5000
5000a

Form 504
Ed. June, 1928

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R. S. Patton, *Director*

State: California.

DESCRIPTIVE REPORT

Topographic / ~~*Hydrographic*~~ *Sheet No.* 8.5000

5000
5000a

LOCALITY

Lower Sacramento River.

Mayberry Slough to Brannan Island.

19 33

CHIEF OF PARTY

M. H. Reese.

U. S. GOVERNMENT PRINTING OFFICE: 1933

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Descriptive Report to Accompany
Air-Photo Topo. Sheet No. A 5000

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

Authority: The Director's Instructions of November 15, 1932.

Methods:-

Sheet No. 8 was compiled from five lens photographs taken by the U. S. Army Air Corps. In general the photographs are very good. A number of the pictures were taken during the day when shadows were of considerable length and this has caused the draftsman some confusion. There is less than 50 percent of overlap in the direction of flight in about 30 or 40 percent of the pictures. With this minimum overlap it is more difficult to obtain the required accuracy than with the proper amount of overlap. The flight lines on the sheet are excellent, and this compensates somewhat for the minimum overlap. The tilt in the pictures is probably at a minimum.

The Radial Line Method as described by W. J. Chovan was used in the Compilations with amendments to fit the five lens photographs.

The Control on this sheet is seven triangulation stations and three U. S. E. stations. The rectangular coordinates were reduced to Geographical Coordinates by the party in charge of L. P. Raynor. Considerable difficulty was experienced in making the U. S. E. stations fit in the radial plot. In some cases it was necessary to disregard the geographic position and relocate them by radial lines. U. S. E. stations not located by the Coast and Geodetic Survey are shown with circles instead of the standard triangle.

The drafting on this sheet is average. In some instances the junctions with adjoining sheets were not very favorable. The largest differences being the southern limit of the sheet and the southwest corner of the sheet. A very good junction was effected with the sheet to the north. No attempt was made to show any detail back in the hills.

Statistics:

Area of sheet = 8.8 sq. mi. (Nautical) = 10.1 sq. mi. (Statute).

M. H. Reese,
Chief of Party, C. & G. Survey.

Form 537a
Ed. Nov., 1929

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.

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 No. 8

REGISTER NO. 5000

State California

General locality Lower Sacramento River

Locality Mayberry Slough to Brannan Island.

Scale 1:10,000 Date of survey December 12 & 15, 1931.

~~Vessel~~ Photographs by U. S. Army Air Corps.

Chief of party M. H. Reese.

~~Surveyed~~ Field Inspection by L. P. Raynor.

Inked by J. B. Moreland.

Heights in feet above to ground to tops of trees

Contour, Approximate contour, Form line interval feet

Instructions dated November 15, 1932.

Remarks: The scale of the celluloid sheet is 1:10,000 and the negative is to be made to that scale.

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REVIEW OF PHOTO TOPOGRAPHIC SURVEY NO. 5000

Title (Par. 56) Lower Sacramento River, May berry Slough to Rhamm Island, Cal.

Chief of Party H. N. Reese Compiled by J. B. Moreland

Project Sacramento-San Joaquin Delta Instructions dated Nov. 15, 1932

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.)

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". See "11" and 15.

3. ✓ The control and adjustment of the radial plot were adequate, except (Par. 12, 29.) as noted under 15

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.)

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.)

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. There is no previous Coast Survey chart of this area.

8. ✓ The span, ~~draw~~ and ~~clearance~~ type of bridges are shown. (Par. 16c.)

9. ✓ The data furnished by the Field Inspection is adequate.

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.

M-10

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

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". (These notes were printed after the compilation of this sheet) Title data is given on the sheet itself. Neither the miles of shoreline nor the photograph numbers are given in the Report. Photo Numbers

12. The descriptions of recoverable stations and references to shore line were not accomplished on Form 524, and scaling of positions checked. (Par. 29, 30 and 57.) This will be accomplished during the hydrographic survey by J.P. Leyner

13. A list of landmarks for charts was not furnished on Form 567 and scaling of positions checked. (Par. 16d, e, 60.) Landmarks for this sheet were submitted by the field inspection and are on file as Chart Letters

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

15. Junctions with contemporary surveys are adequate. Also additional reputed junctions.

16. Geographic names are shown on the sheet and are not covered by the Descriptive Report. (Par. 64, 66k.)

17. The quality of the drafting is ~~fair~~ good. (Par. 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 45, 46.)

18. No additional surveying is recommended.

19. Remarks: "Mayberry Slough" although in the title, does not appear on this sheet. This slough is beyond the southeast corner of this sheet and is shown on T-4685

~~20. Examined and approved:~~

~~Chief of Party~~

21. Remarks after review in office:

Reviewed in office by: Frank Haskins Jan. 30, 1934

Examined and approved:

K.T. Adams
Chief, Section of Field Records

L.O. Colbert
Chief, Division of Charts

P. Borden
Chief, Section of Field Work

G. Rude
Chief, Division of Hydrography and Topography.

M-10

JUNCTION TO NORTH--T-5001.

This junction was good.

JUNCTION TO WEST--T-5020.

T-5000 showed a trail symbol approximately joining with a double-dashed road on T-5020. As corrected, a trail from T-5020 runs up to T-5000 a short distance. The trail symbol N. T-5000 was changed to a long single dashed line, indicating in general the base of the hills.

JUNCTION TO SOUTH--T-4685

1. Long. 121°-47½ northern shoreline of Sacramento River. The last 100 meters on T-5000 disagreed with T-4686 by about ten meters.

   Long. 121-46¼ southern shoreline of Sacramento River. The shorelines disagree by some ten meters.

   Two triangulation stations were added to the celluloid of T-5000, and the radial plot checked up. It was found that T-5000 was incorrect with the northern shoreline and T-4685 incorrect with the southern shoreline. The errors on both sheets were corrected.

2. Long. 121-45½. Levee, roads and ditches. The two sheets disagreed by about ten meters in the location of this levee and in a less extent with the roads and ditches. The radial plot check was extended to cover this area. Both sheets are incorrect at the junction but both are correct about 100 meters from the junction. This error was probably due to interpretation. T-5000 was slightly incorrect with the roads and ditches. The errors were corrected.

3. Long. 121°-43'. Ditch.
   The two sheets disagree by some seven meters. T-5000 is incorrect. This error was probably due to not plotting the point spotted at the southern part of this ditch. Using this point in the radial plot of T-5000, the ditch checks T-4685.

4. Long. 121-41 to 121-42. Ditches.
   Disagreements of from three to fifteen meters were found in these ditches. T-5000 is incorrect. Plot adjustments enabled a good junction to be obtained.

   Inexperience on the part of the compiler probably accounts for these errors. Evidently in making the plot, very little regard was given T-4685 for several of the errors were easily corrected after an examination of T-4685 and the photographs. Another reason for error (for example #4) the compiler made no allowance of the proportionate distances between "point and cut".

JUNCTION TO WEST--T-4686

The shoreline, at the hairpin bend of Three Mile Slough, disagrees with T-4686 by as much as 43 meters.

A radial plot was made on a sheet of celluloid with a projection and all

control covering half of each sheet. After disregarding one three point fix station (Lat. 38°06', Long. 121°-40'-) and taking into account tilt, a good plot was finally achieved. Detail was then traced on this sheet. Placing this sheet over T-5000 and T-4686 it was found that the northern shoreline of the slough at the hairpin bend was incorrecton T-5000 by a maximum of 18 meters and on T-4686 by about 25 meters. The southern (at the bend) and western shorelines (along 121°-41') was incorrecton T-5000 by about 15 meters and correcton T-4686. The detail immediately east and west of this slough on both sheets was correct. These corrections were applied to both sheets.

The error on T-5000 was probably due to failure to extend the plot beyond the limits of the sheet using the control which appears on T-5001 and T-4686 and also due to tilted photographs. The error on T-4686 was probably due to tilted photographs and the doubtful three point fix.

In considering the discrepancies on T-5000 it will be well to bear in mind the distortion of the projection. (Meridian 121°-41' checked within one meter for three minutes of latitude while the other meridians for the same distance were long by six or seven meters. (no allowance being made for convergence of meridians)

The parallels for three minutes of longitude were the same length and naturally varied in error from three to six meters.

The junctions of this sheet being bad, the question arose as to whether or not the interior of this sheet was in error. To determine this, a complete radial plot of the sheet was made tying in to the four adjoining sheets. This plot was then compared with the original sheet. The two plots agreed very closely and it is therefore believed that T-5000 as submitted is correct throughout within the allowable error of five meters.

Frank G. Erskine

Survey No. T-5000
H-6013

GEOGRAPHIC NAMES

Date. Dec. 19, 1934
HMS

Chart No.

Diagram No.

Names approved Dec. 19, 1934. Harlow Bacon

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

¢, Not Approved by the Division of Geographic Names, Department of Interior.

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

Status	Name on Survey	Name on Chart	New Names in local use	Names assigned by Field	Location
	Sacramento River	U.S.G.B. 6th Report			
	Horseshoe Bend	U.S.G.S. Jersey Quad and other maps			
	Sherman Island	"			
	Brannan Island	"			
	Threemile Slough	"			
	Seven [illegible] Slough	"			
	Decker Island	"			
	Chinamans Cut OK	[illegible]			
	Tolands Landing		Maps		
	Decker Landing OK				
	Toland Landing Beacon	Light List Pacific Coast United States, 1934			
	Emmation Ldg. S.E.Gable	Maps spell this word Emmaton			
	MacDonald Landing	does not appear on overlap with T-4686 anddo not find it on any maps.			
	For references consulted see DR for T-4685.				

(M 100)

Form 537a
Ed. Nov., 1929

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

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 No. 8.

REGISTER NO. 5000

State California.

General locality Lower Sacramento River.

Locality Mayberry Slough to Brannan Island.

Scale 1:10,000 Date of survey December 12 & 15, 1931.

~~Vessels~~ Photographs by U. S. Army Air Corps.

Chief of party M. H. Reese.

~~Surveyed by~~ Field Inspection by L. P. Raynor.

Inked by J. B. Moreland.

Heights in feet above to ground to tops of trees

Contour, Approximate contour, Form line interval feet

Instructions dated November 15, 1932.

Remarks: The scale of the celluloid sheet is 1:10,000 and the negative is to be made to that scale.

Projection by M.H. Reese Jan. 5, 1933
Projection checked by E.L.F Jan. 5, 1933
Control plotted by E.L.F. Jan. 6, 1933
Control checked by M.H.R. Jan., 6, 1933
Photographs plotted by J.B. Moreland Jan., 6 to 13, 1933
Sheet inked by J. B. M. Jan 13, Feb. 1 1933

Form 537a
Ed. Nov., 1929

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 5000a

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.

~~Register No.~~ .....

REGISTER NO. 5000 A
5000a

State.....California.....

General locality....Lower Sacramento River.....

Locality.....Decker Island.....

Scale..... Date of survey....., 19.....

Vessel.....

Chief of Party.....

Surveyed by.....

Inked by.....

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

Contour, Approximate contour, Form line interval.....feet

Instructions dated....., 19.....

Remarks:.....Corrections and additions to the original survey.

....For additional data see the Descriptive Report.....

GPO

DESCRIPTIVE REPORT TO ACCOMPANY

50008

Air Photo Topographic Sheet No. T-5000A
(to be included in report of T-5000)

Decker Island, Lower Sacramento River, California.

This sheet contains corrections (shown in red) to the original survey of this area T-5000.

Sources of Information:

Hydrographic survey #6013; blue print #25708; sheet #58, July 1934 and letter #21 (Air Photo Section files.)

Compilation:

Planetable revision sheet #58 containing changes in shoreline of Threemile Slough was applied by Frank G. Erskine and checked by D. H. Benson. The revision extended east of 121°41' into T-4686. About 250 meters of the east shoreline of the slough was run in. Since this strip was not extended to a junction and no revision of the slough made on sheet #24a (revision for T-4686) this strip is not shown on either T-5000 or T-4686. However the hydrographic party transferred it to the hydrographic survey of T-5000 (H-6013).

Blueprint #25708 furnished the name "Horseshoe Bend" and changed the name "Three Mile Slough" to "Threemile Slough".

The hydrographic survey furnished bridge and overhead cable clearance over Threemile Slough. The two piles northeast of Decker Island and the first tower north of triangulation station Threemile Slough, North Transmission Tower have been removed according to H-6013.

The title of this sheet was changed from "Mayberry Slough to Brannan Island" to "Decker Island."

In the complete check radial plot of this sheet, mentioned in the junction report of the "Review," an error in the transmission line at the western end of the sheet was discovered. This was corrected on the A sheet.

Respectfully submitted,

Frank G. Erskine

Frank G. Erskine

October 5, 1934.

Examined and approved
K.T. Adams
Asst Chief - Chart Division

NAMES: There are no charts covering the area of this project except chart 5534 at the junction of the Sacremento and San Joaquin Rivers. The following maps filed as Blueprints were furnished by the field party with corrections made from field examination to show the names in local use and have been used in making the corrections to compilations on this project.

Capt. Weathers Map (1931) BP.-25708

U.S.G.S. Quadrangles-- BPs.- 25702 to 25707

(see also chart letter No. 698 (1932)

Name lists are now being prepared under Mr. Bacon's direction and will be attached at the back of the descriptive reports when completed. Any changes in names indicated by the name lists will be applied to the compilations at the next printing.

November 26, 1934.

Frank G. Parkinson

T 5000 and T 5000a
applied to drawing of chart 5527
Jan 9, 1935 - J.T.W.