

6005a  
6005b

U. S. COAST & GEODETIC SURVEY  
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Form 504  
Rev. Dec. 1933  
DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY  
R. S. PATTON, DIRECTOR

DESCRIPTIVE REPORT **6005a**  
**6005b**

~~Topographic~~ } Sheet No. ... E ... (T 4686.)  
Hydrographic }

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State California

LOCALITY  
Sacramento River  
Dierssen Landing to Hayes Point

1933  
1934

CHIEF OF PARTY  
Lieut. L.P. Raynor

6005a  
6005b

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

REG. NO. 6005 a  
6005 b

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

Field No. E (T-4686) ✓

<sup>6005</sup>  
REGISTER NO. 6005 a  
6005 b

State..... CALIFORNIA

General locality..... SACRAMENTO RIVER

Locality..... DIERSSEN LANDING TO HAYES POINT

Scale 1:10,000 ✓ Date of survey Nov. 14, 1933-May 1919 34 ✓

Vessel..... HELEN F. Leased Launch

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

Surveyed by..... L. P. Raynor and Frank Davis

Protracted by..... George C. White

Soundings penciled by..... George C. White

Soundings in ~~fathoms~~ feet

Plane of reference..... M.L.L.W.

Subdivision of wire dragged areas by.....

Inked by..... A.H. YEOMANS

Verified by..... A.H.Y.

Instructions dated..... September 2, 1933

Remarks:.....

DESCRIPTIVE REPORT  
OF  
HYDROGRAPHIC SHEET E (T 4686)

AUTHORITY, LIMITS, DATES:

The INSTRUCTIONS for this work are contained in the following letters:

1. 22LE 1990 March 17, 1933
2. 22AHH August 12, 1933
3. SUPPLEMENTAL INSTRUCTIONS PROJECT 98HT September 2, 1933
4. 26RS 1990 November 9, 1933
5. 22AHH 1990 November 16, 1933
6. 22Men 1990 December 2, 1933

This sheet covers Fisherman Slough (Cut), Potato Slough, and Mokelumme River in the San Joaquin Delta. All of these waterways terminate in the main channel of the San Joaquin River. The work in Fisherman Cut was done in November and the rest of the work was done in January and February.

GENERAL NOTES:

The levees have been built up from material dredged from the adjacent waterway. This dredging has been carried on at various intervals of time on account of the settlement of the levee. No particular attention was paid to the channel for navigation purposes which resulted in an uneven bottom in many places along the shore line.

The Mokelumme River shows hard sand shoals in midstream with an abrupt increase in depth near the west shore. This condition reverses about halfway between P & B Landing and Pedro Landing where the hard sand shoals extend from the west shore over near to the east shore with an abrupt increase in depth near the east shore. The hard sand shoals end about opposite the Bouldin Pump. From that point on to the San Joaquin River the bottom is fairly deep, uneven, and of soft mud. The shoalest part of the bottom is

near the west shore. Opposite the Bouldin Pump a major break in the levee occurred sometime ago. The bottom in this locality is of soft mud and uneven as a result of dredging when reclaiming the island.

Potato Slough is of soft mud and uneven bottom. Fisherman Cut is of soft mud and fairly even bottom. Most of the unevenness of bottom is due to dredging since it is a dredger cut.

#### SURVEY PARTY:

Fisherman Cut was surveyed by Frank Davis, Surveyor, usual duties in charge of the launch; Joseph LeConte, Observer, left angle and bearings with pelorus; Chas. M. Anstead, Right Angle and Reading Range Finder; S. H. Van Gelder, Plotting; C. Kester, Recorder; Milo D. Dibble and Myron Bear alternating as Leadsman and Coxswain.

Work on the Mokelumme River and Potato Slough was carried out by Lieut. L. P. Raynor, in charge of launch and plotting; George C. White, Left Angle and Bearing with Pelorus; Chas. M. Anstead, Right Angle and Reading Range Finder; C. Kester, Recorder; Myron Bear and John Logan alternating as Leadsman and Coxswain.

At the time this work was done all of the crew was thoroughly experienced with our methods of hydrography.

#### SURVEY METHODS:

- A. The signals for control of the work were located by the following methods:
  1. A few of the signals on Potato Slough and the latticed steel

poles on Bouldin and Venice Islands were located by using the boat sheet T4686 as a plane table sheet and rodding in the signal from some well defined object on the sheet. These signals are shown on the boat sheet thus: (P) and in red ink.

2. Spotting directly on the smooth sheet from topographic detail, i.e., tule points, intersection of ditch lines with high water line, gables of buildings, corners of buildings, windmills, and other prominent landmarks. These signals will be found on the boat sheet.
  3. Three point fixes. These are shown in blue circles on both the boat sheet and smooth sheet and are listed in Vol. 3, pp. 1 and 2.
- B. Boat positions were obtained either with the sextant three point fix or by the use of range finder #7277 and range finder H8, and bearings by compass #24874 using pelorus #24874. Three point fixes were used almost entirely in the Mokelumme River and Potato Slough; whenever possible the steel towers were used as objects because of their well determined location. The deviations of the compass were determined by using range #3 San Joaquin River and three point fix to Andrus Island Steel Tower, taking bearings on every 15° Rhumb. The following determinations for compass deviation were used on this sheet:

Date	Range	Magnetic Bearing
Sept. 22, 1933	#3 San Joaquin River	312°
Dec. 14, 1933	" " " "	"
Feb. 15, 1934	Three pt. to Andrus Island Steel Tower S. Fork Mokelumme R.	212°

~~are attached to this report.~~ Range Finder #7277 was calibrated and used as follows:

Date of Calibration	Days Used	Observer
Nov. 1, 1933	A & B	Chas. Anstead
Jan. 29, 1934	C	L. P. Raynor
Feb. 9, 1934	D	L. P. Raynor
Feb. 9, 1934	E & F	Chas. Anstead
Feb. 20, 1934	G & H	Chas. Anstead

Range Finder H8 was calibrated and used as follows:

Date of Calibration	Days Used	Observer
Feb. 23, 1934	J & K	Chas. Anstead
Feb. 23, 1934	L	George White

Range finder readings above 50 were not considered reliable, therefore, all readings above 50 were avoided as much as possible.

C. Depths were obtained by leadline or sounding pole. The leadline carried a 9 lb. head weight and had a 3 ft. toggle. Sounding pole was a 4 fathom pole and was used in depths less than  $3\frac{1}{2}$  fathoms. Soundings on A and B days were read to the nearest  $\frac{1}{2}$  ft. and soundings on the rest of the days were read to the nearest tenth. In the sounding volumes soundings were reduced to the nearest  $\frac{1}{2}$  ft. and plotted to the nearest  $\frac{1}{2}$  ft. up to 10 ft. and to the nearest foot over ten feet, as authorized by the instructions of December 2, 1933.

*a misinterpretation. Should be plotted in half feet in the office. Done*

D. The smooth sheet is aluminum coated with tanned gum arabic and is free from the distortion that occurs in the Whatman's prints. Positions and signals are marked with needle indentation and are easily found by the use of a reading glass. The surface is receptive to ink but pencil work is not accomplished satisfactorily. Erasures leave a shiny mark and pencil or ink over the erasure is unsatisfactory.

ANCHORAGES AND LANDINGS:

There are few wharves in the locality of this sheet, but boats and barges can make fast alongside the levee at most any place. There are no ferries on this sheet but the following landings are noted:

1. Andrus Island:

- |                       |                    |
|-----------------------|--------------------|
| A-Denicke Landing     | D-Pedro Landing    |
| B-San Andreas #2 Ldg. | E-Gibson Landing   |
| C-P & B Landing       | F-San Andreas Ldg. |

2. Bouldin Island:

- |          |                |
|----------|----------------|
| A-Camp 7 | D-Camp 35      |
| B-Camp 5 | E-Bouldin Pump |
| C-Camp 1 |                |

3. Venice Island:

- A-Camp 2

4. Bradford Island:

- A-Camp 9

5. Webb Tract:

- |                        |           |
|------------------------|-----------|
| A-Camp 8 $\frac{1}{2}$ | C-Camp 10 |
| B-Camp 9               | D-Camp 11 |

SHOALS, WRECKS, AND SNAGS:

1. There is a 4 ft. shoal between ME7 and MM8.. The center of } the shoal is about 150 meters east.northeast of MM8. *There is also a 3 1/2 spreading about 80 meters to the West.*
2. A 6 ft. shoal, <sup>with least depth of 5 ft.</sup> extends along midchannel on the line 21-22F ✓ south southeast of MM8.
3. A 7 ft. shoal lies about 100 meters north of PM11 in Potato ✓ Slough. *See 99-100 D 30m actual.*

About half way between MM8 and ME7 three snags were located by three point fixes; 49, 50, and 51G. These snags were apparently rooted in the mud. All three snags are in the first shoal area noted above. Half way between MM9 and ME7 is an old piling. The depth at the piling is 18 ft. See Vol. 2, p. 2 for three point location.

The above snags are shown on the smooth sheet and should be avoided by small craft due to the size of the snags. damage to the hull and propellor would certainly result.

CHANNELS:

All the waterways on this sheet are used for navigation both by pleasure craft or commercial vessels. The pleasure craft draw  $1\frac{1}{2}$  ft. to 4 ft. while tugs and barges draw 4 ft. to 9 ft. The channel depths vary and are indicated by depth curves drawn on the boat sheet. All U. S. Engineers projects in most sloughs call for a depth of 9 ft. at M.L.L.W.

DISCREPANCIES, DEPTHS:

1. Near PM9--depth between positions 9 and 10C is 17 ft. Depth between positions 54 and 55D is 26 ft. The two depths do not fall on the same point. It is possible that the bottom changes 9 ft. in a vertical distance of about 3 meters. See note in record book concerning revised shoreline at this point.
2. Near PM9--Depth on position 52D is <sup>26</sup>26 ft. Depth between positions 67 and 68D are 39 ft. and 32 ft. controlled by a range picked out by the helmsman. The depth of 26 ft. is about 3 meters nearer the shore than the line between the 39 ft. and 32 ft. depths. Uneven bottom accounts for the apparent discrepancy.

*These soundings OK  
but space permit  
plotting of 17 only.  
Hydro.*



3. Center of Mokolumne River, NE of MW 4. Depth between positions 6 and 7J is 28 ft. Depth on position 8D is 12 ft. Both lines controlled by three-point fixes. The 28 ft. depth was rejected because the boat was probably off line between fixes 6 and 7J.
4. Near shore between ME 5 and ME 4. Depth between positions 18 and 19J is 41 ft. <sup>photo</sup> Depth between positions 58 and 59G is 25 ft. and 19 ft. Dredger operated for two days in this locality between the time the two lines were run.
5. Near ME 11. Depth on position 32G is 10 ft. Depth between positions 30 and 31J is  $5\frac{1}{2}$  ft. <sup>photo</sup> The depth of 10 ft. is probably 3 meters back of fix on account of the possibility that leadsman was holding the lead line astern when the angles were taken.
6. Near MW 8. Depth between positions 11 and 12K is 29 ft., channel line. Depth between positions 14 and 15D is 37 ft., <sup>photo</sup> cross line. Reduced sounding of 37 ft. was rejected. It is probably an error in reading the lead line.
7. Near ME 7. Depth between positions 22 and 23F is 31 ft. <sup>photo</sup>

✓  
✓  
All notes, pages 8

- plotted*
- 7.2 Depth on position 26J is 29 ft. Depth between positions 23 and 24K is 21 ft. All lines controlled by three point fixes. The latter depth does not fall exactly on either of the other two depths--about 2 meters separation. Very uneven bottom in this locality due to a large amount of dredging when island was reclaimed after break in levee.
  8. About 30 meters off shore south of ME7. Depth on position 53K--29 ft. Depth between positions 41 and 42G is 17 ft. and 15 ft. Both lines controlled by three point fixes. Apparent discrepancy result of uneven bottom caused by dredging when island was reclaimed.
  9. About 25 meters off shore south of ME7. Depth on position 60K is 22 ft. Depth on position 42G is 17 ft. The two positions are about 3 meters apart but the 22 ft. depth falls between two 17 ft. depths. Another result of an uneven bottom caused by dredging when island was reclaimed.
  10. Near ME10. Depth on position 56K is 28 ft. Depth between positions 46 and 47G is 15 ft. The soundings do not plot on each other. Lines were sounded in opposite directions allowing a maximum distance of approximately 3 meters between the soundings.
  11. Near MM8. Depth on position 72K is 41 ft. Depth between positions 36 and 37F is 48 ft. Soundings are about 4 meters apart. Uneven bottom in this locality. Depths are apparently there. The 41 ft. depth was ~~not~~ plotted on the smooth sheet.
  12. Near MM20. Depth between positions 92 and 93K is 17 ft. Depth between positions 7 and 8H is 22 ft. Soundings do not fall on same point. They are about 3 meters apart.
  13. Near ME5, about 25 meters off shore. Depth on position 12L is 37 ft.

*In most cases the surface has plotted the soundings. The deeper soundings usually do not plot on same point and are of no value as regards channels, narrow.*

13. Depth between positions 12 and 19H is 46 ft. The 37 ft. depth has been plotted but it is possible that the 46 ft. depth is near, but came a little before or after the fix 12L.
14. About 50 meters north of MM9A. Depth on position 20L is 29 ft. Depth on position 43J is 22 ft. Depth preceding 43J is 21 ft. Position 20L does not fall on line between 42 and 43J.

*See notes, page 8*

TIDAL DATA:

Tide reducers were obtained from the records of two portable automatic gages, one located at the Ferry Slip on Webb Tract at the mouth of Fisherman Cut in False River and one on Bouldin Island at the mouth of Potato Slough. The areas and times for which each gage are to be used are indicated on the boat sheet. Tide tabulations, records, comparisons, marigrams, data sheets, and level records have been sent you under separate cover with the exception of what is attached to this report.

The plane of reference for reductions of soundings is MLLW and is 4.4 ft. on the tide staff at the Webb Tract. The highest tide observed at this gage was 9.0 on the staff and occurred October 30, 1933; the lowest tide was 4.0 on the staff and occurred on November 18 and 19, 1933. MLLW on the staff at Bouldin Island is 2.66 on the staff. The highest tide was 7.0 on the staff and occurred Feb. 19 and 20, 1934. The lowest tide was 2.5 on the staff and occurred Feb. 1 and 10, 1934.

TIDE REDUCERS:

Bouldin Island Tide Gage

MLLW is 2.66 on staff.

1.9 to 2.4	add	$\frac{1}{2}$ ft.
2.4 to 2.9	zero correction	
2.9 to 3.4	subtract	$\frac{1}{8}$ ft.
3.4 to 3.9	"	1 ft.
3.9 to 4.4	"	$1\frac{1}{2}$ ft.
4.4 to 4.9	"	2 ft.
4.9 to 5.4	"	$2\frac{1}{2}$ ft.
5.4 to 5.9	"	3 ft.
5.9 to 6.4	"	$3\frac{1}{2}$ ft.
6.4 to 6.9	"	4 ft.
6.9 to 7.4	"	$4\frac{1}{2}$ ft.

Webb Gage.

MLLW is 4.4 on staff.

Staff reads:

2.6 to 3.1	add	$1\frac{1}{2}$	ft.
3.1 to 3.6	"	1	ft.
3.6 to 4.1	"	$\frac{1}{2}$	ft.
4.1 to 4.6	zero correction		
4.6 to 5.1	subtract	$\frac{1}{2}$	ft.
5.1 to 5.6	"	1	ft.
5.6 to 6.1	"	$1\frac{1}{2}$	ft.
6.1 to 6.6	"	2	ft.
6.6 to 7.1	"	$2\frac{1}{2}$	ft.
7.1 to 7.6	"	3	ft.
7.6 to 8.1	"	$3\frac{1}{2}$	ft.
8.1 to 8.6	"	4	ft.

CLEARANCES, OVERHEAD POWER LINES:

1. The overhead cable, Bradford Island to Webb Tract, over Fisherman Cut has a clearance of 111 ft. Mean High Water as determined by the range finder in November, 1933.
2. The overhead cable clearance Bouldin to Venice Island is 117 ft. above MHW as determined by the range finder, February, 1934.
3. The overhead cable clearance Andrus to Bouldin Island is 110 ft., taken from the U. S. Engineers Data, above MHW.

CHANGES TO T 4686:

The following corrections have been noted on the boat sheet but not on the smooth sheet:

1. FM5 is a tule island. *not added on sheet*
2. Cloth signal next to FE6 is gone. *Deleted.*
3. Tule point a few meters south of FM4 is gone. *Deleted from chart.*

ADDITIONS TO T 4686:

1. Locations of E of 2 wood poles, Fisherman Slough, 1932 and W of 2 wood poles Fisherman Slough were determined by triangulation in 1932 and scaled off on smooth sheet.

The location of the west wood pole as shown by photographs on the boat sheet was incorrect and the east wood pole was not shown. Neither of the two poles were shown on the smooth sheet print.

*Correctly shown on T-4686 as a revision*

2. Locations of latticed steel pole, Andrus Island 1932, and latticed steel pole, Bouldin Island 1932, (Mokelumme River) were determined by triangulation in 1932 and scaled off on the smooth sheet. Andrus Island steel tower was shown as a photo plot but the Bouldin Island tower was not shown. This was the case on both boat sheet and smooth sheet.
3. Locations of steel tower, Bouldin Island and steel tower, Venice Island at Potato Slough were made by planetable and scaled off on boat sheet and smooth sheet.

**LANDMARKS:**

Copy of a list of landmarks on form 567 is attached to this report and a further copy has been mailed under separate cover. The objects with (3) are useful in local navigation only, i.e., for help in determining the camp near which one is passing or the exact location in an adjacent slough. The objects with (2)(3) are for the most part power line poles, wooden or steel, and can be seen for a considerable distance. Since most of these landmarks are located by third order triangulation their positions are well determined. They should prove of much help in Delta navigation and they could be used as ranges for compass deviations if so desired. It is suggested that both classes of landmarks be placed on the chart (new) of the Delta if space permits. At any rate all of those in class (2)(3) should appear on the chart.

COMPARISON WITH THE U. S. ENGINEERS SURVEYS:

Hydrography carried out by the U. S. Engineers in the Mokelumme River, Potato Slough and Fisherman Cut was transferred to sheet 4686 and found to check well. There was a difference in shore line in some places on the three waterways checked. It should also be noted that the U. S. Engineers show a 26 ft. depth between a 55 ft. and a 54 ft. depth. The 26 ft. depth is about 195 meters south southeast of Andrus Steel Tower. Our work does not show such a depth in that particular locality.

*For field investigation  
see page 12a*

South of PM15 our work shows a 27 ft. depth as compared to a 17 ft. depth shown by the U. S. Engineers work. This discrepancy is a result of dredging to fill a break in the levee. The break in the levee occurred in June, 1932. Several dredgers were called to stop the break. Tracings of the work of the U. S. Engineers, reduced to scale of 1:10,000, is submitted with the smooth sheet.

*7 filed work B.S.*

GEOGRAPHIC NAMES:

List of geographic names was submitted with the field inspection, as well as blue prints, showing camp numbers of the various islands, namely: Webb, Mandeville, Venus, and Bouldin.

ADDITIONAL SOUNDINGS:

On May 16, Lieut. L. P. Raynor, using boat "CMB 19" carried out additional sounding lines in both Potato Slough and Mokelumme River. The survey party was as follows: Lieut. L. P. Raynor, Right Angle and Plotting; H. Korneeff, Left Angle; George C. White, Recorder; C. Kester, Leadsman; and E. Forster, Coxswain. An attempt was made to find a 7 ft. shoal in Potato Slough, but it could not be located. Also, a few lines were run at the mouth of the Mokelumme River to find the 26 ft. sounding shown by the U. S. Engineers soundings. (See discussion of comparison with U. S. Engineers Surveys). The discrepancy was not brought out in this additional work.

*They only retained  
confirmed by 11 ft.  
only to north.  
shown*

*Pos. 99-100 D*

It should be noted that the soundings were taken 4.4 meters aft of the angles. This was accounted for on the smooth sheet plotting.

*George C. White*



*This has been referred to Air Photo  
Section.  
A-L-S.*

REVISION OF HYDROGRAPHIC SHEET E (T-4686)

After the above report was written an error in photo-compilation was discovered while comparing the junction with T-5001. The windmill at Denicke Landing (MW 1, T-4686 and MW 4, T-5001) used for three-point fixes in hydrography was considerably out of position. This necessitated a complete topographic revision of the junction of the two sheets, including all the shoreline of the Mokelumme river on T-5001, a portion of Georgianna Slough, and the shoreline on the Mokelumme River down as far as MW 5 on T-4686. The windmill at Denicke Landing was located by measurement from a theodolite three-point fix on the levee near by. The latter was used as a control for topography.

All hydrographic work affected by this topographic revision was replotted and a comparison of the junction with T-5001 compared favorably. There were no variations in soundings common to both sheets. Shoreline affected by topography in this region was not redrawn.

Upon comparison with U. S. Engineers blueprints a few differences in topography was discovered and considerable topographic revision was made extending from the mouth of Potato Slough to Three Mile Slough along the San Joaquin River. Two hydrographic signals were affected by this work, namely; PE 7 and FE 8. Hydrography affected was replotted accordingly. Shoreline changes were not redrawn on the hydrographic smooth sheet. A list of all signals relocated by planetable on this sheet will be found in the accompanying report of the topographic revision for this sheet. All shoreline changes will be found on the topographic aluminum sheets of T-4686.

*George C. White*

STATISTICS SHEET 4686

Date	Vol.	Day	Miles	Soundings	Positions
Nov. 14	1	A	5.60	476	51
" 15	"	B	2.00	174	19
Jan. 30	"	C	1.00	62	10
Feb. 12	"	D	6.00	439	106
" 13	"	E	1.50	65	20
" 16	"	F	5.00	344	55
" 20	2	G	5.80	391	66
" 21	"	H	7.50	486	71
" 26	"	J	4.90	405	62
" 27	"	K	8.30	551	98
" 28	3	L	2.60	275	52
May 16	5	M	2.00	114	30
Totals.....			<u>52.20</u>	<u>3782</u>	<u>640</u>

PLANE TABLE POSITIONS 4686  
(scaled from boat sheet 4686)

Signal	Latitude	DM	Adjusted DM	Longitude	DP	Adjusted DP
Latt. St. Tower Camp 1 Boulder Island	38°05'	(1463.2) 380.5	(1468.2) 381.8	121°33'	(148.8) 1303.2	(150.0) 1312.3
Latt. St. Tower Camp 2 Venice Island	38°05'	(1650.7) 192.8	(1656.6) 193.4	121°33'	(338.1) 1113.2	340.6 1121.7
PE7	38°05'	(1551.8) 294.7	(1554.7) 295.3	121°34'	(1297.1) 162.8	1299.2 163.1
PM15	38°05'	(1716.1) 127.5	(1722.1) 127.9	121°33'	(3.0) 1447.7	(3.0) 1454.3

scaled by GCW chkd - 554 Copy Chkd GCW + TTM  
PLANE TABLE POSITIONS 4686  
(scaled from boat sheet 5010)

5010 - (PM34) PM3	38°06'	(1502) 353	(1498) 352	121°33'	335	338
5010 - (PM33) PM4	38°06'	(1646) 210	(1641) 209	121°33'	374	376
5010 - (PM31) PM7	38°06'	(1704.0) 150.0	(1700) 150	121°33'	444	497
5010 PER22	38°05'	(1450.5) 388.3	(1461.3) 388.7	121°33'	92	93

scaled by REM chkd GCW Copy Chkd GCW + TTM

Section of Field Records

Report on H. 6005.

Chief of Party - L. P. Raynor.

Protracted by - George C. White.

Verified and inked by - A. Yeomans.

Surveyed in Nov. 14, 1933-May 16, 1934.

Surveyed by - L. P. Raynor; Frank Davis.

Soundings plotted by - G. C. White.

1. The records conform to the requirements of the General Instructions. ✓  
*As noted on the records.*
2. The usual depth curves were drawn but due to the congestion on the sheet the curves were not completed along the shore line. ✓
3. The field plotting was completed to the extent prescribed in the General Instructions. ✓
4. The office draftsman did not have to do over any drafting done by the field party. ✓
5. The junctions with the adjacent sheets, H. 6011, 6006, ~~6014~~ and 6013 could not be investigated as these sheets have not been completed. The junction with H. 6000 was made and the soundings seem to agree reasonably well. ✓

*A. N. Yeomans*

Submitted by - A. H. Yeomans.

Field Records Section (Charts)

HYDROGRAPHIC SHEET No. ....6005

The following statistics will be submitted with the cartographer's report on the sheet:

Number of positions on sheet	.640.
Number of positions checked	...0...-
Number of positions revised	...0...-
Number of soundings recorded	.3782
Number of soundings revised	...0...-
Number of signals erroneously plotted or transferred	...0...-

Date:.....Oct. 5, 1934.....

Cartographer:.....A.H. YEOMANS.....

Verification of protracting  
Verification & inking of rocks & shoals)  A.H.Y.

Time: 29 hrs.

Verification of inking by

Time:

Review by

H.W. Murray

Time: 1 1/4

7th Ellis

LCC

Division of Hydrography and Topography:

✓ Division of Charts:

Tide Reducers are approved in  
3 volumes of sounding records for

HYDROGRAPHIC SHEET 6005

Locality Dierssen Landing to Hayes Point, San Joaquin Delta, Calif.

Chief of Party: L. P. Raynor in 1933-34

Plane of reference is mean lower low water, reading

2.7 ft. on tide staff at Bouldin Island

7.6 ft. below B. M. 1

2.5 ft. on tide staff at Georgiana Slough

10.6 ft. below B.M.1

4.4 ft. on tide staff at Webb Tract

9.6 ft. below B.M. 1

2.3 ft. on tide staff at Frank Tract Pump

0.4 ft. below B.M. 3

Height of mean higher high water above plane of reference is

approximately 3.5 ft.

Condition of records satisfactory except as noted below:

*Paul B. Whitney*

Chief, Division of Tides and Currents

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 6005 <sup>at b</sup> (1933-34).

Diressen Landing to Hayes Point, Sacramento River, California.

Instructions dated September 2, 1933.

Surveyed Nov. 14, 1933 - May 16, 1934.

Hand Lead and Pole Soundings.      Control - (3-Point Control on Shore Signals.  
(Range Finder Distance.  
(Compass Bearings using Pelorus.

Chief of Party - L. P. Raynor.  
Surveyed by - L. P. Raynor; Frank Davis.  
Protracted by - George C. White.  
Soundings penciled by - George C. White.  
Verified and inked by - A. H. Yeomans.

1. Condition of Records.

The records are neat, legible and conform to the requirements of the Hydrographic Manual except as follows:

- (a). No list of signals used was noted in the records (Par. 139).
- (b). There is no evidence that the plotting of signals were checked since no initials pertaining to the checking appeared on the sheet. This was accomplished in the office.

2. Compliance with Instructions for the Project.

The plan, character and extent of the survey satisfy the instructions for the project. The junctions with existing Army Engineers' Surveys (required by the instructions) will be separately considered under paragraph 5 below.

3. Sounding Line Crossings.

Sounding Line crossings are satisfactory.

4. Depth Curves.

The usual depth curves may be satisfactorily drawn.

5. Junctions with Surveys.

- (a). The junction with H-6000 (1933-34) is satisfactory. The junctions with H-6006 (1934) and H-6011 (1934) will be considered in the reviews of those sheets.

(b). U. S. Engineers B.P. No. 26303.

The junction of this survey with H-6005 (1933-34) is satisfactory except as follows:

5. (b). (Continued.)

1. 14 and 17 foot soundings on B.P. 26303;  
lat. 38°05'.1, long. 121°34'.0.

These soundings fall in depths of 27 feet on H-6005 (1933-34). The Chief of Party states that this discrepancy is a result of dredging made to repair a broken levee. The 27 foot sounding of H-6005 (1933-34) should be charted.

2. 26 foot sounding on B.P. 26303;  
lat. 38°05'.8, long. 121°33'.9.

This sounding was obtained between 55 and 54 foot sounding on the Engineers' work and falls in depths of about 52 feet on H-6005 (1933-34). The field party made a search in the locality and failed to find it. The 26 foot sounding should not be used in charting unless corroborated by correspondence with the Engineers.

(c) U. S. Engineers B.P. No. 26301.

The junction of this survey in Fishermans Cut with H-6005 (1933-34) is satisfactory.

6. Comparison with Prior Surveys.

There are no previous surveys within the area covered by the present survey.

7. Comparison with Chart No. 5527.

Aside from a few soundings at the mouth of Mokelumne River and Potato Slough considered in paragraph 5 above, the chart contains no further information within the limits of the new survey.

8. Field Plotting.

Field protracting and plotting were accurate and conform to the requirements of the Hydrographic Manual.

9. Additional Field Work Recommended.

No additional field work is recommended within the limits of this survey. However, attention is called to the fact that the survey of Three Mile Slough, which connects the Sacramento and San Joaquin Rivers, has not been accomplished. A portion of this slough was surveyed <sup>in</sup> H-6013 (1934), which joins H-6005 (1933-34) on the northwest. Similarly, Seven Mile Slough, which extends on both H-6005 (1933-34) and H-6006 (1934), has not been surveyed. There is no record in this office at the present time that these sloughs have been surveyed by the U. S. Engineers.

*Note: B.P. Nos. 27746-8(1914) covering this area have been received in this office subsequent to this review. 11/15/34 H.W.M.*



10. Superseding Previous Surveys.

There are no previous surveys to be superseded within the limits of the present survey.

11. Reviewed by Harold W. Murray - October 11, 1934.

Inspected by A. L. Shalowitz.

Examined and approved:

*K. T. Adams*  
K. T. Adams,  
Chief, Section of Field Records.

*L. O. Lobbut*  
Chief, Division of Charts.

*F. S. Bosden*  
Chief, Section of Field Work.

*G. Wade*  
Chief, Division of H. & T.

GEOGRAPHIC NAMES

Survey No. H-6005  
T-4686

Date. Dec. 13, 1934  
HMS

Chart No. \_\_\_\_\_

Names approved Dec. 13, 1934.

Diagram No. \_\_\_\_\_

*Harlow Bacon*

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

Ø 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
	<u>Sherman Island</u>	U.S.G.S. <sup>n</sup> quadrangles and other reliable authorities			
	<u>Twitchell Island</u>	"			
	<u>Bradford Island</u>	"			
	<u>Webb Tract</u>	"			
	<u>Mandeville Island</u>	"			
	<u>Venice Island</u>	"			
	<u>Bouldin Island</u>	"			
	<u>Andrus Island</u>	"			
	<u>Potato Slough</u>	"			
	<u>Mokelumne River</u>	"			
	<u>Sevenmile Slough</u>	"			
	<u>Brannon Island</u>	"			
	<u>Fishermans Slough</u>		Delete, does not appear on any maps or quads.		
	<u>Fishermans Cut</u>	"			
	<u>Short Slough</u>	"			
	<u>Serpent Slough</u>	"			
	<u>Elk Slough</u>	"			
	<u>Threemile Slough</u>	"			
	<u>Old River</u>	"			
	<u>San Joaquin River</u>	U.S.G.B. 6th Report			
	<u>Venice Island Light and</u>	Echo Board Light List, Pacific Coast, U.S., 1934			

## GEOGRAPHIC NAMES

Survey No. H-6005  
T-4686Date. Dec. 13, 1934

Chart No. \_\_\_\_\_

HMS

Names approved Dec. 13, 1934.

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*Harlow Bacon*

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Status	Name on Survey	Name on Chart	New Names in local use	Names assigned by Field	Location
	* <u>Sevemile Slough Light</u>	Light List, Pacific Coast, U.S., 1934			
	<u>Twitchell Island Lower End Light</u> <del>not Twitchell Island Light</del>	"			
	* <u>Fishermans Slough Light</u>	"			
	* <u>Kentucky Landing Light</u>	"			
	* <u>Potato Point Light</u>	"	and U.S.G.S. BOULDIN Quad. field party notes.		
	* <u>Potato Point</u>		"	and maps	
	<u>Denicke Landing</u>		"		
	<u>San Andreas No. 2 Landing</u>		"		
	<u>P &amp; B Landing</u>		"	"	
	<u>Pedro Landing</u>		"		
	<u>Gibson Landing</u> OK		"	"	
	<u>San Andreas Landing</u>		"		
	<u>Wulffs Landing</u>		"	"	
	<u>Frodshams Landing</u>		"		
	<u>G &amp; M Landing</u> OK		"	"	
	* <u>San Andreas Shoal</u>		"		
	* <u>Webb Reach</u>		"		
	* <u>Webb Point</u>		"	"	
	* <u>Webb Point Light</u>	"			
	* <u>Old River Flats</u>		"		
	<u>Webb Headquarters</u>		"	"	
	* <u>Hayes Point</u>		"	"	
		See page 3			

Survey No. H-6005  
T-4686

GEOGRAPHIC NAMES

Date Dec. 13, 1934

Chart No. \_\_\_\_\_

HMS

Names approved Dec. 13, 1934. *Harlow Bacon* Diagram No. \_\_\_\_\_

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Ø, 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
	* <u>Hayes Point Light</u>	Light List, Pacific Coast, U.S., 1934.			
	* <u>Oulton Point Light</u>	"			
	Camps in general agreement	Quadrangles and maps			
	<u>McCormack Landing</u> Not McCormick			detailed maps	
	<u>Rosetta Landing</u>	U.S.G.S. Jersey Quad. marked by field party			
	<u>Browns Dairy No. 2<sup>3</sup> Landing</u>	"		"	
	<u>Oulton Landing</u>	"		"	
	* <u>Oulton Point</u>	"		"	
	* <u>Twitchell Pump OK</u>			"	
	* <u>Santa Clara Shoal</u>	"			
	<u>Kentucky Landing</u>	"		"	
	<u>Mackenson</u> Mackenson on property map			"*	
	<u>Noverd</u>			"	
	<u>Landing No. 5A</u> OK not on any maps				
	<u>Washington Slough</u>	<i>delete</i>		"	
J.	McDonald, Crawford, Mumford or Mollenbeck Slough as noted on Sherman Island in name paragraph of DR for T-4686 do not agree in location on various maps, so have not been placed on sheet.				
	* To be added				
	For references consulted see DR for T-4686.		HMS		

Applied to drawing of Chart 5527  
Jan 2, 1935 - J.T.W.