

# 10416

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-10416

### LOCALITY

State California

General locality Marin County

Locality Tomaes Bay

Bolinas Ridge

1955-57

CHIEF OF PARTY

December 31, 1959

LIBRARY & ARCHIVES

DATE

B-1870-1 (1)

# 10416

DESCRIPTIVE REPORT - DATA RECORD

T - 10416

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

Quadrangle Name (IV):

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

\* **SUB - PARTY: Point Reyes Station, Calif.**

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

Chief of Party: **J. Ralph Sobieralski (1957)**

**Fred Natella (1956)**

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, Supp.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): **9 July 1959**

Publication Scale (IV):

Publication date (IV):

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

Vertical Datum (III): **MHW**

~~MSL~~ except as follows:

Elevations shown as (25) refer to mean high water

Elevations shown as (5) refer to sounding datum

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

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

Lat.:

Long.:

Adjusted

~~Unadjusted~~

Plane Coordinates (IV):

State:

Zone:

Y= **603,048.17 FT.**

X= **1,319,266.29 FT.**

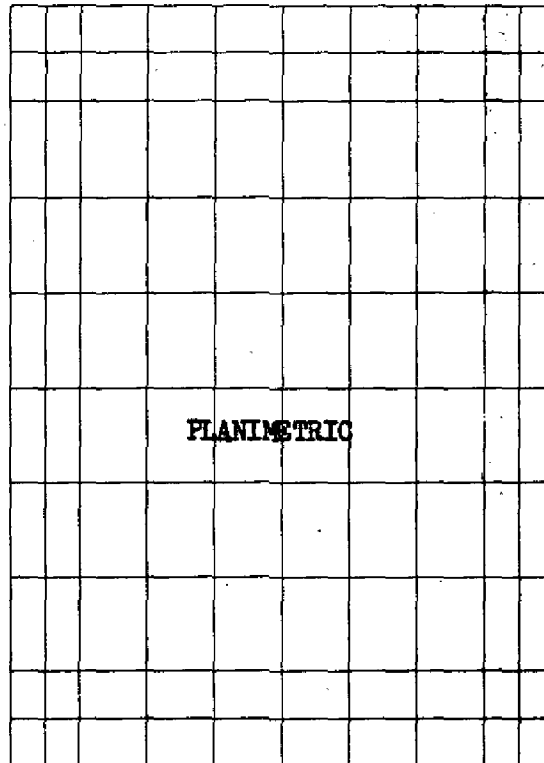
Roman numerals indicate whether the item is to be entered by (II) Field Party, (III) Photogrammetric Office,  
or (IV) Washington Office.

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

\* sub. Party location - Sebastopol, Calif.

DESCRIPTIVE REPORT - DATA RECORD

U.S. DEPARTMENT OF COMMERCE  
COAST AND GEODETIC SURVEY





DESCRIPTIVE REPORT - DATA RECORD

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

Date: **April 1957**

**C.H. Bishop - V.J. Franz**  
Planetable contouring by (II): **Inapplicable**

Date: **July - Aug. 1956**

Completion Surveys by (II): **NONE**

Date:

Mean High Water Location (III) (State date and method of location): **April 1957 Air Photo Compilation**  
**1957 field inspection of 1955 photography**

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

Date: **Aug. 1956**

Projection and Grids checked by (IV): **A.R. (W.O.)**

Date: **Aug. 1956**

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

Date: **— 1956**

Control checked by (III): **W.O.**

Date: **— 1956**

~~Control Plotter~~ Stereoscopic

Date: **1956**

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

Planimetry **W. W. Dawsey**  
Stereoscopic Instrument compilation (III):

Date: **Sept. 1958**

~~XXXXXXXX~~

Date:

Manuscript delineated by (III): **W. W. Dawsey**

Date: **Sept. 1958**

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

Date: **Oct. 1958**

Elevations on Manuscript

checked by (II) (III): **Inapplicable**

Date:



DESCRIPTIVE REPORT - DATA RECORD

4

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

**Diapositives**

~~NO COORDINATES~~

Number	Date	Time	Scale	Stage of Tide
55W-649	10 Oct. 1955	10:42	1:25,000	3.8 3.3
55W-650	"	10:42	"	" 3.3
55W-668	"	10:55	"	--

**Predicted  
Tide (III)**

**Diurnal**

Reference Station: **San Francisco**

Subordinate Station: **Marshall, Tomales Bay**

Subordinate Station: **Height of MHW 4.3 ft.  
(above reference plane)**

Washington Office Review by (IV): **S.G. Blankenbaker**

Final Drafting by (IV): **Tampa Office**

Drafting verified for reproduction by (IV):

Proof Edit by (IV):

Land Area (Sq. Statute Miles) (III): **13**

Shoreline (More than 200 meters to opposite shore) (III): **1MI**

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

Control Leveling - Miles (II): **None**

Number of Triangulation Stations searched for (II): **3**

Number of BMs searched for (II): **None**

Number of Recoverable Photo Stations established (III): **None**

Number of Temporary Photo Hydro Stations established (III): **None**

Remarks:

1959 TIDE TABLES  
TIME DIFFERENCE  
HIGH WATER LOW WATER  
+04 34m +1h 10m

Ratio of Ranges	Mean Range	<del>Mean</del> Range
-	3.9	5.7
1:0.2	3.6	5.4
0.1		

Date: **July, 1959**

Date:

Date:

Date:

Recovered: **2**

Recovered: **--**

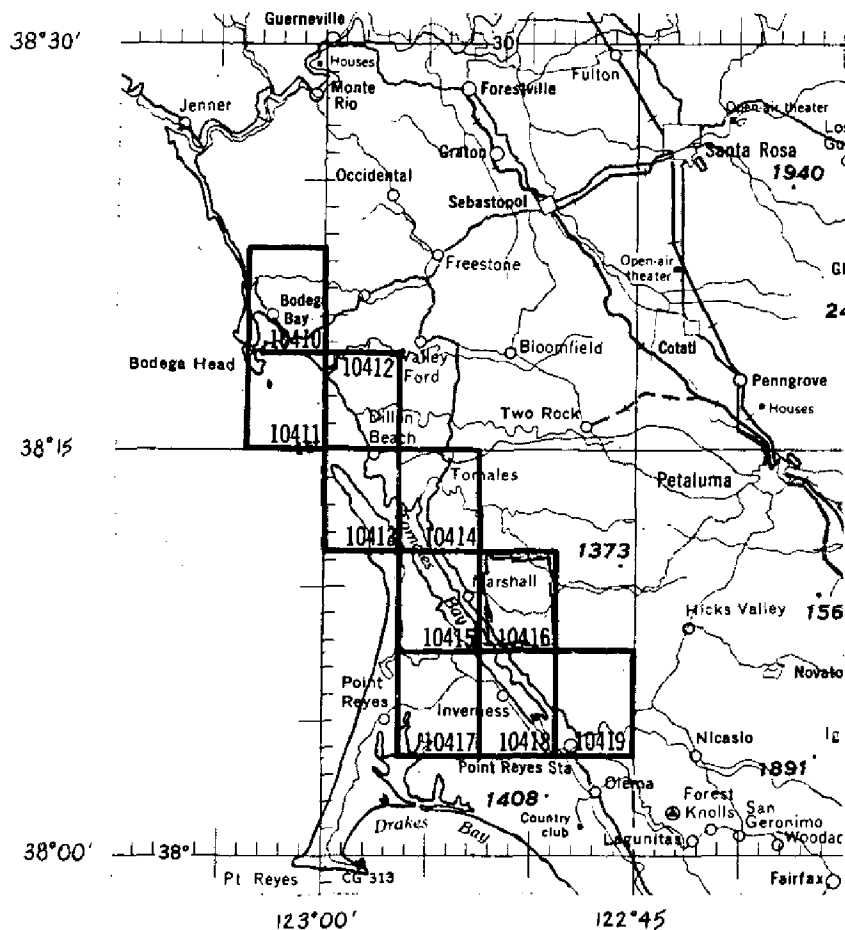
Identified: **2**

Identified: **--**

# PLANIMETRIC PROJECT 25160

## 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
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

# Summary To Accompany Descriptive Report T-10416

Planimetric map T-10416 is one of ten similar maps comprising Project PH-159. The project covers the Bodega Bay-Tomales Bay area of the California coast. This survey is in the south half of the project and covers a portion of the east shore of Tomales Bay and the alongshore area.

This is an instrument compilation project. Field work accomplished in 1956 and 1957 included field inspection and the recovery and establishment of horizontal control. The 1956 field party recovered, established and identified 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 shoreline and alongshore features.

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

Items registered under T-10416 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 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 T-10418.

Desc. Report for



SCALE OF MAP 1:10,000

1 FT. = .3048006 METER	1956	1956	COMM-DC-57843
COMPUTED BY: W. O.	DATE	CHECKED BY: W. O.	DATE

COMPILATION REPORT T-10416PHOTOGRAMMETRIC PLOT REPORT

21 through 30.

The stereoplanigraph bridge was run in the Washington Office. The bridge points held except point No. 503. Point 503 failed to hold by about 20 meters (2 mm. on manuscript) while holding the other control. The new position also held when the adjoining flight was set up.

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

31. DELINEATION

The "INCOMPLETE MANUSCRIPT" was delineated by the instrument method in the Washington Office. Shoreline corrections noted during field inspection were applied by the graphic method for application to the smooth boat sheets. Interior delineation was accomplished by Kelsh plotter in the Tampa Office.

Field inspection was adequate. Areas labelled "S" (scrub) by the field inspector were shown as "open" on the map compilation.

32. CONTROL

The density of primary and secondary control was adequate. Refer to Items 21 through 30.

Corps of Engineers station MILL is shown on the map manuscript without a date of establishment since the date was not furnished by the field party or the Washington Office.

33. SUPPLEMENTAL DATA

None used.

34. CONTOURS AND DRAINAGE

Contours inapplicable.

Drainage was delineated according to field inspection notes and photographic interpretation.

35. SHORELINE AND ALONGSHORE DETAILS

Mean high-water line and alongshore details were delineated according to field inspection notes.

Shoreline inspection was adequate and delineation of low-water and shallow lines was based on the information furnished by the field inspector.



36. OFFSHORE DETAILS

Rocks have been shown as indicated by the field inspector. No other offshore details are indicated.

37. LANDMARKS AND AIDS

There are none.

38. CONTROL FOR FUTURE SURVEYS

None.

39. JUNCTIONS

Junctions have been made with the following:

To the north - USGS Quadrangle POINT REYES NE  
 To the east - USGS Quadrangle POINT REYES NE  
 To the south - T-10418  
 To the west - T-10415

40. HORIZONTAL AND VERTICAL ACCURACY

No statement.

46. COMPARISON WITH EXISTING MAPS

Comparison has been made with U.S.G.S. Quadrangle POINT REYES NE CALIF. 1:24,000. Dated 1954. A favorable comparison was made. No other maps were available.

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 major differences were noted.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None.

66. Adequacy of Results and Future Surveys

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

Reviewed by:

S. G. Blankbaker  
S. G. Blankbaker  
Blankbaker

Approved by:

L. C. Lande  
Chief, Review & Drafting Section  
Photogrammetry Division

Lee H. Carson  
Chief, Photogrammetry Div.

25 May '60

BSG


Max Skellett  
Chief, Nautical Charts Branch  
Charts Division

J. Bowie  
Chief, Coastal Surveys Div.

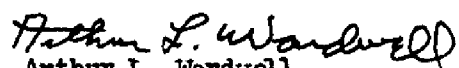


ITEMS TO BE CARRIED FORWARD

None.

  
W. W. Dawsey  
Cartographer (Photo)

APPROVED AND FORWARDED:

  
Arthur L. Wardwell  
Chief of Party

48. GEOGRAPHIC NAME LISTBOLINAS RIDGECALIFORNIAFRINK CANYONMARSHALL - PETALUMA ROADMILLERTON GULCHTOMALES BAYVERDE CANYONWALKER CREEK

Names approved  
July 8, 1959  
L. Heck



# PHOTOGRAMMETRIC OFFICE REVIEW

T. 10416

50.

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 XX  
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 WBS 14. Rocks, shoals, etc. WBS 15. Bridges XX 16. Aids to navigation XX 17. Landmarks XX 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 XX 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. William H. Shearson M. H. Slattery  
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-10416  
July 1959

62. Comparison with Registered Topographic Surveys

No. 840 - 1:10,000 scale - 1862    No. 4638 - 1:10,000 scale-1931  
No. 880 - 1:10,000 scale - 1862

T-10416 and the contemporary hydrographic survey (H-8356) together provide the required shoreline and alongshore planimetric details for nautical charting and supersede the prior topographic surveys for this purpose. Possible exceptions are the three rocks "awash" shown on topographic survey T-4638 approximately 30 meters offshore at latitude 38°08'. There are no photogrammetric field inspection data pertaining to rocks in the area and in addition no rocks can be seen on the photographs. The rocks were not accounted for by the hydrographic survey.

63. Comparison with Maps of Other Agencies

Point Reyes NE, Calif.-1:24,000 scale - 1954

Common details are in good agreement. Minor differences exist due to differences in time and scale.

64. Comparison with Contemporary Hydrographic Surveys

H-8356 1:10,000 scale 1957

A copy of the incomplete manuscript (compiled without field inspection), a partial compilation which included shoreline, adjacent inshore features and offshore rocks was furnished the hydrographic party. Later the shoreline and alongshore details were corrected using the 1957 photogrammetric field inspection and a copy of the corrected manuscript furnished the hydrographic party in Oct. 1957. Differences between the hydrographic smooth sheet and the final photogrammetric manuscript were discussed with the Hydrographic Section during the final review of the photogrammetric survey. Discrepancies were resolved and the two surveys are in agreement.

65. Comparison with Nautical Charts

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

Minor differences exist in shoreline and alongshore features.

## NAUTICAL CHARTS BRANCH

SURVEY NO. T-10416

### 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.