DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

State: CALIFORNIA

DESCRIPTIVE REPORT
Topographic Sheet No. T-5038

LOCALITY
Sacramento-San Joaquin Delta

1934

CHIEF OF PARTY
L. P. Raynor
The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field Letter

REGISTER NO. T-5038

State... CALIFORNIA

General locality... SACRAMENTO-SAN JOAQUIN DELTA

Locality... BETHANY

Date of photographs, January 3, 1932

Scale... 1:10,000

Date of Compilation, December 29, 1933

Vessel... Army Air Corps MIA Airplane

Chief of Party... Lieut. L. P. Raynor

Compiled by... S. B. Lane

Surveyed by... 

Inked by... V. J. Mignola

Heights in feet above... to ground... to tops of trees

Contour Approximate contour Form line interval... feet

Instructions dated August 12, 1933 and September 2, 1933

Remarks: Compiled from photographs Nos. SS 1161 to 1164, inc.

Reduced to scale and printed by photographic process.
<table>
<thead>
<tr>
<th>DESCRIPTION OF WORK</th>
<th>DONE BY</th>
<th>DATE COMPLETED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyconic Projection</td>
<td>S.B. Lane</td>
<td>December 28, 1933</td>
</tr>
<tr>
<td>Projection Verified</td>
<td>S.S. Whitehead</td>
<td>December 28, 1933</td>
</tr>
<tr>
<td>Control Plotted</td>
<td>S.B. Lane</td>
<td>December 28, 1933</td>
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<tr>
<td>Control Verified</td>
<td>S.S. Whitehead</td>
<td>December 28, 1933</td>
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<td>Compiled in Pencil</td>
<td>S.B. Lane</td>
<td>December 29, 1933</td>
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<tr>
<td>Inked</td>
<td>W.J. Mignola</td>
<td>January 13, 1934</td>
</tr>
<tr>
<td>Hachures and Woodland Symbol</td>
<td>S.S. Whitehead</td>
<td>February 14, 1934</td>
</tr>
<tr>
<td>Proofreading</td>
<td>T.P. Pendleton</td>
<td>February 2, 1934</td>
</tr>
<tr>
<td>Names Attached Various Members of Party</td>
<td></td>
<td>February 28, 1934</td>
</tr>
<tr>
<td>Descriptive Report</td>
<td>S.B. Lane</td>
<td>February 26, 1934</td>
</tr>
</tbody>
</table>
GENERAL INFORMATION

The area of this sheet is 5.6 square miles.
The length of rivers and sloughs is 2.0 miles.
At and north of Old River the land is very low, varying in elevation from a few feet above to a few feet below mean sea level. South and west of Old River it slopes gradually upward, becoming much steeper beyond the irrigation canal which forms the south boundary of the sheet.

There are no bridges or transmission line crossings over navigable waters on this sheet, and no submarine cable crossings. Bethany Ferry across Old River was formerly operated at a point near White House Landing, but the operation of this ferry has been discontinued.

PHOTOGRAPHS

Photographs Nos. 1161 to 1164, inc. fall on this sheet.
These pictures were taken January 3, 1932 between 1:30 and 2:30 p.m.
CONTROL

Bethany is a U.S.G.S. station. 1155A is a theodolite three point fix by T.P. Pendleton, and is not marked and not recoverable. All other points were triangulated by L.P. Raynor in 1933. All theodolite three point fixes are shown on the sheet by small circles. The control has been adjusted to 1927 N.A. Datum.

The locations given in the following table are the values used in the compilation of this sheet.

TABLE OF CONTROL

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>LATITUDE</th>
<th>LONGITUDE</th>
</tr>
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<tbody>
<tr>
<td>Δ RAY, 1933</td>
<td>37 - 48 - 10.21</td>
<td>121 - 32 - 52.05</td>
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<tr>
<td>HILWAY, 1933</td>
<td>37 - 48 - 26.00</td>
<td>121 - 32 - 26.09</td>
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<td>◊ Bethany, U.S.G.S.</td>
<td>37 - 47 - 18.31</td>
<td>121 - 32 - 15.00</td>
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<td>◊ 1162 B 3pt Fix, not marked</td>
<td>37 - 46 - 58.02</td>
<td>121 - 32 - 15.25</td>
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<tr>
<td>◊ 1155 A (T.P.P.) 3pt Fix, not marked</td>
<td>37 - 47 - 57.69</td>
<td>121 - 33 - 22.25</td>
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<tr>
<td>◊ 1159 A 3 pt Fix, not marked</td>
<td>37 - 46 - 59.28</td>
<td>121 - 35 - 07.42</td>
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<tr>
<td>◊ 1159 B 3 pt Fix, not marked</td>
<td>37 - 48 - 25.79</td>
<td>121 - 35 - 38.47</td>
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</table>

The positions shown above are from field computations on 1927 N.A. Datum and differ slightly from the final office adjusted positions.

COMPILATION

The radial line method was used in the compilation of this sheet. The map was completed in pencil before being inked.

The boundary line between Alameda and San Joaquin Counties is not marked in the field. Old acts of the State legislature.
designating county boundaries were investigated and county markers on the railroad and highways investigated. It was possible to recover monuments on the west line of the Pescadero Grant, and the county boundary was located from these monuments, using data secured from the office of the County Surveyor of Alameda County. The County Surveyor of San Joaquin County was unable to furnish any definite information on the subject.

The information secured checked reasonably close to the location of the county boundary markers on both the railroad and highways, and was used in locating the line on the map. It appears that the boundary line has not been run out for many years, and the notes of the old compass survey were looked over, but found to be very vague and of little value today. It is believed that the line as shown is well within a probable error of five meters.

LANDMARKS AND RECOVERABLE OBJECTS.

For reference to landmarks and recoverable objects see general section of descriptive report for Sheet No. T-5027. Copy of list of landmarks is attached to descriptive report 5-17.

RECOMMENDATIONS

This sheet is believed to have a probable error of less than five meters in all places.
Title (Par. 56)

Chief of Party L. P. Raynor

Project 153 H. & T.

Compiled by John Doe.

Instructions dated Aug. 12, 1933.

1. The survey and preparation for it conform to the requirements of the Topographic Manual. (Par. 8; and 16, a, b, c, d, e, g and i.)

Yes

2. The character and scope of the compilation satisfy the instructions and the "Notes on the Compilation of Planimetric Line Maps from Five Lens Aerial Photographs".

Yes

3. The control and adjustment of the radial plot were adequate. (Par. 12, 29.)

Yes

4. There is sufficient control on maps from other sources that were transmitted by the field party for their application to the charts. (Par. 26.) Maps from other sources were not used.

5. High water line on marshy and mangrove coast is clear and adequate for chart compilation. (Par. 16a, 43, 44.)

6. The representation of low water lines, reefs, coral reefs and rocks, and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41.) These features, except low water line, do not appear on this sheet. A general statement regarding water lines appears in Descriptive Report Sh. No. T-5027.

Important details shown on previous surveys and on the chart have been compared with this sheet and a statement has been entered in the report regarding the removal from the chart or change in position of important detail such as rocks, lights, beacons, prominent objects, bridges, docks, and structures along the water front. No previous surveys for navigational use have been made.

7. The span, draw and clearance of bridges are shown. (Par. 16c.)

These details appear in descriptive reports.

8. The data furnished by the Field Inspection is adequate.

Yes

NOTE: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual. Use reverse side for extending remarks.
10. The descriptive report covers all details listed in the Manual, so far as they apply to this survey. (Par. 64, 65 and 66.)

Yes

11. The descriptive report also contains all additional information required in photo topography as prescribed in the instructions and in the "Notes on the Compilation of Planimetric Line Maps from Five Lens Aerial Photographs".

Yes

12. The descriptions of recoverable stations and independent shots were accomplished on Form 524, and scaling of positions checked. (Par. 29, 30 and 57.) Yes, these recoverable topographic stations are shown on this sheet.

13. A list of landmarks for charts was furnished on Form 567 and scaling of positions checked. (Par. 16d, e, 60.) Yes. This is a duplicate of list supplied by L. P. Raynor with omitted positions, scaled and a few additional marks.

14. The geographic datum of the sheet is W.D. 1927 and the reference station is correctly noted. (Par. 34.)

Yes

15. Junctions with contemporary surveys are adequate.

Yes

16. Geographic names are shown on the sheet and are covered by the Descriptive Report. (Par. 64, 66k.) Yes, names approved.

17. The quality of the drafting is good. (Par. 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 45, 46.) Yes, except that black celluloid ink was used throughout.

18. No additional surveying is recommended.

19. Remarks:

20. Examined and approved: L. P. Raynor

Chief of Party

Chief Photo Compiler

21. Remarks after review in office:

Reviewed in office by: R. G. Jones

Examinad and approved: K. T. Adams

Chief, Section of Field Records

Chief, Division of Charts

Chief, Section of Field Work

Chief, Division of Hydrography and Topography.
<table>
<thead>
<tr>
<th>Status</th>
<th>Name on Survey</th>
<th>Name on Chart</th>
<th>New Names in local use</th>
<th>Names assigned by Field</th>
<th>Location</th>
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<td></td>
<td>Union Island</td>
<td>Established usage shown on all maps early and recent</td>
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<tr>
<td></td>
<td>Old River</td>
<td>&quot;</td>
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<td></td>
<td>Byron-Bethany Irrigation District</td>
<td></td>
<td>The name, Thomas Mournian, appears as a land owner in the same location as Mountian Tract on the Map of San Joaquin County and vicinity, 1916, compiled by S. &amp; A. Widdoes. R. Mournian is a land owner in the same area on the Map of San Joaquin County, by Compton, 1895. The spelling of Mountian on the Weathers map evidently is an error.</td>
<td></td>
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<tr>
<td></td>
<td>Mountian Tract</td>
<td>Mountian Tract</td>
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<tr>
<td></td>
<td>Mountain House Creek</td>
<td>Mountain House Creek</td>
<td>This spelling appears on: Topographical Map of Central California, State Geological Survey of California, 1873, 1&quot; to 6 miles San Joaquin valley Tulare Lake to Suisun Bay, sheet 2 by Corps of Engineers, in cooperation with Dept. of Engineering, State of Calif. Field Reports U.S.G.S. Mountainhouse appears on U.S.G.S. Bethany Quadrangle, and other maps which evidently follow it, conforming to the principle of the U.S.G.S. favoring one word. Since Field Reports of the U.S.G.S. use Mountain House, would use this spelling as the probable local usage. No U.S.G.S. decision.</td>
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