

7121

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

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey TOPOGRAPHIC

Field No. BO-B-48 Office No. T-7121

LOCALITY

State California

General locality San Francisco Bay

Locality San Francisco Waterfront

194 8

CHIEF OF PARTY

W.M. Gibson

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DATE Jan. 20, 1950

7121

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET

Each Topographic and Graphic Control Sheet, and each Air Photographic Drawing should be accompanied by this form, completed so far as practicable, when forwarded to the Washington office.

REGISTRY No. T-7121

Field No. BO - B - 48

Scale 1:5000

State California General locality San Francisco Bay

Specific locality San Francisco Waterfront

Dates: Survey began 27 March 1948 Completed 5 May 1948

Photography _____, Supplemented by ground surveys to _____

Project No. CS - 256 Instructions dated 16 November 1940, 24 April 1947

Vessel } or BOWIE Chief of party W. M. Gibson
~~Party~~ }

Field work by L. F. Woodcock Office work by L. F. Woodcock

Final inking by L. F. Woodcock

Ground elevations } in feet above { M. H. W.
Treetop elevations } or { _____

Contours } by { Planetable } Interval _____ ft.
Approximate contours } { Multiplex }
Form lines } { _____ }

REMARKS _____

Notes To Accompany
Graphic Control Sheet BO-B-48

San Francisco Waterfront

February 1949

Instructions dated 16 Nov. 1940
Supp. Instructions dated 24 April 1947

The purpose of this survey was to furnish control for inshore hydrography along the San Francisco Waterfront. It was used to control the launch hydrography and also to locate hand-lead soundings taken from all the piers.

CONTROL:

The existing control for this sheet consisted of the following triangulation stations:

SAN FRANCISCO, PIER NO. 34 GABLE, 1916 - 17
SCHMIDT BUILDING TOWER, 1932
BELL TELEPHONE BUILDING, 1932
M 38 + (SFBB), 1931
STANDARD OIL CO. BUILDING CHIMNEY, 1932
SHELL OIL BUILDING FLAGSTAFF, 1932
MATSON BUILDING TOWER, 1932
SOUTHERN PACIFIC CUPOLA, 1919
FERRY BUILDING TOWER, 1932
COIT MONUMENT, 1933
SAN FRANCISCO, NORTH POINT GAS TANK, 1925

SAN FRANCISCO, NORTH POINT GAS TANK, 1925 was found to be of no use as a control station because of its size, and was not used. It is a large cylindrical gas tank with no definite center mark.

During the course of the work it was found necessary to establish two additional control stations, namely PIER 29, 1948 and PIER 41, 1948. These

stations were located by observing a four-point fix at each mark with a 7 inch repeating theodolite, using one set of 6 D and R. These two stations were not permanently marked, and are not recoverable. It was not considered practical to put in permanent marks, due to constant repair and re-surfacing of the piers.

METHODS:

All the work on this sheet was done with plane-table and alidade, using conventional methods. Plane-table traverses were run between control points, or between points where a fix could be obtained using control points, locating signals enroute.

Although the primary purpose of this survey was to locate signals for control of hydrography, it was found that only a few extra rod shots were required to delineate the piers. This was done wherever it was possible to do so without extra plane-table set-ups.

To start field work on this sheet the position of signal VAT was transferred from sheet BO-C-48. Then a traverse was run from SAN FRANCISCO, PIER NO. 34 GABLE, 1916-17, southward to signal VAT. There was no error of closure, and no adjustment was necessary. A fix was then taken near Tidal Bench Mark No. (179), 1925 on STANDARD OIL CO. BUILDING CHIMNEY, 1932, SHELL OIL BUILDING FLAGSTAFF, 1932, MATSON BUILDING TOWER, 1932 and FERRY BUILDING TOWER, 1932. The position obtained was checked by a rod reading on M 38 + (S.F.B.B.), 1931. From this fix a traverse was run southward, closing on SAN FRANCISCO, PIER NO. 34 GABLE, 1916-17 with an error of 2 meters. The traverse has been adjusted for the error of closure.

From the fix mentioned in the preceding paragraph, a traverse was run northward to a set-up on pier 14 near signal Bid. Here a fix was obtained on BELL TELEPHONE BUILDING, 1932, MATSON BUILDING TOWER, 1932 and FERRY BUILDING TOWER, 1932. The accumulated error was $\frac{1}{2}$ (one half) meter for which the traverse has been adjusted.

It was found impossible to traverse northward around pier 14, as the warehouse on the pier is flush with the pier on the outboard side. Accordingly, the plane-table was set up near signal Nit, on an elevated concrete walk-way leading to the fleet land and a fix was taken on FERRY BUILDING TOWER, 1932, MATSON BUILDING TOWER, 1932 and BELL TELEPHONE BUILDING, 1932. From this position signals as far south as the north side of pier 14 were rodded in, and a traverse was run northward to the south side of pier 3. Here a fix was obtained on FERRY BUILDING TOWER, 1932, MATSON BUILDING TOWER, 1932, SHELL OIL BUILDING FLAGSTAFF, 1932 and STANDARD OIL CO. BUILDING CHIMNEY, 1932. The accumulated error was 1 meter, for which the traverse has been adjusted.

From this fix a traverse was continued northward to PIER 29, 1948. The error of closure was 3 meters, for which the traverse has been adjusted.

Then a traverse was run from PIER 29, 1948 to PIER 41, 1948. The error of closure was 3 meters, for which the traverse has been adjusted.

LANDMARKS:

Landmarks as charted are adequate.

Lorin F. Woodcock

Lorin F. Woodcock
Lieut. U.S.C. & G.S.

Approved and forwarded:

W. M. Gibson

W. M. Gibson
Chief of Party

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF TOPOGRAPHIC SURVEY

REGISTRY NO. T-7121

FIELD NO. B0-B-48

California, San Francisco Bay, San Francisco Waterfront

Instructions dated 24 April 1947

Surveyed in March - May, 1948

Scale 1:5,000

Plane Table Survey

Aluminum Mounted

Chief of Party - W. M. Gibson
Surveyed by - L. F. Woodcock
Inked by - L. F. Woodcock
Reviewed by - I. M. Zeskind, 2 November 1951
Inspected by - R. H. Carstens

1. Adjoining Surveys

The present topographic survey makes an adequate junction with T-7120 (1948) on the northwest. The junction with B0-C-48 (field number) on the south will be considered in the review of that survey.

2. Comparison with Prior Surveys

A.	H-241 (1851)	1:1,000,000	T-1629 (1882)	1:10,000
	H-290 (1851)	1:375,000	T-2205 (1893)	1:10,000
	T-352 (1852)	1:10,000	T-2482 (1899-1900)	1:10,000
	T-398 (1853)	1:10,000	FE-5 (1936)	1:20,000
	T-687 (1857)	1:10,000	T-6666 (1936-38)	1:20,000
	T-1619 (1882)	1:10,000	T-6897a (1942)	1:10,000

These prior surveys have been compared with and superseded by T-5923 (1941-45). Further consideration of these prior surveys, therefore, is deemed unnecessary in the present review.

B. T-5923 (1941-45) 1:10,000

The present survey lies entirely within the water-front area covered by this prior survey. The primary purpose of the present survey was to locate signals for use on contemporary hydrographic survey H-7716 (1948). While obtaining these signals only those piers or portions of piers were delineated which did not require extra plane

table set-ups. There are no differences in the delineation of the piers on the prior and present surveys, except in lat. $37^{\circ} 47.72'$, long. $122^{\circ} 23.45'$, where several ferry slips have been rebuilt. Detail shown in red on the present survey has been transferred from T-5923.

The present survey is adequate to supersede the delineation of the piers on the prior survey within the common area.

3. Comparison with Chart 5535 (Latest print date 8/28/50)

The charted piers originate with T-5923 (1941-45) considered in the preceding paragraph.

The charted piers are in agreement with the present survey except for the rebuilt piers in latitude $37^{\circ} 47.72'$, longitude $22^{\circ} 23.45'$. The present survey should supersede the charted piers in this vicinity.

4. Condition of Survey

a. The survey was neatly inked and conforms to the requirements of the Topographic Manual.

b. The Descriptive Report covers all matters of importance.

5. Compliance with Project Instructions


The present survey adequately complies with the Project Instructions.


6. Additional Field Work Recommended


No additional field work is recommended.

Examined and approved:


H. R. Edmonston
Chief, Nautical Chart Branch


L. S. Hubbard
Chief, Section of Hydrography


H. Arnold Karo
Chief, Division of Charts


W. M. Scaife
Chief, Division of Coastal Surveys

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

TO BE CHARTED
~~TO BE DELETED~~

STRIKE OUT ONE

Ship BOWIE, Oakland, California. February, 19 49

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 by P. A. Weber

W. M. Gibson, Chief of Party.

STATE	CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION				METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
				LATITUDE	LONGITUDE		DATUM						
				° ' "	D. M. METERS	° ' "	D. P. METERS						
✓	Lt.	Pacific Coast L.L. # 292 and 293	T-7121 F.M.A.	37 48	1253	122 24	1066	N. A.	1927				5532 ✓
✓	Gas Tank	S. F., North Point Gas Tank	T-7121 F.M.A.	37 48	916.8	122 24	1034.6	N. A.	1927				5532 ✓
✓	Siren	Pacific Coast L.L. # 294	T-7121 F.M.A.	37 48	795	122 24	25	N. A.	1927				5532 ✓
✓	Tower (Coit)	Coit Monument	T-7121 F.M.A.	37 48	270.8	122 24	416.8	N. A.	1927				5532 ✓
✓	Ferry Tower	Ferry Building Tower	T-7121 F.M.A.	37 47	1350.8	122 23	808.2	N. A.	1927				5532 ✓
✓	Diaphone	Pacific Coast L.L. # 318	T-7121 F.M.A.	37 47	1460	122 23	690	N. A.	1927				5532 ✓
✓	Cup	Southern Pacific Cupola	T-7121 F.M.A.	37 47	1179.3	122 23	921.8	N. A.	1927				5532 ✓
✓	Cup	Matson Building Tower	T-7121 F.M.A.	37 47	1048.9	122 23	1069.8	N. A.	1927				5532 ✓
✓	Flag Staff	Shell Oil Building Flagstaff	T-7121 F.M.A.	37 47	914.6	122 23	1363.0	N. A.	1927				5532 ✓
✓	Siren	Pacific Coast L.L. # 320	T-7121 F.M.A.	37 47	837	122 23	114	N. A.	1927				5532 ✓
✓	Tower	Schmidt Building Tower	T-7121 F.M.A.	37 47	43.9	122 23	851.5	N. A.	1927				5532 ✓
✓	Flag Staff	Bell Telephone Building	T-7121 F.M.A.	37 47	375.4	122 23	1369.8	N. A.	1927				5532 ✓

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. 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.