

5923

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

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Air Photo Compilation

Field No. _____ Office No. T-5923

LOCALITY

State California

General locality San Francisco Bay

Locality Treasure Is.-Yerba Buena Is. and
Vicinity

194 5

CHIEF OF PARTY

J.C. Bose

LIBRARY & ARCHIVES

DATE

April 3-1949

8-1870-1 (1)

5923

Fully applied to Chart 5532 Rec. after review. 10/21/54 J/E

The projection for this sheet was received in this office in August 1944. Control was plotted and checked by the meter bar and beam compass method by members of the control section.

A circle with 14 inch radius was drawn upon each photograph in order to facilitate use of the central area of the photographs rather than the outer portions.

Secondary control was picked in a regular scheme of Quadrilaterals, 5 inches on a side.

Primary control was plotted on all photographs without regard to the 14 inch circle.

All azimuths between centers were drawn by means of the stereoscope and radial line method.

Photographs used in this plot were printed on unmounted positype paper; therefore, it was necessary to eliminate the effect of paper distortion. This was accomplished by use of a distortion templet constructed from non-shrinking, vinylite material.

The regular discussion of the main radial plot follows:

(A) CONTROL DENSITY

Control was well distributed throughout this entire sheet. The following stations were used for the plot:

1. Black Point Stack, 1916
2. Yerba Buena Lighthouse, 1919
3. Coit Monument, 1933
4. Alcatraz Lighthouse, 1910
5. Alcatraz Water Tank, 1940
6. San Francisco Pac. Gas Electric Co. Stack, 1932.
7. San Francisco Pac. Gas Electric Co., Gas Tank, 1925
8. *St. Francis Yacht Club Naval Beacon 1932
9. Tower of the Sun, 1938
10. Ferry Bldg. Tower, 1932
11. *Fine Arts Bldg. Dome, 1925
12. *St. Ignatius Church, Most Western Spire, 1916-17

* Outside sheet limits

13. Russ Bldg. Elevator Shaft, 1916
14. Mark Hopkins Hotel, 1932
15. Southern Pacific Cupola, 1919
16. Matson Bldg. Tower, 1932
17. Pier 34, East Gable, 1916
18. Schmidt Bldg., Tower, 1932
19. City Hall Steeple, 1932
20. *American Smelting Refinery Stack, 1942
21. *K.F.S.O. Radio Tower, 1937
22. *Gray Incinerator Chimney, 1916
23. Union Iron Works Gas Tank, 1925
24. S.Fran. Bell Telephone Bldg., 1932

Identification on all stations listed proved to be adequate.

(B) PHOTOGRAPHS

The following nine (9) lens photographs were used:

5300	5494
5301	*5497
5302	5502
*5304	5503
5310	6319
5311	*6398
*5487	*6399

No difficulty was encountered with bad chamber junctions and photograph coverage was very good.

(C) CLOSURES AND ADJUSTMENTS

The normal procedure of laying each templet in the order of the strength with which it was controlled, was followed. All azimuths to adjacent centers were held and excellent intersections were obtained. It was found that the tilt which existed on these photographs caused no difficulty in completing a strong plot; therefore, it was completely ignored.

(D) AREAS OF QUESTIONABLE ACCURACY

It is not believed that any part of this sheet falls outside of the limit of required accuracy.

(E) GENERAL

Centers of photographs were drawn on the projection with

* Outside sheet limits

double blue circles of 4.0 mm. and 2.8 mm. radius, while secondary control was shown by double blue circles of 2.8 mm. and 1.5 mm. radius. The sheet was released to the draftsmen for the adding of detailing points.

Respectfully submitted,

Bennie H. Lyon

Bennie H. Lyon
Chief Aero. Map Draftsman

Forwarded by:

J. C. Bose
J. C. Bose,
Chief of Party.

DESCRIPTIVE REPORT
TO ACCOMPANY
SHEET NO. T-5923

26 & 27 CONTROL AND RADIAL PLOT

See report submitted by B.H.Lyon Chief Aeronautical Draftsman, which has been incorporated in this report.

Attention is called to a letter from E. H. Pagenhart, dated February 27, 1945 stating that all necessary notes and forms covering the triangulation and topographic stations have been forwarded to the Washington Office.

28. DETAILING

The detailing of this sheet has been done according to the current instructions for this sheet and project.

The photographs were of good scale and sufficiently clear to insure interpretation of the details. The recent changes in certain areas, particularly new construction in the vicinity of the Bethlehem Steel Company shipyards, were not on the photographs and were taken from plans submitted by the field party.

29 SUPPLEMENTAL DATA.

The following plans were used to supplement the photographic details. Each is discussed in the following paragraphs:

(1) "General Plan, Bethlehem Steel Company, Shipbuilding Division, San Francisco, California."

Considerable new construction has been done at the Bethlehem Steel Company's Shipbuilding yards. The above plans were submitted to this office and such details as were unobtainable from available photographs have been transferred by pantographic method to this compilation. Attention is called to a discrepancy in the position of pier number five on the photographs as compared with that on the plans. On the plans, the position of this pier apparently has been moved east to make room for the construction of a drydock. The width and length of the pier; however, remain the same. The draftsman has drafted this pier in the position as shown on the plans.

(2) "Southern Pacific Railway, Coast Division, Station Plan, Mission Bay & Jackson Square, San Francisco."

These plans were used by the draftsman for comparison only. A comparison with the photographs showed few changes except in the area between Sixth and Fourth Street South of China Basin. These minor changes are noted in the following paragraphs.

(3) "San Francisco Storage Depot, Sixth and Channel Street, General Plot Plan."

This set of plans was obtained from the U.S. Engineers Office, San Francisco. The plans cover certain new construction in the area just South of China Basin between Sixth and Fourth Streets. Given distances taken from the plans were compared to the same area on the compilation adjacent to that of the new construction and found to be the same. Since the plans showed chained distances for the new construction, they were used to map this area by converting the distances to scale of this sheet. Buildings, street systems and changes in railroad spurs were added or changed to conform to the plans.

33. WHARVES AND SHORELINE STRUCTURE

Attention is called to new construction at the Bethlehem Steel Company's shipbuilding yard, at Potrero Point. An additional pier has been added from these plans that is not shown on the latest published chart. Piers number 9 and number 10, have undergone considerable change. (U. S.C. & G.S. No. 5535 & 5532). Buildings at ferry just north of bridge have been enlarged. Pier North side of China Basin has been numbered No. 56.

34. LANDMARKS AND AIDS TO NAVIGATION

The landmarks and aids to navigation appearing on this sheet have been listed on form No. 567 and made part of this report.

Present published U.S.C. & G.S. Charts show lights on the San Francisco-Oakland Bay Bridge. No information about these lights was furnished this office by the field party and they, accordingly, have not been located on this sheet.

*

38. COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES.

Comparisons were made with U.S. Geological Survey Topographic Quadrangles surveyed 1892-94 and a photostatic print of section of Topographic survey T-687, 1:10,000 scale, surveyed in 1857 and 1882. The radical changes in shoreline and shoreline structure occurring between the date of these surveys and the present make it impractical to undertake a comparison.

* 35. HYDROGRAPHIC CONTROL

Instructions to field party February 8, 1944 state that no hydrographic stations need be selected.

The bridge clearances, both vertical and horizontal, for the bridges spanning China Basin at 3rd, 4th and Sixth Streets were taken from the U.S. Coast Pilot 1934 edition. The Department of Public Works, San Francisco, submitted clearances for these bridges; however, they gave the vertical clearance as 0.0. Inasmuch as this was not in conformance with that published by the Coast Pilot, it was not used.

44 COMPARISON WITH NAUTICAL CHARTS

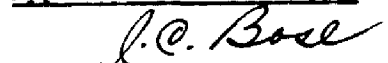
A comparison was made with U.S.C & G.S. Nautical Chart 5535, bearing a print date of September 13, 1944. The only outstanding changes noted have been recorded above under paragraphs 29 and 33.

Respectfully submitted,

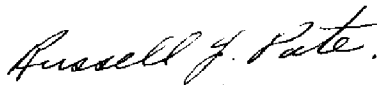


Rudolph Dossett,
Prin. Photogrammetric Aid.

Approved and Forwarded:



Lieut. Comdr. J. C. Bose,
Chief of Party.



Russell J. Pate
Photogrammetric Aid

DAF 5923

QUANTIFIABLE (II):

Project No. (II):

Model 335: San Francisco, Calif. Chief of Party: E. H. Pagenhart

Model 335: Tampa, Fla. Chief of Party: J. C. Bose

Instructions: (II, III): February 8, 1944 Filed in Div. of Photogrammetry
Magnification Scale: 1:10,000 Office Files

Geographic Datum (III): N.A. 1927 Scale Factor (III):

Reference Datum (XXI): San Francisco Ferry Bld. Tower Datum Plane (III): MHW

Lat: 37° 47' 43" 812 Long: 122° 23' 33" 034
(1350.8 meters) (808.2 meters) ~~XXXXXX~~
Adjusted

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
6409	9/3/41	1:21 PM	1:10,000	+3.8
5301	5/14/41	4:04 PM	1:10,000	+4.9
5302	5/14/41	4:04 PM	1:10,000	+4.9
5300	5/14/41	4:04 PM	1:10,000	+4.9
5503	5/18/41	11:20 AM	1:10,000	+0.7
5310	5/14/41	4:08 PM	1:10,000	+4.8
5311	5/14/41	4:08 PM	1:10,000	+4.8
5494	5/18/41	11:03 AM	1:10,000	+0.9

Area (III): Mission St., Potrero Pt., North Pt. Refer. Station
-----San Francisco, Golden Gate-----

Area (Area of Area): U.S.C. & G.S., 9 lens, 8" focal length.

Area (Area of Area): E. H. Pagenhart, San Francisco: 1944

Area (Area of Area): Mean Water Line Location (III) Between Mar. & April 15,

Area (Area of Area): Checked by (III) J. T. & ALT, Wash. D.C.: April, 1944

Area (Area of Area): Checked by: " " " " Date: April, 1944

Area (Area of Area): Checked by: D. G. Singleton, Jr. Date: Oct., 1944

Area (Area of Area): Checked by: B. H. Lyon Date: " " " " 1944

Area (Area of Area): Checked by: B. H. Lyon Date: Nov. 22, 1944

Area (Area of Area): Checked by: R. Dossett Date: Jan. 1945

Area (Area of Area): Checked in comparison office by: J. A. Giles Date: March, 1945

STATISTICS (III)

Area (Area of Area): 1.7 (shoreline only)

Area (Area of Area): 200 meters to opposite shore: 4.6

Area (Area of Area): 200 meters to opposite shore: 0.5

Area (Area of Area): 200 meters to opposite shore: 5

Area (Area of Area): 200 meters to opposite shore: 5

Area (Area of Area): 200 meters to opposite shore: 00

Additional photographs:

5502	5/18/41	11:20 AM	1:10,000	+0.7
6319	9/3/41	10:54 AM	1:10,000	+0.9
5504	5/18/41	11:20 AM	1:10,000	+0.6
6223	9/3/41	10:54 AM	1:10,000	+5.3

DM's & DP's

Sheet No. T-5923

<u>STATION</u>	<u>LATITUDE</u>			<u>LONGITUDE</u>		
Monument (B.M.)	37 ⁰	48'	618(1232)	122 ⁰	25'	840(628)
B.M. V-108	37	48	399(1450)	122	24	1195(273)
B.M. J-329	37	48	100(1750)	122	23	1262(206)

Scaled by : R. J. Pate
 Checked by: R. Dossett

Sheet No. T-5923(S $\frac{1}{2}$)

<u>STATION</u>	<u>LATITUDE</u>			<u>LONGITUDE</u>		
B.M. H-329	37 ⁰	47'	1578(272)	122 ⁰	23'	1070(398)
Tidal B.M.(179)	37	47	777(1073)	122	23	366(1102)
B.M. R-568, 1939	37	46	1440(410)	122	23	328(1141)
B.M. S-568, 1939	37	46	644(1206)	122	23	444(1024)
Tidal B.M. 4 (Potrero Pt.)	37	45	1218(632)	122	23	229(1240)

Scaled by: R. Dossett
 Checked by: R. J. Pate

(COAST PILOT SECTION)

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

TO BE CHARTED } STRIKE OUT ONE
~~TO BE DELIVERED~~

1101 E. Broadway, Tampa, Fla. March 23, 1945

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

The positions given have been checked after listing.

Lieut. Comdr. J. C. Pose

[illegible]

This form shall be prepared in accordance with 1934 Field Memorandum, "LANDMARKS FOR CHARTS." Positions of charted landmarks and nonfloating aids to navigation, if redetermined, shall be reported on this form. 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.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

(COAST PILOT SECTION)

TO BE CHARTED

STRIKE OUT ONE

~~TO BE DELETED~~

LANDMARKS FOR CHARTS

Tampa Photogrammetric Office

1101 E. Broadway Tampa, Fla.

March 23, 1945

I recommend that the following objects which ~~have not~~ (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.

Lieut. Comdr. J. C. Bagg

Chief of Party.

GENERAL LOCALITY	NAME AND DESCRIPTION	POSITION						METHOD OF LOCATION	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
		LATITUDE		LONGITUDE									
		D. M. METERS		O I		D. P. METERS							
		O	I	O	I	O	I						
	(San Francisco Union)	37	45	683	122	23	110.8	1927	Triangu- lation	1925	✓		5532
	Gas Tank	37	45	844	122	23	113	"	radial Plot	1945	✓		5532
	Flag Staff (Hopkins Htl. Flagstaff)	37	47	919.9	122	24	817.22	"	Triangu- lation	1932	✓		5532
	Dome (Hall Steeple)	37	46	1406.7	122	25	129.38	"	"	1932	✓		5532
	Flagstaff (& Tel. flagstaff)	37	47	375.2	122	23	369.7	"	"	1925	✓		5532
	Ferry (San Francisco, Ferry)	37	47	1350.7	122	23	808.3	"	"	1932	✓		5532
	Tower (Bldg. Tower)	37	47	1048.8	122	23	1069.9	"	"	1932	✓		5532
	Cupola (Bldg. Cupola)	37	47	43.9	122	23	851.5	"	"	1932	✓		5532
	Tower (Bldg. Clock Tower)	37	47	904.1	122	24	144.0	"	"	1932	✓		5532
	Flagstaff (Bldg. Flagstaff)	37	47	1179.3	122	23	921.8	"	"	1919	✓		5532
	Cupola (Pacific Building)	37	45	752.0	122	23	1321.3	"	"	1925	✓		5535
	Water (San Francisco Potrero)												
	Tank (Mill Tank)												

This form shall be prepared in accordance with 1934 Field Memorandum, "LANDMARKS FOR CHARTS." Positions of charted landmarks and nonfloating aids to navigation, if redetermined, shall be reported on this form. 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.

(COAST PILOT SECTION)

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

~~TO BE CHARTERED~~ STRIKE OUT ONE
TO BE DELETED

Tampa Photogrammetric Office
1101 E. Broadway, Tampa, Fla
March 23, 1945

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

The positions given have been checked after listing.

J. C. Bose

Lieut. Condr.

[illegible]

This form shall be prepared in accordance with 1934 Field Memorandum, "LANDMARKS FOR CHARTS." Positions of charted landmarks and nonfloating aids to navigation, if redetermined, shall be reported on this form. 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.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEYNon Floating Aids
to Navigation

(COAST PILOT SECTION)

TO BE CHARTED

~~TO BE CHARTED~~
~~TO BE DELETED~~ } STRIKE OUT ONE

LANDMARKS FOR CHARTS

Tampa Photogrammetric Office

have not been inspected from seaward to determine their value as landmarks,
1101 E. Broadway, Tampa, Fla. March 23, 1945I recommend that the following objects which ~~have been~~ be charted on ~~(deleted from)~~ the charts indicated.

The positions given have been checked after listing.

Lieut. Comdr. J. C. Boss
Chief of Party.

GENERAL LOCALITY	NAME AND DESCRIPTION	POSITION					METHOD OF LOCATION	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
		LATITUDE		LONGITUDE								
		°	'	D. M. METERS	°	'						
	P. R. Light	37	40	approx. 910	122	21	approx. 873	Not Recovered by Field Party.				
	161 Fl. G. Lt., Bell	37	49	947	122	21	1029	N. A. Radial Plot June 1944	✓			5532 5535
	162 Fl. G. Lt. Siren	37	49	1587	122	21	1372	"	✓			"
	160 Diaphone	37	48	804	122	21	975	"	✓			"
	142 Siren	37	48	1025	122	25	1090	" Apr. 1944	✓			"
	141 Siren	37	48	793	122	24	33	"	✓			"
	Yerba Buena Lighthouse-1919	37	48	815.8	122	21	982.8	" Triangu- lation 1919	✓			"
	Alcatraz Lighthouse 1910	37	49	1069	122	25	385.3	"	✓			"
	140 Diaphone	37	47	1451	122	23	704	" Radial Plot Jan. 1943	✓			"
	Siren	37	45	439	122	22	1096	"	✓			"
	Pier # 41 Fixed Red Lt.	37	48	---	122	24		Not recovered by field party - Could not be identified on photographs by Compilation Office.				
	Pier # 41 Fog	37	48	---	122	25						
	Pier # 45 Fixed Red Lt. Siren	37	48	---	122	25		Not recovered by field party.				
	143 F. R. Siren	37	48	1279	122	25	229	N. A. Radial Plot Apr. 1944	✓			5532 5535

This form shall be prepared in accordance with 1934 Field Memorandum, "LANDMARKS FOR CHARTS." Positions of charted landmarks and nonfloating aids to navigation, if redetermined, shall be reported on this form. 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. **T-5923**

GEOGRAPHIC NAMES										
Survey No. T-5923										
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>									USGB	1
✓ <u>San Francisco</u>									"	2
✓ <u>San Francisco Bay</u>									"	3
✓ <u>Potrero Point</u>										4
✓ <u>Potrero Nuevo</u>		(district)								5
✓ <u>Central Basin</u>		(just south of lat. 46')								6
✓ <u>Mission Rock</u>										7
✓ <u>China Basin</u>										8
✓ <u>Rincon Point</u>										9
✓ <u>North Point</u>										10
✓ <u>Black Point</u>										11
✓ <u>Aquatic Park</u>										12
✓ <u>Fort Mason</u>										13
✓ <u>San Francisco-Oakland Bay Bridge</u>										14
✓ <u>Yerba Buena Island</u>									USGB	15
✓ <u>Treasure Island</u>										16
✓ <u>Alcatraz Island</u>										17
<u>U.S. No. 40 50</u>		(across bay)								18
										19
										20
										21
										22
										23
										24
										25
										26
										27

M 234

Names underlined in red
are approved. 9/30/47.
L. Heck

DIVISION OF PHOTOGRAMMETRY
Review Report of
Shoreline Map Manuscript T-5923

July 1945

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

28. DETAILING

Additional information has been received from the field office during this review and has been applied to the map manuscript in red acid ink. Numerous details were obtained from supplemental surveys and plans, bringing the map manuscript information to June 15, 1945. *See T-7121 (1948) for revisions to Perry plans on T-5923.*
1112 10-24-51

29. SUPPLEMENTAL DATA

A map of U. S. Naval Training and Distribution Center (Scale: 1:2400 (200')) showing conditions as of June 30, 1945 was used in the Washington Office. New detail was applied by holding detail in common with the original compilation. Accuracy of positions, therefore, do not necessarily meet the standard of accuracy. Only additional buildings were applied on Yerba Buena Island.

(Filed under "Field Inspection Data", Project 262,
Division of Photogrammetry general files.)

44. COMPARISON WITH EXISTING TOPOGRAPHIC SURVEYS

T-687	1/10000	1857
U.S.G.S.	San Francisco	1892-94

The present survey supersedes all previous surveys in their common areas for planimetric and shoreline detail.

46 APPLICATION TO CHARTS

This survey has not been applied to chart 5535 as of the date of this review.

Reviewed by:

R. J. Tallman *c.t.*
R. J. Tallman, 27 July, 1945

Under the direction of

S. V. Griffith *c.t.*
Chief, Review Section

APPROVED BY:

B. G. Jones *3/49*
Technical Assistant to the
Chief, Div. of Photogrammetry

H. B. Edmonson
Chief, Nautical Charts Branch,
Division of Charts

K. T. Adams
Chief, Div. of Photogrammetry

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

T-5923

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-aal, 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 (MS) 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