

5947

Diag'd. on diag. ch. No. 5534

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Air Photo. Compilation

Field No. _____ Office No. T-5947

LOCALITY

California

State _____

Suisun Bay

General locality _____

Grizzly Bay

Locality _____

194 3

CHIEF OF PARTY

Lieut. Comdr. K.G.Crosby

Lieut. Comdr. L.D.Graham

LIBRARY & ARCHIVES

DATE

Feb 9-1948

5947

DATA RECORD

T- 5947

Quadrangle (II): Antioch, Calif
 Carquinez, Calif

Project No. (II): 262

Field Office: San Francisco, Calif. Chief of Party: L.D.Graham

Compilation Office: Tampa, Fla. Chief of Party: K.G.Crosby

Instructions dated (II III): 9-4-41

Div of Photogrammetry
 Office Files
 Copy filed in Descriptive
~~Report No. T-~~ (VI)

Completed survey received in office: 4-30-43

Reported to Nautical Chart Section: ✓

Reviewed: 1-15-48 Applied to chart No. 5574 Date: May, 1943
 5575 May 7, 1945

Redrafting Completed:

Registered: 1-20-48 Published:

Compilation Scale: 1:10,000 Published Scale:

Scale Factor (III): 1.00

Geographic Datum (III): N.A. 1927 Datum Plane (III): M.S.L.

Reference Station (III): Griz 1922

Lat.: 38° 09' 40" 789 (1257.6 m.) Long.: 121° 59' 48" 517 (1181.1 m.) Adjusted
~~Unadjusted~~

State Plane Coordinates (VI):

X =

Y =

Military Grid Zone (VI)

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
6334	9/3/41	11:33	1:10,000	4.1
6330	"	"	"	"
5525	5/18/41	11:58	"	1.7
5526	"	11:59	"	"
5527	"	"	"	"
5529	"	12:00	"	1.6
5537	"	12:11	"	1.5
5538	"	12:12	"	"
5543	"	12:35	"	1.2
5544	"	12:36	"	"
5545	"	12:37	"	1.1
5546	"	12:38	"	"
5547	"	12:39	"	"
5551	"	12:44	"	"

Tide from (III): Point Buckler (Reference Station: San Francisco)

Mean Range: 4.1

Spring Range: 5.5 (diurnal)

Camera: (Kind or source) U.S.C. & G.S. 9 lens ($8\frac{1}{4}$ " focal length)

Field Inspection by: W.J.Chovan, Lieut (j.g.) date: 1941
W.C.Russell, Lieut. (j.g.)

Field Edit by: None date:

Date of Mean High-Water Line Location (III): Date of Photographs

Projection and Grids ruled by (III) C.H.R. Wash.Offc. date: 12-10-42

" " " checked by: " " " date: 12-10-42

Control plotted by: R.Dossett, Sr.Photo.Aid date: 12-8-42

Control checked by: P.G.Gill, Photo.Aid date: 12-8-42

Radial Plot by: Tampa Office Personnel date: 12-19-42

Detailed by: J.Collins, Asst.Photo.Aid date: Jan.-Feb. 1943

Reviewed in compilation office by: date: March 1943
A.L.Kidwell, Jr.Topo.Engr.; J.A.Giles, Asst.Photo.Engr.

Elevations on Field Edit Sheet
checked by: date:

STATISTICS (III)

Land Area (Sq. Statute Miles): 22

Shoreline (More than 200 meters to opposite shore): 11.4

Shoreline (Less than 200 meters to opposite shore): 59.1

Number of Recoverable Topographic Stations established: 1

Number of Temporary Hydrographic Stations located by radial plot: 6

Leveling (to control contours) - miles:

Roman numerals indicate whether the item is to be entered by, (II) Field Party, (III) Compilation Party, or, (VI) the Washington Office.

When entering names of personnel on this record give the surname and initials (not initials only).

Remarks:

COMPILATION REPORT
TO ACCOMPANY
SHEET NO. T-5947

CONTROL

With the exception of the eastern edge, the area covered by this survey sheet was adequately controlled by triangulation stations to insure accurate detailing. These stations are listed in the Field Inspection Report of L. D. Graham covering the Suisun Bay area, which was submitted to the Washington Office in 1941. Filed in the Div. of Photogrammetry - General Files

It was stated in the Report of Triangulation for Air Photo Control - Suisun Bay, California, 1942, submitted by Lieut. Comdr. S. B. Grenell, that the position of station Three Point No. 1 should be recomputed. This is discussed in a paragraph under Main Radial Plot included in the report for sheet T-5946. Filed in Div. of Photogrammetry General Files.

MAIN RADIAL PLOT

For a discussion of the radial plot of which this sheet is a part, reference is made to the compilation report for sheet T-5946.

DETAILING

The photographs used in detailing this sheet were generally clear and the scale was found to be fair.

The field inspection was adequate along the shoreline and some areas inshore. Along the southern inshore portion of Grizzly Island the field inspection was meager. It is believed that by comparison a true interpretation has been obtained.

Photographs 5546, 5545, 5544, 5538 and 5537 were computed for tilt and all radial points were located from the isocenters with adequate allowance for distortion.

Attention is called to a discrepancy in the distance from triangulation station HYDRO GUN, 1942, to the shoreline. The card (Form 524) as prepared by the field party states "it is 30 meters back from the marsh line" whereas the shoreline was clearly outlined by the field party on field print number 5546 and is nearer 50 meters from the station. The shoreline has been detailed as shown on the field print. Distance changed to 50 meters on the Form 524 card, filed in Div. of Photogrammetry, General Files. The original distance was evidently not measured because of the marshy ground. The SUPPLEMENTAL DATA picking card shows no measurement.

There were no graphic control surveys nor maps and plans of other agencies used to supplement the photographs with the exception of the standard quadrangle map of the Geological Survey. This quadrangle map was used to determine elevated positions, ditches and levees, etc.

LANDMARKS AND AIDS TO NAVIGATION

No objects were noted which would serve as landmarks.

No aids to navigation are located in this area.

HYDROGRAPHIC CONTROL

There are six unmarked H & T stations appearing on this sheet which were located during the radial plot. These stations will be of value to the hydrographer and may be recovered when hydrographic work is done in the area. These stations are numbered on the survey sheet, the same numbers being used that were used in Lieut. Comdr. L. D. Graham's Field Inspection Report of the Suisun Bay Area submitted to the Washington office in 1941.

GEOGRAPHIC NAMES List filed in Div. of Charts, Geographic Names Section.

No geographic names appear on this compilation except those so well established as to be correct beyond question. Reference is made to a letter from the Acting Director dated December 2, 1942, Reference 28-PFA-1990, which authorizes this procedure.

COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES

A comparison was made with the U. S. Geological Surveys ANTIOCH CALIFORNIA quadrangle map, edition of 1908 and reprinted in 1936. This quadrangle map is 1:62,500 scale and while an accurate comparison could not be made it was ascertained that the main features such as shoreline were in general agreement. Quite a few small cultural changes were noted, such as new ditches and levees. According to the field inspection report the marsh area is used extensively by hunters and it is believed new ditches and levees are almost constantly being constructed in order that the water may be more effectively controlled when flooding or drainage is desired.

COMPARISON WITH NAUTICAL CHARTS

This sheet was compared with U.S.C. & G.S. Chart 5534 scale 1:40,000 published April 1935 and corrected to August 12, 1942.

In the area around approximate Latitude $38^{\circ} 07'$ and Longitude $121^{\circ} 58'$, the marsh area has been converted to cultivation and numerous drainage ditches have been established.

In the area around approximate Latitude $38^{\circ} 06'$ - Longitude $121^{\circ} 59'$, Simmons Island, it has been converted back to marsh.

The shoreline and other features compare favorably with exceptions as noted under the paragraph "Comparison With Existing Topographic Quadrangles". This compilation should supersede the charted information.

Respectfully submitted,

James Collins
James Collins,
Asst. Photogrammetric Aid

Forwarded by:

Kenneth G. Crosby
Kenneth G. Crosby,
Chief of Party....

Division of Photogrammetry
Review Report of
Planimetric Map Manuscript T-5947

Subject numbers not used in this report have been adequately covered in other parts of the descriptive report.

26. Control.-

The positions for ^{the following} ~~two~~ stations were established by the field inspection party with sufficient accuracy for the control of the radial plot, but they are of less than third order accuracy. The computations are filed in the Bureau Library.

The station, Hydro Gun, 1942, originally shown as a triangulation station on the map manuscript, was changed to a recoverable topographic station. A Form 524 card is filed in the Division of Photogrammetry, General Files.

The station, Hydro No. 525, 1942, was removed from the map manuscript since it is unmarked and not recoverable.

35. Hydrographic Control.-

The names and descriptions of the photo-hydro stations were removed from the map manuscript. The reference numbers used by the field party were added. The list of the photo-hydro stations in this area and their descriptions is part of the Field Inspection Report of the Suisun Bay area filed in the Division of Photogrammetry, General Files.

44. Comparison with Existing Topographic Surveys.-

USGS Carquinez Quadrangle	1:62,500	1901
USGS Antioch Quadrangle	1:62,500	1908
USGS Denverton Quadrangle	1:31,680	1918
USGS Honker Bay Quadrangle	1:31,680	1918
T-1847	1:10,000	1887-88
T-4023	1:10,000	1922

The map manuscript is in good agreement with the surveys with the following exceptions:

The shoreline in northeast Grizzly Bay is considerably different on the map manuscript than on the surveys. This change in shoreline has been caused by the construction of levees and ditches.

Many ditches, levees, roads and buildings that are shown on the map manuscript do not appear on the surveys.

45. Comparison with Nautical Charts.-

Chart No. 5534	1:40,000	1946
Chart No. 5575	1:10,000	1945

The map manuscript has been applied to the nautical charts and they are in excellent agreement with the following exceptions:

A small island shown on Chart No. 5534 west of Pelican Point, is not on the map manuscript.

A fishing shack in Grizzly Bay is not shown on Chart No. 5534. *Not charted 2/22 8/5/48*

Reviewed by:

Reviewed under direction of:

Charles Theurer
C. Theurer
1-15-48

S. V. Griffith
S. V. Griffith
Chief, Review Section

APPROVED BY:

B. G. Jones 1/48
Technical Assistant to the
Chief, Div. of Photogrammetry

Robert M. ...
Chief, Nautical Chart Br.
Division of Charts

K. T. Adams
Chief, Div. of Photogrammetry

C. K. Green
Chief, Div. of Coastal Surveys

GEOGRAPHIC NAMES

Survey No.

T-5947

Name on Survey

	On Chart No.	On previous survey No.	On U. S. quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List	
A	B	C	D	E	F	G	H	K	
<u>California</u>		(for title)						USGB	1
<u>Suisun Bay</u>		" "							2
✓ <u>Grizzly Bay</u>									3
✓ <u>Point Duckler</u>									4
✓ <u>Suisun Cutoff</u>									5
✓ <u>Simmons Island</u>								USGB	6
✓ <u>Pelican Point</u>									7
✓ <u>Norther Slough</u>									8
✓ <u>Noyce Slough</u>									9
✓ <u>Hammond Island</u>									10
✓ <u>Howard Slough</u>									11
✓ <u>Frost Slough</u>									12
✓ <u>Island Slough</u>									13
✓ <u>Tree Slough</u>									14
✓ <u>Grizzly Island</u>									15
✓ <u>Montezuma Slough</u>								USGB	16
✓ <u>Garnet Pt.</u>									17
✓ <u>Ryer Island</u>									18
✓ <u>Grizzly Slough</u>									19
									20
									21
									22
									23
									24
									25
									26
									27
									M 234

Names underlined in red are
approved. 1/20/48

L. Heck