5934

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: Planimetric Air Photographic Compilation

Field No. 262 A Office No. T-5934

LOCALITY

State: California

General locality: San Pablo Bay

Locality: Tolay and Petaluma Creeks

194 1-'42

CHIEF OF PARTY

S.B.Grenell

LIBRARY & ARCHIVES

DATE Dec 19- 1949

B-1870-1 (1)

5934

Form T-1

DATA RECORD

T-5934

Quadrangle (II): Project No. (II): 262-A

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

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

Instructions dated (II III): 9/4/41 Copy filed in ~~Descriptive Report No. T-~~ ~~(VI)~~ Division of Photogrammetry Office Files

Completed survey received in office: 10/4/43

Reported to Nautical Chart Section: 10/11/43

Reviewed: 10/15/48 Applied to chart No. 5533 (Examined only) Date: 2/7/47

Redrafting Completed: 12/14/48

Registered: 12/1/49 Published: 5/12/49

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.S.L.~~ M.H.W. Dotted line represents plane of Mean Lower Low Water

Reference Station (III): Swift 2

Lat.: 38°08'31".325 (965.8 m.) Long.: 122°28'49".589 (1207.5 m.) 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
6456	9/3/41	3:23	1:10,000	3.1
6457	"	3:24	"	"
6458	"	3:25	"	"
6459	"	3:26	"	"
6462	"	3:27	"	3.0
6463	"	3:28	"	"
6479	"	4:00	"	2.6
6424	"	2:30	"	4.1
6464	"	3:30	"	3.0

Tide from (III): Petaluma Creek Entr.(R.R. bridge) (Ref.Sta. San Francisco)

Mean Range: 4.5 **Spring Range:** 6.1 (Diurnal)

Camera: (Kind or source) USC & GS 9 lens (8¼" focal length)

Field Inspection by: 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:** "

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 **date:** 5/19 to 5/29/43

Detailed by: J.Collins, Photo. Aid **date:** 6/16 to 9/18/43

Reviewed in compilation office by: J.A.Giles, Asst. Photo.Engr. **date:** Sept. 1943

Elevations on ~~Field Edit Sheet~~ Manuscript **checked by:** Not applicable **date:** ——

STATISTICS (III)

Land Area (Sq. Statute Miles): 27.77.

Shoreline (More than 200 meters to opposite shore): 9.84

Shoreline (Less than 200 meters to opposite shore): 39.36

Number of Recoverable Topographic Stations established: 0

Number of Temporary Hydrographic Stations located by radial plot: 5

Leveling (to control contours) - miles:

Roman numberals 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- 5934 PROJECT NO. 262-A SCALE OF MAP 1:10000 SCALE FACTOR 1.00

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-COORDINATE / LONGITUDE OR x-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)
BUSH ON KNOLL, 1942 ✓	G.P.	1927	38° 10' 26.828"	827.2						
			122° 29' 20.760"	505.3						
SLEEPY HOLLOW CERTIFIED MILK CO. DAIRY, SILO, YELLOW. WEST, 1942 ✓	"	"	38° 09' 21.57"	665.0						
			122° 29' 53.83"	1310.6						
TOLAY CREEK, E. TRANSMISSION TOWER, 1922 ✓	"	"	38° 09' 16.443"	507.0						
			122° 26' 42.126"	1025.6						
TOLAY CREEK, W. TRANSMISSION TOWER, 1922 ✓	"	"	38° 09' 10.919"	336.7						
			122° 26' 51.340"	1250.0						
SWIFT 2, 1887 ✓	"	"	38° 08' 31.325"	965.8						
			122° 28' 49.589"	1207.5						
SEARS POINT, 1886 ✓	"	"	38° 08' 23.244"	716.7						
			122° 26' 40.360"	982.8						
WHITE HOUSE, S.E. GABLE, 1922 ✓	"	"	38° 07' 29.041"	895.4						
			122° 29' 31.487"	766.9						
PETALUMA CREEK, N. TRANSMISSION TOWER, 1922 ✓	"	"	38° 06' 47.078"	1451.5						
			122° 29' 25.893"	630.8						
PETALUMA CREEK, S. TRANSMISSION TOWER, 1922 ✓	"	"	38° 06' 30.286"	933.8						
			122° 29' 32.803"	799.1						
PETALUMA CREEK, 1851 ✓	"	"	38° 06' 12.434"	383.4						
			122° 29' 21.149"	515.3						
PETALUMA CREEK, BEACON 6, 1922 ✓	"	"	38° 06' 36.008"	1110.2						
			122° 27' 51.853"	1263.2						
NAVAL ENGINEER'S SIGNAL, 1942	"	"	38° 11' 40.22	1240.1						
			122° 28' 20.93	509.3						

Station underlined in red was added to Map Manuscript during review!

1 FT. = .3048006 METER

COMPUTED BY: DATE CHECKED BY: DATE

M-2388-12

COMPILATION REPORT
TO ACCOMPANY
SHEET NO? T-5934

CONTROL

Triangulation was adequate to control the detailing of this sheet. All stations are listed in the Field Inspection Report of Ensign Lorin F. Woodcock covering the San Pablo Bay area, which was submitted to the Washington Office in 1942. Filed in Div. of Photogrammetry General Files

MAIN RADIAL PLOT

A continuous radial plot was run on May 19 to 29, 1943 for the purpose of locating all photograph centers, all hydrographic stations, topographic stations, bench marks, azimuth marks and radial points. The plot extended over the area covered by sheets T-5933 to T-5940 inclusive. This area is the north part of Nautical Chart No. 5533. On the western side of San Pablo Bay it extends from Lat. 38° 06' up Petaluma Creek to and including the City of Petaluma. On the eastern side it extends from the south shore of the entrance to Carquinez Strait up the Napa River to and including the City of Napa. Sheet T-5936 covers Mare Island Navy Yard and the City of Vallejo.

The usual practice of laying the plot was followed. This consisted of plotting the control on the survey sheets and then transferring it to the base grid sheets by matching grid squares. The agreement between the grid lines on survey sheets and those on the base grid sheets was good and very little adjustment was necessary at any place. After laying the plot the intersections of the radial lines were transferred to the survey sheet by again matching grid squares.

Sheet T-5936 of this plot joins sheet T-5941 of a previous plot. The two plots did not make a completely satisfactory tie-in, the radial points of one plot missing the other by from 2 to 10 meters. It was thought advisable to request the return of sheet T-5941 and after taping the two sheets together have all disagreeing points reestablished by radial intersections. By this operation control could be utilized that could not be reached at the time the plots were laid. A complete discussion of the operation will be found in the compilation report for sheet T-5936.

Control, in general, was of sufficient density for the plot. A large number of the stations were stacks and transmission line towers and were easy to accurately identify.

Photographic coverage was complete except for sheets T-5933 and T-5940. A discussion of these sheets will be included in the compilation report by the draftsmen.

Fifteen single lens photographs of the Soil Conservation Service were furnished for sheet T-5934, covering the shore line west of the entrance to Petaluma Creek. Of these, only photographs 4-57, 4-58, 4-59 were used in the plot as the area was sufficiently covered by 9 lens photographs.

Those points established by the plot were obtained from three to eight radial line intersections forming tight closures.

Points established on sheet T-5940 were not satisfactory, however, and the accuracy of the area is considered questionable. Further work will be done in this area by the draftsman and a discussion of the results included in the report for that sheet.

In addition to the above notes on the radial plot, the following work was done by the draftsman.

Upon receipt of the metal template for paper distortion correction, celluloid templates were made for all photographs on this survey sheet. Following the instructions for using the metal template, radial cuts through the triangulation stations were taken. Then, by orienting the celluloid template under the survey sheet, the chamber junction lines, lines to the collimation marks and lines to the mechanical corners were transferred to the survey sheet. Cutting in additional radial points was then accomplished by holding these lines or adjusting between them and making the radial cuts. By this method good results were obtained.

DETAILING

The photographs used in detailing this sheet were generally clear and the scale was found to be fair with the exception of photographs 6479, 6425 and 6467. These were of a poor scale except near the center where it was fair.

Single lens photographs Nos. 4-57, 4-58 and 4-59 were used in the main radial plot but were of a smaller scale than the 9 lens photographs and were of no value to the draftsman.

Field inspection was adequate along the shoreline, but was too generalized inland.

SUPPLEMENTAL DATA

No graphic control surveys, nor maps or plans of other agencies, were available in this office to supplement the photographs in detailing this sheet.

LANDMARKS AND AIDS TO NAVIGATION

There are no uncharted landmarks worthy of being charted, nor Aids to Navigation on this sheet.

HYDROGRAPHIC CONTROL

There are five unmarked H & T stations appearing on this sheet that may be recovered for future hydrographic use.

GEOGRAPHIC NAMES

This office is authorized to omit geographic names, except those so well charted as to be correct beyond question. Reference is made to a letter from the Acting Director dated December 2, 1942, Reference 28-PFA, 1990, in which this authorization is given. Approved list of names attached.

COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES

A comparison was made with the U. S. Geological Surveys Mare Island quadrangle map, edition of 1916 and reprinted in 1927. This quadrangle map is 1:62,500 scale and while accurate comparison could not be made it was ascertained that the main features such as shoreline were in general agreement.

Some cultural changes were noted, such as new roads, ditches and levees. Also the area shown as marsh at approximate Lat. 38° 08' to 38° 09', Long. 122° 30' to 122° 31' has been reclaimed and is now solid ground.

A comparison was made with the U. S. Engineers War Department, Mare Island Quadrangle map, printed in 1942. This map is 1:62,500 scale. An accurate comparison could not be made but it was ascertained that all the main features were in general agreement, and the cultural features compared favorably. One cultural change worthy of noting is that the area shown as solid ground at Midshipman Pt. is now marsh.

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 accurate comparison could not be made due to scale difference it was found that the shoreline was in general agreement. There are some cultural changes such as levees and ditches along the shoreline.

Respectfully submitted,

James Collins

James Collins,
Photogrammetric Aid

Forwarded by:

Kenneth G. Crosby

Kenneth G. Crosby,
Chief of Party...

GEOGRAPHIC NAMES

Survey No.

Name on Survey	A On Chart No.	B On previous survey No.	C On U. S. quadrangle Maps	D From local information	E On local Maps	F P. O. Guide or Map	G Rand McNally Atlas	H U. S. Light List	K	
San Pablo Bay										1
Petaluma Creek										2
Petaluma Point										3
Green Point	(village and point)									4
Black Point	(P.O. & R.R. Sta)									5
~~Grandview~~	(Calcto, L.H 1/6/49)									6
Day Island										7
Rose	(locality name)									8
Reclamation										9
Greenwood										10
Midshipman Point										11
Tolay Creek										12
Tubbs Island										13
Sears Point										14
Sleepy Hollow ~~Dairy~~ Ranch										15
Sonoma Mountains										16
State Highway 37										17
Northwestern Pacific R.R.										18
California*	(for title)									19
Martin County										20
Sonoma County										21
										22
										23
										24
										25
										26
										27

*-Decision of BGN.
Underlined names approved.
9-15-48.
a. g. w.

M 234

Division of Photogrammetry
Review Report of
Planimetric Map Manuscript T-5934

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 (attached to 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. On Page 2 of this Descriptive Report mention was made of 15 photographs of this area, furnished by the Soil Conservation Service (date of photos not stated). Three of these 15 photographs, used in the radial plot, could not be located at the time of this review.

44. Comparison with Existing Topographic Surveys:

T-472	1:10,000	1854
T-564	1:10,000	1856
T-817	1:10,000	1860
T-1826	1:10,000	1886-87
T-1827	1:10,000	1887
T-2447	1:10,000	1897-98
T-4014	1:10,000	1921
T-4015	1:10,000	1922
T-4017	1:10,000	1921-22
T-4018	1:10,000	1922

This map supersedes these surveys for nautical charting purposes.

45. Comparison with Nautical Charts:-

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

51. Application to Nautical Charts:- This map manuscript has not been applied to Nautical Chart 5533 as of the date of this review report.

52. Classification

The area covered by this map is unclassified.

Reviewed by:

J. J. Streifler
10/15/48

Under the direction of:

S. V. Griffith
Chief, Review Section

Approved by:

B. G. Jones 12/5/49
B. G. Jones
Tech. Asst. to the Chief
Division of Photogrammetry

Chief, Nautical Chart Branch
Division of Charts

O S Reading
~~Acting~~ Chief, Division
of Photogrammetry

W. M. Leaf
Chief, Div. of Coastal Surveys

NAUTICAL CHARTS BRANCH

SURVEY NO. T 5934

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
2/7/47	5533	J J Walby	Before After Verification and Review
			Examined – not applied
1953	Reconstr. 5533	Jones & Daugherty	Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			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.