4892 4895
4893 4896
4894

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* / ~~*Hydrographic*~~ *Sheet No.* U, V, W, X & Y
1934

*State* CALIFORNIA

LOCALITY

Santa Margarita River to
Corona del Mar
~~Newport Bay~~

*193* 4

CHIEF OF PARTY

Robert W. Knox,
H & G Engr

U. S. GOVERNMENT PRINTING OFFICE: 1934

4895 4896
4892 4893 4894

Form 537a

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES
MAR 12 1935
Acc. No.
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 U 1934 4892

REGISTER NO.

State California.

General locality Southern California COAST.

Locality Santa Margarita River to Harno Canyon. ~~S. W. Stuart RR. Siding to Triangulation Station PIEDRA.~~

Scale 1:10,000 Date of survey April, 1934

Vessel Shore party.

Chief of Party Robert W. Knox.

Surveyed by N. C. Skansen

Inked by N. C. Skansen

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

Contour Approximate contour Form line interval feet

Instructions dated January 10, 1934, 19

Remarks:

U. S. GOVERNMENT PRINTING OFFICE: 1926

Form 537a

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 Letter V- 1934

REGISTER NO. 4893

State California.

General locality Southern California COAST

Locality Horno Canyon ~~HORNIDRA~~ to San Mateo Creek.

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

Vessel Shore Party.

Chief of Party Robert W. Knox.

Surveyed by N. C. Skansen,

Inked by N. C. Skansen,

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

Contour Approximate contour Form line interval feet

Instructions dated January 10, 1934, 19

Remarks:

U. S. GOVERNMENT PRINTING OFFICE: 1928

Form 537a

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

U. S. COAST & GEODETIC SURVEY
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REG. NO.
Acc. 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 W- 1934

REGISTER NO. 4894

State California.

General locality Southern California COAST

Locality San Mateo Creek to San Juan Creek.

Scale 1:10,000 Date of survey May, 1934, 19

Vessel Shore party.

Chief of Party Robert W. Knox.

Surveyed by N. C. Skansen.

Inked by N. C. Skansen.

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

Contour Approximate contour Form line interval feet

Instructions dated January 10, 1934, 19

Remarks:

U. S. GOVERNMENT PRINTING OFFICE: 1928

Form 537a

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

U. S. COAST & GEODETIC SURVEY
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MAR 12 1935
REG. NO.
Acc. 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 X-1934

REGISTER NO. 4895

State California.

General locality Southern California COAST

Locality San Juan Creek to Laguna ~~Beach~~.

Scale 1:10,000 Date of survey June, 1934, 19

Vessel Shore party.

Chief of Party Robert W. Knox.

Surveyed by N. C. Skansen.

Inked by N. C. Skansen.

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

Contour Approximate contour Form line interval feet

Instructions dated January 10, 1934, 19

Remarks:

U. S. GOVERNMENT PRINTING OFFICE: 1929

Form 537a

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES
MAR 12 1935
REG. NO.
Acc. 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 Y- 1934

REGISTER NO. 4896

State California.

General locality Southern California. COAST

Locality Laguna ~~Beach~~ to ~~Newport Bay Entrance~~ Corona del Mar.

Scale 1:10,000 Date of survey July 1934., 19

Vessel Shore party.

Chief of Party Robert W. Knox.

Surveyed by N. C. Skansen.

Inked by N. C. Skansen.

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

Contour Approximate contour Form line interval feet

Instructions dated January 10, 1934, 19

Remarks:

U. S. GOVERNMENT PRINTING OFFICE: 1926

DESCRIPTIVE REPORT

to accompany

Sheets U to Y 1934

Santa Margarita River to Newport Bay

April to July, 1934

Robert W. Knox Chief of Party

Scale 1:10,000

INSTRUCTIONS:

The Instructions for this project were dated Jan. 10, 1934.

GENERAL DESCRIPTION:

The description of the area covered by these topographic sheets will be found in the report covering Air-Photo sheets T-5414 to T-5418 inclusive.

CONTROL:

The control on sheets U to Y inclusive is from the triangulation done by Charles Pierce in 1933. Also a few of the 1884 and 1886 triangulation stations were used.

SURVEY METHODS:

Before field work was begun the rods were stood on a measured base and longer rods were graduated, so as to make longer half interval sights possible.

Plane-table traverses were run between triangulation stations or three point fixes.

The tops of the bluffs of sheets U to W inclusive, were determined by rod shots. Sheets X and Y, only the base of the bluff was determined and the top is to be plotted by air-photo compilation.

CLOSING ERROR OF TRAVERSE:

| | Traverse. | Closure. |
|---|---|---|
| SHEET U SPADE to fix 957 meters S.E. of signal DUM | 2080 | 4 |

| | | Meters. Traverse. | Closure. |
|---|---|---|---|
| | SPADE to SHINGLE BLUFF | 0 | 0 |
| | SHINGLE BLUFF To PULGAS | 3236 | 7 |
| | PULGAS to DON | 3520 | 8 |
| | DON to PIEDRA | 2838 | 3 |
| SHEET V. | PIEDRA to ONOFRE BLUFF | 6451 | 12 |
| | ONOFRE BLUFF to MEDIO | 3247 | 2 |
| | MEDIO to AIRWAY # 5 | 0 | 0 |
| SHEET W. | AIRWAY # 5 to COTTON | 0 | 0 |
| | COTTON to fix west of CUPOLA RED ROOFED HOUSE | 1304 | 2 |
| | 3 point fix W. of CUPOLA to Fix S. C. of signal INK | 0 | 0 |
| | 3 point fix S. S. of INK to N.LIGHT POLE, end San Clemente Pier | 950 | 2 |
| | N.LIGHT POLE, end San Clemente pier to SEGUNDA | 0 | 0 |
| | SEGUNDA to PRIMA | 2348 | 4 |
| | PRIMA to CENTER LIGHT POLE end of Doheny Pier | 2680 | 2 |
| | CENTER LIGHT POLE, end of Doheny Pier to DOHENY | 0 | 0 |
| | DOHENY to fix S. of signal NON | 1627 | 4 |
| SHEET X | Fix S. of signal NON to DANA | 1806 | 2 |
| | DANA to JUAN | 2041 | 3 |
| | JUAN to MUSSEL COVE* | 2617 | 15 |

*This traverse was run five times, three one way and two back and still the same error. Great care was taken each time a set up was established, that the rod was held vertical, and when there was any difference in elevation, corrections were made. The plane-table was set up on both these stations and on the triangulation stations on both sides of JUAN and MUSSEL COVE, all visable triangulation stations fell very close to positions. This error was probably due to distortion. The traverse was proportionally adjusted.

| | | Meters Traverse. | Closure. |
|---|---|---|---|
| | LUSSEL COVE to 3 point fix N.E. Signal LEV | 1630 | 4 |
| | 3 point fix N.E. signal LEV to GOFF ID. 2. | 2117 | 5 |
| | GOFF ID. 2 to CACTUS PT. | 1840 | 1 |
| | CACTUS PT. to N. LIGHT POLE, end Laguna Pier | 2460 | 4 |
| SHEET Y | N. LIGHT POLE, end LagunapPier, to RECREATION PT. 2. | 0 | 0 |
| | RECREATION PT. 2 to EXTRA | 2450 | 4 |
| | EXTRA to ABALONE PT. | 0 | 0 |
| | ABALONE PT. to ROCKY BIGHT | 2872 | 2 |
| | ROCKY BIGHT to PELICAN PT. | 1586 | 2 |
| | PELICAN PT. to ARCH ROCK | 1200 | 2 |
| | ARCH ROCK to BREAKWATER LIGHT | 2112 | 2 |

All of the above traverses that were in error, were proportionally adjusted.

NOTES ON INDIVIDUAL SHEETS:

SHEET U The previous survey in this area was covered by sheet Registry No. 2015, made in 1889. A comparison of high water line shows slight differences now and then, possibly due to erosion or the rodmans interpretation of the high water line. Approximately 125 meters S.E. of signal LAM, the previous survey shows high water line extending up this valley, where as now the high water line continues in a relatively straight line. This is probably due to the mouth having been filled by silt deposited by the creek in the winter months.

Neither this or the previous survey show any offlying rocks or reefs in this territory.

The U. S. Highway No. 101 and the Santa Fe R.R. were located

by numerous three point fixes. The blue points encircled are objects tied in for photo compilation, the description of which are in pencil.

The bluff line was left in pencil awaiting the compilation of the photo maps of this area.

SHEET V In comparison with sheet Registry No. 2016 surveyed in 1889 it is very good except for two or three places. S. E. of ONOFRE BLUFF for about 500 meters the high water line is about 15 meters inshore from the present survey. This portion being backed by high dirt bluffs, has in all probability been filled in.

N. W. of signal FIN is a very similar example. Here the previous survey shows the high water line extending up a small narrow valley. This has been filled in, establishing a high water line some 20 meters farther south.

At the mouth of the San Mateo Valley the previous survey has the high water line extending up in the valley with a narrow sand-spit across the mouth, leaving a narrow channel. This has been all filled in establishing a high water line across the mouth of the valley and yet some 50 meters inshore. The high water line in the locality is no doubt changing year by year, the cause being obvious.

No offlying rocks or reefs are shown by either survey.

The highway and railroad were located by a number of three point fixes and all beginnings and ends of curves were accurately located as on sheet U.

The blue circled dots are objects located for photo compilation, with description of each in pencil.

The top of the bluff line was determined by rod shots and were left in pencil, awaiting compilation of photo work.

SHEET W The former surveys in this area are on sheet Registry No 1738

surveys in 1886 and Registry No. 1648 1645 surveyed in 1885. The two high water lines parallel each other up to the San Juan Capistrano Valley, except that the present one established is from 5 to 30 meters off shore. The small indentations in the old high water line at the mouths of small ravines are now all filled in. The first point west of signal NON is shown to project out farther to sea a few meters but otherwise checks very good.

The highway and railroad were located from the beach traverse when possible. The rest was located from three point fixes.

The blue circled dots are objects located for photo maps, with description of each in pencil.

The top of the high steep dirt bluffs were located by rod shots. These were left in pencil until the photo maps of this area are made.

The San Clemente Pier is owned by the City of San Clemente. The DohenyPier is the property of the Doheny Palisade Land Company.

The position of the San Mateo Rocks in the old survey check very close to true position, as the highest of this group is now a triangulation station. A new rock awash was located 200 meters east of the largest rock in this group.

The group of rocks, shown as submerged, about 1000 meters S. of SEGUNDO were located by cuts to each one, shows a slight difference in position. These rocks referred to on page 12.

A new rock was located about 680 meters due S. of WINDVANE atop plunge.

The rock shown 130 meters W. of the end of Doheny Pier was not verified. There is no rock in this area.

See descriptive report of T-5416

The two groups of rocks 250 meters S. of signal NON were checked but slight difference in location. These are now rocks awash.

The three sunken rocks shown off the first point W. of signal NON were shown in the previous survey as two sunken rocks and but slight difference in position.

The two groups of rocks one 270 meters and the other 325 meters, directly S. of signal NON were shown in the old survey above M. H. W. This survey shows these rocks awash.

The reefs W. of signal NON are about the same latitude as on the old survey, but are located about 10 meters off shore of the old position.

The previous survey shows break in the highwater line, and extending up the San Juan Capistrano Valley. This is now closed in and the shore line is 100 meters North. About 300 meters E. of signal NON the highwater line checks very close. The cause for these changes are undoubtedly the deposits brought down the creek by winter rains.

The black lines crossing M. H. W. line S. of signal OIL are sheet metal piling groins.

The San Diego and Orange County line monuments could not be found, but the surveyor at San Clemente reported the fence is on the county line and the bearing of the county line as S. 12° 28' 00" W.

SHEET X A comparison with sheets, Registry No. 1645 surveyed in 1885 and Sheet Registry No. 1646 also surveyed in 1885 show a very good agreement in delineation. The high water line and off-lying rocks and reefs shown on the previous survey check very close to the present ones, except, the point near Dana Point where signal GRE is located. This can be verified by the San Juan Rocks group, the highest of which was cut in by triangu-

† The note on the opposite page means that the rocks above H.W. on T-1645 at Lat 33° 28.+ Long 117 43.2 and at Lat 33° 28.3 Long 117° 43.4 (black projection on T-1645) were not found by this survey T-4895.

The sunken rock is at Lat. 33° 31.84 Long 117° 46.75 and there is also a rock awash just south of this position Contrary to the statement on the opposite page T-4895 shows the rock awash but does not show the sunken rock which is on H-5602.

*

lation in 1933 by Charles Pierce.

The group of rocks 230 meters S. of signal CIR were not verified, also the rocks just off shore from signal TAR.

See Appendix page X

The entire area covered by this sheet show the points to be shorter and more narrow, and the bays and coves more shallow.

A new rock was charted 200 meters N. W. of signal BAN.

The point △ RUSSEL COVE 2, 1933 is now located on what was previously shown as an island. This short strip has been filled in with sand forming a square nosed point.

The rock 150 meters S.W. of signal ROOF, previously plotted as a high rock is now rock awash.

A rock 270 meters directly south of signal NIN was newly plotted.

Two rocks and a reef just off shore from signal ATE, were also newly plotted.

A reef and ~~also~~ a rock awash ~~was~~ were located directly south of GOFF ISLAND. These were not shown on the old survey.

Two rocks 150 meters S. W. of signal FOR are newly located.

Two new sunken rocks 200 meters N. of △ GOFF ISLAND 2, 1933 were located.

Goff Island, previously shown as such, is now connected to the mainland by a narrow neck of sand.

The three sunken rocks S. of △ CACTUS PT. 2, 1933 are now designated as rocks awash.

The group of high rocks [on T-1646, which correspond to a position] 350 meters S.W. of signal TWO on T-4895, are shown as rocks awash, and a sunken rock plotted some 130 meters to the N.W. of this group. There was no sign of this sunken rock on the old survey.

See Appendix page *

Two rocks awash N. W. of △ CACTUS PT. 2, 1933 were not shown before.

The blue circled points are objects tied in for photo compilation, the description adjacent in pencil.

Neither the highway or the top of the bluff was located on this sheet, due to the compilation of photo maps of this area. Only the bottom of the bluff was determined.

The triangulation station HIGHEST OF TWO BLACK STACKS, E. OF DANA PT. 1933, should be changed to tanks. They are two tall black tanks, not stacks.

SHEET Y This area is covered by previous survey sheets Registry No. 1646, surveyed in 1885, and Registry No. 1392, surveyed in 1875. In comparing the new with the old survey, the points agree very good, except in the vicinity of of TWO ROCK POINT, and the point ARCH ROCK is located on. The former is shown about 20 meters S. by E. of the present position, while the latter is N. by W. of the recent location. The bays, coves, and relatively straight shore line is shown as being built out from 15 to 40 meters since the last survey.

The previous survey shows a sunken rock 280 meters due S. of RECREATION POINT 2. This is now shown as rock awash with a very close check as to position. There is shown a short line of breakers 150 meters west of this rock which was not located by the old survey.

The rocks off RECREATION POINT were checked with one added a little farther off shore.

A new rock awash was located 120 meters south of signal RED.

The two large high rocks, known as Two Rocks check flat.

The reef and two rocks, S. and W. of Abalone Pt., was not located before.

The reefs S. W. of signal TEX were checked, with one additional rock awash, added on this survey to the south about 100 meters, and three to the N. W. of the reefs, about 50 meters.

The reef and several rocks shown off shore from signal ABE, are newly located.

Two sets of breakers are now located, one 400 meters S. W. of PELICAN PT. and the other 300 meters S. W. of signal DOG. These were not shown on the old survey.

A group of rocks 270 meters south of ARCH ROCK were not shown on the old work.

The rocks and reefs between △ ARCH ROCK and ⊙ TRI, and ⊙ TRI to ⊙ JIM were not located before.

The large high rock locally known as Arch Rock, just off shore of △ ARCH ROCK was not shown before.

Three new rocks are located close to low water line West of ⊙ NEL.

The entrance to Newport Bay has been changed by dredging and breakwaters having been built. The mole on the east side of the entrance has caused the high water line directly east of it to be some 150 meters farther south.

The reef previously shown in this little cove is now designated as a rock awash, the location of which agrees perfectly.

The blue circled points are objects located to assist in the compilation of air photo maps, the descriptions of which are in pencil.

The bell bouy outside the Newport Bay entrance was located by three cuts.

The bottom of the bluffs was located and left in pencil.

LANDMARKS:

See the descriptive reports for Air-Photo sheets T-5414 to T-5418. inclusive, for the list of landmarks for charts.

INKING:

The inking was done by the topographer, except the lettering, which was done by D. L. Aukland.

Respectfully submitted:

N. C. Skansen

N. C. Skansen,

Topographer.

Approved and forwarded:

Robert W. Knox

Robert W. Knox,
Chief of Party.

# STATISTICS

SHEET U

S. W. of Stuart railroad siding to △ PIEDRA.

| | |
|---|---|
| Statute Miles of shore line, | 7.53 |
| " " " highway, | 8.4 |
| " " " railroad, | 8.1 |

SHEET V. △ PIEDRA to San Mateo Creek.

| | |
|---|---|
| Statute Miles of shore line, | 6.7 |
| " " " highway | 7.4 |
| " " " railroad, | 6.9 |

SHEET W. San Mateo Creek to San Juan Creek,

| | |
|---|---|
| Statute miles of shore line, | 8.3 |
| " " " highway, | 7.9 |
| " " " railroad, | 7.5 |

SHEET X. San Juan Creek to Laguna Beach.

| | |
|---|---|
| Statute miles of shoreline, | 9.54 |

SHEET Y. Laguna Beach to Newport Bay entrance.

| | |
|---|---|
| Statute miles of shoreline, | 7.82 |

no area claimed for these sheets.

VERIFICATION REPORT

I have reviewed the sheets covered by this report and have supervised the field and office work on the sheets insofar as it was possible to do so without interference with the progress of the field work.

The sheets are hereby approved.

Robert W. Knox

Robert W. Knox,
Chiefof Party.

Additional notes by Chief of Party.

A comparision between the air-photo compilation and topographic sheet of the shore line in the vicinity of Emerald Bay ( sheet Y ) showed a discrepancy of such magnitude as to warrant investigation. The traverse was re-run on an aluminum mounted sheet, and the original sheet changed to show the correct detail. The former sheet will be submitted in the near future.

Slight changes in the position of several offshore breakers and rocks were made in order to make them agree with positions as obtained by the hydrographic party, the latter position being thought to be more accurate in those cases. The air-photo topographic sheets show the rocks in their original location, and it is respectfully suggested that they be changed to agree with the positions as now appear upon the topographic and hydrographic sheets. For further information, see page 13 of the General Descriptive Report of Air-Photo Sheets Register No. T-5375 and T-5410 to T-5418 inclusive.

RWK

See descriptive report of T-5416

M-189

REVIEW OF GRAPHIC CONTROL SURVEY T-4894, SCALE 1/10,000

Date of Review

1. This survey has been reviewed in connection with Air Photo Compilation Nos. T-5416 , , with particular attention to the following details:

(a) Projection has been checked in the Field.

(b) Accuracy of location of plane table control points.

(c) Discrepancies between detail on this survey and the air photo compilations listed above.

(d) Discrepancies found in descriptions submitted on Form 524 when compared with the air photo compilations listed above.

2. Refer to the reviews and descriptive reports of air photo compilations Nos. T-5416 , , for a more complete discussion of any errors or discrepancies found.

Any material errors found on this survey are noted in subsequent paragraphs of this review, and these have been reported to the Field Records Section and the Cartographic Section.

Notes and corrections resulting from the review are shown on this survey in green. none -

Andrews

B.G. Jones

The blue circle stations on T-4892, 3, 4, 5, 96 were located by planetable for air photo control. 11/10/50 FOE

M-189

REVIEW OF GRAPHIC CONTROL SURVEY T- 4895 , SCALE 1/10,000.

Date of Review February 1, 1936

1. This survey has been reviewed in connection with Air Photo Compilation Nos. T- 5417. , , with particular attention to the following details:

(a) Projection has been checked in the Field.

(b) Accuracy of location of plane table control points.

(c) Discrepancies between detail on this survey and the air photo compilations listed ~~above.~~ in review for compilation. T-5417

(d) Discrepancies found in descriptions submitted on Form 524 when compared with the air photo compilations listed above. none

2. Refer to the reviews and descriptive reports of air photo compilations Nos. T-5417 , , for a more complete discussion of any errors or discrepancies found.

Any material errors found on this survey are noted in subsequent paragraphs of this review, and these have been reported to the Field Records Section and the Cartographic Section. none

Notes and corrections resulting from the review are shown on this survey in green. none

Leonard A. McGann
B.J. Jones

The blue circle stations shown on T-4892, 3, 4, 5, & 6 were located by plane table for air photo control. 11/10/36 - J.S.E.