423 WIRE DRAG

U. S. COAST & GEODETIC SURV.  
LIBRARY AND ARCHIVES

MAR 21 1959

No. 10

6423 WIRE DRAG

Form 504

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

....., Director

State: CALIFORNIA

DESCRIPTIVE REPORT

Topographic } Sheet No. 9 - 38  
Hydrographic }

LOCALITY  
Mendocino  
Little Hill Point to ~~POINT CABRILLO TO STILLEWELL~~  
POINT

1938  
~~1928~~

CHIEF OF PARTY  
F. H. HARDY.

Little Hill Point to

GOVERNMENT PRINTING OFFICE

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

U. S. COAST & GEODETIC SURVEY  
LIBRARY AND ARCHIVES

MAR 21 1939

REG. NO.

~~HYDROGRAPHIC~~ TITLE SHEET

WIRE DRAG

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. 9 - 38

REGISTER NO. H 6423 W.D.

State CALIFORNIA

General locality Northern Mendocino  
~~OFF MENDOCINO, CALIFORNIA COAST.~~

Locality Little River to Stillwell Point to Point Cabrillo  
~~POINT CABRILLO TO STILLWELL POINT, Little River~~

Scale 1:10,000 Date of survey September 10 - 28, 1938

Vessel Chartered Launches FLORENCE (guide) VIRGINIA I (end)

Chief of Party F. H. HARDY

Surveyed by I. E. RITTENBURG & W. F. MAINATE

Protracted by C. A. SCHOENE

Soundings penciled by \_\_\_\_\_

Soundings in fathoms ~~FMS~~ DRAG DEPTHS IN FEET

Plane of reference M. L. L. W.

Subdivision of wire dragged areas by C. A. SCHOENE

Inked by C. A. SCHOENE

Verified by A. F. Stegman

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. 9 - 38.  
Project H.T.206  
Coast of California  
U.S.C. & G.S.S. GUIDE  
1938.

INSTRUCTIONS: Instructions for this project were dated May 31, 1934, ✓  
and supplemental instructions dated May 2, 1935 and March 6, 1937.

CHARACTER OF WORK: This work includes the area from Point Cabrillo  
to Stillwell Point, and approximately one-half mile offshore to one and ✓  
one-quarter miles offshore.

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

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

The effective depth range is from eighteen to eighty-<sup>nine</sup> ~~five~~ feet. ✓

CONTROL: Control for the work on this sheet was by means of visual ✓  
fixes on shore objects located by triangulation or topography.

Dual control was used for the work on this sheet. ✓

Hydrographic signals were built over all recoverable triangulation  
stations, and plotted on the Final Adjusted North American Datum of 1927. ✓

Topographic signals were transferred from Topographic Sheet Field ✓  
No. A 'A' - 1936.  
T-4946

Shoreline was transferred from Sheet No. H - 4984, scale 1:20,000 ✓  
photostated to a scale of 1:10,000.

DATES OF SURVEY: Three days of work was done on this sheet, September ✓  
10, 14 and 28, 1938.

TIDAL REDUCERS: See Season's Tidal Report, attached. ✓

JUNCTIONS: The overlaps of drag strips joining with Sheet Field No. ✓  
8 on the north and Sheet Field No. 10 on the south are good.  
H-6411 W.D. H-6424 W.D.

There is a good overlap between this sheet and the work on Wire ✓  
Drag Sheet No. 4587 b.

A discrepancy of one foot in the deep section of the drag was noted  
where this sheet joined Sheet No. <sup>H-6413</sup> 8. This discrepancy could not be corr-  
ected in the field because Sheet No. 8 had gone into the office. Difference  
due to lift. O.K.  
H-6419

J. A. M.

GROUNDINGS: On September 14, in picking up the drag, the ground wire was found to be caught on a rock. A position was obtained but the end launch drifted off before a shoal sounding could be obtained. ✓  
Latitude  $39^{\circ} 19.26'$ , Longitude  $123^{\circ} 49.20'$ ; upright depth is thirty-three feet. This spot was covered twice, once with twenty-eight feet and once with twenty-six feet.

COMPARISON WITH PREVIOUS SURVEYS: An eight fathom sounding shown ✓  
on Chart No. 5703 at Latitude  $39^{\circ} 18'.83$ , Longitude  $123^{\circ} 49'.45$  was covered with forty-eight feet. Charted 8 originates with  $8\frac{1}{2}$  on H-5921 (1935) ✓  
J.A.M.

The drag depths on this sheet compare favorably with the soundings shown on Sheet H-4984. There are no drag depths greater than the soundings shown on Sheet H-4984. ✓

PERSONNEL AND LAUNCHES: Lieutenants I. E. Rittenburg and W. F. Malnate were in charge of this work and also in charge of the guide ✓  
launch. Lieutenant (j.g.) H. F. Garber was in charge of the end launch.

Respectfully submitted,

*Charles A. Schoene*

Charles A. Schoene,  
Aid,  
C. & G. Survey.

Approved and forwarded:

*E. W. Eickelberg*

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  
to accompany  
WIRE DRAG SHEET FIELD NO. 9 - 38.

TRIANGULATION

<u>Hydrographic name</u>	<u>Location</u>
CAB	Pt. Cabrillo Lighthouse, 1909
GUL	Russian Gulch <sub>2</sub> , 1929
POINT	Point, 1872
CINO	Mendocino <sub>2</sub> , 1919
HI	Mendocino High School Belfry, 1930
MASON	Mason, 1930
PAR	Chaparral <sub>2</sub> , 1930
STICK	Stickney, 1871
MAL	Mallory, 1930

TOPOGRAPHIC

Located on Topographic Sheet Field Letter A-1 - 1936.

ED	RIC	FLAG
CEN	POI	BARN
WHITE	TAN	TRI

STATISTICS  
to accompany  
WIRE DRAG SHEET FIELD NO. 9 - 38

Date 1938	Day Let.	Year Vol.	Statute Miles	Positions	Drag Length Ft.	Soundings	Tender Positions
9-10	A	1	7.4	106	6,000	--	--
9-14	B	1	2.0	41	4,000	--	--
9-28	C	1	1.4	20	4,000	--	--
TOTALS			10.8	167			

AREA IS 6 SQUARE STATUTE MILES.

STATEMENT  
to accompany  
WIRE DRAG SHEET FIELD NO. 9 - 38.  
1938

The smooth sheet and record have been inspected and are 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.

LWC

### TIDE NOTE FOR HYDROGRAPHIC SHEET

April 1, 1939

Division of Hydrography and Topography:

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

Plane of reference

~~Tide Records are~~ approved in  
3 volumes of sounding records for  
and wire drag

HYDROGRAPHIC SHEET 6423

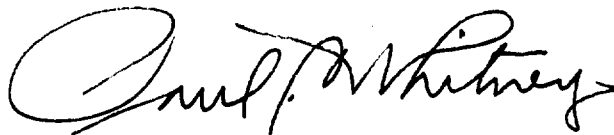
Locality Little River to Point Cabrillo, Northern California Coast

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, Humboldt Bay  
11.5 ft. below B.M. 1  
3.4 ft. on tide staff at Shelter Cove  
7.1 feet below B.M. 1A

Height of mean high water above plane of reference is 5.8 feet at  
North Jetty; 5.6 feet at Shelter Cove.

Condition of records satisfactory except as noted below:



Chief, Division of Tides and Currents.



GEOGRAPHIC NAMES

Survey No. H-6423 W.D.

Name on Survey	Sources											
	A	B	C	D	E	F	G	H	K			
<u>X</u> <u>Point Cabrillo</u>	✓											1
<u>X</u> <u>stillwell Point</u>	✓											2
<u>X</u> <u>Little River</u>	✓											3
<u>X</u> <u>Big River</u>	✓											4
<u>X</u> <u>Mendocino</u>	✓											5
<u>X</u> <u>colby Reef</u>	✓											6
<u>X</u> <u>Russian Gulch</u>	✓											7
												8
												9
												10
												11
												12
												13
												14
												15
												16
												17
												18
												19
												20
												21
												22
												23
												24
Names underlined in red approved											25	
by <u>MHE</u> on <u>3/30/39</u>											26	
											27	

Remarks

Decisions

	Remarks	Decisions
1		File No. 393 238
2		" 392 237
3		" 392 237
4		" 392 237
5		" 393 238
6		" 392,237
7		" 393238
8		
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Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. **H6423** W.D.

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

Number of positions on sheet	..167.
Number of positions checked	...21.
Number of positions revised	...0.
Number of soundings recorded	...0... {1 grounding 1 no bottom sdg}
Number of soundings revised	...0.
Number of soundings erroneously spaced	.....
Number of signals erroneously plotted or transferred	...None.

Date: **APRIL 7, 1939**

Verification by **H.F. STEGMAN**

Time: **8 hrs**

Review by **J.A.M. Cormick** 4/12/39.

Time: **8 hrs.**

HYDROGRAPHIC SURVEY NO. H6423 W.D.

Smooth Sheet Yes

Boat Sheet Two

Records; Sounding One Vols., Wire Drag Two Vols., Bomb     Vols.

Descriptive Report Yes

Title Sheet Yes

List of Signals In D.R.

Landmarks for Charts (Form 567) Yes

Statistics Yes

Approved by Chief of Party Yes

Recoverable Station Cards (Form 524) ---

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

Hydrography: Total Days 3; Last Date Sept. 28, 1938

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

# MEMORANDUM

## IMMEDIATE ATTENTION

SURVEY  
 DESCRIPTIVE REPORT } No. H-6423 W.D.  
~~PHOTOSTAT OF~~ } ~~No. T~~

{ received Mar. 21, 1939  
 { registered Mar. 28, 1939  
 { verified  
 { reviewed  
 { approved

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			
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62			
63			
82			
83			
88			
90			

RETURN TO

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

✓ JBR

## VERIFICATION REPORT ON H-6423(1938)WD

### 1. CONDITION OF RECORDS

The records are neat and legible, and conform to the requirements of the "Wire Drag" Manual.

The Descriptive Report (page 1, last paragraph) states that there is a discrepancy of 1 foot in the deep section of the drag, where H-6423 joins H-6419(1938)WD. This discrepancy is due to a difference of 1 foot in lift in this section, as noted in the Tender records of the two surveys. As drag lift tests were made at frequent intervals it is believed that this change in lift is correct as plotted.

The kelp recorded on page 18 of the Guide launch record was not inked by the verifier ( $\phi$ -39°-17.6' x 123°-48.5'). It falls well within the area dragged to  $3\frac{5}{8}$  feet on A day and is therefore believed to be floating kelp. No mention was made of this kelp on A<sup>day</sup> when the Guide launch passed about 120 meters inshore of its reported location.

### 2. SHORELINE AND SIGNALS

Shoreline originates with T-4499, T-4500, and T-4501 (1929)

Topo signals originate with T-4946 (1936) graphic control.

### 3. JUNCTIONS WITH CONTEMPORARY WIRE DRAG SURVEYS. ✓

Junctions were made with the following sheets:

H-6419 W.D. (1938) on the north.

H-6424 W.D. (1938) on the south.

H-4587.6 W.D. (1926) inshore in the vicinity of Russian Gulch.

Overlap was satisfactory in each case.

### 4. JUNCTIONS WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

The 5½ fm grounding (upright depth) was transferred in green ✓  
to H-4984 (1929)  $\phi - 39^{\circ} - 19.2$   $\lambda - 123^{\circ} - 49.2$

The kelp recorded on page 12 of vol. 1 was transferred in green ✓  
to H-4984 (1929)  $\phi - 39^{\circ} - 15.4$   $\lambda - 123^{\circ} - 47.8$

### 5. FIELD PLOTTING

Field plotting was well done - neat and accurate. The only work done over by the verifier was the transfer of limits of H-4587.6 W.D. This work had apparently been penciled without correcting the datum. ✓

April 7, 1939

Respectfully submitted

Harold F. Stegman

SECTION OF FIELD RECORDS

REVIEW OF HYDROGRAPHIC SURVEY NO. 6423 (1938) W. D. FIELD NO. 9

Little River to Point Cabrillo, Mendocino, California.  
Surveyed in September, 1938, Scale 1-10,000  
Instructions dated May 31, 1934;  
May 2, 1935; March 6, 1937. (GUIDE)

Wire Drag.

Dual control on shore signals.

Chief of Party - F. H. Hardy  
Surveyed by - I. E. Rittenburg and W. F. Malnate  
Protracted by - C. A. Schoene  
Subdivision of wire dragged areas by - C. A. Schoene  
Inked by - C. A. Schoene  
Verified by - H. F. Stegman

1. Shoreline and Signals.

- a. Shoreline was transferred in the field from a bromide enlargement of H-4984 (1929). It should not be used for charting purposes.
- b. Topographic signals originate with T-4946 (1936).

2. Junctions with Wire Drag Surveys.

Junctions with H-6419 (1938) W.D. on the north, H-4587b (1926) W. D. off Russian Gulch, and H-6424 (1938) W.D. on the south are satisfactory.

3. Results of Survey.

- a. Shoals discovered and clearance depths obtained.

A  $5\frac{1}{2}$  fathom grounding in latitude  $39^{\circ} 19.26'$ , longitude  $123^{\circ} 49.20'$  falls in depths of 18 to 25 fathoms on H-4984 (1929). Cleared with an effective depth of 28 feet.

- b. Splits and insufficient overlaps.

There is a small split at Mendocino Bell Buoy in latitude  $39^{\circ} 17.9'$ , longitude  $123^{\circ} 48.7'$ . Overlaps are otherwise ample.

4. Comparison with Latest Hydrographic Surveys.  
H-4984 (1929), H-4989 (1929), H-4990 (1929),  
H-5921 (1935).

There are no conflicts between soundings on the above surveys and effective drag depths on the present survey. The  $8\frac{1}{2}$  fathom shoal (charted as 8 fathoms) in latitude  $39^{\circ} 18.8'$ , longitude  $123^{\circ} 49.4'$  on H-5921



(1935) was cleared with an effective depth of 48 feet on the present survey.

5. Comparison with Chart 5703 (New Print dated Sept. 28, 1937)  
Chart 5710 (New Print dated May 18, 1937)

There are no conflicts between charted depths and effective drag depths. The position of Mendocino Bell Buoy, as determined on the present survey, is in substantial agreement with the charted position.

6. Condition of Survey.

- a. The drag records are neat and legible.
- b. The descriptive report satisfactorily covers all items of importance.
- c. The field plotting is very good.
- d. Effective depths are sufficiently close to bottom depths.

7. Compliance with Instructions for the Project.

The survey satisfies the instructions for the project.

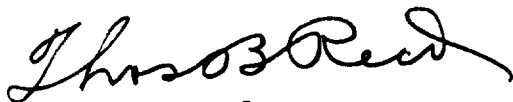
8. Additional Field Work Recommended.

No additional work is required.

9. Reviewed by - J. A. McCormick, April 12, 1939.

Inspected by - E. P. Ellis

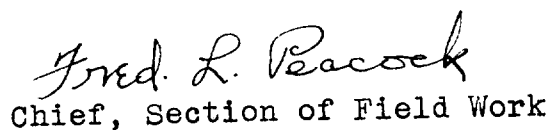
Examined and approved:



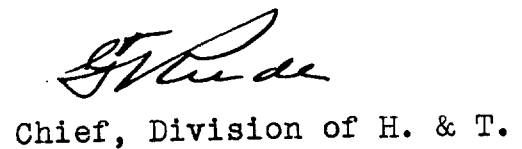
T. B. Reed,  
Chief, Section of Field Records



K. T. Adams  
Chief, Division of Charts.



Fred. L. Peacock  
Chief, Section of Field Work



J. H. Adams  
Chief, Division of H. & T.

Applied to Chart Comp. 5711 Aug. 13, 1941. H. M. E. Swen