DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

State: CALIFORNIA

DESCRITIVE REPORT

Topographic Sheet No. T-5037
Hydrographic H 6621

LOCALITY
Sacramento-San Joaquin Delta
LAUTHROP

1933

CHIEF OF PARTY
L. P. Raynor
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

AIR PHOTO
TOPOGRAPHIC TITLE SHEET

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-5637

State CALIFORNIA

General locality SACRAMENTO-SAN JOAQUIN DELTA

Locality LATHROP

Date of photographs, January 3, 1932

Scale 1:10,000

Date of compilation, October 25, 1933

Vessel Army Air Corps FA Airplane

Chief of Party Lieut. L. P. Raynor

Compilation by W. J. Mignola

Surveyed by

Inked by W. 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 21, 1933

Remarks Compiled from photographs Nos. SS 1099 to 1132, Inc.

Reduced to scale and printed by photo lithographic 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>K.B. Walker</td>
<td>September 12, 1933</td>
</tr>
<tr>
<td></td>
<td>K.B. Walker</td>
<td></td>
</tr>
<tr>
<td>Projection Verified</td>
<td>T.P. Pendleton</td>
<td>September 12, 1933</td>
</tr>
<tr>
<td>Control Plotted</td>
<td>K.B. Walker</td>
<td>September 12, 1933</td>
</tr>
<tr>
<td>Control Verified</td>
<td>T.P. Pendleton</td>
<td>September 12, 1933</td>
</tr>
<tr>
<td>Compiled in Pencil</td>
<td>W.J. Mignola</td>
<td>October 25, 1933</td>
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<td>W.J. Mignola</td>
<td></td>
</tr>
<tr>
<td>Inked</td>
<td>W.J. Mignola</td>
<td>November 23, 1933</td>
</tr>
<tr>
<td>Hachures and Woodland Symbol</td>
<td>S.S. Whitehead</td>
<td>December 5, 1933</td>
</tr>
<tr>
<td>Proofreading</td>
<td>T.P. Pendleton</td>
<td>January 19, 1934</td>
</tr>
<tr>
<td>Names Attached</td>
<td>Various Members of Party</td>
<td>February 24, 1934</td>
</tr>
<tr>
<td>Descriptive Report</td>
<td>S.B. Lane</td>
<td>February 26, 1934</td>
</tr>
</tbody>
</table>
PROJECT NO. H.T. 153
DESCRIPTIVE REPORT
To Accompany
SHEET NO. T-5037
LATHROP, CALIFORNIA

L. F. Raynor, Lieut., C.& G.S., Chief of Party

See descriptive report for Sheet No. T-5027 for information which applies to the entire project.

GENERAL INFORMATION

Area of sheet, 31.1 square miles
Length of rivers and sloughs, 17.2 miles
The land slopes very gradually upward east of the San Joaquin River. The rest of the sheet is very low, varying from a few feet above to a few feet below mean sea level.

The San Joaquin River and Middle River are both navigable, the San Joaquin throughout the entire length shown on this sheet and Middle River only in the northern part of the sheet.

There are two county bridges on this sheet, one where the Roberts Island Road crosses the San Joaquin River and one where the Undine Road crosses Middle River.

The bridge over the San Joaquin is a hand operated swing span. Both east and west channels have a width of 103 feet. The clearance above high water will be determined by the hydrographic party.
The bridge over Middle River is a fixed steel span. The width of channel and clearance above high water will be determined by the hydrographic party.

TRANSMISSION LINE CROSSINGS OVER NAVIGABLE WATERS

<table>
<thead>
<tr>
<th>ACROSS</th>
<th>LOCATION</th>
<th>Towers or Poles</th>
<th>Clear HW</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIDDLE RIVER</td>
<td>South of Mowry Bridge</td>
<td>Steel</td>
<td>110 ft</td>
</tr>
<tr>
<td>MIDDLE RIVER</td>
<td>South of Mowry Bridge</td>
<td>Wood</td>
<td>#</td>
</tr>
</tbody>
</table>

# Clearance unknown. Will be determined by hydrographic party.

SUBMARINE CABLE CROSSINGS

All underwater cable crossings noted by the field inspection party or by the photo compilation party have been shown.

PHOTOGRAPHS

The following photographs fall on this sheet: Nos. 1099 to 1132, inc. These photographs were taken January 3, 1932 between 1:30 and 2:30 p.m.

CONTROL

Mowry, Cactus, Lath, Chic, Muri, and Sal were triangulated by J. Bowie in 1931. Other points by L. P. Raynor in 1932 and 1933, except those marked "T.P.P." The latter are all theodolite three point fixes, by T.P.Pend;eton, are all not marked and not recoverable, and are shown on the sheet by small circles. All values have been adjusted to 1927 N.A.Datum.

The locations shown in the following table are the values used in the compilation of this sheet.
Note: In addition to the objects listed on the opposite page, the following recoverable objects were located by the Airphoto Plot and are shown as Topographic Stations on this sheet.

<table>
<thead>
<tr>
<th>Station</th>
<th>Approx Lat.</th>
<th>Approx Long.</th>
<th>Height</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Wood</td>
<td>37° 49'</td>
<td>121° 23'</td>
<td>Not described</td>
<td></td>
</tr>
</tbody>
</table>
T-5037 Positions given here are from the field computations on NA 1927 datum.

TABLE OF CONTROL

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>LATITUDE</th>
<th>LONGITUDE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mowry, 1931</td>
<td>37 - 50 - 07.130</td>
<td>121 - 22 - 56.548</td>
</tr>
<tr>
<td>Cactus, 1931</td>
<td>37 - 50 - 54.031</td>
<td>121 - 17 - 00.434</td>
</tr>
<tr>
<td>Lath, 1931</td>
<td>37 - 49 - 36.182</td>
<td>121 - 18 - 35.111</td>
</tr>
<tr>
<td>Chic, 1931</td>
<td>37 - 51 - 23.157</td>
<td>121 - 19 - 12.368</td>
</tr>
<tr>
<td>Muri, 1931</td>
<td>37 - 52 - 05.75</td>
<td>121 - 20 - 52.82</td>
</tr>
<tr>
<td>Sal, 1931</td>
<td>37 - 49 - 01.786</td>
<td>121 - 21 - 09.870</td>
</tr>
<tr>
<td>Tallest of North Trio</td>
<td>37 - 49 - 46.82</td>
<td>121 - 23 - 03.75</td>
</tr>
<tr>
<td>Steel Towers, 1933</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tallest of South Trio</td>
<td>37 - 49 - 42.38</td>
<td>121 - 23 - 08.60</td>
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<tr>
<td>Steel Towers, 1933</td>
<td></td>
<td></td>
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</tbody>
</table>

Compilation was by the radial line method. The map was completed in pencil before it was inked.

The following names were obtained from Weather's map. They have been checked by an interview with another old-time river-man, who stated that they were in common use by the river-men of this section. For this reason they have been placed on the map as distinguishing certain portions of the
San Joaquin River, although they do not appear to be in common use to other than river-men.

DOUBLE CHICKORY BEND, LITTLE CHICKORY BEND; SLAUGHTERHOUSE BEND, BULKHEAD BEND, BLACKSMITH CUT, NIGGER BILL BEND, PICNIC BEND, PUMP BEND, JACKSTAFF BEND.

The track layout at Lathrop was checked by field inspection. The tracks as shown omit one, which it was impossible to include at the scale of the sheet.

LANDMARKS AND RECOVERABLE OBJECTS

For list of landmarks and recoverable objects see reference in general section of Descriptive Report for Sheet No. T-5027. List of landmarks on form 567 attached to desc. report see T5027.

NEW ROAD

The county road near the southwest corner of this sheet, which crosses Paradise Cut on two steel bridges, shown on Sheet No. T-5040, has been constructed since the photographs were taken. Its position was determined in the field.

RECOMMENDATIONS

This sheet is believed to have a probable error of less than five meters in all places.

Attention is called to the use of the name "Old River" on this sheet. This is the name given to the stream by nearby long-time residents and it so appears on "Map of the San Joaquin River, 1915" prepared by the U.S. Engineers in

Names as here given sent to D.G.N for approval.
collaboration with the Department of Engineering, State of California, and the California Debris Commission.

The use of the name "Middle River" for this stream, as it appears on the U.S. Geological Survey, Lathrop, California Quadrangle, seems to be erroneous.
<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>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
<td>Old River</td>
<td></td>
<td>Name to stand as on 75037 till division is made</td>
<td>Old River</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Roberto Island</td>
<td></td>
<td>All map and local usage</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Middle River</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Lathrop</td>
<td></td>
<td></td>
<td>U.S. Postal Guide, 1934</td>
<td></td>
</tr>
<tr>
<td></td>
<td>San Joaquin River</td>
<td></td>
<td></td>
<td>U.S.G.B.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mowry Ferry Bridge</td>
<td></td>
<td>Maps</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Union Island</td>
<td></td>
<td>Maps and local usage</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Paradise Cut</td>
<td></td>
<td>Maps and local usage</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>For authorities consulted see DR-jr-75027</td>
<td></td>
</tr>
</tbody>
</table>
Title (Par. 56)

Chief of Party  L.P. Raynor

Project  153 H. & T.

Compiled by  

Instructions dated  Aug 12, 1935

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. 28.) 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 occur on this sheet. A general statement regarding water lines appears in Descriptive Report Sh. No. T-5027.

7. 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.

8. The span, draw and clearance of bridges are shown. (Par. 16c.) These details appear in descriptive reports.

9. 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 object points were accomplished on Form 524, and scaling of positions checked. (Par. 29, 30 and 57.)

Yes

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.

Yes

14. The geographic datum of the sheet is N.A. 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

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:

[Signatures of Chief of Party and Chief Photo Compiler]

21. Remarks after review in office:

Reviewed in office by:

Examined and approved:

[Signatures of Chief, Section of Field Records, Chief, Division of Charts, Chief, Section of Field Work, Chief, Division of Hydrography and Topography]