

5937

Diag'd. on Diag. Ch. No. 5502

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Air Photo. Compilation

Field No. CS-262-A Office No. T-5937

LOCALITY

State California

General locality San Pablo Bay

Locality Middle Section Napa River

194 1-'42

CHIEF OF PARTY

L.D.Graham

LIBRARY & ARCHIVES

DATE

Sept 28-1949

8-1870-1 (1)

5937

DATA RECORD

T- 5937

Quadrangle (II):

Project No. (II): CS 262 -A

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

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

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

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

Completed survey received in office: 10/12/43

Reported to Nautical Chart Section: 10/19/43

Reviewed: 10/21/48 Applied to chart No. 5533 Date: 1/7/47

Redrafting Completed: 4/26/49

Registered: 9/14/49

Published:

9/13/49

Compilation Scale: 1:10,000

Published Scale: 1:10,000

Scale Factor (III): 1.00

Geographic Datum (III): N.A. 1927

Datum Plane (III): ^{M.H.W.}
~~U.S.L. 1929~~

Reference Station (III): Good Luck Point 2 - 1921

Lat.: 38°11'02"099(64.7 m) Long.: 122°18'09"801(238.5) Adjusted
m. ~~Unadjusted~~

State Plane Coordinates (VI):

X =

Y =

Military Grid Zone (VI)

Tide from (III): Mean between NAVY YARD, MARE ISLAND STRAIT and NAPA RIVER
Mean Range: 5.0 Spring Range: 6.6 (Diurnal)
Camera: (Kind or source) USC&GS 9 lens ($8\frac{1}{4}$ " focal length)

Field Edit by: *None* date:

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

date:

STATISTICS (III)

Land Area (Sq. Statute Miles); 17.8

Shoreline (More than 200 meters to opposite shore); 8.9

Shoreline (Less than 200 meters to opposite shore); 77.5

Number of Recoverable Topographic Stations established; 3

Number of Temporary Hydrographic Stations located by radial plot; 11

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;

MAP T. 5937

PROJECT NO. 262A

SCALE OF MAP 1:10000

SCALE FACTOR 1.0

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ψ -COORDINATE LONGITUDE OR χ -COORDINATE	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS FORWARD (BACK)	DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS FORWARD (BACK)
BOW OF OLD DESTROYER, 1942	G.P.	1927	38°10' 01.75"	54.0			
NAPA RIVER BEACON 3, 1922-42	"	"	122°17' 11.85"	288.5			
	"	"	38°10' 13.59"	419.0			
LOW WINDMILL, 1942	"	"	122°17' 39.52"	962.0			
	"	"	38°10' 06.97"	214.9			
	"	"	122°18' 17.24"	419.7			
BARN,	"	"	38°10' 13.16"	405.8			
NORTH GABLE, 1942	"	"	122°18' 10.84"	263.9			
WINDMILL,	"	"	38°10' 08.323"	256.6			
STEEL TOWER, 1922	"	"	122°19' 06.334"	154.2			
NAPA RIVER BEACON 2, 1922-42	"	"	38°10' 59.48"	1833.9			
	"	"	122°18' 26.52"	645.4			
GOOD LUCK POINT 2, 1921	"	"	38°11' 02.099"	64.7			
	"	"	122°18' 09.801"	238.5			
NAPA BRANCH, 1922	"	"	38°11' 13.002"	400.9			Rebuilt since 1922.
	"	"	122°19' 34.375"	836.6			
GREEN HILL 2, 1921	"	"	38°12' 06.589"	203.2			
	"	"	122°17' 17.301"	421.0			
GOTTSCALK,	"	"	38°12' 12.276"	378.5			
LONE TREE, 1922	"	"	122°18' 08.653"	210.5			
CENTER OF DRAWBRIDGE, 1922	"	"	38°12' 32.97"	1016.6			
	"	"	122°18' 21.06"	512.4			
BRAZOS, 1921	"	"	38°12' 47.252"	1456.9			
	"	"	122°18' 25.708"	625.4			

1 FT. = .3048006 METER

COMPUTED BY:

DATE

CHECKED BY:

DATE

M-2388-12

MAP T.

PROJECT NO.

SCALE OF MAP.

SCALE FACTOR

[illegible]

1 FT. = 3048006 MEYER

COMPUTED BY:

DATE:

CHECKED BY:

DATE _____

M-2388.12

Field Inspections T-5937

The field inspection for the area of T-5937 is covered in the Field Inspection Report, San Pablo Bay Area, California, by L.F. Woodcock and is filed in the Division of Photogrammetry general files.

COMPILATION REPORT
TO ACCOMPANY
SHEET NO. T-5937

CONTROL

Thirteen triangulation stations are plotted within the limits of this sheet, two of which have field inspection points established since the station itself could not be identified on the photographs. They are Green Hill 2-1921 and Fly Hill 2-1921.

Station Napa Branch Windmill 1922 could not be held to on any photograph. It is believed the original windmill has been destroyed and a new one erected in the vicinity of the former location. This is indicated by the information on the picking card. *Station deleted. Windmill is shown as a recognizable object.*

All other stations were easily identified with the exception of Brazos, 1921 which could not be identified definitely on photos 6470 and 6477.

Station LOW WINDMILL, 1942, was not identified on the field print but a triangle was penciled around the area where the windmill is located. Identification of the point could not be certain, as no card was furnished by the field party and the station was not used in the main radial plot. The draftsman later identified it on photographs 5580, 6431, 6432, 6437, and 6478, and it was held to in cutting in additional radial points.

There is insufficient control in the extreme northern corners of this sheet, however, points in these areas established by the main radial plot were held to as additional control with very good results.

Triangulation stations "BOW OF OLD DESTROYER 1942" and "NAPA RIVER BEACON 3-1922-42" could not be held to on photo. 6469. Chamber No. 6 of this photo is very badly matched and double images appear along the junction between chambers 1 and 5. Chambers 5 and 6 were not used in cutting in additional radial points.

Triangulation stations "NAVY YARD SLOUGH TRANSMISSION TOWERS" East and West could not be held to on photo 6431. This apparently is due to a bad chamber.

Photograph No. 6437 appears to be very bad in that all triangulation could not be held directly "on". Some stations were touching the line while "NAPA RIVER BEACON 2" and "GOOD LUCK POINT 2" were close but not touching.

On photo. 6478 "NAPA RIVER BEACON 2" could not be held. The station was too hazy on this photo for accurate picking. "GOOD LUCK POINT 2" was shaded on this photo.

MAIN RADIAL PLOT

A discussion of the radial plot has been made a part of the descriptive report of sheet T-5934. Several radial points were picked in each chamber of the photographs used in the main radial plot, these points being used to advantage in cutting in additional points as they could be held to for secondary control by the draftsman.

Due to apparent distortion in so many photographs, a template was made for each photo from a "paper distortion corrector" template. These templates were adjusted to the photograph chamber lines and cuts through the control taken off. The templates were then adjusted to the control on the survey sheet and chamber lines transferred to the sheet. By placing each photograph under the sheet and holding the centers, chamber lines were matched or adjusted where necessary and radial cuts taken through each radial point.

Through this method satisfactory intersections were obtained.

DETAILING

All photographs used for detailing were exceptionally clear and no difficulty was encountered in delineating vegetation, shore line and marshes.

Two series of photos were used in this compilation. The 5500 series were taken on May 18, 1941 while the 6400 series were taken on September 3, 1941. Streams at Latitude $38^{\circ} 11'$, Longitude $122^{\circ} 17'$ were detailed from photo 5580 as they appear much wider than in the 6400 series photos.

Field inspection in general was fair, but not thorough.

A number of roads leading to the water front and supplying ranch settlements were classified as 3rd class by the field man, but according to instructions should be 2nd class. Where the error was evident without doubt, the classification was changed by the compiler.

In reclaimed areas, now under cultivation, the shapes of numerous streams, now dry, appear on the photographs. Those shapes that appear to no longer serve as drainage, due to construction of levees, have been omitted from the survey sheet. It is noted that roads, in many cases, traverse these old stream beds, without bridges, and it is assumed they are no longer active.

SUPPLEMENTAL DATA

The War Department, Corps of Engineers, U. S. Army, 1942 Mare Island quadrangle, The U. S. Geological Survey 1927, Mare Island quadrangle, and the U.S.C. and G.S. San Pablo Bay nautical Chart No. 5533 were consulted to supplement field inspection.

LANDMARKS AND AIDS TO NAVIGATION

There are no uncharted landmarks in this area. Aids to navigation which are on this sheet are listed on Form 567, which is made a part of this report.

HYDROGRAPHIC CONTROL

There are eleven unmarked stations located by the radial plot that fall in the limits of this sheet. These stations are listed at the bottom of the survey sheet. Also they are listed in Ensign Lorin F. Woodcock's Field Inspection report of the San Pablo Bay area.

*Filed in Div. of Photogrammetry
General Files.*

GEOGRAPHIC NAMES

Only those geographic names considered so well established as to be correct beyond question are shown on this sheet. This was done in accordance with a letter from the Acting Director dated December 2, 1942, Reference 28-P.F.A. 1990.

List of approved names attached.

COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES

A comparison was made with the following quadrangles: War Department Corps of Engineers, U. S. Army, 1942, Mare Island Quadrangle and the U. S. Geological Survey quadrangle 1927. Numerous changes were noted in ditches and levees but the features in general are about the same.

The most noted change has occurred in Fly Bay, Latitude $38^{\circ} 12'$, Longitude $122^{\circ} 19'$ in which a marsh island of considerable size has formed off the northern tip of Coon Island.

Other notable changes are in the main land where formerly shown as marsh are now converted to cultivation.

COMPARISON WITH NAUTICAL CHARTS

A comparison was made with U. S. Coast and Geodetic Survey West Coast, Calif. nautical chart #5533. A bridge is now shown across Devils Slough, Latitude $38^{\circ} 10'$, Longitude $122^{\circ} 20'$. The bridge is approached by a second class road on a levee on the west side of the slough.

Cultivation is now shown in the area west of Devils Slough and NE of the station Brazos. These areas are shown as marsh on nautical chart No. 5533.

Bull Island Latitude $38^{\circ} 13'$, Longitude $122^{\circ} 18'$ is shown as solid ground on the chart but is shown in this compilation as marsh.

A large marsh island is shown on the sheet at the northern tip of Coon Island that does not appear on the nautical chart.

This compilation should supersede the charted information.

Respectfully submitted,

Russell J. Pate.

Russell J. Pate,
Photogrammetric Aid

Forwarded by:

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

GEOGRAPHIC NAMES

Survey No.

GEOGRAPHIC NAMES		Survey No.										
Name on Survey		<div>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</div>										
		A	B	C	D	E	F	G	H	K		
<u>Napa River*</u>	✓										1	
<u>China Slough</u>	✓										2	
<u>Knight Island</u>	✓										3	
<u>Devils Slough</u>	✓										4	
<u>Goodluck Point</u>	✓										5	
<u>Coon Island</u>	✓										6	
<u>Southern Pacific R.R.</u>	✓										7	
<u>Edgerley Island</u>	✓										8	
<u>Green Island</u>	✓										9	
<u>Ely Bay</u>	✓										10	
<u>Dutton Landing</u>	✓										11	
<u>Brazos</u>	✓										12	
<u>Buchli</u>	✓										13	
<u>Bull Island</u>	✓										14	
<u>Cutting Wharf</u>	✓										15	
<u>Carneros Creek</u>	✓										16	
<u>Carneros</u>	✓										17	
<u>Middleton</u>	✓										18	
<u>Squab</u>	✓										19	
<u>California*</u>	✓	(for title)									20	
											21	
											22	
<u>Banty Island</u>	✓										23	
<u>Little Island</u>	✓										24	
<u>Napa Slough</u>	✓										25	
<u>Hudeman Slough</u>	✓										26	
											27	
											28	

* - Decis. of BGN.

Underlined names approved.
10-7-48.
4 names added 10-24-49
L.H.

M 234

(for title)

* - Decis. of BGN.

Underlined names approved.

10-7-48.

4 names added 6-24-49
L.H.

DIVISION OF PHOTOGRAMMETRY
Review Report of
Planimetric Map Manuscript T-5937

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

26 Control

All triangulation stations falling within the limits of the map manuscript are listed on Form M-2388-12, now attached to the Descriptive Report. (The station underlined in red was added during review.)

28 Detailing

Only minor changes and additions were necessary to complete the map manuscript. A narrow margin of detailing was added on the west limit of T-5937 from adjoining map manuscript T-5939 to complete all detailing to 122° 21' longitude, which represents a better common junction.

44 Comparison with Existing Topographic Surveys

T-777	1:10,000	1858
T-4018	1:10,000	1922
T-4019	1:10,000	1922
T-4020	1:10,000	1922

The more permanent of prominent features common to these surveys and T-5937 are in good agreement. These surveys are superseded by T-5937 ^{for charting purposes} in all common areas, except for contours.

45 Comparison with Nautical Charts

5533 1:40,000 1940 (48- 3/8)

51 Application to Nautical Charts

This map manuscript has been only partially applied to Nautical Chart 5533 as of the date of this review report.

Reviewed by:


J. J. Streifler 10/21/48

Approved by:

S. V. Griffith
Chief, Review Section *R.M.*

H. C. Edmonston
Chief, Nautical Chart Branch,
Division of Charts

K. T. Adams
K. T. Adams, Chief,
Division of Photogrammetry

W. M. Seafie
Chief, Div. of Coastal Surveys *192*

NAUTICAL CHARTS BRANCH

SURVEY NO. T 5937

Record of Application to Charts

[illegible]

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.