

6485

U. S. COAST & GEODETIC SURVEY
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Form 504
Rev. Dec. 1933
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R. S. PATTON, DIRECTOR

DESCRIPTIVE REPORT

Topographic | Sheet No. _____
~~#####~~ Field No. D

State CALIFORNIA

LOCALITY

~~Northern California~~ NORTH COAST

~~NEEDLE ROCK AND WHALE GULCH~~

Bear Harbor to Small White Rock

1935

CHIEF OF PARTY

F. H. HARRY

U. S. GOVERNMENT PRINTING OFFICE: 1934

6485

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVE

MAY 12 1936

REG. NO.

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.

6485

Field Letter D

REGISTER NO.

State CALIFORNIA

General locality NORTH COAST Northern California Coast

Locality NEEDLE ROCK AND WHALE GULCH Bear Harbor to Small White Rock

Scale 1:10,000 Date of survey August, 19 35

Vessel U.S.C. & G.S.S. GUIDE

Chief of Party F. H. Hardy

Surveyed by Max G. Ricketts

Inked by Max G. Ricketts

Heights in feet above high water to ground ~~#####~~

Contour Approximate ~~#####~~ Form line interval 100 feet

Instructions dated May 2nd, 19 35

Remarks:

1

DESCRIPTIVE REPORT

to accompany

Topographic Sheet No. D.

PROJECT NO. HT-206

U.S.C. & G.S.S. GUIDE

F. H. Hardy, Commanding

Season 1935

INSTRUCTIONS

Director's instructions dated May 2, 1935.

LIMITS

This sheet covers the shoreline of the North Coast of California from [△]Bear Harbor 2 to [△]White Rock. Junction at the south end is with Sheet C-1935 and at the north end is with Sheet E-1935.

DESCRIPTION

At the south end of the sheet the north end of a detached coastal ridge with an extreme height of 375 feet is quite prominent. The ridge is grass covered and has sheer bluffs on it's coastal face. From this ridge a narrow grass covered flat, elevation 100 to 180 feet, extends northward parallel to the coast and ends just south of Whale Gulch. The coastal face of this flat is an abrupt bluff ranging in height from 100 to 150 feet. One of the few sand beaches of any size found along the Mendocino County Coast extends from the ledge rock at the southern end of the flat on northward past the old Needle Rock Landing. Scattered small rocks lie a short distance off this beach. The group of old mill buildings, a few houses and an old loading platform about midway up the flat are all that remains to mark the abandoned Needle Rock Landing. The north end of the flat is marked by a small group of ranch buildings. The ridge in back of the flat rises abruptly over grassy slopes with scattered timber above 1500 feet. ✓

2

Whale Gulch at the northern end of the flat is a deep creek gully but does not show well from offshore. On north of the gulch the hills rise abruptly from the coast to heights of 1400 to 1500 feet and are in general grass covered with scattered timber along the top of ridge. The bluff faces show heavy erosion and numerous small rocks are found close inshore. In general the area covered by this sheet has very little in the way of distinguishing features which are of use to the navigator.

CONTROL

The control for this sheet was furnished by the 1930 scheme of second order coastal triangulation supplemented by the field adjusted position of White Rock 1871.

SURVEY METHODS

The usual methods of plane table topography were used on this sheet. Triangulation stations Bear Harbor 2, Laurie 2 and Whale Gulch 2 were occupied for cuts.

A traverse from Bear Harbor 2 northward to Topographic Signal IRA (Lat. 39-58.1) was completed by a shore party. This traverse was checked by resection at Laurie 2, Needle Rock and Double Rock, error 3.7 meters not adjusted. A check at Whale Gulch 2, error 4.5 meters was not adjusted. All offshore detail was located by the intersection of at least three cuts. At the northern end of this traverse cuts were taken to the two offlying rocks (Topographic Signals SIX and HOD) and the position of SIX so determined. From this point north it was impossible to carry traverse along the beach due to numerous impassable points.

For the remainder of this sheet the shore party was detailed to duty aboard the GUIDE. The Gig and dory were used for transportation along this section. Topographic Signal SIX (Lat. 39-58.1),

as determined from the previously mentioned traverse, was occupied for cuts and a traverse carried on north along the coast closing at White Rock 1871, error 5 meters not adjusted. On this traverse the offshore detail is located by the intersection of at least three cuts or by rod readings.

Elevations were taken from triangulation and traverse stations to check the old form lines.

COMPARISONS WITH PREVIOUS SURVEYS

This sheet covers the area previously surveyed on Sheet T-1285 in 1872 and Sheet T-1324 in 1873. One discrepancy found common to all the 1873 sheets resurveyed in 1935 and which was also found in the 1872 work covered by this sheet is the lack of definition between high water and MLLW rocks. This has occasioned a general revision of the rocks in this area. In general the shoreline agreement was satisfactory. Slight discrepancies were noted in the high water line from the southern end of the sheet to Needle Rock, the base of the bluff was shown on Sheet T-1285 as high water line. The 1935 work represents existing conditions and this section should be so charted. North of Whale Gulch discrepancies up to 50 meters were noted these being almost entirely due to the heavy erosion along this section. Some minor discrepancies were noted in the shapes of bights and points. This entire section should be charted as shown on the 1935 work as this represents clearly the existing condition of the area. Throughout the entire section of shoreline covered by this sheet a great many changes have been made in the close inshore detail. The 1935 work along this section was done during a period of low tides and the traverse closures were within that allowed. Taking these points and the time between the two surveys into account it is believed that this detail should be charted as shown on the 1935 sheet.

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Minor revisions of the form lines were made in the southern part of this sheet and in the vicinity of Red Hill 2. It will be noted that the penciled transferred form lines as shown on this sheet are not complete. As transferred they show all form lines which could be taken from the bromide of T-1285 which was furnished this party. The form lines shown dotted in red are the sketched completion of those transferred from T-1285 and were sketched in the field without additional control. These dotted form lines should be used for charting only in case that the original of Sheet T-1285 does not show complete form lines.

Discrepancies warranting special attention are as follows:-

(1) Lat. 39-55.3 to 55.8 -- In this area numerous changes in the shape of points and the definition of rocks were made. It is noted that the Sheets T-1285 and T-1324 of the 1872-3 work in overlapping at this point do not exactly agree. This section should be charted as shown on the 1935 sheet as it clearly defines the present conditions.

(2) Lat. 39-56.3 -- Sheet T-1285 shows a high water rock. The 1935 work changes this to a 6'MLLW rock and the position about 25 meters inshore. No doubt exists as to these not being the same rock as this area was worked during a 1' minus tide and no indications of other rocks were noted. The high water rock should be removed from the chart and the MLLW rock charted as shown on this 1935 sheet.

(3) Lat. 39-56.5 -- The two high water rocks shown on T-1285 are clearly out of position, one of these being located by the 1930 triangulation. These rocks and the additional ones in this area should be charted as shown on this 1935 sheet.

(4) Lat. 39-57.0 -- The high water rock shown on T-1285 should be removed from the chart. This area as seen on a zero tide shows a 5'MLLW rock about 25 meters southeast of the previously

5

charted position. This rock should be charted as shown on this 1935 sheet.

(5) Lat. 39-57.1 to 57.2 -- Nine high water rocks are shown on T-1285. As charted in 1935 the position of this group is shifted about 20 meters south and the rocks are not all high water rocks as previously shown. The 1935 work clearly defines existing conditions of this section, this offshore detail should be charted as shown on this 1935 sheet.

(6) Lat. 39-57.5 -- A group of high water rocks are shown on T-1285 as the outer extension of the inshore groups. This section was worked in 1935 on a 2 to 3 foot tide and it clearly showed that these rocks should be charted as MLLW rocks. On this 1935 sheet additional rocks were added to the chain extending inshore in a northeasterly direction. The inner group of this chain was revised to show three high water rocks and several MLLW rocks in place of the previously charted five high water rocks. There was no indication of the inshore rock of this group although a moderate swell was running. This rock should be removed from the chart and the entire chain charted as shown on this 1935 sheet.

(7) Lat. 39-57.8 -- An important 5' MLLW rock, not previously shown, was accurately located 0.2 mile offshore on this 1935 sheet. This rock should be charted.

(8) Lat. 39-58.1 to 58.2 -- Two large high water rocks shown on T-1285 are found during the 1935 work to be about 50 meters out of position. These rocks and the inshore detail of this section should be charted as shown on the 1935 sheet.

LANDMARKS FOR CHARTS

This section of the coast has very few objects suitable for use as landmarks. Only one, White Rock 1871, is submitted on Form No. 567. Once identified this rock makes a valuable mark.

charted as "Small White RK" on 5607, as distinguished from Big White RK about ten miles below

6

RECOVERABLE TOPOGRAPHIC STATIONS

Descriptions of stations are submitted on Form No. 524 for the following topographic stations; GABLE, DON, EID and SIX.

LIST OF NAMES

Well established names :- Needle Rock, Point No Pass and Whale Gulch.

Point No Pass is not distinguishable to the navigator, the name merely indicates a small point beyond which one may not travel on the beach.

Needle Rock at present refers more to the group of buildings at the abandoned landing than to the rock itself. The rock blends into the bluff from offshore and is of no value to the navigator.

MISCELLANEOUS

The tracing used in transferring Sheet T-1285 to this sheet is forwarded with this report, discrepancies noted in this report have been indicated on this tracing. The tracing used in transferring Sheet T-1324 to this sheet was forwarded with Sheet C-1935.

STATISTICS

Statute Miles of Shoreline ----- 5.4

Elevations ----- 10

Magnetic Meridians ----- 1

Respectfully submitted,

Max G. Ricketts
Max G. Ricketts, Jr. H. & GE.

Approved and Forwarded:

F. H. Hardy
F. H. Hardy,
Commanding Ship GUIDE

Remarks

Decisions

1		
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4		
5	see note on chart, p. 6.	
6	so charted, 5602, and recommend name	}
7	be continued, to distinguish between "Big White RK" ten miles south along coast	
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GEOGRAPHIC NAMES

Survey No.

6485

Name on Survey	A	B	C	D	E	F	G	H	K	
<u>State of California</u> ✓	*	✓	✓	✓	✓	✓	✓	✓		1
<u>Pacific Ocean</u> ✓	*	✓		✓	✓		✓	✓		2
<u>Point No Pass</u> ✓	*			✓				✓		3
<u>Whale Gulch</u> ✓	*	✓		✓				✓		4
<u>Needle Rock</u> ✓	*	✓		✓				✓		5
<u>Small White Rk</u> ✓	*	✓		✓				✓		6
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Names underlined in red approved
by E.R.D. on 6/6/36

M 234

Names underlined in red approved
by *[Signature]* on 6/6/36

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
DESCRIPTIVE REPORT
PHOTOSTAT OF

No. H

No. T **6485**

received
registered
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
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90			

RETURN TO

82	
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C. K. Green

REVIEW OF TOPOGRAPHIC SURVEY No. 6485

Title (Par. 56) *Bear Harbor to Small White Rock, California*Chief of Party *F.H. Hardy* Surveyed by *M.G. Ricketts* Inked by *M.G. Ricketts*Ship *Guide* Instructions dated *May 2, 1935* Surveyed in *August, 1935*

1. The survey and preparation for it conform to the requirements of the Topographic Manual. (Par. 7, 8, 9, 13, 16.) ✓
2. The character and scope of the survey satisfy the instructions. ✓
3. The control and closures of traverses were adequate. (Par. 12, 29.) ✓
4. The amount of vertical control that the Manual specifies for ~~contours~~ ~~formlines~~ was accomplished. (Par. 18, 19, 20, 21, 22, 23.)
Only revision of form lines accomplished
5. The delineation of ~~contours~~ ~~formlines~~ is satisfactory. (Par. 49, 50.)
See par. 4
6. There is sufficient control on maps from other sources that were transmitted by the field party to enable their application to the charts. (Par. 28.) *None submitted*
7. High water line ~~on marshy and mangrove coast~~ is clear and adequate for chart compilation. (Par. 16a, 43, 44.) ✓
8. The representation of low water lines, reefs, ~~coral reefs~~ and rocks, and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41.) ✓
9. Rocks and other important details shown on previous surveys and on the chart were verified. (Par. 25, 26, 27.)
See Reverse Side
10. ~~The span, draw and clearance of bridges are shown. (Par. 16c.)~~
11. Locations and elevations of summits are given. (Par. 19, 51.)
See Par. 4
12. The tree line was shown on mountains. (Par. 16g.)
See Par. 4

NOTE: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual. Use reverse side for extending remarks.

Paragraph 9

T1285 (1872) and T1324 (1873)

A detailed and complete comparison of these two surveys with the present survey (T6485) is given on pages 3, 4 and 5 of the Descriptive Report. The Chart, 5602, is on too small a scale to make a comparison of the inshore detail of any value.

T6485 supersedes T1324 and T1285 in part.

T3845 (1921)

This survey was executed to locate signals only, and is not comparable to the present survey (T6485) for shore line or other details.

13. The descriptive report covers all details listed in the Manual, in so far as they apply to this survey. (Par. 64, 65, 66, 67.) ✓
14. ~~The descriptive report also contains additional information required in aero-topography relative to type of photographs, method of compilation and type of ground control.~~
15. The descriptions of recoverable stations and references to shore line were accomplished on Form 524. (Par. 29, 30, 57, 67 except scaling of DMs and DPs, 68.) *4 cards submitted*
16. A list of landmarks for charts was furnished on Form 567 and plotting checked. (Par. 16d, e, 60.) ✓
17. The magnetic meridian was shown ✓ and declination was checked. (Par. 17, 52.) *Declination checked value shown on chart.
No note of having checked declination*
18. The geographic datum of the sheet is *N.A. 1927 (Adjusted)* and the reference station is correctly noted. (Par. 34.) ✓
19. Junctions with contemporary surveys are adequate. ✓
*Joins T 6379 (1935) on the South
Joins T 6486 (1935) on the North*
20. Geographic names are shown on the sheet and are covered by the Descriptive report. (Par. 64, 66k.) ✓
21. The quality of the drafting is good. (Par. 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 45, 46, 47, 48, 49, 50.) ✓
22. No additional surveying is recommended. ✓
23. The Chief of Party inspected and approved the sheet and the descriptive report ~~after review by~~ ✓
24. Remarks:

Reviewed in office by

Chas. O. Bush Jr. June 15, 1936.

Examined and approved:

E. G. Green.
Chief, Section of Field Records

L. O. Pollock.
Chief, Division of Charts

Fred. L. Peacock
Chief, Section of Field Work

G. H. G. G.
Chief, Division of Hyd. and Top.