

6288

U. S. COAST & GEODETIC SURVEY
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Form 504
Ed. June, 1928

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R. S. PATTON, Director

State: CALIFORNIA

DESCRIPTIVE REPORT

Topographic } Sheet No. P
~~HYDROGRAPHIC~~

LOCALITY

~~GENERAL~~ CALIFORNIA COAST

POINT EUCEDON & Vicinity

1934

CHIEF OF PARTY

O. W. Swainson, H. & G. Engr.

U. S. GOVERNMENT PRINTING OFFICE: 1923

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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 Letter P

REGISTER NO. 6263

State California

General locality ~~Central~~ California Coast ¹⁴

Locality Point Buchon & Vicinity ²¹

Scale 1:10,000 Date of survey Nov.-Dec., 1934, 19

Vessel U.S.C. & G.S.S. PIONEER

Chief of Party O. W. Swainson

Surveyed by E. M. Prudames

Inked by E. M. Prudames

Heights in feet above MHW to ground ~~to tops of rocks~~

~~Sea level~~ Form line interval 100 feet

Instructions dated November 18, 1932, 19

Remarks: _____

DESCRIPTIVE REPORT

TO ACCOMPANY TOPOGRAPHIC SHEET NO. P.

Central California Coast,
Point Buchon,
Lat. $35^{\circ} 13.7$ to Lat. $35^{\circ} 16.8$

AUTHORITY

The work on this sheet was performed pursuant to instructions dated November 18, 1932, to the Commanding Officer of the PIONEER, for Project No. 120, and those to the Commanding Officer of the GUIDE, dated April 4, 1932, for Project No. 101.

CONTROL

The triangulation stations in this area were established by the party of Chas. Pierce in 1932.

Both traverse and three point fixes were used on the sheet as control, the presence of an unusual number of triangulation stations making the latter method particularly useful.

Traverse

△ Islay Point to △ Islay Creek Oil Derrick - error 1 meter too far; adjusted in the field on positions nearest the last triangulation station.

Offlying features were located by suitable cuts as were those inshore features which were not readily accessible.

GENERAL DESCRIPTION

As this area is approached from the sea, it will be noticed that four distinct types of bluffs make up the shoreline. At the northern end above △ Islay are high sand dunes covered with low brush and grass, and resting on a rocky shelf which runs some one hundred meters offshore from the edge of the dunes. This same shelf of sedimentary rock underlies the whole area, being covered at different points by different kinds and thicknesses of soil, while at some places this sedimentary rock makes up the entire bluff.

Between Islay Point and Point Buchon the shoreline is extremely irregular and is greatly cut up by long rock fingers which extend out into the sea below a bluff of moderate height. It is a most unusual area; the very center of a syncline. All the edges of strata are thus exposed producing the innumerable points running out from the shore, all continuing for a great distance, becoming

rocks awash, and finally sunken rocks. The rocks are very long and narrow, one side of each being a vertical drop and the other sloping from the highest point into the sea. This same characteristic applies to the points of the bluff itself and may be distinguished on the sheet.

Just north of Valencia Creek the rocky fingers end and from the south a precipitous vertical bluff continues. Throughout this section as far as O FAR there is very little top soil on the bed rock. Consequently, the bluffs are sheer rock cliffs and the high islands are the same. Therefore no hatchures are shown on the sheet nor is a slope indicated.

Throughout this area where hatchures are indicated, the slope is parallel with the strata and this has resulted in many cases, particularly around Point Buchon, in an undercutting of the bluffs, a condition which could not be shown on the sheet.

At topographic signal FAR the bluff assumes a slope and increases in height for a short distance but disappears almost entirely at WIND, again increasing to considerable height between there and the southern limit. The greater slope to the north here is in the eroded soil overlying the rock shelf which still remains vertical from fifteen to twenty feet out of the water. The height of the bluffs varies with a difference in depth of soil since the rock shelf is almost a level plane. Irregularities in the shoreline are to be found at points where the rock has not been eroded and stands out from the otherwise regular bluff. From most of these points it will be noticed a reef continues out into the sea.

The whole area is under cultivation between the bluff tops and the base of the hills, which begin to rise between four and five hundred meters back. The hills just inshore from O Nub are quite bare up to the very top. The hill tops throughout are covered here and there with small pine trees, while most of the slope is brush covered, spotted with scrub oak or scrub pine. Toward the north the peaks are farther away from the shore and are mainly brush covered. The range of hills is broken at three points by valleys running inshore from CROWBAR, FAR, and by Valencia Creek. The center one of these is rather short and from the sea would not be recognized as such. A very distinct break occurs at Valencia Creek on the south side of which the range ends. North of the creek a new series begins, gradually increasing in height to the most prominent peak in the whole area, "Valencia", which stands alone, some 2300 meters back from the shore. It is conical in shape, composed of strata of grey rock slightly inclined, between which brush and grass grow giving it a somewhat striped appearance when seen near to. From a distance it is merely a conical brush covered peak.

COMPARISON WITH PREVIOUS SURVEYS

There are no major changes in shore line to be noted from a comparison of the present survey with that of 1883. The work at this time was pursued with considerable attention to detail which was noticeably absent in the earlier survey, this will account for the differences noted in the shore line. Throughout the sheet the previous work has shown the bluffs to be sloping and hatchures are used. In many instances the width of the bluff is shown much greater than the actual case and much detail has been obscured thereby. Between Δ Roy and \odot FAR the bluff is vertical and hatchures were impossible. This is a true representation of actual conditions and the only accurate means of showing this area.

In general there is close agreement of the rocks shown in each case. The old work, however, used no special designation for rocks of different heights and it will be seen that many shown as islets previously are in reality rocks awash, and have been so indicated in the present work. Likewise a reef symbol has here been used which may embrace some rocks formerly shown separately.

The reefs were found to be more extensive than previously indicated. All areas of the sheet were visited at both high and low water, which will account for the many more sunken rocks and particularly rocks awash, than were shown on the previous survey. Many of these could only be seen at the low tide, and would be missed entirely at any other time.

The shape and exact location of islets may differ somewhat but sufficient care was taken in their location to make the present survey reliable and in general the two will be found in close agreement.

The long high island close to shore, 200 m. west of CROWBAR is connected to the mainland and may be reach afoot. The addition of two detached reefs should be noted, one west of \odot Pil and the other west of \odot Ho.

The eroded bluff up the hill from \odot Ash was found to be much larger than shown. There are innumerable rocks off \odot Wash and their irregularity makes a check between old and new surveys quite difficult.

Contours were checked from a form line standpoint. The elevations determined for points on top of the ridges were found to be somewhat higher than indicated from the contours and were checked with sufficient cuts and angles to insure their accuracy.

It will be seen that in many cases the elevations shown along the bluff are greater than indicated in the 1883 survey, by from five to fifteen feet. Great care was used in checking these points and the elevations here given are correct. Valencia, which is found to be 20 feet lower than indicated on chart 5302, was checked from three points with agreement within one foot.

STATISTICS

Shoreline	14.5 statute miles.
Road	4.6 statute miles.
Creek	.7 statute miles.

E. M. Prudames

E. M. Prudames,
Topographer.

Forwarded:

O. W. Swainson

O. W. Swainson,
H. & G. Engineer,
Commanding PIONEER.

RECOVERABLE PLANE TABLE
POSITIONS

Sheet P.

Barn Gable (Bak)	35° 13' 1601	Barn Gable (Bar or	35° 16' 420
	120 52 277	Ban)	120 53 670
Windmill (Wind)	35 14 1	Rock Outcrop (Out)	35 14 187
	120 52 1209		120 53 24
Flagstaff on House	35 16 947	Barn Gable (Arm)	35 14 1038
Gable (Spo)	120 53 152		120 53 312

LANDMARKS

Sheet P
Chart 5302

Barn, North Cable

Standing back from the shore at the base of the hills is a group of farm buildings. The barn is the foremost of the group.

Erosion on Hillside

This erosion is a large area which has been eroded to a vertical bluff on the hillside. It is large and the ground is buff colored which forms a distinct contrast to the surrounding vegetation.

Barn, North Cable

Just below the Erosion a short distance from the base of the hills is a group of farm buildings. The barn is the most northerly building.

Barn, West Cable

This is a group of farm buildings midway between the shore and the hills. The large barn faces offshore and is the most southerly building of the group.

Valencia Peak

Valencia Peak is the most prominent peak in this particular area. It stands 2300 meters back from the shore and is somewhat conical in shape with a rounded top. From some positions it appears slightly striped since vegetation grows between the strata.

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

U.S.C. & G.S.S. PIONEER, Long Beach, Calif.

March 20, 1935.

19

DIRECTOR, U. S. COAST AND GEODETIC SURVEY:

The following determined objects are prominent, can be readily distinguished from seaward from the description given below, and should be charted.

Chief of Party.

[illegible]

A list of objects which are of sufficient prominence for use on the charts, together with a description of the same, must be furnished in a special report on this form, and a copy of such report must be attached by the Chief of Party to his descriptive report. The selection, determination, and description of these points are of primary importance.

The description of each object should be short, but such as will identify it; for example, standpipe, water tower, church spire, tank, tall stack, red chimney, radio mast, etc. Generally, flagstaves and like objects are not sufficiently permanent to chart.

REVIEW OF TOPOGRAPHIC SURVEY No. 6288

Title (Par. 56) *Point Buchonnd Vicinity, California*Chief of Party *O.W. Swainson* Surveyed by *E.M. Prudames* Inked by *E.M. Prudames*Ship *Pioneer* Instructions dated *Nov. 18, 1932* Surveyed in *Nov.- Dec. 1934*

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.)
Contours of previous work accepted - No new contours drawn
5. The delineation of -contours-formlines- is satisfactory. (Par. 49, 50.)
No original contours on this sheet
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.)
A few additional elevations taken to supplement previous surveys.
12. The tree line was shown on mountains. (Par. 16g.)
Not shown

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

T1500 a and b (1881)

The present survey is much more in detail than T1500 a and b. The off-lying rocks check very well but the old survey used a bare rock symbol many times where a rock awash symbol no doubt should have been used. Since the topographer of T6288 made it a point to examine the area at low water the present survey is no doubt accurate and should supersede T1500 a and b for that area covered.

Chart 5302

The present survey checks the chart very closely. The foul area runs the entire length of the sheet.

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.) *6 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.) ✓ *No note of having checked declinatoire*
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 4925 (1934-35) on the North and T 6287 (1934) on the South
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 R. Bush Jr. May 26, 1936*

Examined and approved:

C. H. Green
Chief, Section of Field Records

L. O. Lobbat
Chief, Division of Charts

Fred. L. Peacock
Chief, Section of Field Work

Harde
Chief, Division of Hyd. and Top.