

5933

Diag'd. on Diag. Ch. No. 5502 & 5530-4

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey AirPhoto. Compilation

Field No. CS-262-A Office No. T-5933

LOCALITY

State California

General locality San Pablo Bay - Petaluma Cr.

Locality Novato and Vicinity

1941-'42

CHIEF OF PARTY

S.B. Grenell

LIBRARY & ARCHIVES

DATE

Dec. 21-1949

5933

DATA RECORD

T- 5933

Quadrangle (II):

Project No. (II): CS 262 A

Field Office: San Francisco, Chief of Party: S.B. Grenell
Calif.

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

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

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

Completed survey received in office: 11-29-43

Reported to Nautical Chart Section: Nov. 1943

Reviewed: 10-12-48 Applied to chart No. 5533 Date: 2/7/47

Redrafting Completed: 9-20-49

Registered: 12-¹³~~8~~-49

Published: 12-1-49

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.*
M.S.L.
Dotted line represents plane of Mean Lower Low
Water

Reference Station (III): SAN ANTONIO 3, 1922

Lat.: 38°09'52"045 (1604.7m) Long.: 122°34'07"214 (175.6m) Adjusted
~~Unadjusted~~State Plane Coordinates (VI): *California 2nd & 3rd Zones.*

X =

Y =

Military Grid Zone (VI)

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
6480.	9 7 3/41	4:01	1:10,000	2.8
6464	"	3:30	"	3.3
6488	"	4:12	"	2.7
6489	"	4:13	"	2.6
6490	"	4:14	"	2.6
6479				
6481				

Tide from (III): Lakeville, Petaluma Creek

Mean Range: 4.9

Spring Range: 6.4 (diurnal)

Camera: (Kind or source) USC&GS 9 lens (8 $\frac{1}{4}$ " focal length)

Field Inspection by: ^{E.H. Pagenhart, Sup.}
Ensign L.F. Woodcock

date: 1942

Field Edit by: *None*

date:

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

Projection and Grids ruled by (III) Wash. Office

date: 4/8/43

" " " checked by: " "

date: 4/8/43

Control plotted by: J.L. White, Prin. Photo. Aid

date: 4/17/43

Control checked by: R. Dossett, Prin. Photo. Aid

date: 4/19/43

Radial Plot by: Tampa Office Personnel

5/19 to
date: 5/29/43

Detailed by: J. Collins, Photo. Aid

9/20 to
date: 11/14/43

Reviewed in compilation office by: ^{F.H. Elrod}
Prin. Photo. Aid

date: Nov. 19,
1943

^{Manuscript}
Elevations on ~~Field Edit Sheet~~
checked by: *None*

date:

STATISTICS (III)

Land Area (Sq. Statute Miles): 35.87

Shoreline (More than 200 meters to opposite shore): 15.16

Shoreline (Less than 200 meters to opposite shore): 59.5

Number of Recoverable Topographic Stations established: 5

Number of Temporary Hydrographic Stations located by radial plot: 12

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:

Field Inspection

Field inspection for the area of
T-5933 is covered in the Field Inspection
Report, San Pablo Bay Area by E. H. Pagenhart.
This report is filed in the Division of
Photogrammetry General Files.

COMPILATION REPORT
TO ACCOMPANY
SHEET NO. T-5933

CONTROL

Four triangulation stations were plotted within the limits of this sheet, two of which have field inspection points since the stations themselves could not be identified on the photographs. These stations are PALA, 1930 and SAN ANTONIO 3 1922.

F.I.P. Fence for Station PALA 1930 was not held on photograph 6487. The difficulty in holding this station is believed due to the fact that it could not be properly identified. This photograph is outside the limits of this sheet, but was used in cutting in additional radial points.

Clump of Trees on Levee, 1942 could not be held on photograph No. 6489. This difficulty appeared to be due to mismatching of chamber junctions.

There is insufficient control in the southern and western parts of this sheet; however, points in these areas established by the main radial plot were "held to" with satisfactory results.

There are a number of stations just outside the limits of this sheet on the north and east which were "held to" satisfactorily.

West of this sheet, outside the limits of this project, two stations were held in cutting in additional radial points. These stations are SONOMA, 1930 and MARIN, 1930. Two field inspection points were established for MARIN as the station itself cannot be identified on the photographs. These field inspection points are F.I.P. Mare and F.I.P. Rin.

These stations were plotted on a piece of acetate taped to the survey sheet.

MAIN RADIAL PLOT

A discussion of the radial plot was made a part of the descriptive report for Sheet T-5934 which is a part of this project. *Filed in Bureau Archives.*

Due to the apparent distortion, templates were made for all photographs, using the "Paper Distortion Corrector" template. By this method the correct chamber junction lines were transferred to the survey sheet. These lines were held to in cutting in extra radial points from which satisfactory results were obtained.

DETAILING

The photographs used for detailing this sheet were generally clear and the scale was satisfactory except on photographs 6487, 6488 and 6489. Certain areas of these photographs are of a very bad scale, but it is believed that this is due to elevations.

In the area between Latitude $38^{\circ}07'$ - $38^{\circ}10'$ and Longitude $122^{\circ}34'$ - $122^{\circ}36'$ there is only one flight of photographs. The radial points directly between centers are not believed to be very accurate due to parallel radial lines. There is not sufficient overlap between flights for accurate radials in this area.

In this area also, accurate delineation between portions heavily wooded and thinly wooded, could not be made due to differences in elevation and shadows cast by trees on slopes.

Field inspection in general was fair, but not thorough.

SUPPLEMENTAL DATA

The U. S. Geological Survey 1938, Petaluma Quadrangle, and the general Highway Map of Marin County, California were consulted to supplement field inspection.

LANDMARKS AND AIDS TO NAVIGATION

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

HYDROGRAPHIC CONTROL

There are 12 unmarked stations located by radial plot that appear on this sheet. These are named on the sheet and also appear in the Field Inspection Report for the San Pablo Bay area. They may be recovered for future use by the hydrographic party.

GEOGRAPHIC NAMES

In accordance with a letter from the Acting Director dated December 2, 1942, Reference 28-P.F.A. 1990, only those geographic names considered well established are shown. *A list of approved names attached.*

COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES

A comparison was made with the U.S. Geological Survey Petaluma Quadrangle Map, edition of 1914. There are some changes in cultural features along Petaluma Creek. By the

addition of levees and ditches some of the area then under water is now cultivated, thus producing a change along the shoreline. Some marsh areas are now cultivated.

*water
change*

U. S. Highway No. 101 is not shown on the 1914 edition.

The town of Novato has been extended.

A comparison was made with the Petaluma Quadrangle, War Dept. Corps of Engineers, compiled in 1942 from photographs made in 1937. All features seem to be in general agreement except in the town of Novato. Grant Avenue is joined to U. S. Highway No. 101 on the east. This is not shown on the War Dept. Quadrangle. All other streets are in agreement.

COMPARISON WITH NAUTICAL CHARTS

A comparison was made with U.S.C. & G.S. Chart No. 5533 published in 1940. This chart is of scale 1:40,000 and while an accurate comparison could not be made due to scale difference, it was ascertained that there were some changes in the shoreline along Petaluma Creek.

The only other change worthy of note is in approximately Latitude $38^{\circ}09'$ and Longitude $122^{\circ}31'$. Part of this area shown as marsh and water is now cultivated.

Respectfully submitted,

James Collins
James Collins,
Photogrammetric Aid

Forwarded by:

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

GEOGRAPHIC NAMES

Survey No.

GEOGRAPHIC NAMES											
Survey No.											
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	
Lakeville	/									1	
Petaluma Creek	/									2	
California*	/									3	
Senoma County	/									4	
Wolokj Slough	/									5	
San Antonio Creek*	/									6	
Mc Donough Island	/									7	
Burdell	/									8	
Burdell Island	/									9	
Rush Creek	/									10	
Story	/									11	
Novato	/									12	
Radoni Creek	/									13	
Martin County	/									14	
U.S. # 101	/									15	
Northwestern Pacific R.R.	/									16	
State Highway 110	/									17	
Novato Creek	/									18	
Novato Valley	/									19	
Neill Island	/									20	
Burdell Mtn.	/									21	
False Bay	/									22	
Black Point	/									23	
	/									24	
	/									25	
	/									26	
	/									27	

M 234

*-Decision of BGN.

Underlined names approved.

9-13-48. a.s.w.

1-2-49

Division of Photogrammetry
Review Report of
Planimetric Map Manuscript T-5933

Subject numbers not used in this 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 (attached to descriptive report). Stations underlined in red were added during review.

28 Detailing

Only minor changes and additions were necessary to complete the map manuscript. Insufficient photo-coverage of the area made detailing and checking of planimetry difficult. Prominent features such as U.S. Highway 101 and Northwestern Pacific R.R., falling within the area of insufficient photo-coverage are in very good agreement with Topographic Surveys 4015 and 4016 of 1922.

44 Comparison with Existing Topographic Surveys

T-472	1:10,000	1854
T-817	1:10,000	1860
T-818	1:10,000	1860
T-1827	1:10,000	1887
T-2447	1:10,000	1897-98
T-4015	1:10,000	1922
T-4016	1:10,000	1922

Common features on these surveys are superseded by T-5933 in all common areas, except for contours *for nautical charting purposes.*

45 Comparison with Nautical Charts

5533	1:40,000	1940 (48-3/8)
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51 Application to Nautical Charts


This map manuscript has not been applied to Nautical Chart 5533 as of the date of this review report.

This map area is unclassified.

Reviewed by:

Under the direction of:


J. J. Streifler 10/12/48


Chief, Review Section R.H.M.
Div. of Photogrammetry

Approved by:

B. J. Jones 12/49
Technical Asst. to Chief,
Division of Photogrammetry

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

O. S. Reading
Chief, Division of Photo-
grammetry

W. M. Sciffe
Chief, Division of Coastal
Surveys *149*

NAUTICAL CHARTS BRANCH

SURVEY NO. 75933

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.