
Form 501

U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

<table>
<thead>
<tr>
<th>Type of Survey</th>
<th>Planimetric</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field No.</td>
<td>Ph-159</td>
</tr>
<tr>
<td>Office No.</td>
<td>T-10419</td>
</tr>
</tbody>
</table>

LOCALITY

<table>
<thead>
<tr>
<th>State</th>
<th>California</th>
</tr>
</thead>
<tbody>
<tr>
<td>General locality</td>
<td>Tomales Bay</td>
</tr>
<tr>
<td>Locality</td>
<td>Pint Reyes Station</td>
</tr>
</tbody>
</table>

1955-57

CHIEF OF PARTY

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

LIBRARY & ARCHIVES

DATE December 17, 1959
DESCRIPTIVE REPORT - DATA RECORD

T - 10419

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: V. Ralph Sobieralski 1957
Fred Natiha 1956
Officer-in-Charge: A. L. Wardwell

Instructions dated (II) (III): Project 6159 3 July 1956 (Field)
Compilation Project 25160 13 Aug. 1956
Project 25160 22 Oct. 1956 Supplement I (Field)
Instructions (office) Supplement I Project Ph-159 4 Oct. 1957

Method of Compilation (III): Stereoscopic Instrument (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): 23 July 1959

Publication Scale (IV):

Geographic Datum (III): N.A. 1927

Vertical Datum (III): MHW
Elevations shown as (25) refer to mean high water
Elevations shown as (s) refer to sounding datum
Elevations shown as (20) mean lower low water

Reference Station (III): TOMASI 1930

Lat.: Long.: Adjusted

Plane Coordinates (IV):
State: Calif Zone: 3

Y = 585,361.76 Ft.

X = 1,339,684.33 Ft.
Areas contoured by various personnel
(Show name within area)
(II) (III)
Inapplicable
Field Inspection by (II): C.H. Bishop  
J.S. Chamberlin  
C.D. Upham

C.H. Bishop - V.J. Franz
Planetary 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. (W.O.)

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

Control plotted by (III): W.O.

Control checked by (III): W.O.

Stereoscopic
Control extension by (III): W.O.

Stereoscopic Instrument compilation (III):

Planimetry W.O.

Tampa

Contours Inapplicable

Manuscript delineated by (III): E. T. Ogilby

Date: April 1958

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

Date: April 1958

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

Date:
DESCRIPTIVE REPORT - DATA RECORD

Camera (kind or source) (III): Wild

<table>
<thead>
<tr>
<th>Number</th>
<th>Date</th>
<th>Time</th>
<th>Scale</th>
<th>Stage of Tide</th>
</tr>
</thead>
<tbody>
<tr>
<td>55-W-616</td>
<td>10 Oct, 1955</td>
<td>10:12</td>
<td>1:25,000</td>
<td>Inapplicable</td>
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<tr>
<td>652</td>
<td></td>
<td>10:43</td>
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<tr>
<td>653</td>
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<tr>
<td>661</td>
<td></td>
<td>10:54</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Ratio of Mean Spring Ranges

Reference Station: Inapplicable

Subordinate Station:

Subordinate Station:

Washington Office Review by (IV): G. Blankenbaker

Date: July 1959

Final Drafting by (IV): Tampa Office

Date: 1958

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): 14

Shoreline (More than 200 meters to opposite shore) (III): 0

Shoreline (Less than 200 meters to opposite shore) (III): 0.5 mile

Control Leveling - Miles (II): None

Number of Triangulation Stations searched for (II): 17

Recovered: 12

Identified: 6

Number of BMs searched for (II): None

Number of Recoverable Photo Stations established (III): 2

Number of Temporary Photo Hydro Stations established (III): 0

Remarks:

- 10 stations fell outside neat-line of which 8 were recovered and 3 identified.
- 2 Landmarks, plus 1 landmark that fell outside neatline.
- 4 recovered stations within manuscript limits. 3 identified.
Summary to Accompany Descriptive Report T-10419

T-10419 is one of ten planimetric maps in project PH-159. The project covers the Bodega Bay-Tomales Bay area of the California coast. Map T-10419, in the south end of the project, covers the area east of the head of Tomales Bay and includes the town of Point Reyes Station.

This is an instrument (Kelsh) compilation project. Field work was accomplished during the summers of 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 the contemporary hydrographic surveys. The 1957 field party inspected the photographs for use in compiling the final planimetric manuscripts.

Bridging and preliminary compilation of shoreline were accomplished in the Washington Office. Final compilation and scribing were accomplished in the Tampa Office.

Items registered under T-10419 will include a Descriptive Report and a positive impression on cronar of the scribed copy of the manuscript.
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 T10412
(1) Copies of Field Inspection Reports (1956-1957)
(2) Bridging Sketch
(3) Two (2) Combined Bridging and Compilation Reports
<table>
<thead>
<tr>
<th>STATION</th>
<th>SOURCE OF INFORMATION (INDEX)</th>
<th>DATUM</th>
<th>LATITUDE OR U-COORDINATE</th>
<th>LONGITUDE OR X-COORDINATE</th>
<th>DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS FORWARD (BACK)</th>
<th>DATUM CORRECTION</th>
<th>N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)</th>
<th>FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)</th>
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<tr>
<td>SS TACLOMA 1930</td>
<td>Calif Zone III</td>
<td>N A 1927</td>
<td>572</td>
<td>675.68</td>
<td>1346 317.25</td>
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<tr>
<td>FAULTLINE E</td>
<td></td>
<td>1930</td>
<td>573</td>
<td>968.35</td>
<td>Outside Proj.</td>
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<tr>
<td>SS FAULTLINE E</td>
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<td>1930</td>
<td>573</td>
<td>968.34</td>
<td>Limits</td>
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<tr>
<td>GARCIA 1930</td>
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<td></td>
<td>578</td>
<td>260.83</td>
<td>1342 452.34</td>
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<tr>
<td>SS GARCIA 1930</td>
<td></td>
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<td>578</td>
<td>271.68</td>
<td>1342 467.52</td>
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<tr>
<td>TOMASI 1930</td>
<td></td>
<td></td>
<td>585</td>
<td>381.78</td>
<td>1339 681.33</td>
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<tr>
<td>SS TOMASI 1930</td>
<td></td>
<td></td>
<td>585</td>
<td>148.58</td>
<td>1348 280.73  &amp; 55.66</td>
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<tr>
<td>BLACK 1930</td>
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<td>583</td>
<td>453.42</td>
<td>1348 280.73</td>
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<tr>
<td>BLACK (HUB &quot;A&quot;) 1930</td>
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<td>583</td>
<td>473.11</td>
<td>1348 306.49</td>
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<tr>
<td>SUB Sta BLACK 1930</td>
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<td>583</td>
<td>711.27</td>
<td>1348 348.81</td>
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</table>
COMPILATION REPORT T-10419

PHOTOGRAMMETRIC PLOT REPORT

The stereoplanigraph bridge was run in the Washington Office. The Bridging Report is a part of the Descriptive Report for T-10418.

31. DELINEATION

The "INCOMPLETE MANUSCRIPT" was delineated with stereoscopic instrument in the Washington Office before field inspection. After field inspection the compilation was completed in the office using the Kelsh Plotter.

Areas shown as S (scrub) in the field inspection photographs were shown "open" on the compilation.

The field inspection was adequate.

32. CONTROL

The density and identification of primary and secondary control was adequate.

33. SUPPLEMENTAL DATA

None used.

34. CONTOURS AND DRAINAGE

Contours are inapplicable. Drainage was delineated from field inspection notes and interpretation of the model.

35. SHORELINE AND ALONGSHORE DETAILS

There is no shoreline or alongshore detail except approximately a half mile of Lagunitas Creek which was delineated in accordance with field inspection.

36. OFFSHORE DETAILS

None.
37. **LANDMARKS AND AIDS**

Three landmarks are reported on Form 567.

There are no aids to navigation.

38. **CONTROL FOR FUTURE SURVEYS**

Form 524's were submitted for the landmarks mentioned in Item 37 (a tank and a barn gable).

39. **JUNCTIONS**

Junctions have been made with the following:

T-1012B to the west; POINT REYES N.E. U.S.G.S. 1:24,000, 1954 to the north; INVERNESS, U.S.G.S. 1:24,000, 1954 to the south; SAN Geronimo, U.S.G.S. 1:24,000, 1954 to the east.

40. **HORIZONTAL AND VERTICAL ACCURACY**

No statement.

46. **COMPARISON WITH EXISTING MAPS**

Comparison was made with USGS Quadrangle INVERNESS 1:24,000, 1954. The two maps compare very well.

47. **COMPARISON WITH NAUTICAL CHARTS**

Comparison with Chart 5603, scale 1:30,000, 2nd edition 1934 corrected to 1952. There are some minor changes, the most important being the deletion of the Northwestern Pacific Railroad on this compilation.
 ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

 None.

 ITEMS TO BE CARRIED FORWARD

 None.

 E. T. Ogilby
 Cartographer (Photo)

 APPROVED AND FORWARDED:

 Arthur L. Wardwell
 Chief of Party
48. GEOGRAPHIC NAME LIST

Names were taken from the USGS Quadrangle INVERNESS and the field inspector's notes.

BLACK MOUNTAIN
BOLINAS RIDGE
CALIFORNIA
CYPRESS ROAD
GRAND CANYON
LAGUNITAS CREEK *
MES A ROAD
NICASIO CREEK
POINT REYES STATION
ST FRANCIS DRAKE HWY
TOMASINI CANYON

* BGN DECISION

Chicked June 3rd 1957
Geographic Names Section
George H. Sace
PHOTOGRAMMETRIC OFFICE REVIEW


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

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

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

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

BOUNDARIES
31. Boundary lines
32. Public land lines

MISCELLANEOUS
33. Geographic names
34. Junctions
35. Legibility of the manuscript
36. Discrepancy overlay
37. Descriptive Report
38. Field Inspection photographs
39. Forms

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:
62. Comparison with Registered Topographic Surveys

T-4638 1:10,000 scale 1931

T-10419 supersedes the prior survey for nautical charting purposes.

63. Comparison with Maps of Other Agencies

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

Details common to T-10419 and the USGS quadrangle are in good agreement.

64. Comparison with Contemporary Hydrographic Surveys

8356 1:10,000 1957

A small portion of Lagunitas Creek and the circled position of two landmark barns (gables) are the only details on the hydrographic smooth sheet in the area common to the two surveys. The surveys are in agreement.

65. Comparison with Nautical Charts

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

Minor shoreline and alongshore differences exist.

66. Adequacy of Results and Future Surveys

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

Reviewed by:

S. G. Blankenbaker

Approved by:

Chief, Review & Drafting Section  Chief, Nautical Charts

Chief, Photogrammetry Division  Chief, Coastal Surveys Division

13 July 59
I recommend that the following objects which have (have not) been inspected from seaward to determine their value as landmarks be charted on (deleted from) the charts indicated.

The positions given have been checked after listing by E. T. Gilby.

Arthur L. Wardwell  
Chief of Party.

<table>
<thead>
<tr>
<th>CHARTING NAME</th>
<th>DESCRIPTION</th>
<th>SIGNAL NAME</th>
<th>LATITUDE</th>
<th>LONGITUDE</th>
<th>LATITUDE</th>
<th>LONGITUDE</th>
<th>DATUM</th>
<th>METHOD OF LOCATION AND SURVEY</th>
<th>CHARTS AFFECTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>BARN</td>
<td>S.W. Gable (Large barn with galvanized roof)</td>
<td>36 0h 02.72</td>
<td>122 4h 35.29</td>
<td>(1766)</td>
<td>85.74</td>
<td>85.74</td>
<td>1927 1-10h 19</td>
<td>1957</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>ht. = 2h (45)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>TANK</td>
<td>E.L. (cylindrical water tank flat-top)</td>
<td>36 0h 18.65</td>
<td>122 4h 10.63</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>ht. = 50 (180)</td>
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<td></td>
</tr>
<tr>
<td>BARN</td>
<td>N. Gable (Large barn with galvanized roof)</td>
<td>38 0h 38.28</td>
<td>122 4h 31.61</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

(Barn is south of project limits)

Positions determined graphically during final review.

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and nonfloating aids to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.
<table>
<thead>
<tr>
<th>DATE</th>
<th>CHART</th>
<th>CARTOGRAPHER</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>12-2-60</td>
<td>5603</td>
<td>E. B. Ekins</td>
<td>Before After Verification and Review</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Consider fully adopted.</td>
</tr>
<tr>
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<td>Before After Verification and Review</td>
</tr>
</tbody>
</table>

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.