U.S. COAST & GEOBETIC SURVEY LIBRARY AND ARCHIVES MAR 2 1938



Form 80.4 Rev. April 1935 DEPARTMENT OF COMMERCE U. S. COAST AND GEODETIC SURVEY
DESCRIPTIVE REPORT WIRE DRAG INTERPORT Sheet No. 4
State California
Nothern California Coast Rol War Gualala Point
793 7 CHIEF OF PARTY
F. H. Hardy

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U. S. COAST & GEODETIC SURVEY LIBRARY AND ARCHIVES

MAR 8 1938

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DEPARTMENT OF COMMERCE U. S. COAST AND GEODETIC SURVEY

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. 4 REGISTER NO. H-6248 W.D. California State General locality Northern California Coast Gualala Point Locality Rel Man Nov. 2 & 30. Scale 1:10,000 Date of survey Dec. 1 and 2 , 19 37 Vessel __GUIDE Chief of Party F. H. Hardy Surveyed by Charles Shaw Protracted by R. C. Bolstad Soundings penciled by R. C. Bolstad Soundings in fathoms feet Drag Depths in Feet Plane of reference M.L.L.W. Subdivision of wire dragged areas by R. C. Bolstad Inked by R. C. Bolstad Verified by May 2,1935, Project No. HT-206 Instructions dated March 6, 1937 & 3rd para. Director; s19 letter 22/MEK 1995 GU 4, dated July 29, 1937. Remarks: Dual Control-Visual fixes using Chartered Launches FLORENCE, (Guide Launch). VIRGINIA I (end launch) & No. 28 A 889 (tender).

U. S. GOVERNMENT PRINTING OFFICE

DESCRIPTIVE REPORT
to accompany
WIRE DRAG SHEET FIELD NO. 4
Project No. HT-206
DEL MAR
Coast of California
U.S.C. & G.S.S. GUIDE
1957

INSTRUCTIONS:

Instructions for Project No. HT-206 were dated May 2, 1935. Supplemental Instructions for this work were dated March 6, 1937, and July 29, 1937, in the third paragraph of letter from the Director, Ref. No. 22/MEK, 1995 GU 4.

WORKING CONDITIONS:

The drag work around Del Mar Landing was considered of primary importance and was completed at the earliest opportunity that weather conditions permitted. It should be understood that the nearest safe anchorage for the wire drag launches was at Drakes Bay some 65 nautical miles distant. On the runs to and from Del Mar Danding it was necessary to tow the tender from and to Bodega Head so that dragging could start at once upon arrival and continue through the few remaining daylight hours as long as possible.

On the first day of this dragging season just north of San Francisco that weather seemed suitable for work off Del Mar() that is on November 2nd, the radio weather reports, sea, wind and barometer conditions were all favorable that morning and it was expected after dragging to spend the night at anchor at Fish Rocks, yet by mid-afternoon conditions had become distinctly unfavorable.

The launches had anchored for the night on November 1st under Bodega Head in Bodega Bay, and at 6 the next morning made a dash up the coast under good conditions towing the tender. Arrival on the working grounds was about 11 and the drag was set out immediately. By early afternoon the northwest wind and sea had picked up sharply so that it was necessary to quit dragging at 3:00 p.m. and hasten back supposedly to Bodega Bay shelter. We reached the Head after dark by 8:00 o'clock. Going with the northwest wind and sea was not bad until the buoy off Bodega Head was reached, but on making the turn from the buoy to clear the Head it was not but a few minutes before the guide launch found itself suddenly in troubled dangerous water from the heavy northwest swell producing bad rollers over the comparatively deep water between the buoy and Bodega Head. Changing course and getting out of this as soon as possible the end launch, which was astern a mile, was contacted by radio phone and warned. The end launch requested

approval of attempting to cross the Bodega Bay shoal at the deepest part if sea conditions were here satisfactory. However, upon reaching this area it quickly withdrew from this attempt as conditions were at least equally dangerous there.

The entrance to Tomales Bay is impossible in strong northwest weather. Hence the safe maneuver was to head for Drakes Bay rather than attempt further possible trouble in Bodega Bay under unfavorable conditions, and the three launches arrived there at almost midnight after a very rough time doubling Point Reyes.

The remaining two trips to Del Mar area were made satisfactorily with one night spent at anchor off the Gualala River.

LIMITS OF WORK:

The dragging on this sheet is from about 2 1/4 miles southeast to 3 1/2 miles northwest of Del Mar Landing. Or from the vicinity of Latitude 38° 43' N and Longitude 123° 29'W to the vicinity of Latitude 38° 46'N and Longitude 123° 34'W. The dragged area covered extends from the 30 to 40 fathom curve about 2 miles offshore, to within 1/4 to 1/2 mile from the shore. The inshore limit was slightly outside the generalized foul area line but as close as practicable bearing in mind the attendant dangers in drag launch operations due to swell, offlying rocks awash, kelp, etc.

No wire drag sheets join this work.

PURPOSE OF WORK:

The immediate purpose of this dragging was to prove or disprove a charted sunken "PD" rock off Del Mar Landing bout 3/4 mile as shown on Chart 5502. See chart letter No. 423 of 1932.

An effective drag depth of 82 feet was carried over this spot and the dragging extended inshore 1/2 mile and offshore 3/4 mile from the charted location and also 3 miles north and 2 miles south of the reported position.

It has been recommended by this party that this "PD" be expunged from the chart.

LOCAL INFORMATION:

Masters of several steam schooners navigating along these waters report no evidence of this "PD" rock, and it is their opinion the "SOMOA" was close inshore when she struck.

CHARACTER OF WORK:

The scale of the projection is 1:10,000. Dual control by sextant angle fixes was used with usual position interval of 5 minutes except when it seemed advisable to have closer control when 2 1/2 minute intervals were used.

(1) Del Mar to be deleted from chart. 3/21/38 GM.E.

Drag tests were made as often as appeared necessary and at least once a day and usually after every hook-up unless prevented by unavoidable circumstances. Drag speed was maintained as far as practicable at not over 1 1/2 miles per hour to minimize or eliminate lift. Effective drag depths ranged from 15 to 90 feet.

DATUM AND CONTROL:

This sheet is on the adjusted North American 1927 datum. Triangulation stations were located in 1878 and 1930. Topographic stations are from T-4507 and from 1937 topographic field sheet "L" 58248 GUIDE.

All shoreline, offlying rocks, etc. were transferred from photostats of sheets T-4506 and T-4507 and none of the topographic features such as offlying rocks, etc. were located by the 1937 field party.

DATES OF SURVEYS:

Wire drag work on this sheet was done on November 2nd, 30th and December / 1st, 2nd, 1937. All work was done by the chartered launches.

TIDAL REDUCERS:

Tidal reducers for this sheet were taken from the records of the standard automatic tide gage at San Francisco maintained by the San Francisco Field Station. See attached Tidal Data Sheet for further information.

JUNCTIONS AND OVERLAPS:

As no wire drag work has been previously done here there are no junctions with other sheets. The overlaps of the adjacent and adjoining lines are good, conforming to first class wire drag practice.

There are no splits.

GROUNDINGS:

At Position 1 a, 49 feet, rocky, near Buoy No. 2, it was realized additionally that the drag was aground also some what toward Buoy No. 1 from this spot but with very rough storm weather fast making up from the northwest at this time the guide launch towline parted in trying slowly to maintain the "V" in the drag. With a safe anchorage 8 hours away, which would be about midnight, it was felt no further time should be lost in making shelter and no further work of investigating was done by the tender on this day. However, at positions 1 c and 2 c, both 38 feet, rocky, the additional shoal was found and was covered with an effective depth of 37 feet.

The soundings in a cluster at positions 2 b, 3 b and 4 b, rocky, least depth 29 feet, were covered by an effective depth of 16 feet in clearing

Position 5 b, rocky, 21 feet, only 50 yards inshore from this cluster.

Pos.No. & Day Letter	Longitu & Latitud		Grounded Eff. Depth	Least Sdg. Depth	Cleared Eff. Depth	Depth Plotted	l Remarks
	0	1	Feet	Fms.	Feet	Fms.	Inshore limit dragged
1 a		1.63 / 1.66 \		8 1/4	37 42	8 1/4	area.
		5.71					-ditto-
3 b	123 32	2.48	38	6	16	6	Pos.2b is 6 4/6 fms. between pos. 3 & 4b. This pos.in general vicinity of 5b.
4 b ·	-	5.70 2.47	38	4 5/6	16	4 5/6	Inshore limit dragged area. This pos. in general vicinity of 5b.
	38 4	5.73				,	Inshore limit dragged
5 b	123 3	2.45	23	3 1/2	16	3 1/2	area.
2 0		4.67 1.65	42	6 2/6	37	6 2/6	-ditto- Pos. lc in practically same location with 6 2/6 fms.

COMPARISON WITH PREVIOUS SURVEYS AND CHARTS:

There are no soundings on H-4986, 4987 and 5094 nor on Chart 5502 shoaler than the dragged depths shown on this sheet.

PERSONNEL AND LAUNCHES:

Lieutenant-Commander Charles Shaw was in charge of this work and in charge of the guide launch. Lieutenant W. H. Bainbridge and Lieutenant (j.g.)
Walter J. Chovan were in harge of the end launch on different days.

Chartered Launch FLORENCE was used as guide launch and VIRGINIA I as end launch. Chartered Launch No. 28 A 889 was used as tender.

Respectfully submitted,

H. & G. Engineer, C. & G. Survey.

Approved, forwarded:

F. H. Hardy,

Chief of Party, C. & G. S.,

Commanding Ship GUIDE.

STATEMENT to accompany WIRE DRAG SHEET FIELD NO. 4 1937

The plotting and protracting of buoy positions was done by Lieutenant (j.g.) R. C. Bolstad.

The drag areas were subdivided and inked by Lieutenant (j.g.) R. C. Bolstad.

The completed smooth sheet has been inspected and is approved.

F. H. Hardy,

Chief of Party, C. & G. S., Commanding Ship GUIDE.

STATISTICS to accompany WIRE DRAG SHEET FIELD NO. 4 1937

Date	Day		Statute		Drag Length	Tend	er
1937	Letter	Volume	Miles	Positions	Feet	Soundings	Pesitions
Nov. 2	A	1	3.6	61	10,000	1	1
30	В	1	4.4	95	10,000	5	5
Dec. 1	C	1	3.0	63	10,000	2	2
2	D	1	0.9	25	4,200		-
TOTALS			11.9	244		8	8

TOTAL AREA 8 SQUARE STATUTE MILES.

LIST OF SIGNALS for WIRE DRAG SHEET FIELD NO. 4 1937

TRIANGULATION

Hydrographic Name	Location					
FRICK	Frick Ranch Barn, South Cupola, 1930					
CHIM	Bournes Landing, House Chimney,					
SAND KNIPP	Sandstone, 1878 Knipp, 1878					

TOPOGRAP HIC

	Sheet
HED	T-4507, 1929
JAN	C.S. 62ևթ
BARN	C.S. 62 48 L-193 7
BIL	11
ALE	n
RIV	11
DOG	n e
CAL	n

TIDE NOTE FOR HYDROGRAPHIC SHEET

March 15, 1938.

Division of Hydrography and Topography:

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

Plane of reference

Tide Reducers are approved in

3 volumes of sounding records for

HYDROGRAPHIC SHEET 6248 W. D.

Locality Del Mar, Northern California Coast.

Chief of Party: F. H. Hardy in 1937

Plane of reference is mean lower low water reading

5.55 ft. on tide staff at Presidio (Golden Gate) Not on H-6248 GHE

10.3 ft. below B.M. 165

Time of tide used is 40 minutes earlier than San Francisco with the range the same.

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

Condition of records satisfactory except as noted below:

Chief, Division of Tides and Currents.

		Chart 60	16 1/163	7. Nog	or localitation	On lead Mage	O Cajide of	Mood Medilin	ALION JE	ر ار
Name on Survey	/A,	B,	C,	S. Made	E	S	G		J.S. JS	
Bournes sending	1	Bourn's Ladg.								1_
Robinson Reef	V	/								2
* Gualala	V	Walalla Walalla								3
Gualala River	/	R		ļ						4
Gualala Point	/	walalla Pt							Gualala Pt. I.	5
Dex Mark Darding	/	T-4506								6
Bourn Rock		~								7
Jeff Davis Rock										8
Robinson Y Point		/								9
Robinson Point Walatta Landing Walatta (vittage)									<u> </u>	10
Walalla (village)										11
										12
										13
										14
										15
,				<u>.</u>						16
				<u> </u>						17
										18
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	<u></u>									20
										21
	·····		-							22
										23
·										24
Hames underlined in red appr	oved									25
by It on 3/2/	38	-								26

Decisions

	Terriar As	Decisions
1	Called Bournes Landing T- 4506 (pg. 2)	Landing destroyed See D.R.
2		
3	* Not necessary to be inted on this sheet.	USGB decision
4		11 4
5		
6		No longer in use see USCP pg. 133.
7	•	
8	a sunken rock Lat 38°-46.68; Long. 122-33.52	
9		
10		
11		
12		
13	·	
14		
15		
16	·	
17		
18		
19		
20	·	
21		
22		
23		
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25		
26		
27		
M 234		

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. H6248 W.D.

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

Number of positions on sheet	25 2
Number of positions checked	!!
Number of positions revised	0.
Number of soundings recorded	8
Number of soundings revised	0
Number of signals erroneously	
plotted or transferred	0

Date: april 8, 1938

Verification by g.a. me Cormick

Review by g.a. me Cormick

Time: 8 hrs.

Time: 5 hrs.

HYDROGRAPHIC SURVEY NO. H-6248 W.D.

Smooth Sheet Yes
Boat Sheet Yes (Two)
control Sheet One
Records; Sounding One Vols., Wire Drag Two Vols., Bomb Vols.
Descriptive Report Yes
Title Sheet Yes
List of Signals Vol.#1 W.D.
Landmarks for Charts (Form 567) None
Statistics Yes
Approved by Chief of Party Yes
None
Recoverable Station Cards (Form 524) None
Special Chart for Lighthouse Service None
Special Chart for Lighthouse Service None (Circular Nov. 30, 1933)
Hydrography: Total Days 4; Last Date Dec. 2, 1937
Remarks

MEMORANDUM IMMEDIATE ATTENTION

SURVEY DESCRIPTIVE REPORT PHOTOSTATXOR)	received Mar. 7, 1938 registered Mar. 9, 1938 verified reviewed approved
		Capproved

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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40			
62			
63			
82			
83			
88			
90			
-			

RETURN TO

82 T. B. Reed

Verefrer's Report on H-6248 (1937) W.D.

No comments other than those contained in the review are considered necessary.

april 8, 1938.

J.a. me Cormick.

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 6248 (1937) W. D. FIELD NO. 4

Gualala Point, Northern California Coast, California Surveyed in Nov.-Dec. 1937, Scale 1:10,000 Instructions dated May 2, 1935 and March 6, 1937 (GUIDE) and Director's letter of July 29, 1937

Wire Drag Hand Lead Soundings.

Dual control on shore signals.

Chief of Party - F. H. Hardy.

Surveyed by - Charles Shaw.

Protracted by - R. C. Bolstad.

Subdivision of wire dragged areas by - R. C. Bolstad.

Inked by - R. C. Bolstad.

Verified by - J. A. McCormick.

1. Condition of Records.

The records are neat and legible and conform to the requirements of the Hydrographic Manual and of S. P. 118.

The Descriptive Report is complete and satisfactorily covers all items of importance.

2. Compliance with Instructions for the Project.

The survey satisfies the general instructions for the project. The investigation of the "P. D." rock called for in the Director's letter of July 29, 1937 was satisfactorily accomplished (see par. 6a, this review).

3. Shoreline and Signals.

- a. Shoreline originates with T-4506 (1929) and T-4507 (1929).
- b. Topographic signals originate with T-4507 (1929) and control sheet C. S. 6248 (1937).

4. Junctions with Wire Drag Surveys.

There are no wire drag surveys adjoining this survey.

5. Comparison with Latest Hydrographic Surveys. H-4987 (1929), 1:40,000; H-5094 (1930), 1:10,000.

The present survey covers portions of the above hydrographic surveys. The effective drag depths do not conflict with the depths shown.

6. Comparison with Chart 5502 (New Print dated Oct. 12, 1937).

a. Hydrography.

The sunken rock, P. D., charted in latitude 38° 43.9', longitude 123°31.3' originates with Chart Letter 423 of 1932 which reports the striking of the S. S. Samoa on an uncharted rock 1/4 mile south of Del Marr Landing and 3/4 mile offshore. The vessel was drawing 15 feet aft when she struck. No soundings or bearings were taken but the weather was clear and the master was positive in his statements as to the ship's position. The reported position falls in 23 fathoms on H-5094 (1930) and was cleared with an effective depth of 82 feet on the present survey (see Descriptive Report, page 2). The surrounding area from 1/2 mile inshore to 3/4 mile offshore and parallel to the shore for two to three miles on either side was dragged with effective depths of 37 to 90 feet. There is no doubt as to the nature of the obstacle encountered because a large piece of rock was removed from the hull when the vessel was in dry dock. The reported position is undoubtedly erroneous, however, and the sunken rock, "P. D.", should be removed from the chart. There are no other conflicts between the effective drag depths and the charted information.

b. Aids to Navigation.

There are no navigational aids within the area of the present survey.

7. Field Plotting.

The field plotting was, in general, excellent. A difference in length of the two uprights in an inclined section exceeding 2-1/2 per cent of the length of the section was not taken into account in the subdivision of the D day drag strips (S. P. 118, page 37, par. 2). The necessary changes were made in the office.

8. Results of Survey.

a. Shoals discovered and clearance depths obtained.

- (1) The 6-2/6 and 8-1/4 fathom soundings in latitude 38° 44.65', longitude 123° 31.65' falling in 12 fathoms on H-5094 (1930). Cleared with an effective depth of 37 feet.
- (2) The 3-1/2 and 4-5/6 fathom soundings in latitude 38° 45.72', longitude 123° 32.46' falling in 9 to 11 fathoms on H-5094 (1930). Cleared with an effective depth of 16 feet.

b. Effective Depths.

The effective depths of the various drag strips are sufficient to insure safety to surface navigation to within 1/4 to 1/2 mile from the shore.

Splits and insufficient overlaps.

There are no splits within the dragged area and the overlaps are satisfactory.

9. Additional Field Work Recommended.

The survey is complete and no additional field work is required.

10. Reviewed by - J. A. McCormick, April 8, 1938.

Inspected by A. L. Shalowitz.

Examined and approved:

T. B. Reed,

Chief, Field Records Section.

Chief. Division of Charts.

Chief, Division of H. & T.

CONTROL SHEET

Form 504
Rev. April 1935
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

U. S. COAST & GEODER L.C. LIBRARY AND ARE

MAR 2 1938

Acc. No.

DESCRIPTIVE REPORT

Topographic | Sheet No. L-37

State California

LOCALITY

South of Point Arena

Del Mar Landing

1937

CHIEF OF PARTY

F. H. Hardy

U. S. GOVERNMENT PRINTING OFFICE

SONTROL SHEET

DEPARTMENT OF COMMERCE U. S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET

The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field Letter L-37

REGISTER NO.

State	Califor	nia		
General loc	ality South of Po	oint Arena		
Locality A	t and South of De	l Mar Landing		
Scale 1:10	,000 Date of	survey Octo	ober	, 19 3
Vessel GUI	DE	· 		
Chief of Pa	rty F. H. Hardy			
Surveyed by	H. G. Coner	ly		
Inked by	H. G. Coner	ly	••••••	
Heights in	feet above	to ground	l to tops of	ftrees
Contour Ar	proximate contour	Form line in	terval	feet
Instruction	s dated May 31,		·,	, 19 34
Remarks: Th	is sheet for grap	hic control on	ly.	

DESCRIPTIVE REPORT to accompany TOPOGRAPHIC SHEET FIELD NO. L-1937

INSTRUCTIONS:

Dated May 31, 1934 and Director's letter dated July 29, 1937. Project HT-206.

CONTROL:

Triangulation stations are on 1927 datum. 🗸

PURPOSE OF SURVEY:

The purpose of the survey was to furnish control for the wire drag work in this vicinity.

METHODS:

Stations CAL and RED were located by rod readings from Station BOURNS LANDING 1879 and checked by a cut from Station ROBISON POINT 1878. DOG was located by a rod reading from ROBISON POINT 1878 and a cut from BOURNS LANDING 1879. BIL was located by cuts from BOURNS LANDING 1879 and ROBISON POINT 1878. For a check a set up was made at station and a check made on stations ROBISON POINT, BOURNS LANDING and Topographic Station RIV. Riv was located by cuts from triangulation stations BOURNS LANDING, ROBISON POINT and SANDSTONE. Station BARN was located by a cut from Station SANDSTONE, a traverse to the station from SANDSTONE and checked by resection on KNIPP 1878. ALE was located by a rod reading from Station SANDSTONE.

There is no magnetic meridian on the sheet but declinometer observations were made on all of the triangulation stations during the time the work was being done.

GENERAL DESCRIPTION OF COAST:

Along the coast are low rolling hills with bluffs at the high water line from about 25 to 100 feet high. There are several rows of trees extending in a northeasterly-southwesterly direction. The north one is very near Signal RIV and the most southerly one is approximately 3/4 mile south of the limits of the sheet. These lines of trees are used for wind breaks and extend back to where the hills become steeper, approximately 3/4 mile from shore.

CHANGES SINCE LAST SURVEY:

Bourns Landing has been burned and wrecked and at present all the landing is gone except a very small upright boiler called CAL on the sheet.

Bourns Landing, House Chimney 1930, is located on the largest and unpainted house nearby. There are a few outhouses and a small red tank left of the old landing houses.

Respectfully submitted,

H. G. Conerty,

Aid,

C. & G. Survey.

Approved, forwarded:

F. H. Hardy,

Chief of Party, C. & G. S.,

Commanding Ship GUIDE.