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: Tomales Bay

1955-57

CHIEF OF PARTY
V.R. Sobiersalski, Chief of Field Party
A.L. Wardwell, Tampa Photo, Office

LIBRARY & ARCHIVES

DATE: December 17, 1959
Areas contoured by various personnel
(Show name within area)
(II) (III)
INAPPLICABLE
DESRIPTIVE REPORT - DATA RECORD

Field Inspection by (II): G. H. Bishop
J. S. Chamberlin
C. D. Upham

Ch. Bishop - L. J. Franz

Planetable contouring by (II): Inapplicable

Completion Surveys by (II): Inapplicable

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)
Projecton and Grids checked by (IV): A.R. 

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

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

Reduction Stereoscopic
Control extension by (III): Washington Office

Stereoscopic Instrument compilation (III):

Planimetry I. I. Saperstein

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

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

Elevations on Manuscript checked by (II) (III): Inapplicable

Date: Jan. thru April 1957

July-Aug., 1956

Date:

Date:

Date: 23 Aug. 1956

Date: " " "

Date: 1 July 1958

Date: 1 July 1958

Date: July 1958

Date: July 1958

Date: Sept. 1958
Camera (kind or source) (III): USC&GS Single-lens Wild "M" and "S"
Diapositives

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

Washington Office Review by (IV): S. G. Blankenbaker
Final Drafting by (IV):
Drafting verified for reproduction by (IV):

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 *
Recovered: 5** Identified: 5**
Number of BMs searched for (II): 0
Number of Recoverable Photo Stations established (III): 0
Number of Temporary Photo Hydro Stations established (III): 0

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.
# OFFICIAL MILEAGE FOR COST ACCOUNTS

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**TOTALS** 101 45

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**Planimetric Shoreline Project**

**TOMALES AND BODEGA BAYS, CAL.**

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**Map Diagram**

- Scales and coordinates are marked on the map.
- Various locations and geographical features are labeled, such as Bodega Head, Tomales, Petaluma, etc.
- The map includes grid lines and measurement references for precise location and planning.

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*Note: The map diagram is not transcribed in the text format.*
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 (Kelsch) in the Tampa Office.

Items registered under T-10417 will include a Descriptive Report and positive impression on cronom of the scribed copy of the manuscript.
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<th>STATION</th>
<th>SOURCE OF INFORMATION (INDEX)</th>
<th>CALIF Zone-3 DATUM</th>
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1 FT. = 304.8000 METER
COMPUTED BY: ________________________ DATE 1956

Wash. Office Compilation Unit

CHECKED BY: ________________________ DATE 1956
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 T-10418.
COMPILATION REPORT T-10417

PHOTOGRAMMETRIC PLOT REPORT

The stereoplanigraph bridge was run in the Washington Office.

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

1. 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" = 100 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 34.) 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-10h15 to the north, T-10h18 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.
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.

I. I. Saperstein
Cartographer (Photo)

APPROVED AND FORWARDED:

Arthur L. Wardwell
Chief of Party
16. **GEOGRAPHIC NAME LIST**

Names were taken from the Drakes Bay Quadrangle.

BLACKSMITH SHOP

CALIFORNIA

GLENROCK 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

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by Geographic Division

George M. Ball

July 13, 1959
PHOTOGRAAMETRIC OFFICE REVIEW

T-10417

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

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

ALONGSHORE AREAS
(Nautical Chart Data)
12. Shoreline WBS
13. Low-water line XX
14. Rocks, shoals, etc. WBS
15. Bridges WBS
16. Aids to navigation XX
17. Landmarks XX
18. Other alongshore physical features WBS
19. Other alongshore cultural features WBS

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

CULTURAL FEATURES
27. Roads WBS
28. Buildings WBS
29. Railroads XX
30. Other cultural features WBS

BOUNDARIES
31. Boundary lines WBS
32. Public land lines WBS

MISCELLANEOUS
33. Geographic names WBS
34. Junctions WBS
35. Legibility of the manuscript WBS
36. Discrepancy overlay XX
37. Descriptive Report WBS
38. Field inspection photographs WBS
39. Forms WBS
40. W. H. Shearman

Reviewer

W. H. Slavens
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:

COMM-DC 34529
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 monument boundary 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 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 base 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 4/26/58

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.
Small portions of Schooner Bay and Home Bay are covered by T-10h17. 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

Approved by:

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

W. Swanson
Chief, Photogrammetry Division

J. Bowie
Chief, Coastal Surveys Div.

13 Nov. 59
## Nautical Charts Branch

**Survey No. T-10417**

Record of Application to Charts

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<td>R.E. Elkins</td>
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Before After Verification and Review

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.