State: California

DESCRIPTIVE REPORT

Locality

San Joaquin River Delta
Taylor Slough to Old River

19.33

Chief of Party

O. S. Reading
(T5014 & T5014a)

Applied to drawing of Chart 5527

Dec 21, 1934 - JFW
DESCRIPTIVE REPORT TO ACCOMPANY

AIR PHOTO-TOPOGRAPHIC SHEET NO. 5014

TAYLOR SLOUGH TO OLD RIVER, SAN JOAQUIN RIVER DELTA, CALIFORNIA.

See Descriptive Report T-4685 for general report of Field Inspection

I. General Information

(a) A duplicate of the title sheet is attached to this report.

(b) Statistics. The sheet covers 30 square miles, and contains 12-3/4 miles of shoreline, and 30-1/2 miles of rivers and sloughs, less than 200 meters wide.

(c) The report of T-4686 contains a good description of the general topography of the San Joaquin Delta. It might be added that the various tracts are divided up more or less into camps and ranches, and on this sheet there are numerous sand mounds, especially on Holland Tract, protruding some five to ten feet above the general level of the land. Occasionally these mounds have been leveled somewhat and cultivated with the surrounding land; however, in general they are more or less overgrown with weeds.

(d) The sheet is made up of two flights, one across the northern half SS 651-666 taken between 1:15 p.m. and 2:10 p.m. December 12, 1931, and the other across the southern half, SS 739-755 taken between 9:30 a.m. and 10:20 a.m. December 12, 1931 (or between 11:30 a.m. and 12:15 p.m. December 16, 1931). The statement in the flight report of the aviator is not clear as to which part of the strip was flown on the 12th and which on the 16th.

II. Control.

Sources - Control of this sheet is from triangulation by J. Bowie, 1931, theodolite three point fixes by L. P. Raynor, 1932, and U. S. Engineer Traverse along False River. The triangulation and three-point fixes are on the North American, 1927, datum. The Engineer's traverse was not received until the sheet was nearly completed and was used to prove and strengthen the plot along the False River.

(b) Errors - Considerable difficulty was experienced with "Tank near Inst. Set-up 649C". The location finally accepted checks T-4685, but is five meters east of the field's location. The latitude checks.

(c) Discrepancies - U. S. E. D. station 250 * 85 was omitted from the sheet. It plotted some 15 to 20 meters east of its coordinate location.

III. Compilation.

(a) Method - The radial plot method of photograph compilation was used.
(b) Adjustments of plot - Latitude 38° 00' Longitude 121° 34' to 121° 35', in the area of Rhode Island this sheet failed to join with 5015 by some 20 meters. In longitude the junction was very good. A detailed statement as to the adjustment in this area may be found in the report of 5015.

Around the mouth of the False River, the northwestern corner of the sheet, the junction with 4686 was troublesome. Photographs SS 662 - 647 contained tilt probably due to the difference in air pressure over the San Joaquin River from over the ground. This sheet was extended and the plot was carried into T 4686. By taking offset plumb points and proportioning "point to cut," the plot was smoothed out and a good junction made. The plot, however, moves "Tank near Inst. Set Up 649 C" about five meters eastward.

Between 121° 35' and 121° 37' along the False River and northward, a discrepancy of 15 to 20 meters was noted in the junction with T-4666. After T-4666 was completed, control along this river was received. "North Wooden House 3, Webb to Hanks" was cut in on T-4686 and in investigating the junction it was found to be about 15 meters too far south. The photos of T-4686 in this area were badly tilted and the detail indistinct. This pole fell in the wings and as mentioned in T-4666 repeated difficulty was experienced in this area. T-4698 was the compilers first and only sheet, and due to his lack of experience, was unable to cope with the extremely distorted photographs, coupled with a shortage of control. With Raynor's control and some fairly good photographs a good plot of this area was made on T-5014. The U. S. Engineers furnished a traverse of the river and numerous stations on both sides of the river were plotted and verified the location established on T-5014. An overlap with T-4886 of about 900 meters is shown and it is recommended that T-5014 be used in preference to T-4686 for this area.

(c) Interpretation - In general there were no discrepancies in the field inspection notes. However, a few camps and ranches were given two different names on different photographs.

The numerous mounds in this area are indicated by the fill or half-level symbol, thus: 

(d) Information from other sources - The field inspection noted all landmarks (poles, trees, tanks, etc.) shown. Plots of Holland Tract, Quimby Island and Jersey Island were used as a general check on detail.

(e) Conflicting names - Bethel Tract is also known as SandMound Tract and Stone Tract according to the field inspection.

IV. Comparison with Other Surveys.

(a) Junctions - The junction of this sheet with the four adjoining sheets is satisfactory when adjusted as described above.
V. Landmarks.

Lists of landmarks for charts covering this area have been submitted as chart letters by the field inspection party.

A list of prominent objects recommended by the field inspection for use in hydrographic work is attached to this report.

VI. Recommendation for Further Surveys.

(a) It is believed that there is no error in compilation greater than 5 meters.

(b) Additional work is not considered necessary.

Respectfully submitted,

[Signature]

Frank G. Erskine,
Jr. Cartographic Engineer.

June 22, 1933.

Approved

[Signature]
CORRECTION T-5014

In approximate Latitude 38° 00', Longitude 121° 38' there is a
 tank and silo. Letter #1 (1934) Air Photo Section files gives a loca-
 tion for each ± 10 meters northwest of the photo plot location. A care-
 fully plot of the photographs was made holding to the sheet control which
 included a 3 pt. fix (N. gable of shed on levee - 798B) falling off the
 sheet, (Lat. 37° 59-1/3', Long. 121° 37-1/4'). This plot gave a loca-
 tion very near the theodolite location. To use the theodolite location
 necessitated pulling off N. gable shed 798B and changing the junction
 with sheet T-5015. The photo location was shown on sheet.

<table>
<thead>
<tr>
<th>Theodolite</th>
<th>Photo</th>
<th>Theodolite</th>
<th>Photo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silo</td>
<td>38° 01'</td>
<td>302.5</td>
<td>300.0</td>
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<tr>
<td>Square Tank</td>
<td>38° 01'</td>
<td>283.3</td>
<td>280.8</td>
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</table>

In the vicinity of 38° 02', 121° 34' there were several errors in
 the shoreline location and the large shed on the levee. With the use
 of additional control furnished by a plane table revision sheet (#5 Air
 Photo files) a replot was made tying into the original plot and fixing
 the shoreline and sheds to agree with the plane table locations.

These two corrections were made to the file copy before it was
 registered.

[Signature]
The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No.

REGISTER NO. T-5014

State. California

General locality. San Joaquin River Delta

Locality. Taylor Slough to Old River

Date of Photographs - December 12, 1931

Date of survey - April - May, 1933

Lieut. J.F. Phillips, Pilot

Vessel. Army Air Corps Aeroplane Capt. A.W. Stephens - Photographer

Chief of party. O. S. Reading

Photographs Plotted by

Surveyor

F. G. Erskine

Inked by. F. G. Erskine

Heights in feet above to ground to tops of trees

Contour, Approximate contour, Form line interval - feet

Instructions dated 19...

Remarks: Compilation of five lens air-photographs Nos. SS-650 to SS-666 and SS 739 to SS 755, printed by the photo-lithographic process

Polyconic projection by F. G. Erskine Feb. 15, 1933.

Projection verified by H. E. MacEwen Feb. 15, 1933.

Control plotted by F. G. Erskine Feb. 17, 1933.

Control verified by H. E. MacEwen Feb. 20, 1933.
REVIEW OF TOPOGRAPHIC SURVEY No.

Title (Par. 56)

Chief of Party Orders Inked by J.G. Parkinson
Surveyed by J.G. Parkinson

Ship Plane: U.S.A.A.C.

Instructions dated

1. The survey and preparation for it conform to the requirements of the Topographic Manual. (Par. 7, 8, 9, 13, 16.)

2. The character and scope of the survey satisfy the instructions.

3. The control and closures of traverses were adequate. (Par. 12, 29.) See discussion of control in Dese Report

4. The amount of vertical control that the Manual specifies for contours-formlines was accomplished. (Par. 18, 19, 20, 21, 22, 23.)

5. The delineation of contours-formlines is satisfactory. (Par. 49, 50.)

6. There is sufficient control on maps from other sources that were transmitted by the field party to enable their application to the charts. (Par. 28.)

7. High water line on marshy and mangrove coast is clear and adequate for chart compilation. (Par. 16a, 45, 44.)

8. 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.)

9. Rocks and other important details shown on previous surveys and on the chart were verified. (Par. 25, 26, 27.) No previous survey by

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

11. Locations and elevations of summits are given. (Par. 19, 51.)

12. The tree line was shown on mountains. (Par. 16g.)

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.
13. The descriptive report covers all details listed in the Manual, in so far as they apply to this survey. (Par. 64, 65, 66, 67.)

14. The descriptive report also contains additional information required in aero-topography relative to type of photographs, method of compilation and type of ground control.

15. The descriptions of recoverable stations and references to shore line were accomplished on Form 524. (Par. 29, 30, 57, 67 except scaling of IMs and DPs, 69.) Descriptions of recoverable objects on Form 524 will be submitted for this sheet, by L.R. Rayner during the progress of his hydrographic work in this vicinity.

16. A list of landmarks for charts was furnished on Form 567 and plotting checked. (Par. 16d, e, 60.) submitted as chart letter by field inspection party.

17. The magnetic meridian was shown and declination was checked. (Par. 17, 52.) not shown.

18. The geographic datum of the sheet is NAD 1927 and the reference station is correctly noted. (Par. 34.)

19. Junctions with contemporary surveys are adequate.

20. Geographic names are shown on the sheet and are covered by the descriptive report. (Par. 64, 66k.)

21. The quality of the drafting is good. (Par. 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 45, 46, 47, 48, 49, 50.)

22. No additional surveying is recommended.

23. The Chief of Party inspected and approved the sheet and the descriptive report after review by —

24. Remarks:

Reviewed in office by B.G. Jones

Examined and approved:

K.T. Adams
Chief, Section of Field Records

L.O. Smith
Chief, Division of Charts

I.A. Garver
Chief, Section of Field Work

Chief, Division of Hyd. and Top.
Descriptive Report to Accompany
Air Photo Topographic Sheet No. 5014-A
(to be included in report T-5014)

Taylor Slough to Old River, San Joaquin River Delta, California.

This sheet contains changes, additions and corrections (shown in red) to the original survey of this area, T-5014.

Sources of Information:

Hydrographic survey #6000 by L. P. Raynor, 1933-34; blue print #27021 and chart letter #706 (1933); plane table correction sheet by L. P. Raynor 1933, sheet #6 Air Photo Section files; letters #1 and #4, Air Photo Section files; sheet #14, Air Photo Section files; photographs ss651-667 and ss759-755; original celluloid sheet T-5014.

Compilations:

The most important correction was that of Old River between Latitude 38°-03' and 38°-04'. Additional control was plotted on the celluloid and a plot was made which tied into the original plot, and a shoreline was established which checked with the plane table. The tips of the two islands were also slightly changed. The houses were transferred from the plane table survey and checked by the photographs where possible. All of these houses are not visible in the photographs. This error was mentioned in paragraph one page 12 descriptive report H-6000.

Plotting was extended west from Old River along False River to Longitude '121°-36'. At the junction with the Old River an error was found in the south channel of False River and was corrected. Farther along the river other slight errors were noted and the shoreline changed where the greatest discrepancies occurred, (7 meters). These two corrections correspond to errors referred to in chart letter #706(1933) as cases one and two page two.

Cases 3, 4 and 5 page two chart letter #706(1933) were investigated. Careful plotting indicated an error in the shoreline but as the difference was so slight, (about the width of the shoreline) no correction was made.

The two tule islands mentioned in paragraph two, page twelve, descriptive report H-6000 were plotted from the photographs and checked the location on the smooth sheet. The other tule island referred to was not visible in the photographs nor was it shown on either the boat sheet or smooth sheet. As the sounding volumes were not available, this island was not located.

Errors in the vicinity of Latitude 38°-02' Longitude 121°-34' were corrected before T-5014 was registered. The hydrographic sheet, however, was printed before these errors were discovered and the corrections are shown in red on it.

The other changes, additions and corrections mentioned in descriptive report H-6000 have been applied and require no explanation.

Respectfully submitted

Frank G. Erskine.

June 13, 1934.
### Geographic Names

**Survey No.:** T-5014  
**Chart No.:** H-6000  
**Diagram No.:**

**Name approved Nov. 30, 1934.**

*, Approved by the Division of Geographic Names, Department of Interior.

☑, Not approved by the Division of Geographic Names, Department of Interior.

▪, Referred to the Division of Geographic Names, Department of Interior.

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<th>Name on Chart</th>
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<th>Names assigned by Field</th>
<th>Location</th>
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<tr>
<td>Fletchers Landing</td>
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<td>Shima-Shima Landing</td>
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<tr>
<td>Jersey LANDING**</td>
<td>On all maps this is on San Joaquin River, near entrance of false River, instead of where located on T-5014. **Approve spelling, but not location without further search.</td>
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<td>Washington Slough</td>
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Survey: 38° 03' 5'  
121° 38' 3'