

4813

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Form 504
Ed. June, 1928

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R. S. Patton, Director

State California.

DESRIPTIVE REPORT

Topographic } Sheet No. E 4813
~~Hydrographic~~

LOCALITY

Monterey Bay.

Point Cypress to Point Pinos.

1933.

CHIEF OF PARTY

Fred L. Peacock.

U. S. COAST & GEODETIC SURVEY
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APR 2 1934

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DESCRIPTIVE REPORT
to accompany
TOPOGRAPHIC SHEET E
Project HT 130
Coast of California
Sub-Party
U.S.C. & G.S.S. GUIDE
1933

LOCALITY: This sheet covers the area from Triangulation Station JEFFERS at the south end of Carmel Beach in Carmel Bay to Triangulation Station MUSSEL at Mussel Point in Monterey Bay. It joins Sheet F at Triangulation Station JEFFERS and Sheet D at Triangulation Station MUSSEL.

AUTHORITY: This survey was made under the Director's instructions dated April 4, 1932, supplemented by instructions dated March 27, 1933, U.S.C. & G.S. Project HT 130, G. C. Jones, in charge.

GENERAL DESCRIPTION: The shoreline is very jagged and rocky with stretches of sand beach interspersed with the rocky sections and with low rock cliffs close to the high water line. Back of this generally is thick pine and cypress forests on low rolling hills. From Triangulation Station JEFFERS to Arrowhead Point is a long stretch of sand beach generally backed by a rock cliff 10 to 20 feet in height. From Arrowhead Point to Pescadero Point, there are two sand beaches, backed by low cliffs, at Pebble Beach only 7 to 10 feet high. In the center of this cove are Pescadero Rocks, an extensive outcropping of low rocks. Stillwater Cove has a pier and offers an excellent anchorage for small boats. Carmel Bay has scattering kelp patches throughout. From Pescadero Point to Cypress Point a bold coast is indicated with steep rocky cliffs 40 to 60 feet in height followed by thick woods of cypress and pine. Bird Rock, when seen from the west, shows a black color at the base and a contrasting color of light tan above. From Seal Rocks to Point Joe, low rock cliffs, from 15 to 30 feet high, are adjacent to the shore line and jagged reefs extend therefrom. Moss Beach is really two beaches, sometimes designated separately as north and south. Back of Moss Beach are white sand dunes finally forming a ridge which is covered with pine and cypress. From Moss Beach to Point Pinos low cliffs, about 15 feet high, rocky reefs and offlying rocks characterize the section. From Point Pinos to Lover's Point, the same character as south of Point Pinos prevails, except that the reefs do not extend as far offshore and beaches

of sand and boulders are more frequent. East of the lighthouse properties in the outlying section of Pacific Grove, houses are sparse and scattered. From Lover's Point to Mussel Point, the reefs are few and sand and gravel beaches are predominant. The rock cliff is from 10 to 20 feet in height. The hill back of Point Pinos and Pacific Grove is thickly wooded with pine and cypress.

LANDMARKS: Holman's Department Store on the northwest corner of Lighthouse Avenue and Fountain Avenue in Pacific Grove is a large white building about 55 feet above street level. From Monterey Bay it stands out boldly above adjacent buildings and should be charted. ✓

The center of the square stone tower, indicated on the sheet as Topographic Station TOWER, is a tower on a residence one-fourth mile west of Pescadero Point. This tower is of light buff colored stone and has a four hipped red tile roof, coming to a peak at the center. The tower is approximately 60 feet above the base of the building on the seaward side. This tower can be seen readily from the south and west and should be charted. No

Pebble Beach White Stack is a concrete stack about 15 feet in diameter at the base, about 50 feet high and is readily seen from the south, there being nothing to obscure it from that direction. It should be charted. No

CHARACTER OF CONTROL; Control for this survey was furnished by second order triangulation executed by Lieutenant Charles Pierce in 1932. The stations are plotted using the adjusted North American 1927 datum.

METHODS OF SURVEY; A planetable was used throughout. All setup positions were determined by traverses. These traverses were executed by Engineer Rand, Harold Clarke, who was unfamiliar with Coast Survey methods and requirements. It was discovered later, by inspection, that this survey was not complete in regard to the high water line and offshore detail. Consequently the area was gone over again by Lieutenant (j.g.) I. R. Rubottom, and the highwater re-run and all offshore detail located. It was discovered when this re-survey was made that all traverses, and topographic signals were accurate well within the required limits. Therefore, this part of Mr. Clarke's survey, and the inshore detail were considered accurate and complete, and no further work was done, except to check it by inspection.

Sunken rocks were located by cuts to the breakers and later checked by going over the area very carefully at minus tide and taking sextant cuts to them.

See GN 1 (1934) for 4 additional names.

When a comparison was made with the bromides of the old surveys it was found that several sunken rocks shown thereon had not been found, but these were left for the hydrographic party to examine. Detailed notes regarding each of these rocks may be found in the Descriptive Report of the hydrographic sheet of this area. All rocks awash and sunken rocks definitely located are enclosed in small dotted circles on the sheet, and all offshore and prominent rocks that bare at high water have their elevations shown on the sheet.

COMPARISON WITH OLD WORK: Due to an insufficient datum on the old bromides it was not possible to transfer the old survey with sufficient accuracy to determine if there had been any change in the shoreline, as the change, if any, was no doubt very slight. The comparison with sunken rocks has been covered above.

GEOGRAPHIC NAMES: After conferring with Del Monte Properties Inc. and looking over their maps dating as far back as 1858, we suggest that the names on their map, which is enclosed, be used. Reasons for changed names are as follows.

SUNSET POINT: This point is generally known locally by this name, though about 1900 was called Point Douty in honor of a man concerned with the improvements in this section at that time. There seems to be no knowledge of its ever being known locally as Timber Point, as shown on Chart No. 5476. Therefore Sunset Point is recommended. *Sent to Div. of Geog. Names, Dept. of Interior for approval. H.B.*

POINT JOE: This is called Pyramid Point on Charts Nos. 5402 and 5403, but local maps as old as January 1898 show the name for this point as Point Joe. Older maps give no name. It is commonly known as Point Joe. There is a rock outcropping about 450 meters south of Triangulation Station Point Joe, which was the location of a few Chinese shacks and was at one time referred to as Pyramid Rock. This probably is the reason for the name Pyramid Point. However, the point is only known locally as Point Joe, and this is the name recommended. *Use name on Surveys + Charts. because of local usage. H.B.*

LOVER'S POINT: This is called Point Anlon on Charts Nos. 5402 and 5403 and has on some early maps, been so named. Apparently, this is confused with Point Alones, (spelled Anlones on 1858 map, but generally recognized as Alones now), which point is shown on all the early maps as dividing the City of Monterey from Pinos Rancho. Due to this confusion of names and to the fact that the point is locally known as Lovers Point, a change to this name on the charts is recommended. *Lovers Point: Sent to Division of Geog. Names Dept. of Interior for approval. H.B.*

MUSSEL POINT: This is the name shown on Charts Nos. 5402 and 5403 and was so named due to the fact that a bed of Mussels at one time existed there. This point was also known as

If there is no question that Cabrillo Point has displaced Mussel Point as the local name of this feature, would make the change to Cabrillo Pt. on survey sheets and charts. Before making the change it should be approved by the proper authorities. Card sent for this recommendation to Div. of Geog. Names Dept. of Interior. H.B. July 25, 1934

names in pencil on the sheet - Arrowhead Point Stillwater Cove
Pebble Beach and Bird Rock are not mentioned in Desc. Left
as being local names. Inquiry should be made of the Chief
of Party and if names are in general local use, they should
be inked on the sheet. H.B. Names underlined are OK.
H.B.

China Point, probably due to an old settlement of Chinese between this point and Point Alones. This settlement was indicated on maps as old as 1858, but was later burned. The name adopted by the Del Monte Properties Company, Point Cabrillo^{OK}, is the one by which the point is generally known and so named because this is where Captain Cabrillo supposedly landed. A wooden cross and a plaque giving the history thereof have been placed on this point. However, it is recommended that the name Mussel Point be retained. Report in favor of Point Cabrillo by H. Bacon

RECOVERY NOTES: Point Pinos Lighthouse. The location of this lighthouse as given by the 1932 survey and crossed out, is apparently correct. On the list of Geographic Positions furnished this party, the lighthouse had been crossed out, for reasons unknown to this party. A large number of cuts were taken on it, and the position checked the triangulation position. Therefore it is recommended that the triangulation position be retained.

Pescadero Point, (ventilator on house one-half mile north of). The topographic location of this is nine meters south of the location obtained by triangulation. This position should be given preference over the triangulation position, because of more and stronger cuts taken on the planetable position.

CONTOURS: None of the contours of the old survey have been transferred to this sheet, since insufficient elevations were taken at the time of the new survey. The area is covered by low rolling hills that are heavily timbered and there are very few points inshore that are visible and definite enough to permit obtaining definite and accurate elevations while working along the shoreline. To obtain accurate information it would necessitate carrying traverses inland. The old sheets have good contours, and if these be supplemented by contours from U. S. Geological Survey Maps, very thorough and accurate contours may be obtained.

LOCAL MAPS: Local maps were available and were obtained and are enclosed with the sheet as follows:

General Plan, City of Carmel. Sp 27457
Del Monte Properties Company from Carmel to Monterey. Sp. 27458
2 Tract maps of City of Pacific Grove. Sp. 27459-60

STATISTICS:	Statute miles of shoreline	19.8
	Statute miles of road	9.0
	Area in square statute miles	8.0
	Number of recoverable hydrographic stations located	14.0

COMPARISON WITH AERIAL PHOTOGRAPHS: This sheet was compared with aerial photographs, after completion of inking the sheet, and no discrepancies were found in the high water line and offshore detail. These photographs were borrowed from the Inspector San Francisco Field Station and returned to him.

INKING OF SHEET: This sheet was originally inked by Mr. Clarke, and the Descriptive Report partially written before he was discharged from the party. The sheet was inspected and found to have extensive reefs shown around most of the shore line the limits of which had been originally intended to be only a foul area line. A large amount of these reefs were removed from the sheet by Lieutenant (j.g.) I. R. Rubottom and the reef is now accurately shown on the sheet.


The Descriptive Report has been examined and revised, and is now considered accurate and complete.

Respectfully submitted,



Ira R. Rubottom,
Jr. H. & G. Engineer,
Coast and Geodetic Survey.

Inspected and approved:



G. C. Jones,
H. & G. Engineer,
Coast and Geodetic Survey.

The following geographic names were approved by the U.S.G.B. and added to this sheet:-

ARROWHEAD POINT	} Local names.
STILLWATER COVE	
PEBBLE BEACH	
BIRD ROCK	

E. R. B.

10/15/34

LIST OF TOPOGRAPHIC SIGNALS
to accompany
TOPOGRAPHIC SHEET FIELD LETTER E

Hydro. Name	Object and Description	Remarks
/ Tank	Concrete tank in rocks 110 miles west of Triangulation Station Mussel	Top Center ✓
/ Church	Church spire, Pacific Grove, California	Top ✓
/ Town	Spire on City Hall, Pacific Grove	Top ✓
/ "R"	^{White} W.W. on highest part large island 1/4 mile east of Point Pinos.	Top ✓
/ Ben	Chimney on house 3/8 mile south of Point Pinos.	Top ✓
/ Pump	West corner pump house at north end of moss beach	West corner ✓
✓ Lag Flag	Flag pole 1/4 mile east of Moss Beach	Top ✓
✓ Stone	Chimney on stone house 1/4 mile east of Moss Beach.	Top ✓
/ Ney	Chimney on grey house 1/4 mile east of Triangulation Station Bird.	Top ✓
/ Chim	Chimney on grey house 1/4 mile southeast of Midway Point.	Top ✓
/ Tower	Square stone tower on house, red tile roof 1/2 mile southeast of Midway Point.	Top ✓
✓ In	Chimney at southeast corner stone house 1/8 mile ^{north} southwest of Pescadero Point	Top ✓
/ Dar	Center dormer white house, Carmel Beach	Center ✓
/ White	Chimney on white house, Carmel Beach	Top ✓

NOTE: These stations are all recoverable and Form 524, Description of Hydrographic or Topographic Stations, was filled out for each of them.

Scaled distances checked on form 524

RLD

Der

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

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.

Field No. E 4813

REGISTER NO.

State California

General locality Monterey Bay

Locality Point Cypress to Point Pinos.

Scale 1:10000 Date of survey June & July, 1933

Vessel Sub-Party, U.S.C. & G.S.S. GUIDE

Chief of Party Fred. L. Peacock

Surveyed by Harold Clarke and I. R. Rubottom

Inked by Harold Clarke and I. R. Rubottom

Heights in feet above M.H.W. to ground ~~to tops of trees~~

~~Contour~~ Approximate contour, ~~Form line~~ interval 50 feet

Instructions dated April 4, 1932 and March 27, 1933

Remarks: Continuation Project HT 130, G. C. Jones, Chief of

Party. Surveyed by Harold Clarke. Partially re-surveyed by
I. R. Rubottom.

G P O

REVIEW OF TOPOGRAPHIC SURVEY No. 4813

Title (Par. 56) *Pt. Cypress to Pt. Pinos, Monterey Bay, California*
 Chief of Party *J. L. Pascoe* Surveyed by *J. R. Rubottom* Inked by *J. R. Rubottom*
 Ship *Guide* Instructions dated *April 4, 1932* Surveyed in *June July 1933*
March 27, 1933

1. The survey and preparation for it conform to the requirements of the Topographic Manual. (Par. 7, 8, 9, 13, 16.) *Yes*

2. The character and scope of the survey satisfy the instructions.

Yes, except as to contours

3. The control and closures of traverses were adequate. (Par. 12, 29.)

Yes

4. The amount of vertical control that the Manual specifies for -contours-formlines- was accomplished. (Par. 18, 19, 20, 21, 22, 23.)

Sufficient elevations could not be obtained.

(See par. under Contours p. 4 Descriptive Report)

5. The delineation of -contours-formlines- is satisfactory. (Par. 49, 50.)

Contours of old surveys not transferred because of lack of elevations for control.

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.)

Yes. (Bps. 27457-8-9+60)

7. High water line on marshy and mangrove coast is clear and adequate for chart compilation. (Par. 16a, 43, 44.)

No marsh - Bold coast line.

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.)

Excellent.

9. Rocks and other important details shown on previous surveys and on the chart were verified. (Par. 25, 26, 27.)

Some sunken rocks from old topo surveys were not found. These were left for the hydrographic party who were unable to examine them because no suitable boat was available. These rocks were added to #5414 in red.

10. ~~The span, draw and clearance of bridges are shown. (Par. 16c.)~~

11. Locations and elevations of summits are given. (Par. 19, 51.)

Only a few elevations near the shore line, were obtained.

12. The tree line was shown on mountains. (Par. 16g.)

Yes.

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.

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.)

Yes

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.

Aerial photographs apparently made before this survey since comparison was made by the field party and no discrepancies found.

15. The descriptions of recoverable stations and references to shore line were accomplished on Form 524. (Par. 29, 30, 57, 67 except scaling of IMs and DPs, 68.)

Yes.

16. A list of landmarks for charts was furnished ~~on Form 507 and plotting checked.~~ *in Descriptive Report.* (Par. 16d, e, 60.)

Yes.

17. The magnetic meridian was shown and declination was checked. (Par. 17, 52.)

Yes.

18. The geographic datum of the sheet is *N.A. 1927* and the reference station is correctly noted. (Par. 34.)

Yes.

19. Junctions with contemporary surveys are adequate.

T. 4290

Yes T. 4814 there are some discrepancies in the rocks

20. Geographic names are shown on the sheet and are covered by the Descriptive report. (Par. 64, 66k.)

Yes. (Several new names referred to Mr Bacon for decision by G.B.)

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.)

Excellent.

22. No additional surveying is recommended.

No

23. The Chief of Party inspected and approved the sheet and the descriptive report after review by *J. R. Rubottom*

24. Remarks: *Due to the nature of the country which was thickly wooded and rolling, no definite points were visible and accurate elevations could not be obtained. Contours from old surveys would have to be used without check elevations.*

Reviewed in office by *R. L. Johnston*

Examined and approved:

C. K. Green

Chief, Section of Field Records

L. O. Polub

Chief, Division of Charts

J. B. Gordon

Chief, Section of Field Work

G. W. Wade

Chief, Division of Hyd. and Top.