

# 10415

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-10415**

### LOCALITY

State **California**

General locality **Marin County**

Locality **Tomaes Bay**

**Pelican Point to Marconi**

**1945-57**

### CHIEF OF PARTY

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

### LIBRARY & ARCHIVES

DATE **December 17, 1959**

# 10415

DESCRIPTIVE REPORT - DATA RECORD

T - 10415

Project No. (II): **Ph-159**

Quadrangle Name (IV):

Field Office (II): **Portland Oregon**

Chief of Party: **V. Ralph Sobieralski**

\* **Sub-Party: Point Reyes Stateion Calif. (1957)**

**Fred Natella**

**1957  
1956**

Photogrammetric Office (III): **Tampa Florida**

Officer-in-Charge: **Arthur L. Wardwell**

Instructions dated (II) (III): **Project 6159, July 1956 (Field)**

Copy filed in Division of  
Photogrammetry (IV)

**Compilation Project 25160, 13 Aug. 1956**

**Project 25160, 22 Oct. 1956, Supplement I (Field)**

**Office - Supplement I-Project Ph-159, 4 Oct. 1957**

Method of Compilation (III): **Kalsh Plotter**

Manuscript Scale (III): **1:10,000**

Stereoscopic Plotting Instrument Scale (III): **1:5,000**

Scale Factor (III): **Pantographed to 1:10,000**

Date received in Washington Office (IV): **12 NOV 1958**

Date reported to Nautical Chart Branch (IV):

Applied to Chart No.

Date:

Date registered (IV): **23 July 1959**

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): **N.A. 1927**

Vertical Datum (III): **MHW**

~~When elevations are shown as follows:~~

Elevations shown as (25) refer to mean high water

Elevations shown as (5) refer to sounding datum

i.e., ~~mean lower low water~~

Reference Station (III): **Foster 1857**

Lat.:

Long.:

Adjusted

~~coordinates~~

Plane Coordinates (IV):

State: **Calif.**

Zone: **3**

Y= **604,862.93 FT.**

X= **1,308,018.82 FT.**

Roman numerals indicate whether the item is to be entered by (II) Field Party, (III) Photogrammetric Office, or (IV) Washington Office.

When entering names of personnel on this record give the surname and initials, not initials only.

\* 1956 Sub. Party location - Sebastopol, Calif.

DESCRIPTIVE REPORT - DATA RECORD

U.S. DEPARTMENT OF COMMERCE  
COAST AND GEODETIC SURVEY


PLANIMETRIC

Areas contoured by various personnel  
(Show name within area)  
(II) (III)



DESCRIPTIVE REPORT - DATA RECORD

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

Date: **Jan thru Apr. 1957**

**C.H. Bishop-V.J. Franz**  
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): **Apr. 1957 - Air Photo Compilation**  
**1957 Field Inspection of 1955 photography**

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

Date: **23 Aug. 1956**

Projection and Grids checked by (IV):

Date:

Control plotted by (III): **Washington Office**

Date: **1956**

Control checked by (III): **Washington Office**

Date: **1956**

~~Control checked~~ Stereoscopic

Control extension by (III): **Washington Office**

Date: **1956**

Planimetry  
Stereoscopic Instrument compilation (III): **I. I. Saperstein**  
~~Control checked~~

Date: **Apr. 1958**

Date:

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

Date: **Apr. 1958**

Photogrammetric Office Review by (III): **M. M. Slavney**

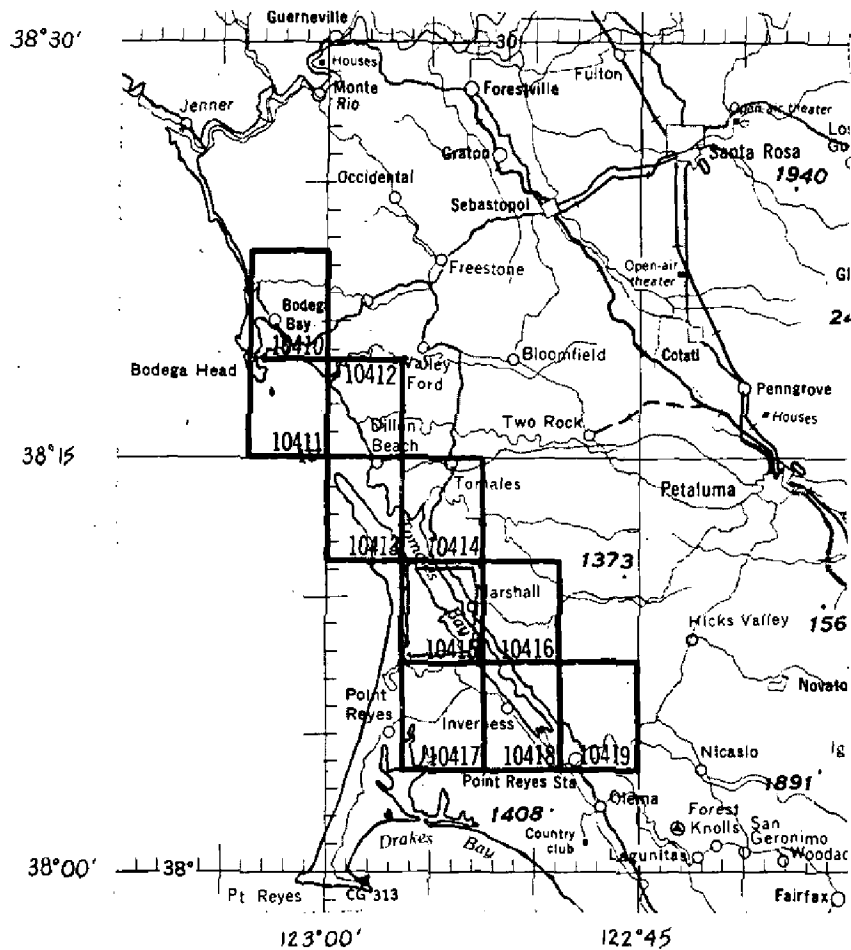
Date: **Aug. 1958**

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

Date:



# PLANIMETRIC PROJECT 25160 TOMALES AND BODEGA BAYS, CAL.



## OFFICIAL MILEAGE FOR COST ACCOUNTS

SHEET NO.	AREA SQ. MI.	LIN. MI. SHORELINE
10410	12	5
10411	1	2
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 45

## DESCRIPTIVE REPORT - DATA RECORD

Camera (kind or source) (III): **Wild, Camera "W" and camera "S"**

4

## PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
55W 620	10 Oct. 1955	10:15	1:25,000	4.1 3.5
55W 621	" " "	10:15	"	4.1 "
55W 622	" " "	10:16	"	4.1 "
55W 647	" " "	10:41	"	3.9 3.3
55W 648	" " "	10:41	"	3.9 "
57S 5802	23 Nov. 1957	--	"	---

Predicated  
Tide (III)

## Diurnal

Reference Station: **San Francisco**Subordinate Station: **Marshall, Tomales Bay**Subordinate Station: **Height of MHW 4.3 ft.**1959 TIDE TABLES  
TIME DIFFERENCEHIGH WATER L. WATER H-  
+0h34m +1h10m L-

Ratio of Ranges	Mean Range	Spring Range
--	3.9	5.7
0.5	3.6	5.4
0.1		

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

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): **9**Shoreline (More than 200 meters to opposite shore) (III): **9**

Shoreline (Less than 200 meters to opposite shore) (III):

Control Leveling - Miles (II):

Number of Triangulation Stations searched for (II): **9**Recovered: **4**Identified: **6\***Number of BMs searched for (II): **3**Recovered: **3**Identified: **3**Number of Recoverable Photo Stations established (III): **1 3**Number of Temporary Photo Hydro Stations established (III): **None**Remarks: **\*2stations reported lost, but were identified.****(Marconi Wireless Mast, 1929)****(White Barn Cupola, 1929) - Not held in bridging**



Summary to Accompany Descriptive Report T-10415

This planimetric map is one of ten similar maps in project PH-159. The project covers the Bodega Bay-Tomales Bay area of the California coast. This survey covers a portion of Tomales Bay and the adjacent land area.

This is an instrument compilation project. Field work accomplished in 1956 and 1957 included field inspection and the establishment of some additional horizontal control. 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 and alongshore details for contemporary hydrographic surveys (1957). The 1957 field party inspected the MHW line and alongshore features.

The bridging and compilation of the "Incomplete" manuscripts were accomplished in the Wash. Office. Final compilation by Kelsh plotter was accomplished in the Tampa Office.

Items registered under the survey will include a Descriptive Report and a positive impression on "cronar" of the scribed copy of the manuscript.

THE 1956 AND 1957 FIELD INSPECTION REPORTS

WERE SUBMITTED AS SEPARATE REPORTS.

INCLUDED IN THE PROJECT COMPLETION REPORT

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

INCLUDED IN THE DESCRIPTIVE REPORT FOR T10412

- (1) copies of field inspection reports (1956-1957)
- (2) Bridging sketch
- (3) Two (2) combined Bridging & Compilation Reports

The Bridging and Compilation Report for T-10415; T-10417; T-10418  
is included in the Descriptive Report for T-10418.



COMPILATION REPORT T-10415PHOTOGRAMMETRIC PLOT REPORT

The stereoplanigraph bridge was run in the Washington Office and a copy of that report is included with the Descriptive Report for T-10418.

31. DELINEATION

The "Incomplete Manuscript" with shoreline, alongshore features, some roads and shoreline pass points was compiled in the Washington Office. Corrections to the shoreline were made graphically by this office from the field photographs holding the shoreline pass points for application to the smooth boat sheets. The manuscript was completed using the Kelsh Plotter.

The southwest corner of the manuscript was compiled from the 1957 photography.

The field inspection was adequate. Scrub shown as "S" on the field prints was shown as "open" on the manuscript.

32. CONTROL

The density of primary and secondary control was adequate.

33. SUPPLEMENTAL DATA

The boundary of Tomales Bay State Park was reconstructed using the following plat:

"Record of Survey for State of California, Dept. of Natural Resources, Division of Beaches and Parks" Dated April 1953, scale 1"= 400' (6 sheets)

34. CONTOURS AND DRAINAGE

Inapplicable.

35. SHORELINE AND ALONGSHORE DETAILS

The shoreline and alongshore details were compiled according to the field inspector's notes. The shoreline inspection was adequate. \*The low-water line was based on data furnished by the field inspector. The shallow areas were delineated by office interpretation of the photographs.

36. OFFSHORE DETAILS

All rocks recovered by the field inspector and those that could be seen on the photographs have been shown.

\* No low-water line or shallow areas shown on the registered manuscript.



### 37. LANDMARKS AND AIDS

Two landmarks have been shown and are reported on Form 567. \*

There are no fixed aids to navigation.

### 38. CONTROL FOR FUTURE SURVEYS

The field inspector recovered topographic station CUT 1931 with a note cautioning "Position should be verified by compilation method". The photostat of the 1931 form 524 gives the position on the N.A. datum. This compilation position checks within 6.4 meters of the 1931 position when the correction for datum is applied. The station is listed under Item 49. No other control was established.

\* 524 cards submitted for the two landmarks

### 39. JUNCTIONS

Junctions have been made with the following:

T-10414 to the north.

T-10417 to the south.

T-10416 to the east

U.S.G.S. Quadrangle TOMALES, CALIF.

1:24,000, 1954 to the west.

### 40. HORIZONTAL AND VERTICAL ACCURACY

No statement.

### 41. BOUNDARIES

The boundary of Tomales Bay State Park was reconstructed 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 TOMALES, CALIF., 1:24,000 dated 1954. The two maps compare very favorably except for a shoreline change around the town of Marshall.

There are no planimetric maps available in this office.

### 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; there were no important differences.





ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None.

ITEMS TO BE CARRIED FORWARD

None.

*Iwing 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 TOMALES Quadrangle, Chart 5603 and field inspector's notes.

CALIFORNIA  
CYPRESS GROVE

DUCK COVE

HEARTS DESIRE

INDIAN BEACH  
INVERNESS RIDGE

KEHOE RANCH

LAIROS LANDING

MARCONI  
MARSHALL  
MARSHALL - PETALUMA ROAD  
MCDONALD McDonald

PEBBLE BEACH  
PELICAN PT.

REYNOLDS

\* SACRAMENTO LANDING — checked by G.M. Ball 7/1/59 Correct usage  
SIR FRANCIS DRAKE HIGHWAY  
STATE 1

TOMALES BAY  
TOMALES BAY STATE PARK

\* YOUNG LANDING

\* U.S.C. & G.S. Chart 5603 shows this feature as YOUNG LANDING but U.S.G.S. Quadrangle TOMALES BAY 1:24,000 dated 1954 shows it as SACRAMENTO LANDING.

Names checked by G.M. Ball 7/1/59  
Geog. Names Section

50.

# PHOTOGRAMMETRIC OFFICE REVIEW

T-10415

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) WBS 7. Photo hydro stations XX 8. Bench marks WBS  
9. Plotting of sextant fixes XX 10. Photogrammetric plot report WBS 11. Detail points XX

## ALONGSHORE AREAS

(Nautical Chart Data)

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

## 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. Shearouse M. M. Slawey  
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-10415  
July 1959

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS

849	1:10,000	1862	4637	1:10,000	1931
880	1:10,000	1862	4638	1:10,000	1931

T-10415 supersedes the planimetric details on the prior bureau topographic surveys for nautical charting purposes.

63. COMPARISON WITH MAPS OF OTHER AGENCIES

Tomales, Calif. (USGS) 1:24,000 1954

There are no major discrepancies between T-10415 and the USGS quadrangle. Minor differences in planimetric details exist due principally to the difference between the maps in time and scale.

64. - COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

H-8355	1:10,000	1957
H-8356	1:10,000	1957

The MHW line and alongshore details were transferred from the "Incomplete" photogrammetric manuscript (compiled without field inspection data) to the boat sheet prior to sounding. Details on the photogrammetric manuscript were subject to edit by the hydrographic survey and the 1957 photogrammetric field inspection party.

Photogrammetric field inspection data were utilized in compiling the advance planimetric manuscript in 1958. Discrepancies between the planimetric and hydrographic surveys were brought to the attention of the Hydrographic Section and disposed of during the final review of the planimetric manuscript. The two surveys are in agreement and together provide the shoreline and alongshore planimetric details required for nautical charting.

65. COMPARISON WITH NAUTICAL CHARTS

5603 1:30,000 1934 revised 4/28/58

Differences exist in shoreline and alongshore details.



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:

*L. C. Lande*  
Chief, Review and Drafting  
Section, Photogrammetry Div.

*Max Stettin*  
Chief, Nautical Charts Branch  
Charts Division

*W. H. Swanson*  
Chief, Photogrammetry Div.  
16 Nov 59

*J. Bowie*  
Chief, Coastal Surveys Division

DESCRIPTIVE REPORT - DATA RECORD

T- 10417

Project No. (II): Ph-159

Quadrangle Name (IV):

Field Office (II): Portland Oregon

Chief of Party: V. Ralph Sobieralski

1957

\* Sub-party: Point Reyes Station, California

Fred Natella

1956

Photogrammetric Office (III): Tampa, Florida

Officer-in-Charge: A. L. Wardwell

Instructions dated (II) (III): Project 6159, 3 July 1956 Field

Copy filed in Division of  
Photogrammetry (IV)

Compilation Project 25160, 13 Aug. 1956

Project 25160 - 22 Oct. 1956, Suppl. 1 (Field)

Office-Supplement 1 Project Ph-159, 4 Oct. 1957

Method of Compilation (III): Kelsh Plotter

Manuscript Scale (III): 1:10,000

Stereoscopic Plotting Instrument Scale (III): 1:5,000

Scale Factor (III): Pantographed to 1:10,000

Date received in Washington Office (IV):

Date reported to Nautical Chart Branch (IV):

Applied to Chart No.

Date:

Date registered (IV):

9 July 1959

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): N.A. 1927

Vertical Datum (III): MHW

~~Mean sea level as follows:~~

Elevations shown as (25) refer to mean high water

Elevations shown as (5) refer to sounding datum

i.e., ~~mean lower low water~~

Reference Station (III): ESTERO 2, 1938

Lat.:

Long.:

Adjusted

~~unadjusted~~

Plane Coordinates (IV):

State: Calif.

Zone: 3

Y= 578,658.71

X= 1,307,563.03

Roman numerals indicate whether the item is to be entered by (II) Field Party, (III) Photogrammetric Office, or (IV) Washington Office.

When entering names of personnel on this record give the surname and initials, not initials only.

\* 1956 Sub-Party location - Sebastopol Calif.





## NAUTICAL CHARTS BRANCH

SURVEY NO. T-10415

## 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.