

7798

Diag. Cht. No. 5534

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

Notes to Accompany

DESCRIPTIVE REPORT

Type of Survey ..... HYDROGRAPHIC

Field No. BO-05150 ..... Office No. H-7798

LOCALITY

State ..... California

General locality ..... San Joaquin River

Locality ..... New York Slough

194 50

CHIEF OF PARTY

C. A. George

LIBRARY & ARCHIVES

DATE ..... OCT 8 1951

86242

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

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

REGISTER No. H-7798

Field No. Bo-05150

State CALIFORNIA

General locality SAN JOAQUIN RIVER

Locality NEW YORK SLOUGH

Scale 1:5,000 Date of survey 15 May 1950  
7 JULY TO 17 AUG. 1950

Instructions dated 12 APR. 1949 & 15 FEB. 1950

Vessel SHIP BOWIE

Chief of party C.A. GEORGE

Surveyed by H.C. APPLEQUIST & C.J. BEYMA

Soundings taken by ~~GRAPHIC~~ graphic recorder, hand lead, ~~etc~~

Fathograms scaled by SHIPS PERSONNEL

Fathograms checked by SHIPS PERSONNEL

Protracted by B.T. LEWIS

Soundings penciled by B.T. LEWIS

Soundings in ~~FOOT~~ feet at ~~LOW~~ MLLW

REMARKS: This survey was smooth plotted in the Hydrographic Section of the Norfolk Processing Office.

782  
10/10/51

APPROVAL SHEET FOR NOTES FOR DESCRIPTIVE REPORT TO ACCOMPANY

HYDROGRAPHIC SURVEY H-7798 (1950), (Field No. BO-05150)

At this writing the smooth sheet has not been plotted, and statements in the report regarding junctions, crossings, et cetera naturally refer to boat sheet soundings. The boat sheet soundings, however, were accurately corrected, and it is not believed that any great differences will result on the smooth sheet. } now refers to smooth sheet

The field work was given personal supervision by the Chief of Party, and the boat sheet was examined daily. It is considered that the survey is complete and adequate.

As mentioned in the report, dredging operations in New York Slough are now in progress. (See Bp. 47383-4)

*C. A. George*

C. A. George,  
Commander, C&GS,  
Chief of Party

DESCRIPTIVE NOTES TO ACCOMPANY HYDROGRAPHIC SHEET

Register No. H-7798 - Field No. BO-05150

Survey of New York Slough, San Joaquin River, from Point New York to the southernmost point of Winter Island, on a scale of 1:5,000 by personnel of the Ship BOWIE.

A. PROJECT:

This survey was executed in accordance with The Director's Instructions dated 12 April 1949 and Supplemental Instructions dated 15 February 1950, Project CS - 256.

B. SURVEY LIMITS AND DATES:

This survey covers the area in New York Slough east from Point New York to Longitude  $121^{\circ} - 50.7$ .

This sheet makes a junction with Sheet Register No. H-7797<sup>(1950)</sup> at both the eastern and western ends and also to the north at the southern entrance to Middle Slough. Sheet Register No. H-7797, Field No. BO-1150 is a contemporary survey.

Hydrography was started on 7 July 1950 and completed on 17 August 1950. Previously dock soundings had been taken on 15 May 1950.

C. VESSEL AND EQUIPMENT:

Launches 113 and 133, operating from the Ship BOWIE were used for the hydrography.

Type 808 J Fathometer No. S-111 was used in Launch 113 on a, c, and d days and No. S-112 on b day.

Type 808 J Fathometer S-111 was used in Launch 133 on all days.

Dock soundings were taken with the hand lead and spaced along the dock by tape.

DESCRIPTIVE NOTES TO ACCOMPANY HYDROGRAPHIC SHEET - continued

D. TIDE AND CURRENT STATIONS:

All soundings were reduced to MLLW using data from the tide gage at Pittsburg, California.

One current station was occupied for a 75 hour series of observations. This station in mid-channel in Latitude  $38^{\circ} - 02.05'$ , Longitude  $121^{\circ} - 52.35'$

F. CONTROL STATIONS:

Triangulation control was furnished by stations listed in the Publications "Geographic Positions, California VII, San Francisco and Vicinity" and by triangulation executed in 1950 by this party.

Topographic stations were taken from Topographic Sheet Field No. BO-C-50 on a scale of 1:5,000 and surveyed in 1950 by this party. (T-7048)

G. SHORELINE AND TOPOGRAPHY:

The shoreline on the north side of New York Slough was taken from Planimetric Sheet No. T-5945<sup>(1941)</sup>. A copy of this sheet on a scale of 1:5,000 had been furnished this vessel from the Washington Office.

The shoreline on the south<sup>T-7048</sup> side of New York Slough was taken from Topographic Sheet Field No. BO-C-50, surveyed by this party. Numerous changes along the Pittsburg waterfront necessitated a complete new survey.

H. SOUNDINGS:

Depths were measured by 808 J type fathometers Nos. S-111 and S-112 except along the faces of the docks where the hand lead was used.

I. CONTROL OF HYDROGRAPHY:

Hydrography on this survey was controlled by sextant angles taken between objects located by triangulation or topography. Dock soundings were spaced by tape.

DESCRIPTIVE NOTES TO ACCOMPANY HYDROGRAPHIC SHEET - continued

J. ADEQUACY OF SURVEY:

This survey is believed to be complete and adequate to supersede prior surveys for charting purposes. However, the major portion is in a dredged channel maintained by the U. S. Engineers and those areas where the depth is less than 30 feet are shortly to be dredged to a least depth of 30 feet. The latest information from the U. S. Engineers, prior to compiling the chart, should be used to supersede the soundings on this sheet.

The boat sheet junctions with contemporary survey H-7797 were satisfactory and continuous depth curves may be drawn.

K. COMPARISONS WITH PRIOR SURVEYS:

In general, the survey agrees with prior survey H-6753 (1942). The only comparison that can be made is in the area outside of the channel and this area is so small and so close to the shoreline that a comparison must be very generalized. The channel area appears to be continually filling in and scouring and the U. S. Engineers periodically dredge it in an attempt to maintain a 30 foot least depth. However, the holes in the channel, considerably over 30 feet agree quite well in position and depth with the prior survey. The 1942 survey was on a scale of 1:10,000 with considerably wider spacing of sounding lines and in nearly all of these holes a greater depth was found in this 1950 survey. Review,  
par. 5b

L. COMPARISON WITH CHARTS:

Chart No. <sup>55</sup>834 on a scale of 1:40,000 covers this area. Very few soundings are shown on the chart outside the dredged channel and a comparison is not practical. Review,  
par. 6a

M. SHOALS AND DANGERS:

There is a general shoaling from the north side of the slough into the channel over the western part of this sheet. These shoals have been reported in Notices to Mariners. The U. S. Engineers attempt to maintain a least depth of 30 feet in the channel and are shortly to dredge to obtain that depth. Their after dredging surveys should be examined and used for charting purposes. (Bp. 47383-4)

N. COAST PILOT INFORMATION:

(Included in a separate report by Captain Green).

DESCRIPTIVE NOTES TO ACCOMPANY HYDROGRAPHIC SHEET - continued

O. AIDS TO NAVIGATION:

Fixed aids to navigation were reported on Form 567 and are not repeated in this report. Mailed 26 September 1950.

There are no floating aids to navigation within the limits of this sheet.

P. LANDMARKS FOR CHARTS:

Landmarks for Charts were reported on Form 567 and the information is not repeated in this report. Mailed 26 September 1950. A list of recommended landmarks is attached to this report.

Q. FATHOMETER CORRECTIONS:

Fathometer corrections were determined by bar checks. An abstract of these corrections is included with this report. A separate report covers these corrections.

*H. C. Applequist*  
H. C. Applequist,  
Lt. Comdr. C&GS

Approved:

*C. A. George*  
C. A. George,  
Commander, C&GS,  
Chief of Party

## STATISTICS FOR HYDROGRAPHIC SURVEY, H-7798 (1950) FIELD NO. BO-05150

LAUNCH NO. 113

DAY	VOL. NO.	DATE	NO. POS.	NO. STATUE MILES
a	1	7 July	176	15.1
b	2	7 August	97	7.5
c	3	8 August	106	9.9
d	3	9 August	85	6.4

LAUNCH NO. 133

a	4	10 August	58	2.7
b	4	16 August	2	--
c	4	17 August	29	1.4

SKIFF AND DOCK SOUNDING

a	5	15 May	55	--
b	5	7 July	116	--

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TOTALS:            724    Positions  
                       43.0    Statue Miles  
                       1.8    Square Statue Miles



TIDE NOTE - SURVEY H-7798(1950) Field No. BO-05150

The tide station at Pittsburgh (New York Slough), California at Latitude  $38^{\circ} - 02.2'$  and Longitude  $121^{\circ} - 52.8'$  was used for the reduction of all soundings on this survey.

The value of mean lower low water on the staff was 1.5 feet, as stated in The Director's letter (36-rcb) dated 22 May 1950.

RECOMMENDED LANDMARKS FOR CHARTS

Pittsburg Johns Manville Co. Water Tank.

Pittsburg Redwood Mfg. Co. Tank.

Pittsburg Columbia Steel Co. Tank.

Pittsburg Columbia Steel Co. River Water Tank.

Pittsburg Columbia Steel Co. Canal Water Tank.

Pittsburg Pioneer Rubber Co. Water Tank.

Pittsburg Dow Chemical Co. Tank.

Pittsburg Tall Elevator Shaft.

ABSTRACT OF VELOCITY CORRECTIONS  
 SURVEY H-7798(1950)(BO-05150)

Launch No. 113

DAY	DEPTH (feet)	CORRECTION (feet)
a 7 July	A Scale	
S-111	0 - 55	0.0
(Initial 2.0 ft.)	B Scale	
	35 - 90	-1.0
b 7 August	A Scale	
S-112	0 - 20	0.0
(Initial 2.0 ft.)	20 - 24	-0.2
	24 - 30	-0.4
	30 - 34	-0.6
	34 - 40	-0.8
	40 - 55	-1.0
	B Scale	
	35 - 47	-1.0
	47 - 53	-1.2
	53 - 59	-1.4
	59 - 63	-1.6
	63 - 67	-1.8
	67 - 72	-2.0
c & d, 8 & 9 August	A Scale	
S-111	0 - 55	0.0
(Initial 2.0 ft.)	B Scale	
	35 - 90	-1.0

Launch No. 133

a 10 August	A Scale	
S-111	0 - 55	0.0
(Initial 1.4 ft.)		
b 16 August	No fathometer soundings.	
c 17 August	A Scale	
S-111	0 - 09	0.0
(Initial 1.4 ft.)	09 - 38	+0.2
	38 - 55	0.0

**(7193) CALIFORNIA — San Francisco Bay — Suisun Bay — New York Slough—Wreck removed—Buoy discontinued.—New York Slough Wreck Buoy**  
WR has been discontinued, the wreck which it marked having been removed.

Approx. position : 38°02'15" N., 121°52'53" W.

(Supersedes N. M. 41 (6014) of 1950.)

(N. M. 48, Dec. 2, 1950.)

(N. M. 114, C. G., San Francisco, Nov. 1, 1950.)

U. S. Coast Survey Chart **5534**.

U. S. Light List, Pacific Coast, 1950, page **410**.

U. S. Coast Pilot, Pacific Coast, 1942, page **143**.

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

POST-OFFICE ADDRESS: Ship BOWIE,  
P. O. Box 328,  
Oakland 4, Calif.

TELEGRAPH ADDRESS:


EXPRESS ADDRESS:

11 December 1950

TO: Norfolk Processing Office,  
U. S. Coast and Geodetic Survey,  
Room 418 U. S. Postoffice Building,  
Norfolk 10, Va.

SUBJECT: Wreck Buoy - Hydrographic Sheet, Register No. H-7798.  
Topographic Sheet BO-C-50.

The enclosed notice to Mariners Item 7193 indicates that the wreck and the buoy marking it have been removed and they should be deleted from the above sheets.

  
Roswell C. Bolstad,  
Commander, USC & GS,  
Commanding Officer, Ship BOWIE

Encl.

# LIST OF SIGNALS

H-7798

## TRIANGULATION STATIONS:

DOW       PITTSBURG, DOW CHEMICAL CO., TANK, 1950.  
 NEW       NEW YORK SLOUGH, WEST END LIGHT, 1950.  
 RED       PITTSBURG, REDWOOD MFG. CO., TANK, 1950.  
 WAT       PITTSBURG, COLUMBIA STEEL CO., RIVER WATER TANK, 1950.  
 STEEL     COLUMBIA STEEL CO., TANK, 1922.  
 JOHN      H. JOHNS MANVILLE CO., WATER TANK, 1932.  
 PITT      PITT, 1922.  
 PIO       PIONEER RUBBER CO., WATER TANK, 1932.  
 CAN       PITTSBURG COLUMBIA STEEL CO., CANAL WATER TANK, 1950.

## TOPOGRAPHIC STATIONS:

<u>Signal Name</u>	<u>Origin</u>	<u>Signal Name</u>	<u>Origin</u>
Aim	Bo-C-50(T-7048)	Key	Bo-C-50(T-7048)
Ask	"	Kit	"
Bat	"	Lan	"
Brown	"	Lax	"
Dot	"	Max	"
Eat	"	Mid	"
Far	"	Owl	"
Fig	"	Paw	"
Gat	"	Fly	"
Gus	"	Rot	"
Hag	"	Sho	"
Hoe	"	Shy	"
Hum	"	Sky	"
Jim	"	Wit	"

ADDENDUM  
To Accompany

HYDROGRAPHIC SURVEY H-7798 (Field No. Bo-05150)

SHORELINE

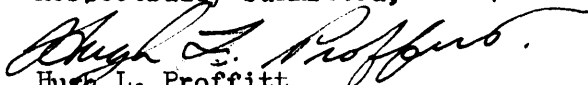
Sounding lines 78 to 89 b and 18 to 30c, indicate some erosion  
along the north shore of New York Slough. corrections during verification brought  
lines into agreement with shoreline.

PIERS

Lat. 38-02.35 Long. 121-52.85 Soundings along Cannery Piers  
were not smooth plotted as they could not be reconciled with topography  
as shown on topographic survey Bo-50-C. (T-7048) (See pages 22 & 23, vol. 5)

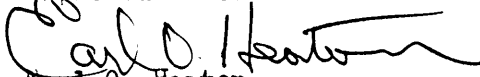
Cannery piers are in ruins and present survey depths in area are  
adequate for charting.

Respectfully submitted,

  
Hugh L. Proffitt  
Cartographer.

Norfolk, Va.  
3 Oct. 1951

Approved & Forwarded:

  
Earl O. Heaton  
Supervisor, SE Dist.

RHC

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~XX~~

22 October 1951

Division of Charts: R. H. Carstens

Plane of reference approved in  
5 volumes of sounding records for

HYDROGRAPHIC SHEET 7798

Locality: New York Slough, San Joaquin River, California

Chief of Party: C. A. George in 1950  
Plane of reference is mean lower low water, reading  
- 1.5 ft. on tide staff at Pittsburg  
23.7 ft. below B. M. 4 (1937)

Height of mean high water above plane of reference is 4.0 feet.

Condition of records satisfactory except as noted below:

E. C. McKay  
Section

Chief, ~~Division of Tides and Currents.~~



GEOGRAPHIC NAMES

Survey No. H-7798

Name on Survey	Source										
	A	B	C	D	E	F	G	H	K		
<u>California</u>										B.N.	1
<u>San Joaquin River</u>										"	2
<u>Pittsburg</u>			(not Pittsburgh)								3
<u>New York Point</u>											4
<u>New York Slough</u>											5
<u>Browns Island</u>											6
<u>Middle Slough</u>											7
<u>Winter Island</u>											8
											9
											10
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											27

Names underlined in red are approved  
10-24-57  
H. Heck

See chart 5534 for placement of names.

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. H-7798...

Records accompanying survey:

Boat sheets ..1..; sounding vols. .5...; wire drag vols. ....;  
 bomb vols. ....; graphic recorder rolls .3.eny.  
 special reports, etc. 1. Smooth Sheet; 1. Descriptive Report.....  
 .....

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

Number of positions on sheet		724
Number of positions checked		10
Number of positions revised		1
Number of soundings revised (refers to depth only)		6
Number of soundings erroneously spaced		1
Number of signals erroneously plotted or transferred		—
Topographic details	Time	6
Junctions	Time	—
Verification of soundings from graphic record	Time	4
Verification by <i>T.L. Janson &amp; A.J. Hoffman</i>	Total time	76 hrs. Date 2/27/52
Reviewed by <i>A. J. Hoffman</i>	Time	28 hrs. Date 3/31/52

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-7798

FIELD NO. BO-05150

California-San Joaquin River, New York Slough

Project No. CS-256

Surveyed in May - August 1950

Scale 1:5,000

Soundings:

Control:

808 Fathometer

Sextant fixes on shore signals

Chief of Party - C. A. George

Surveyed by - H. C. Applequist and C. J. Beyma

Protracted by - B. T. Lewis

Soundings plotted by - B. T. Lewis

Verified and inked by - T. L. Janson and A. J. Hoffman

Reviewed by - A. J. Hoffman, 31 March 1952

Inspected by - R. H. Carstens

1. Shoreline and Signals

The source of the shoreline and signals is given in the Descriptive Report.

2. Sounding Line Crossings

Depths at crossings are in good agreement.

3. Depth Curves and Bottom Configuration

The usual depth curves are adequately delineated.

Dredging and natural changes have caused considerable unevenness on the bottom.

4. Junctions with Contemporary Surveys

The junction with H-7797 (1950) on the east and west will be considered in the review of that survey.

5. Comparison with Prior Surveys

a. The prior surveys in this area made during the period of 1886 to 1923 have been compared with and superseded by H-6753 (1942). Further consideration of these surveys therefore is deemed unnecessary in the present review.

b. H-6753 (1942) 1:10,000

Numerous changes caused by dredging operations and river currents have occurred in this area. There is extensive shoaling in the northwestern part of the Slough as for example in lat.  $38^{\circ} 02.32'$ , long.  $121^{\circ} 52.83'$  where present depths of 26-ft. fall in former depths of 34-ft. Shoaling has occurred in the Slough south of the entrance to Middle Slough in lat.  $38^{\circ} 01.73'$ , long.  $121^{\circ} 50.74'$  where present depths of 27-29 ft. fall in former depths of 41-ft. Prior depths of 24-ft. (charted) in lat.  $38^{\circ} 01.84'$ , long.  $121^{\circ} 51.49'$  have deepened to 31-32 ft.

The present survey is adequate to supersede this prior survey in the common area.

6. Comparison with Chart 5534 (Print date 3/19/51)

a. Hydrography

Charted hydrography originates with the previously discussed survey which needs no further consideration.

The stranded wrecks charted from T-5945 (1941) in lat.  $38^{\circ} 02.31'$ , long.  $121^{\circ} 52.72'$  and lat.  $38^{\circ} 02.45'$ , long.  $121^{\circ} 53.05'$  were not investigated on the present survey. No mention was made of the wrecks on lines run in these vicinities at low tide and the wrecks have, therefore, been carried forward as sunken wrecks.

Except for controlling depths the present survey supersedes the charted information.

b. Controlling Depths

Controlling depths in the dredged channel are charted from a survey by Corps of Engineers (Bp. 47383-4) made subsequent to the present survey.

c. Aids to Navigation

There are no floating aids to navigation in the area of the present survey. The survey and charted positions of the fixed aids are in agreement.

7. Condition of Survey

The sounding records and Descriptive Report are complete and comprehensive.

8. Compliance with Project Instructions

The survey adequately complies with the Project Instructions.

9. Additional Field Work

This is an excellent basic survey and no additional field work is recommended.

Examined and approved:

*Wallace A. Bruder*

~~H. R. Edmonston~~

Acting Chief, Nautical Chart Branch

*H. Arnold Kero*

H. Arnold Kero

Chief, Division of Charts

*L. S. Hubbard*

L. S. Hubbard

Chief, Section of Hydrography

*Earl O. Heaton*

Earl O. Heaton

Chief, Division of Coastal Surveys

# NAUTICAL CHARTS BRANCH

SURVEY NO. H-7798

## Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
10/19/51	5534	H.W. Burgoyne	Before <del>After</del> Verification and Review <i>Consider completely applied.</i> <i>Although not NCR this sheet can be considered completely applied because it is largely superseded by Bp 47383-4 (Drisko)</i> <i>See review H-7798</i>
12-8-52	5576	Earl M. Bragoff	<i>Completely applied</i> Before <del>After</del> Verification and Review
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			Before After Verification and Review

M-2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.