

6047

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES

MAY 7 1934

Acc. No.

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. F 6047
Hydrographic }

LOCALITY

Southern California Coast
Pacific Coast

Schumann Canyon to Mt. Lospe

1934

CHIEF OF PARTY

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

U. S. GOVERNMENT PRINTING OFFICE: 1921

6047

DESCRIPTIVE REPORT
TO ACCOMPANY TOPOGRAPHIC SHEET NO. F
Point Sal South California Coast
Latitude $34^{\circ} 51'$ to 34°

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

O. W. SWAINSON, CMDG.

AUTHORITY

This work was done in accordance with instructions dated November 18, 1932, to the Commanding Officer of the PIONEER, for Project No. 120, and also those dated April 4, 1932, to the Commanding Officer of the GUIDE, Project No. 101. The topography was done during the month of January, 1934.

CONTROL

The control was established by cuts on triangulation points located previously by F. G. Johnson in 1933 at an approximate maximum distance of two miles along the coast line. Traverses were run between these stations with the following errors of closure:

- △ Schumann, 1933, to △ Lion's Head, 1933 - Short 5 meters in distance
Traverse adjusted proportionally.
- △ Lion's Head, 1933, to △ Reef-2, 1933 - Flat.
- △ Reef-2, 1933, to △ Cliff, 1933 - Flat.

Offlying rocks and backlying land features were located by cuts. Elevations of prominent peaks and knolls were determined and contours checked from a form line standpoint.

GENERAL DESCRIPTION

This section is characterized by a sharp rock cliff line of varying height with extensive rock and reef patches offlying and steep grassy slopes back of the cliff, rising to Mount Lospe, the top of the range.

From △ Schumann northward about 1000 meters the coast line consists of broad sand beach extending about 50 meters back of the high water line, where a narrow stretch of low grassy dunes mark the end of the beach. Back of these low dunes is a band of bare sand.

Continuing northward, the sand beach is broken up by several reefs mostly outcropping below the high water line. At the inshore edge of the beach about fifty meters back of the high water line is a low rock cliff topped with sandy loam, the cliff being about 40 feet in elevation. The area between the cliff line and the road is under cultivation, these cultivated fields being broken up by two extensive canyons south of △ Lion's Head.

About 500 meters south of Δ Lion's Head is an extensive reef which is at the head of the northernmost canyon where the cliff increases to about 70 feet elevation. At points between these two canyons the base of the cliff is the high water line and there are many offlying rocks.

Δ Lion's Head is on a rocky knoll, elevation 456 feet, about 150 meters back of the cliff line. The cliff line is from 75 to 100 feet in height, very steep, and composed almost entirely of dark rock with a topping of sandy loam. The high water line is on a beach of boulders and lies very close to the base of the cliff.

About 350 meters west of Δ Lion's Head, just north of a projecting point in the cliff line, a close-in reef starts and continues for about 800 meters with the high water line on boulders adjacent to the base of the cliff. The top of the cliff is broken by many indentations caused by erosion and at the center of the reef is a small canyon.

About 1300 meters southeast of Δ Reef-2 the high water line starts to follow the base of the cliff, which rises with little break to the road. It rises therefrom to a rocky knoll, 221 feet in elevation. Just northeast of this knoll are many offlying rocks and several extensive rock islets of a maximum height of about 20 feet. The cliff line consists of many points and small, deep bights, some of the bights having narrow sand or gravel beaches with the high water line thereon adjacent to the cliff.

Δ Reef-2 is located on the southwest corner of a broad, flat section of cultivated land and marks the location of an extensive offlying reef and several rocks offlying about 450 meters.

From Δ Reef-2 to Δ Cliff is a stretch of sand beach with high water line about 60 meters from the base of the cliff. The cliff is about 90 feet in elevation, composed of a low rock base and a brown sandy soil above. There are two canyons extending back from the cliff line, the southernmost marking the location of a series of farm buildings and shade trees at the road.

Δ Cliff is located on a knoll at the top of the cliff, about 210 feet elevation. The cliff from about 300 meters southeast of Δ Cliff northward is high dark rock with the high water line on a beach of boulders adjacent to the base of the cliff. There are several rocks offlying this point.

The road is improved gravel and marks the inshore edge of the flat section of land lying between the road and the cliff and also the base of the steep grassy slopes up to the ridge and Mount Lospe. At Δ Cliff the road branches, one branch leading to the old landing and the other ascending abruptly the slopes to the top of the ridge and thence to Guadalupe.

About 900 meters north of Δ Lion's head is a sharp rock peak (topographic station TIP) which is 466 feet elevation, the last 50 feet being bare white and of slender proportion. Just north thereof is a rock cliff of which the east portion is red in color.

Between Δ Substitute and Δ Lospe is an outcropping of white and light buff colored stratified rock. The top of this range of mountains, about 1630 feet elevation, is a narrow flat grassy ridge, the easterly portion of the ridge being the highest, 1637 feet elevation, and having scattered pine trees thereon.

A fine black line is used to indicate the bank at the edge of the low grassy dunes, the bank being very abrupt.

LANDMARKS

(1) Lion's Head This knoll, resembling in shape the frame of a lion and having a bare rock outcropping on the southeastern end, corresponding to the head of the lion, is marked by Δ Lion's Head, 1933, elevation 456 feet. Being visible from the northwest, west, and south, and being known by the above name in this section, this knoll should be charted.

(2) Trees These trees near the top of the range, Mount Lospe, are very conspicuous against the grass and sky background, stand out very prominently. The most westerly tree (topographic station Tree) is about 30 meters south of the highest point on the range, 1637 feet elevation. These trees are visible from all directions and should be charted.

CHANGES IN COAST LINE

North of Δ Schumann the high water line moves offshore approximately 80 meters.

From about 1000 meters north of Δ Schumann to Δ Reef-2, the shore line and cliff line shown on the old topographic sheets preserves roughly the form of that indicated on the new sheet, checking with the new sheet at isolated points, but showing considerable discrepancy in the location of individual features.

North of Δ Reef-2, the high water line moves offshore from none to 40 meters.

Off Δ Cliff the cliff line preserves the approximate form of that shown on the old sheet, but varies in location, moving offshore 10 to 50 meters.

The rocks and reefs indicated on the old topographic sheet check with the new sheet only in isolated spots, a great profusion of rocks and reefs and islets shown on the new topographic sheet not being indicated on the old.

It is recommended that the location of the coast line and offlying rocks as indicated on Topographic Sheet F be substituted for locations given by the old survey.

The contours indicated on the old topographic sheet are substantially correct with the exception of the 100 foot contour which has been changed in red on the new sheet.

Note the topographic station TIP, a peak not indicated on the old topographic sheet and also contour changes just north thereof.

Note change in 200 foot contour at Δ Cliff and also at topographic station OUT.

Note change in 400 foot contour at Δ Lion's Head.

Note the addition of a 1634 foot elevation peak south of topographic station TREE and the accompanying 1600 foot contour.

Note the changed elevations of Δ Lospe, 1875, and Δ Substitute, 1878, and the added elevation of 1637 feet, the highest point on the range just north of topographic station TREE.


The streams above the road as indicated on the new sheet in black ink were transferred from the old topographic sheet and the locations checked by alidade cuts, but not by traverses up these streams.

The extensive buildings at Δ Cliff indicated on the old topographic sheet no longer exist and should be removed, as should those east of topographic station TANK.


Note the location of the improved road and of the cultivated fields in contrast to the grassy slopes as indicated on the new sheet.

STATISTICS

Shore line	6.8 statute miles.
Area	6.5 square statute miles.
Road	4.0 statute miles.


Harold Clarke,
Topographer.

Approved and forwarded:


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

Recoverable Plane Table Positions. - Sheet F. -

Item	Latitude		DM	Longitude		DP	Eleva-	Remarks
	o	'	meters	o	'	meters	tion	
ROOF	34	51	210	120	35	908	194'	NW Gable of
		Back	1639		Back	616		Barn
TIP	34	52	1116	120	37	240	466'	Bare, white
		Back	688		Back	1284		tipped peak.
ROCKY PEAK	34	52	1518	120	37	661	509'	
		Back	331		Back	836		
TANK	34	53	159	120	37	1336	194'	Corrugated iron
		Back	1690		Back	186		tank- 25' dia.
								15' high.
GAB	34	53	337	120	37	1450	25' above grnd.	
		Back	1512		Back	74		W. Gable of barn
TREE	34	53	1000	120	35	1223	1650 (Approx.)	
		Back	849		Back	301		Lone West Tree.
WEST END	34	52	849	120	37	975		
Rubble Wall		Back	1000		Back	549		
PIN	34	52	1082	120	37	1451		
		Back	767		Back	73	35'	Rock pinnacle.

Non-recoverable Plane Table Positions - Sheet F

Item	Latitude		Longitude	
	0	1	0	1
EX	34	50	120	36
PERT	34	51	120	36
SHAF	34	51	120	36
BLAC	34	51	120	36
A	34	51	120	36
RED	34	51	120	36
SLAT	34	52	120	36
RIM	34	52	120	37
COR	34	52	120	37
MUT	34	52	120	37
POY	34	52	120	37
TRI	34	52	120	37
OUT	34	52	120	37
BAN	34	52	120	37
PO	34	52	120	38
UM	34	53	120	38
FLAG	34	53	120	38
HAIR	34	53	120	38

LANDMARKS

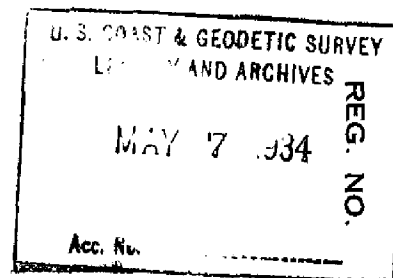
TOPOGRAPHIC SHEET NO. F.

(1) Lion's Head - This knoll, resembling in shape the figure of a lion and having a bare rock outcropping on the southeastern end, corresponding to the head of the lion, is marked by Lion's Head, 1933, elevation 456 feet. Being visible from the northwest, west, and south, and being known by the above name in this section, this knoll should be charted.

(2) Trees - These trees near the top of the range, Mount Lospe, are very conspicuous against the frass and sky background and stand out very prominently. The most westerly tree (topographic station Tree) is about 30 meters south of the highest point on the range, 1637 feet elevation. These trees are visible from all directions and should be charted.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET



5047

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 F

REGISTER NO.

6047

State California

General locality Pacific Coast

Locality Schumann Canyon to Mt. Lospe.

Scale 1:10,000 Date of survey January, 19 34

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

Chief of Party O. W. Swainson

Surveyed by Harold Clarke

Inked by Harold Clarke

Heights in feet above MW to ground ~~to tops of trees~~

~~Contours~~ Approximate contour Form line interval 100' feet

Instructions dated November 18,, 19 32

Remarks:

REVIEW OF TOPOGRAPHIC SURVEY No. 6047

Title (Par. 56) *Schumann Canyon to Mt. Lospe*Chief of Party *O.W. Swainson* Surveyed by *H. Clarke* Inked by *H. Clarke*Ship *Pioneer* Instructions dated *Nov. 18, 1932* Surveyed in *January 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.)
Check elevations taken and corrections made to old contours where necessary
5. The delineation of -contours-formlines- is satisfactory. (Par. 49, 50.)
Corrections to old contours made in part. In most cases old contours were adequate
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.) *Films attached to Descriptive Report showing part of the area of this sheet.*
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. 485
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

The comparison and changes between the present survey and previous surveys T1055 (1867) and T1595 (1879) are exceptionally well discussed in the paragraph "Changes in Coast Line" of the Descriptive Report.

T1055 (1867)

The detail of the present survey is much more dependable than that on T1055. In general there is good agreement but rocks are more carefully shown on the present survey.

T1595 (1879)

T1055 The same may be said about this survey as T1867. Although the general conformity of the shore line is the same the present survey is much more in detail with far better control.

T6047 supersedes T1055 (1867) and T1595 (1879) in part.

Chart 5302

Whereas the chart 5302 shows mostly a sand beach for the area covered by T6047 the shore is mostly a rocky reef formation.

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 IMs and DPs, 68.) *8 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 indication of having checked declinoire*
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 6270 (1934) on the North
Joins T 6046 (1933) 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 29, 1936

Examined and approved:

C. H. Green
Chief, Section of Field Records*L. O. Tolbert*
Chief, Division of Charts*Fred. L. Peacock*
Chief, Section of Field Work*G. H. de*
Chief, Division of Hyd. and Top.