

10417

Diag. Cht. No. 5502.

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Planimetric

Field No. Ph-159 Office No. T-10417

LOCALITY

State California

General locality Marin County

Locality Tomaes Bay

1955-57

CHIEF OF PARTY

V.R.Sobieralski, Chief of Field Party
A.L.Wardwell, Tampa Photo. Office

LIBRARY & ARCHIVES

DATE December 17, 1959

10417

DESCRIPTIVE REPORT - DATA RECORD

FLANIMETRIC

Areas contoured by various personnel

(Show name within area)

(11) (12)

INAPPLICABLE

DESCRIPTIVE REPORT - DATA RECORD

Field Inspection by (II):

C. H. Bishop
J. S. Chamberlin
C. D. Upham

Date: Jan. thru
April 1957

~~C.H. Bishop - V.J. Fran 2~~
Planetable contouring by (II): Inapplicable

Date: July-Aug., 1956

Completion Surveys by (II): Inapplicable

Date:

Mean High Water Location (III) (State date and method of location): April 1957, Air Photo Compilation
Field Inspection (1957) of 1955 Photography

Projection and Grids ruled by (IV): A.R. (Washington Office)

Date: 23 Aug. 1956

Projection and Grids checked by (IV): A.R. " "

Date: " " "

Control plotted by (III): Washington Office
and I. I. Saperstein

Date: 1 July 1958

Control checked by (III): E. T. Ogilby

Date: 1 July 1958

~~Rectangular~~ Stereoscopic

Date:

Control extension by (III): Washington Office

Planimetry I. I. Saperstein
Stereoscopic Instrument compilation (III):

Date: July 1958

~~Rectangular~~

Date:

Manuscript delineated by (III): I. I. Saperstein

Date: July 1958

Photogrammetric Office Review by (III): W. H. Shearouse

Date: Sept. 1958

Elevations on Manuscript

checked by (II) (III): Inapplicable

Date:

DESCRIPTIVE REPORT - DATA RECORD

4.

Camera (kind or source) (III): **USC&GS Single-lens Wild "W" and "S"**Diapositives
/PHOTOGRAPHS (III)1:10,000 (ratio)
Scale 1:25,000

Stage of Tide

FIELD & OFFICE PHOTO

Number	Date	Time
55W-619	10 Oct. 1955	10:14
57S-5786	23 Nov. 1957	12:21
57S-5787	"	12:22
57S-5797	"	12:31
57S-5798	"	12:32
57S-5799	"	12:32
57S-5800	"	12:33
57S-5801	"	12:33

1:25,000
1:25,0004.1 (TOMALES BAY)
5.4 (SCHOONER BAY)

55 W 609 (FIELD PHOTO) 10 OCT. 1955
TIME=10^h05^m 1:10, SCALE - TIDE = 3.5 ft.
(SCHOONER BAY)

Sub. Sta. POINT REYES (PACIFIC OCEAN) 1959 TIDE TABLES

TIME	DIFFERENCES	HEIGHT	MEAN RANGE=3.9 ft.
HW	LW	HW	LW
-1 ^h 05 ^m	-0 ^h 37 ^m	0.0	+0.1

Sub. Sta. INVERNESS (TOMALES BAY) 1959 TIDE TABLES

TIME	DIFFERENCES	HEIGHT	MEAN RANGE=3.7 ft.
HW	LW	HW	LW
+1 ^h 05 ^m	+1 ^h 18 ^m	-0.5 ft.	-0.2 ft.

Predicted Tide (III)

Diurnal

Ratio of Ranges	Mean Range	Spring Range
--	4.0	5.7
H.W.	0.5	5.4
H.W.	0.0	5.4
L.W.	0.1	5.7

Reference Station: **San Francisco**
Subordinate Station: **Marshall, Tomales Bay, Inverness**
Subordinate Station: **Point Reyes**

Washington Office Review by (IV): **S.G. Blankenbaker**Date: **July, 1959**

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): **13**
Shoreline (More than 200 meters to opposite shore) (III): **1*****
Shoreline (Less than 200 meters to opposite shore) (III):
Control Leveling - Miles (II): **None**
Number of Triangulation Stations searched for (II): **6 ***
Number of BMs searched for (II): **0**
Number of Recoverable Photo Stations established (III): **0**
Number of Temporary Photo Hydro Stations established (III): **0**

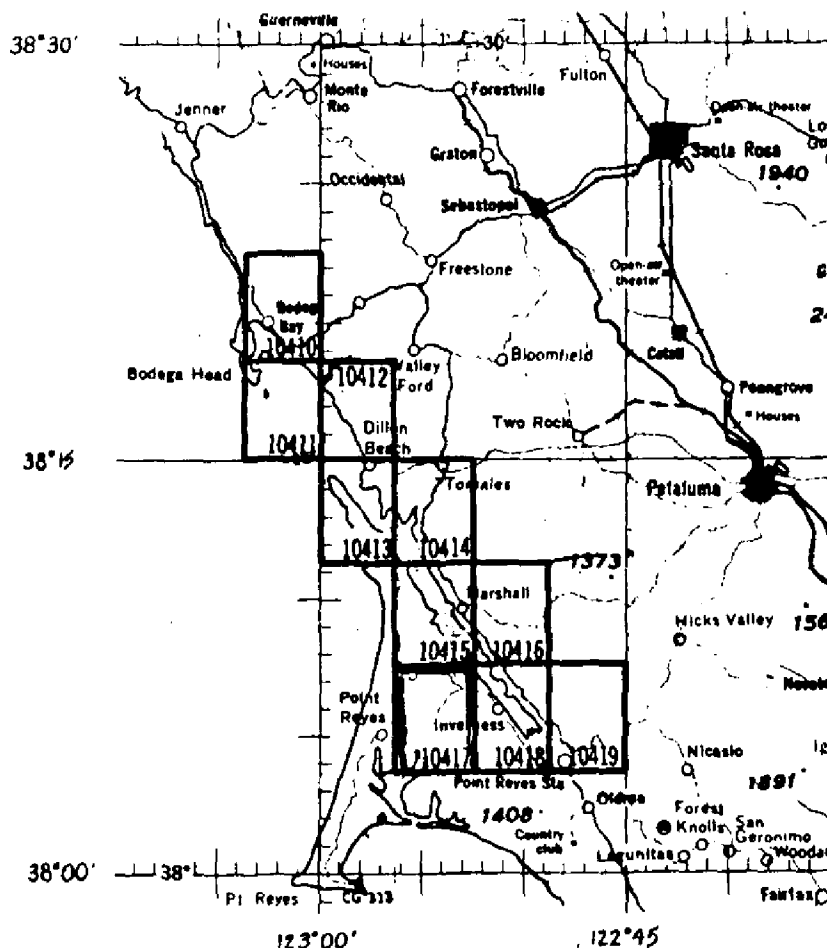
Recovered: **5****
Recovered:Identified: **5****
Identified:

Remarks:

* **5 stations fall outside project limits**
** **4 " " " " " "**
*** **One mile of shoreline in Tomales Bay, but 3 additional miles of shoreline in Home Bay and Schooner Bay in the southwest corner of the manuscript.**

PLANIMETRIC ~~SHORELINE~~ PROJECT Ph-159
TOMALES AND BODEGA BAYS, CAL.

5.



OFFICIAL MILEAGE FOR COST ACCOUNTS

SHEET NO.	AREA SQ. MI.	LIN. MI. SHORELINE
10410	12	5
10411	1	2 5
10412	11	4
10413	6	13
10414	12	3
10415	9	9
10416	13	1
10417	13	1
10418	10	7
10419	14	0

TOTALS 101

15 mi.

Summary To Accompany Descriptive Report T-10417

Planimetric map T-10417 is one of twelve similar maps in project PH-159. The project covers the Bodega Bay-Tomales Bay area of the California Coast. T-10417 is one of the three southernmost maps in the project and its coverage includes small portions of Tomales, Schooner and Home Bays.

This is an instrument compilation project. Field work was accomplished in 1956 and 1957. The 1956 field party recovered, identified and established horizontal control for use in stereoplanigraph bridging and compilation of the incomplete manuscripts used to provide shoreline for contemporary hydrographic surveys. The 1957 field party completed the field inspection for use in compiling the final planimetric manuscripts.

The bridging and compilation of the incomplete manuscripts was accomplished in the Washington Office. The compilations were completed by instrument (Kelsh) in the Tampa Office.

Items registered under T-10417 will include a Descriptive Report and positive impression on carbon of the scribed copy of the manuscript.

MAP T. 10417

PROJECT NO. 6159

SCALE OF MAP
1:10,000

SCALE FACTOR 1.0

[illegible]

1 FT. = 3048006 METER
COMPUTED BY: Wash. Office
Compilation Unit

DATE 1956

Wash. Office
Compilation
CHECKED BY:

1956

COMM-DC-57843

INCLUDED IN THE PROJECT COMPLETION REPORT

- (1) Two field inspection reports (1956-1957)
- (2) Three combined bridging and compilation reports
- (3) Bridging sketch

THE 1956 and 1957 FIELD INSPECTION REPORTS

WERE SUBMITTED AS SEPARATE REPORTS

INCLUDED IN THE DESCRIPTIVE REPORT FOR T-10412

- (1) Copies of field inspection reports (1956-1957)
- (2) Bridging sketch
- (3) Two (2) combined bridging & compilation reports

The combined bridging & compilation report for T-10415;
T-10417; T-10418 is included in the Desc. Report for T10418.

COMPILATION REPORT T- 10417PHOTOGRAMMETRIC PLOT REPORT

The stereoplanigraph bridge was run in the Washington Office.

The bridging report is bound with the Descriptive Report for T-10418.

31. DELINEATION

The "INCOMPLETE MANUSCRIPT", showing the shoreline and pass points in the northeast corner of the manuscript, was delineated by the instrument method in the Washington Office. Some shoreline changes were made in this office by the graphic method after field inspection for use on the smooth boat sheets. The remainder of the manuscript was then compiled using the Kelsh Plotter.

Two sets of photographs were used. One flight was flown in October 1955 and the other set was flown in November 1957.

The field inspection was adequate and no difficulty was encountered in the interpretation of the photographs.

32. CONTROL

The density of primary and secondary control was adequate.

33. SUPPLEMENTAL DATA

Flat (in 6 sheets) titled "Record of Survey for State of California, Dept. of Natural Resources, Division of Beaches and Parks", scale 1" = 400 ft., dated April 1953 was used to construct the boundary of Tomales Bay State Park (see Item 41) It is being submitted with data for survey T-10418.

34. CONTOURS AND DRAINAGE

Contouring not applicable.

Drainage shown was from field inspection and office interpretation.

35. SHORELINE AND ALONGSHORE DETAILS

The high-water line was delineated according to field inspector's notes. (See Item 31.) The shoreline inspection is adequate.

The low-water line was not determined by the field inspector. Therefore, the approximate low-water line and approximate limits of shallow areas were delineated from office interpretation of the photographs.

36. OFFSHORE DETAILS

All offshore details, including rocks and oyster beds have been shown according to the field inspector's notes.

37. LANDMARKS AND AIDS

None.

38. CONTROL FOR FUTURE SURVEYS

None, excepting the shoreline pass points on Tomales Bay which were dropped by the Washington Office, to enable the hydrographer to locate photo-hydro stations.

39. JUNCTIONS

Junctions have been made with the following:

T-10415 to the north, T-10418 to the east and
Drakes Bay -U.S.G.S. 1:24,000 to the west and south.

40. HORIZONTAL AND VERTICAL ACCURACY

No statement.

41. BOUNDARIES

The boundary of Tomales Bay State Park was constructed by using the plat submitted by the field party (see Item 33). Only those boundary monuments that were recovered in the field were shown on the manuscript.

46. COMPARISON WITH EXISTING MAPS

Comparison has been made with U.S.G.S. Quadrangle DRAKES BAY, CALIFORNIA 1:24,000 dated 1953.

The compilation and quadrangle compare very favorably except that a few stock tanks have been created with earth dams since the 1953 survey.

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47. COMPARISON WITH NAUTICAL CHARTS

Comparison has been made with Chart 5603, scale 1:30,000, edition of Nov. 1934 corrected to 4 Feb. 1952. No appreciable differences were noted, except for a dam constructed across the narrow upper part of Home Bay.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None.

ITEMS TO BE CARRIED FORWARD

None.

Iwmg I Saperstein
I. I. Saperstein

Cartographer (Photo)

APPROVED AND FORWARDED:

Arthur L. Wardwell
Arthur L. Wardwell
Chief of Party

48. GEOGRAPHIC NAME LIST

Names were taken from the Drakes Bay Quadrangle.

BLACKSMITH SHOP

CALIFORNIA -

GLENEROOK CREEK -

HOME BAY -

HOME RANCH -

HOME RANCH CREEK -

H RANCH -

INVERNESS RIDGE -

M RANCH -

SCHOONER BAY -

SCHOONER LANDING -

SHALLOW BEACH -

SIR FRANCIS DRAKE HIGHWAY

TOMALES BAY -

TOMALES BAY STATE PARK -

- by Geographic Names Section
George M. Ball
July 13, 1959

PHOTOGRAMMETRIC OFFICE REVIEW

50.

T-10417

1. Projection and grids WHS 2. Title WHS 3. Manuscript numbers WHS 4. Manuscript size WHS
4a Classification label unclassified

CONTROL STATIONS

5. Horizontal control stations of third-order or higher accuracy WHS 6. Recoverable horizontal stations of less than third-order accuracy (topographic stations) XX 7. Photo hydro stations XX 8. Bench marks WHS
9. Plotting of sextant fixes XX 10. Photogrammetric plot report XX 11. Detail points WHS

ALONGSHORE AREAS

(Nautical Chart Data)

12. Shoreline WHS 13. Low-water line XX 14. Rocks, shoals, etc. WHS 15. Bridges WHS 16. Aids to navigation XX 17. Landmarks XX 18. Other alongshore physical features WHS 19. Other along-shore cultural features WHS

PHYSICAL FEATURES

20. Water features WHS 21. Natural ground cover WHS 22. Planetable contours XX 23. Stereoscopic instrument contours XX 24. Contours in general XX 25. Spot elevations XX 26. Other physical features WHS

CULTURAL FEATURES

27. Roads WHS 28. Buildings WHS 29. Railroads XX 30. Other cultural features WHS

BOUNDARIES

31. Boundary lines WHS 32. Public land lines WHS

MISCELLANEOUS

33. Geographic names WHS 34. Junctions WHS 35. Legibility of the manuscript WHS 36. Discrepancy overlay XX 37. Descriptive Report WHS 38. Field inspection photographs WHS 39. Forms WHS
40. W. H. Shearouse M. M. Slavney
Reviewer Supervisor, Review Section or Unit

41. Remarks (see attached sheet)

FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT

42. Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted under item 43.

Compiler

Supervisor

43. Remarks:

- 14 -

Review Report
Planimetric Survey T-10417
July 1959

62. Comparison with Registered Topographic Surveys

T- 805 - 1:10,000 scale - 1862
T- 880 - 1:10,000 scale - 1862
T- 882 - 1:10,000 scale - 1862
T-4638 - 1:10,000 scale - 1931

T-10417 supersedes these prior Bureau surveys for nautical charting purposes in common areas.

63. Comparison with Maps of other Agencies

Drakes Bay, Calif. (USGS)-1:24,000 scale - 1953

The maps are in good agreement except for discrepancies in shoreline at Schooner Landing and in the boundary of the Tomales Bay State Park. The shoreline shown on the quadrangle at Schooner Landing is in error. There are differences between the maps in geographic position of monumented boundard corners of Tomales Bay State Park. The park boundary as constructed on T-10417 is based on the California Dept. of Natural Resources plot which includes plane coordinate positions of monumented corners. Refer to paragraphs no. 33 and 41 (compilation report).

64. Comparison with Contemporary Hydrographic Surveys

H-8356 1:10,000 1956

Shoreline and alongshore details were transferred from the "incomplete" planimetric manuscript, compiled without field inspection, to the boat sheet prior to sounding. The planimetric manuscript was subject to field edit by the hydrographic survey and the photogrammetric field inspection party. The "advance" planimetric manuscript, based on field inspection but subject to final review, was used during verification of the hydrographic smooth sheet. All discrepancies between the two surveys were discussed with the Hydrographic Section and cleared up during final review of the planimetric survey.

65. Comparison with Nautical Charts

No 5603 1:30,000 1934 revised 4/28/58

Only a small portion of Tomales Bay is covered by T-10917. There is a difference between the chart and planimetric map in shoreline at Shallow Beach due to a natural change or a difference in interpretation.

-2-

Small portions of Schooner Bay and Home Bay are covered by T-10417. There is no contemporary hydrographic survey coverage of the area. Shoreline and alongshore details, with the exception of the approximate low water line were field inspected. There are considerable shoreline differences between the chart and map on the point off Schooner Landing and at the head of Home Bay.

66. Adequacy of Results and Future Surveys

This map complies with the National Standards of Map Accuracy and Bureau Requirements.

Reviewed by:

S. G. Blankenbaker
S.G. Blankenbaker

Approved by:

R. C. Landy
Chief, Review and Drafting Section
Photogrammetry Division

Max B. Little
Chief, Nautical Charts Branch
Charts Division

L. W. Swanson
Chief, Photogrammetry Division
13 Nov. 59 1959

J. Bowie
Chief, Coastal Surveys Div.

NAUTICAL CHARTS BRANCH

SURVEY NO. T-10417

Record of Application to Charts

[illegible]

M-2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.