

5942

5945
46

Diag. Cht. No. 5534-1

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Planimetric
Air Photo Compilation

Field No. Office No. T-5942

LOCALITY

State California

General locality San Francisco Bay

Locality Carouinez Strait

5942

DATA RECORD

T- 5942

Quadrangle (II):

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

Copy filed in *Division of*
~~Descriptive~~
~~Report No. T-~~ *(VI)*
Photogrammetry Office
*Files.*Completed survey received in office: *5-8-43*Reported to Nautical Chart Section: *May '43*Reviewed: *12-16-48* Applied to chart No. *5534* Date: *June 1943*
5575 *7 May 1945*Redrafting Completed: *9-20-49*Registered: *4-27-50*Published: *4-8-50*

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.~~

Reference Station (III): Suisun Point 2, 1886

Lat.: $38^{\circ} 02' 05.762$ (177.65 m.) Long.: $122^{\circ} 06' 58.318$ (1422.20 m.) *Adjusted*
~~Unadjusted~~State Plane Coordinates (VI): *California, Zone 3 (primary)*
Zone 2 (secondary)

X =

Y =

Military Grid Zone (VI)

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
5426	5/15/41	1:05	1:10,000	+ 0.1
5427	"	"	"	"
5428	"	1:06	"	"
5429	"	"	"	"
5437	"	1:12	"	+ 0.15
5447	"	1:19	"	"
6324	9/3/41	11:08	"	+ 4.2
6325	"	11:09	"	+ 4.3
5510	5/18/41	11:51	"	+ 1.4
5511	"	"	"	"

NAVY PHOTOS OF 1945 were used in making corrections as shown on T-5942 in red acetate ink.

Acc. 1263

Tide from (III): Mean between Suisun Pt. & Benicia, Army Pt. Ref. Sta.:
San Francisco

Mean Range: 4.1 Ft.

Spring Range: 5.6 Ft.

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.)
W.C.Russel, Lieut. (j.g.)

date: 1941

Field Edit by: *None*

date: —

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

Projection and Grids ruled by (III) W.C.B., Wash. Office, date: 10-4-42

" " " checked by: " " date: 10-4-42

Control plotted by: H.A.Duffy, Prin.Photo.Aid

date: 10-7-42

J.L.White, Prin.Photo.Aid

Control checked by: B.O.Bryant, Sr.Photo.Aid-

date: 10-7-42

Radial Plot by: Tampa Office Personnel

date: 10-9-42

Detailed by: R.Dossett, Sr.Photo.Aid

Nov.-Dec.
date: 1942

Reviewed in compilation office by:

date: Nov.-Dec. '42

A.L.Kidwell, Jr.Topo.Engr.; J.A.Giles, Asst.Photo.Engr.; F.H.Elrod, Sr.Photo.Aid

Elevations on Field Edit Sheet

checked by: *Not applicable*

date: —

STATISTICS (III)

Land Area (Sq. Statute Miles): 20.8

Shoreline (More than 200 meters to opposite shore): 8.05 Statute Mi.

Shoreline (Less than 200 meters to opposite shore): 13.1 " "

Number of Recoverable Topographic Stations established: 31

Number of Temporary Hydrographic Stations located by radial plot: 3

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-5942 PROJECT NO. 262 A SCALE OF MAP 1:10,000 SCALE FACTOR 1.1

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ψ -COORDINATE LONGITUDE OR λ -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)
GREEN HOUSE, WESTGABLE, 1939	G.P.	N.A. 1927	38° 04' 57.82" 122° 06' 16.89"	1.782.7 411.6			
ZINC, 1922	"	"	38° 01' 49.930" 122° 06' 25.136"	1539.4 613.0			
WINDMILL, 1939	"	"	38° 04' 29.08" 122° 07' 19.43"	896.6 473.6			
WATER TANK NEAR STATION BAY, 1939	"	"	38° 04' 28.00" 122° 07' 20.95"	863.3 510.6			
* BAY, 1939	"	"	38° 04' 11.137" 122° 06' 46.507"	343.4 1133.6			
ARSENAL TANK, 1922 (WHITE TANK, 1939)	"	"	38° 03' 16.036" 122° 08' 19.743"	494.4 481.3			
ARMY POINT 2, 1886	"	"	38° 03' 02.046" 122° 07' 45.033"	63.1 1098.0			
CLOCK TOWER, FLAGSTAFF, 1909	"	"	38° 02' 46.18" 122° 07' 52.14"	1423.8 1271.3			
ECHO, 1922	"	"	38° 03' 12.523" 122° 04' 09.232"	386.1 225.1			
* WHITE, 1914	"	"	38° 02' 09.402" 122° 04' 36.724"	289.9 895.6			
AVON, ASSOCIATED OIL CO., STACK, 1932	"	"	38° 01' 51.069" 122° 04' 29.355"	1574.6 715.9			
SOUTHERN PACIFIC RAILROAD, AVIATION BEACON, 1932	"	"	38° 02' 17.882" 122° 07' 09.701"	551.3 236.6			

SCALE FACTOR

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[illegible]

M-2388-12

MAP T. 5942 PROJECT NO. 262 A SCALE OF MAP 1:10,000 SCALE FACTOR 1.1

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)
The following stations were reported by Geodesy as lost or destroyed:							
SHELL, 1922							
SHORE, 1922							
MARTINEZ EAST, 1878							
SIGNBOARD, STAN, 1909							
STAND, 1914							
FAR, 1909							
ISLAND, 1851							
NEAR, 1909							
BELL, 1914							
POINT EDITH POST LIGHT, 1909							
SIGN, 1914							

Field Inspection

Field inspection data for the area of
T-5942 are contained in the "Field Inspection
Report - Suisan Bay Area, California" submitted
by W. C. Russell. ^{in 1944} This report is filed in the
Division of Photogrammetry, General Files.

COMPILATION REPORT
TO ACCOMPANY
SHEET NO. T-5942

CONTROL

There was adequate control on this sheet to insure a good radial plot. Eleven triangulation stations appear on the sheet. All triangulation stations except one "HEDGE" were held to in running radial plot. In addition to the triangulation stations there are a large number of topographic stations for which the geographic positions have been furnished this office.

H. & T. station "Traf 7" plots 1 minute out in Latitude. The G.P. furnished with the description shows this station to be at Latitude $38^{\circ} 02'$. The description itself, places the station along the railroad and the railroad is at Lat. $38^{\circ} 03'$. The station could not possibly be at Lat. $38^{\circ} 03'$ or along the railroad if the published geographic position $38^{\circ} 02'$ were correct.

The geographic position for H & T station "Over" is apparently incorrect. The latitude is out about 70 meters. The geographic position furnished this office gives "Lat. $38^{\circ} 05'$ 249 m.". According to topographic sheet T-6735 and the detail on this sheet (T-5942) the approximate distance should be 179 meters.

*Deleted from
final drawing
J. B. B. B.*

MAIN RADIAL PLOT

Discussion of the radial plot which includes this sheet has been made a part of the descriptive report for sheet T-5945. *Filed in the Bureau Archives.*

DETAILING

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

Field inspection was adequate along the shoreline. Inland, however, notes were too sparse to be considered sufficient. Previous drafting experience enabled the draftsman to classify vegetation where notes were not given and in those areas which were questionable other experienced draftsmen were consulted and it is believed that an accurate interpretation has been obtained.

In the vicinity of Benicia there is an area recently acquired by the Government for the Benicia Arsenal. There are two flights of photographs showing this area. One made in May 1941, and one in September 1941. The September photographs show the newly acquired area as being under construction and the detail subject to change, so the area has been labeled "Benicia Arsenal, Extended Area, Acquisition of 1941" and the detail omitted.

SUPPLEMENTAL DATA

The following graphic control survey and maps and plans of other organizations were used to supplement the photographs:

Coast and Geodetic Survey Sheet No. T-6734 surveyed in 1939, was used for comparison. Only the shoreline is shown on this graphic control sheet and it was found to be in good agreement with this compilation.

Survey plans of the Southern Pacific Railway were used to ascertain number of tracks and detail spurs, sidings, etc.

The boundaries of Benicia Arsenal were taken from the Plans of the War Department, Office of the Construction Quartermaster. The roads, streets and buildings were confirmed by a comparison with Benicia Ordinance Depot General Map.

This office was also furnished with a set of single lens photographs taken by the 91st Observation Squadron, Air Corps - U. S. Army. These assisted in interpreting the southern shoreline along Carquinez Strait.

LANDMARKS AND AIDS TO NAVIGATION

The landmarks and aids to navigation appearing on this sheet are listed on form 567, which is made a part of this report.

HYDROGRAPHIC CONTROL

A description of hydrographic control for this area, including ^{and rec. topo. stations} unmarked stations, is listed in the "Field Inspection Report" for Suisun Bay Area, made in 1941 by L. D. Graham, Lieut. Comdr., U. S. C. & G. S. *Filed in Div. of Photogr. General Files.*
Forms 524 also " " " " " "

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-PFA-1990. *See attached list of names approved by Geographic Names Section.*

COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES

A comparison was made with the U. S. War Department's Corps of Engineers CARQUINEZ QUADRANGLE. In general the detail was found in good agreement, but due to the scale difference only a visual comparison was made.

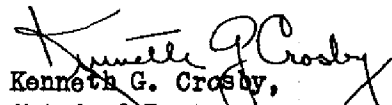
COMPARISON WITH NAUTICAL CHARTS

A comparison was made with Coast & Geodetic Survey, West Coast, California Nautical Chart No. 5534, printed August 1938 and corrected to August 12, 1942 (scale 1:40,000). The scale difference was too great for a thorough comparison, but no large disagreements were noted in the detail. This compilation should, however, supersede the charted information.

Respectfully submitted,


Rudolph Dossett
Sr. Photogrammetric Aid

Forwarded by:


Kenneth G. Crosby,
Chief of Party...

TO BE CHARTED
TO BE CHARTED }
TO BE CHARTED } STRIKE OUT ONE

Thompson, J. Edgar

I recommend that the following objects which have (*have not*) been inspected from seaward to determine if they be charted on ~~(charts)~~ the charts indicated.

The positions given have been checked after listing.

James C. McGee

GENERAL LOCALITY	NAME AND DESCRIPTION	POSITION				METHOD OF LOCATION	DATE OF LOCALITY			
		LATITUDE		LONGITUDE						
		°	'	°	'					
Barataria-Savannah Ferry City	Light - (City 1838)	30	01	1043	123	08	435	"	"	1838
Associated Oil Wharf West	Light (Old 1838)	30	02	105	122	07	638	"	"	"
Associated Oil Wharf East	Light (Old 1838)	30	02	105	123	07	665	"	"	"
Sullivan Bay Wharves, South	Light Pier (Old 1838)	30	05	539	122	07	265	"	"	"
Sullivan Bay Wharves, North	Light Pier (Old 1838)	30	05	544	122	07	264	"	"	"
Avon Wharf (Old 1838)	Control Light	30	05	1714 ¹³⁶	122	05	637 ⁸²⁶	"	"	"
Avon Wharf (Old 1838)		30	05	1705 ⁷²	122	05	641 ⁷²²	"	"	"

This form shall be prepared in accordance with 1934 Field Memorandum, "LANDMAKERS FOR CHART considered for the charts of the area and not by individual field survey sheets. Information under each column

TO BE CHARTED }
TO BE DELETED } STRIKE OUT ONE

LANDMARKS FOR CHARTS

ALL Photographic Party No. 1
Tampa, Florida

4-58-43

105

I recommend that the following objects which have (*have not*) been inspected from seaward to determine their value as landmarks, be charted on (~~deleted from~~) the charts indicated.

The positions given have been checked after listing.

Kenneth E. Crosby

Chief of Party

GENERAL LOCALITY		POSITION							METHOD OF LOCATION	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
		LATITUDE		LONGITUDE			DATUM							
NAME AND DESCRIPTION		O	I	O	I	D.M. METERS	D.P. METERS							
Cargunuez Strait STACK - concrete 70' high con 1939 (F.I.P. Smelt)		38	01	1419	128 06	297	"	N.A. 1927	Piano Table	1939	X			6534
(6) Top of six sided Red Brick Chimney		38	02	1311	122 08	389	"	"	Radiat Plot	1943	X			" / "
AERO, Suisun Point, Southern Pacific Co. always landmark bn. 1932		38	02	561	122 07	236	"	"	Triangu- lation	1932	X			" / "

This form shall be prepared in accordance with 1934 Field Memorandum, "LANDMA PPS FOR CHARTS." The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

GEOGRAPHIC NAMES

Survey No.

Name on Survey	A	B	C	D	E	F	G	H	K
<u>Point Edith</u>									1
• <u>Avon</u>									2
• <u>Vine Hill</u>									3
• <u>Pacheco Creek</u>									4
• <u>Suisun Bay</u>									5
• <u>Bulls Head Point*</u>									6
• <u>Martinez</u>									7
• <u>Arroyo del Hambre*</u>									8
<u>California*</u>									9
<u>Solano County</u>									10
• <u>Peyton</u>				9-10-48.		a. g. w.			11
• <u>Mogoco</u>				7-14-48		L. J.			12
• <u>Pacheco Landing</u>									13
• <u>Carquinez Strait*</u>									14
• <u>Benicia*</u>									15
• <u>Benicia Arsenal</u>									16
<u>Contra Costa County</u>									17
• <u>Army Point</u>									18
• <u>Southern Pacific R.R.</u>									19
• <u>State Highway 21</u>									20
<u>State Highway 14</u>									21
<u>State Highway 106</u>									22
• <u>Atchison Topeka & Santa Fe R.R.</u>									23
• <u>State Highway 4</u>									24
• <u>Martinez Airport</u>									25
• <u>Suisun Point</u>					<u>Goodyear</u>	<u>Slough</u>			26
• <u>Franklin Creek</u>					<u>Grayson</u>	<u>Walnut Creek</u>			27
• <u>Muir</u>									28

M 234

T-5942

17 March 1950

Rear Admiral K.T. Adams
Acting Director
United States Coast and Geodetic Survey
Department of Commerce

Dear Admiral Adams:

Your memorandum, file No. 731-eal, dated 12 December 1949, addressed to the Director of Intelligence, United States Air Force, forwarding seventeen (17) maps for security clearance, was referred to the Assistant Chief of Staff, G-2 for action.

There is no objection to the publication of the following maps as unclassified:

T-5920 Point Avisadero - Point San Bruno
T-5929 San Quentin - California City
T-5931 Davis Point - Pinole Point
T-5936 Vallejo, California

Provided minor deletions are made as indicated on each map, there is no objection to publication of the following maps as unclassified:

T-5922 (MS) San Francisco Bay and Oakland Area, California
T-5923 San Francisco Bay and Oakland Area, California
T-5924 (MW) San Francisco Bay and Oakland Area, California
T-5928 San Francisco Bay and Oakland Area, California
T-5939 San Pablo Bay Area, California
T-5941 Suisan Bay Area, California
T-5942 (2 sheets) Suisan Bay Area, California
T-5943 Suisan Bay Area, California

The remainder of the maps forwarded with your memorandum have not yet been returned from the field agencies where they were sent for examination. Follow up action has been taken requesting that the return of the maps be expedited.

Sincerely,

1 Incl
12 maps
(as listed above)

ERNEST A. BARLOW
Colonel, GSC
Chief, Security & Training Division
the Assistant Chief of Staff, G2

Division of Photogrammetry
Review Report of
Planimetric Map Manuscript T-5942

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 ~~from~~ *form* M-2388-12, attached to this descriptive report. Stations underlined in red (2) were added during review. Stations HEDGE, 1942 and VINE, 1942 are considered as not being of third order triangulation accuracy and these two stations were changed to topographic stations on the map manuscript. Eighteen stations, reported by Geodesy as lost or destroyed have been listed separately on form M-2388-12, attached to this descriptive report. These stations do not appear on the map manuscript. Additional topographic stations plotted on this manuscript were established on sheets T-6734 and T-6735, and Form 524 cards are filed under these respective numbers. *Div. of Photogr. General Files.*

28. Detailing.-Minor corrections and additions were made on the map manuscript in black acetate ink. Completion of the shoreline (south shore of Carquinez Strait-North of City of Martinez) was made in green acetate ink, since previous corrections and additions had been made in red acetate ink. (May 1945 from 1945 Navy single-lens photos).

29. Supplemental Data.-One map of the City of Martinez has been added to the large file envelope, and a *map* of the City of Benecia may be found in the large file envelope of T-5941 should additional street names, etc. be desirable for the final publication of this manuscript. *Div. of Photogr. General Files*

36. Landing Fields and Aeronautical Aids.-One small landing field (Martinez Airport) not reported previously, consisting of one graded landing strip (about 550 meters long) and several buildings, are located directly north of the City of Martinez, south of Carquinez Strait.

37. Security Status.-By authority of the Security Classification map dated 16 December 1946, all photographs covering the area of Benecia Arsenal are classified as "Restricted".

Restrictions removed - see copy of letter attached to this report. KKM 4/21/50

All photographs listed on page 2 of this descriptive report were classified as "Restricted". *All photographs have been cleared.*

43. Comparison with Contemporary Hydrographic Surveys.-

H-6524	1:10,000	1939-40
H-6525	1:10,000	1940-41

T-5942

44. Comparison with Existing Topographic Surveys.-

T- 577	1:10,000	1856
T-1029	1:20,000	1866
T-1696	1:10,000	1886
T-1696b	1:10,000	1922
T-1892	1:10,000	1888
T-4023	1:10,000	1922
T-4026	1:10,000	1922
T-4231	1:10,000	1926
T-6734	1:10,000	1939
T-6735	1:10,000	1939

These surveys are superseded by T-5942 in all common areas, except for contours. *for nautical charting purposes.*

45. Comparison with Nautical Charts.-

5534	1:40,000	1948 (48-9/6)
5575	1:10,000	1945 (48-8/2)

A portion of the south shore of Carquinez Strait north of the City of Martinez is shown by a broken line on Nautical Chart 5534. This, as well as the drainage pattern in the northeasterly direction has been changed on map manuscript T-5942 since Chart 5534 was corrected. These changes would warrant correction of nautical chart 5534 for the next printing.

Nautical chart 5575 is in good agreement with T-5942, since the corrections of the area common to both were considered in the construction of the nautical chart in May 1945.

51. Application to Nautical Charts.-This map manuscript has been applied to Nautical Chart 5575 and to nautical chart 5534 prior to extensive corrections as of the date of this review report (see recommendation under No. 45).

Reviewed by:

J. J. Streifler

J. J. Streifler
16 December 1948

Under direction of

S. V. Griffith

S. V. Griffith *K.H.M.*
Chief, Review Section

APPROVED -

B.G. Jones 5/50

Technical Assistant to the Chief, Nautical Chart Branch
Chief, Div. of Photogrammetry Div. of Charts

O.S. Reading

Chief, Div. of Photogrammetry

W.M. Acaife

Chief, Div. of Coastal Surveys

NAUTICAL CHARTS BRANCH

SURVEY NO. 5942

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.