

7066a

Graphic Control

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

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey TOPO GRAPHIC CONTROL

Field No. BO-B-47 Office No. T-7066a
(Revised 1948)

LOCALITY

State California

General locality San Francisco Bay

Locality Point Richmond

1947-'48

CHIEF OF PARTY

W.M. Gibson

LIBRARY & ARCHIVES

DATE Dec. 14, 1949

B-1870-1 (1)

7066a

Graphic Control

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-7066 a Graphic Control

Field No. BO-B-47 (1948 revision)

Scale 1/10,000

State California General locality San Francisco Bay

Specific locality Point Richmond

Dates: Survey began September 23, 1948 Completed September 25, 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 P.A. Weber (1948 revision)
(1948 revision)

Final inking by P.A. Weber (1948 revision)

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

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

REMARKS _____

Project CS - 256
Descriptive Report to Accompany the
1948 Revision of Graphic Control Sheet BO-B-47

Point Richmond

December, 1948

Instructions dated 11/16/40
Supp. Instructions dated 4/24/47

The purpose of this revision was to check the original sheet where it was found to be in disagreement with the air photo compilation of the area. (T-5928, 1941-45)

METHODS:

The first step in this revision was to correct the old projection. The original pencil projection, where it was still visible, was found to be correct, but had been incorrectly inked. The inked projection was erased where necessary and corrected. When the projection had been properly inked, the control stations were found to have been plotted correctly.

The actual field work consisted essentially of setting up the plane-table at various points, taking a three point fix, then rodding in the nearby topographic signals and taking cuts to the distant ones. A small amount of topographic detail in the vicinity of each set-up was rodded in. Plane-table set-ups were made at the following places: At Point San Pablo 3, 1940, on the catwalk off-shore from signal TRY, on the dock at point Orient near signal FAR on the navy fuel dock at Molate Point, on the hill just inshore from the ferry slip at Castro Point, and twice on the Standard Oil Co. dock south of Castro Rocks. This dock is now nearing completion and has been delineated in its final form. ✓

It was found necessary to re-scale the D.M.'s and D.P.'s for all topographic signals on the sheet. Apparently they were originally scaled after the projection had been incorrectly inked. A list of the recoverable topographic signals accompanies this report.

Landmarks L 1028 (49)

Lorin F. Woodcock

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

Approved:

W.M. Gibson
Chief of Party

These revisions supersede the common area (or features) on air photographic survey T-5928 (1941-45). These revisions appear on contemporary hydrographic survey H-7620 (1947). No further review by the Hydrographic Surveys Section is necessary at the present time.

J. A. Dinmore

9/11/51

(1)

Graphic Control Sheet BO-B-47 (revised 1948)
New Locations of Recoverable Topo Signals

NAME	LATITUDE		METERS	LONGITUDE		METERS
	°	'		°	'	
Try	37	57	1216	122	25	733
Fit	"	"	1063	"	"	692
Fix	"	"	1074	"	"	668
Fox	"	"	1415	"	"	897
Jug	"	"	1568	"	"	786
Fop	"	"	1271	"	"	828
Tub	"	"	1126	"	"	265
Mal	"	"	1341	"	"	830
Out	"	"	1362	"	"	987
Fig	"	"	1601	"	"	950
Cod	"	"	1632	"	"	926
Far	"	"	602	"	"	929
Fat	"	"	758	"	"	945
Few	"	"	760	"	"	927
Fog	"	"	815	"	"	819
Arm	"	"	807	"	"	522
Eel	"	"	74	"	"	795

(2)

NAME	LATITUDE		METERS	LONGITUDE		METERS
	°	'		°	'	
Mol /	37	56	1578	122	25	831
Cup /	"	"	1480	"	"	814
Dim	"	"	1470	"	"	795
Dip	"	"	1476	"	6	699
Doc	"	"	1483	"	"	601
Duo	"	"	1490	"	"	501
Oil	"	"	1541	"	"	377
Hut	"	"	1499	"	"	382
Zak /	"	"	1282	"	"	802
Four	"	"	1185	"	"	598
Nor	37	57	195	"	"	18
Pad	"	"	93	122	24	1455
Don	"	"	55	"	"	1322
Fly	37	56	1759	"	"	1370
Ego	37	57	74	122	25	266
Eat	37	56	1714	"	"	382
Ice	"	"	1602	"	"	32
Hex	"	"	1643	"	"	149

(3)

NAME	LATITUDE		METERS	LONGITUDE		METERS
	°	'		°	'	
Ant	37	56	1281	122	24	982
Dif	"	"	1316	"	"	848
Ear	"	"	1700	"	"	542
Gas	"	"	863	"	"	756
Bum	"	"	704	"	"	228
Dug	"	"	740	"	"	155
Top	"	"	452	"	"	75
Cow	"	"	142	"	"	598
Tab	37	55	1692	"	"	744
Tan	"	"	1496	122	23	1301
Castro Rk.	"	"	1786	122	24	1343
Castro Rk.	"	"	1802	"	"	1455
Lift	37	56	312	"	"	1388
Bob	"	"	403	"	"	1159
Big	"	"	397	"	"	1105
Box	"	"	364	"	"	1160
Boo	"	"	350	"	"	1105
Cat	"	"	342	"	"	1123
Cog	"	"	389	"	"	1078

(4)

NAME	LATITUDE		METERS	LONGITUDE		METERS
Car	37	56	329	122	24	1159
Cab	"	"	319	"	"	1181
Daw	"	"	409	"	"	1088
Deb	"	"	289	"	"	1042
Zoo	"	"	322	"	"	978
Add	37	55	1211	122	25	1091
Fop	"	"	1239	"	"	1098
Abe	"	"	⁶ 655	122	24	792
Stay	"	"	720	"	"	722
Bed	"	"	880	"	"	830
Alp	"	"	628	"	"	790
Aim	"	"	612	"	"	641
Azo	"	"	735	"	"	698
Boa	"	"	975	"	"	699
Bag	"	"	673	"	"	538
Bat	"	"	819	"	"	795
Lag	"	"	929	"	"	396

Scaled by: P.A. Weber
Checked by: L.F. Woodcock

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Topography

SUPERCEDED BY 1948 REVISION

Field No. EO-B-47

Office No. _____

LOCALITY

State California

General locality San Francisco Bay

Locality Point Richmond

1947

CHIEF OF PARTY

W. M. Gibson

LIBRARY & ARCHIVES

DATE DEC 14 1949

B:1870-1 (1)

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-7066a Graphic Control

Field No. BQ-3-47

Scale _____

State California General locality San Francisco Bay

Specific locality Point Richmond

Dates: Survey began July 13, 1947 Completed September 26, 1947

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 W.M. Gibson Office work by W.M.G. W.C.R. C.J.B.

Final inking by H. A. Knapp

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

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

REMARKS _____

Project CS - 256
Descriptive Report to
Accompany Graphic Control Sheet BO-B-47

Instructions - 16 November 1940 Scale 1/10,000
Supplemental Instructions - 24 April 1947

This survey was executed by W.M. Gibson for the purpose of providing additional control for inshore hydrography and for delineating changes in the shoreline and docks.

The control of Richard (1932)
 Red Rock (1851)
 High Hill 3 (1947)
 San Pablo Ridge (1897)
 Pt. San Pablo 3 (1940)
 East Brothers L.H. (1932)

Each control station except Red Rock and East Brothers L.H. was occupied and cuts to prominent objects taken. This was supplemented by cuts and rod readings from 3-point fixes. There was no traverse except on the Standard Oil Pt. Richmond Dock when it was necessary to make a few short traverses to get around buildings and construction equipment. This latter equipment was so numerous that clear sights to the dolphins north of the long dock were difficult to obtain and the locations on this sheet for those dolphins should be verified with the final plans or air photos.

The following triangulation stations were not recovered:

Pt. San Pablo 2 (1897)
Sholin (1940)
Oil (1916-17)

The Standard Oil long dock at Point Richmond is under construction and an effort was made to delineate its final form. However, the present condition did not permit such with certainty. Plans of the final form obtained from Standard Oil Co. of California accompany Hydrographic Sheet BO-1247. It is believed that two of the smallest piers at the south end will be removed.

A separate report is being submitted on geographic names for the entire 1947 project area.

The railroad shown on Planimetric Sheets Nos. T-5928 North and South halves between the Rock Crusher and Castro Point was checked visually and found to be correctly shown.

The Richmond-San Rafael Ferry has been improved since the air photo coverage and its present position rodged in from two three point fixes.

A small dock has been built for small boats just north of the Molate Fuel Dock.

Two of the largest of Castro Rocks were located by intersections. A smaller rock to the westward was not located because of being submerged at times.

The Standard Oil Co. of California plans referred to above are as follows:

General Plan A-52601 Dredging Modernization of Long Wharf.
Scope of Work Plan A-52571-1

Plan of the Molate Fuel Dock is also enclosed with BO-1247. It is P.W. drawing C-11014, 12th Naval District, San Francisco, Public Works Department U.S. Naval Fuel Annex Molate Point, Richmond, California.

The topography was started in July so as to provide control for inshore hydrography in the vicinity of the Standard Oil dock, Castro Point, and Molate Point. It was then discontinued until completion of the triangulation and establishment of HIGH HILL 3 (1947). The work in the vicinity of Point San Pablo and Pt. Orient was then resumed and completed in latter part of September.

A list of recoverable planetable positions on form No. 524 accompany this report.

Wm Gibson
Chief of Party

Bowie

WAR DEPARTMENT
CORPS OF ENGINEERS
Office of the District Engineer
SAN FRANCISCO DISTRICT
74 New Montgomery Street
San Francisco, California

RECEIVED, U. S. C. & G. S.
MAR 18 1947
SAN FRANCISCO, CALIF.

14 March 1947

PUBLIC NOTICE NO. 47-40

TO WHOM IT MAY CONCERN:

Application has been made by the Standard Oil Company of California, Standard Oil Building, San Francisco 20, California, for a War Department permit to remove approximately 400,000 cubic yards from an area adjacent to the Standard Oil Company's long wharf in San Francisco Bay at Richmond, California, and to deposit the material in deep water west of Red Rock as shown on the reverse side of this public notice.

A permit issued by the War Department does not give any property rights, either in real estate or material, or any exclusive privileges, and does not authorize any injury to private property or invasion of private rights, or any infringement of Federal, State, or local laws or regulations; nor does it obviate the necessity of obtaining State assent to the work authorized. It merely expresses the assent of the Federal Government in so far as concerns the public rights of navigation.

Interested parties are invited to submit in writing, in triplicate, any objections based on the interests of commerce and navigation that they may have to the proposed work. Objections should be forwarded so as to reach this office not later than 11:00 A.M., 1 April 1947.

J. H. Veal
J. H. VEAL

Colonel, Corps of Engineers
Acting District Engineer

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

TO BE CHARTED

STRIKE OUT ONE

Ship Board Oakland, California 15 January, 1948

I recommend that the following objects which have ~~been~~ been inspected from seaward to determine their value as landmarks, be charted on ~~charts~~ the charts indicated.

The positions given have been checked after listing by P.A. Weber

M.H. 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									
				°	'	D. M. METERS	°	'	D. P. METERS						
L.H.		East Brothers Island Lighthouse	Bro	37	57	1474.4	122-25		1384.0	N.A.	1947	X			5532
Light		Molate Point Light P.O. Light List No. 449	Hol	37	56	1582.0	122-25		842.0	N.A.	1947	X			5532
Light		Molate Point Light P.C. Light List No. 448	Zek	37	56	1276.0	122-25		815.0	N.A.	1947	X			5532
Tree		Lone tree about 30 meters north of Inshore end of Molate Pt. Light	Oil	37	56	1547.0	122-25		374.0	N.A.	1947	X			5532
Spar 4		Spar about 220 meters S.E. of S. end of Molate Point Light	Four	37	56	1185.0	122-25		600.0	N.A.	1947	X			5532
Tank		Small white storage tank on low hill at inner end of Richmond-San Rafael Ferry slip	Zoo	37	56	323.0	122-24		978.0	N.A.	1947	X			5532
Light		Light & fog signal on 40 foot steel structure corner of Standard Oil Dock.	Alp	37	55	627.0	122-24		789.0	N.A.	1947	X			5532
P9		Bell on steel structure on Pier leading to Union Std. Oil Co. dock	Log	37	55	930.0	122-24		395.0	N.A.	1947	X			5532
H. Tr.		High radio tower on top of Micholl Knob Richmond	Mast	37	55	407.2	122-22		1285.0	N.A.	1947	X			5532
F.S.		Red Rock Fog signal (overturned) P.C. Light List No. 446	Pop	37	55	1236.0	122-25		1097.0	N.A.	1947	X			5532
Rock		Castro Rock		37	55	1803.0	122-24		1453.0	N.A.	1947	X			5532
Rock		Castro Rock		37	55	1785.0	122-24		1344.0	N.A.	1947	X			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.

NAUTICAL CHARTS BRANCH

SURVEY NO. T.7066a

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.

7066b

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

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey TOPO

Field No. BO-C-47 Office No. T-7066b
(Rev. 1948)

LOCALITY

State California

General locality San Francisco Bay

Locality Richmond Inner Harbor

194 7-'48

CHIEF OF PARTY

W.M.Gibson

LIBRARY & ARCHIVES

DATE 14 Dec. 1949

B-1870-1 (1)

7066b

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. - T-7066b

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-7066 bField No. DQ - C - 47 (1948 Revision)Scale 1/5000State California General locality San Francisco BaySpecific locality Richmond Inner HarborDates: Survey began 26, September 1948 Completed 29, September 1948

Photography....., Supplemented by ground surveys to.....

Project No. CS - 256 Instructions dated 16, November 1948 and 24 April 1947Vessel } on Bowle Chief of party W.M. GibsonField work by L. F. Woodcock (1948 revision) Office work by P.A. Weber & L.F. Woodcock (1948 revision)Final inking by P.A. Weber (1948 revision)

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

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

REMARKS

Project CS - 256
Descriptive Report to Accompany the
1948 Revision of Topographic Sheet BO-C-47

Richmond Inner Harbor

December 1948

Instructions dated 11/16/40
Supp. Instructions dated 4/24/47

The purpose of this revision was to check the original sheet where it was found to be in disagreement with the air-photo compilation^s of the area. (T-5927 & T-5928, 1941-46)

METHODS:

The first step in this revision was to correct the old projection. The original pencil projection, where it was still visible, was found to be correct, but had been incorrectly inked. The inked projection was erased where necessary and corrected. When the projection had been properly inked, the control stations were found to have been plotted correctly. In addition, the scaling of recoverable topographic stations in 1947 was found to check, which indicates that the scaling in 1947 was ^{done} prior to the incorrect inking of the projection.

Field work on this revision was started by running a plane-table traverse westward from Richmond Pier Bldg. (1916-17). The plane-table was located to start the traverse by setting on line with Richmond Pier Bldg. (1916-17) and Brooks Island 2 (1905), orienting on Brooks Island 2 (1905) and taking a rod shot on Richmond Pier Bldg. From this location cuts were drawn to all visible topographic signals to the westward.

The traverse was then run, re-locating signals, EBB, DAY, CUE, GAG, FAR, GEM, HAG, YEA, KED, JAP, DIP, WAR, and YAM. The shape and location of the wharf and ferry-slips were also changed. ✓

The next set-up was made on the wharf near topographic signal PAL. The plane-table was located by a three point fix on Brooks Island 2, Harbor (U.S.E.) and Ford Motor Co. Water Tank, with a resection on Radio Tower (1947) as a check on the fix. From this set-up signals LAY, PAL, PAR, PEP, PIE, PET and PIN were re-located, and the location of the ship-ways was changed. ✓

A list of the recoverable topographic stations which were re-located accompanies this report. ✓

Landmarks L1028 (49)

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

Approved:

W.M. Gibson
Chief of Party

(1)

T-7066b

Graphic Control Sheet BO-C-47 Revised 48
New Locations of Recoverable Topo Signals

NAME	LATITUDE		METERS	LONGITUDE		METERS
	°	'		°	'	
Pin ✓	37	55	268	122	21	1094
Pie ✓	"	"	266	"	"	1128
Pet ✓	"	"	273	"	"	1165
Pep ✓	"	"	267	"	"	1201
Par ✓	"	"	269	"	"	1237
Pal ✓	"	"	269	"	"	1273
Lay ✓	"	"	265	"	"	1310
- Cue ✓	37	54	1169	122	23	418
Day ✓	"	"	1074	"	"	499
- Ebb ✓	"	"	1073	"	"	546
Gem ✓	"	"	986	"	"	576
- Far ✓	"	"	992	"	"	585
Ked ✓	"	"	904	"	"	720
Jap ✓	"	"	916	"	"	724
Hag ✓	"	"	919	"	"	622
Yea ✓	"	"	919	"	"	631
Dip ✓	"	"	908	"	"	769
War ✓	"	"	855	"	"	784
Yam ✓	"	"	856	"	"	778
Gag ✓	"	"	1217	"	"	385

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Topography

SUPERCEDED BY 1948 REVISION

Field No. BO-C-47 Office No. _____

LOCALITY

State California

General locality San Francisco Bay

Locality Richmond Inner Harbor

194 7

CHIEF OF PARTY

W. M. Gibson

LIBRARY & ARCHIVES

DATE _____

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-7006 b

Field No. BO-C-47

Scale 1/5000

State California General locality San Francisco Bay

Specific locality Richmond Inner Harbor

Dates: Survey began 21 April 1947 Completed 5 May 1947

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
~~Randy~~

Field work by W. M. Gibson Office work by W. M. Gibson

Final inking by W. M. Gibson - H. A. KNAPP

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

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

REMARKS _____

Project CS-256

W.M. Gibson, Chief of Party
April 21, 1947 to May 5, 1947

Descriptive Report to Accompany
Topographic Sheet BO-C-47

DATE OF INSTRUCTIONS- 16 November 1940. Supplemental Inst. April 24, 1947

This survey was executed for the purpose of establishing control for a 1/5000 scale hydrographic survey of Richmond Inner Harbor. When approaching the harbor the most prominent objects are, Ford Motor Company Water Tank (1942) and the high radio tower on top of Nicholl Knob. The brick stacks at the old brickyard in the bight northeast of Point Richmond are not very conspicuous except when inside the training wall.

The training wall and Brooks Island were not occupied. The training wall appears to be correctly charted.

Control for this survey consisted of:

FORD MOTOR COMPANY WATER TANK (1942)

HARBOR (U.S.E.) 19292

BROOKS ISLAND 2 (1905)

RICHARD (1929)

CORNER RICHMOND PIER BLDG.

New positions of RICHARD (1929) and BROOKS ISLAND 2 (1905) were determined by the party in charge of Sam Hand engaged on the cooperative East Bay Triangulation Project in 1947 but were not available at the time of this survey. The Radio Mast on top of Nicholl Knob was located by triangulation by a Party from the Bowie in 1947 while engaged on reestablishment of missing control north of Point Richmond, after completion of this survey. The following triangulation stations could not be found: BELL NO. 1 (1929)

BELL NO. 2 (1929)

RICH (1929)

Very little traverse was used on this survey. All triangulation stations were occupied and cuts taken to prominent objects. These locations so determined were supplemented by additional cuts or actual rod readings taken from plane table positions established with 3-point fixes. Along the shore north of Point Richmond a short traverse was run with resections from the topographic position of the radio mast on Nicholl Knob and triangulation station CORNER RICHMOND PIER BLDG. as checks. Later it was found that the topographic position of the radio mast was in very close agreement with the triangulation position. Signal "Trip" located near the plotted position of RICH (1929) was also used for resections along the shore of the bight between Point Richmond and Shoal Point. Signal Trip was an Army Engineer tripod built over a 2" - iron pipe driven in the ground. This pipe may be an Army Engineer station for which a description and position was not available. Their condition surveys show a station there called Mon. 13A (C. of E.). This signal was also used for some resections on the east edge of the sheet where the topo alidade would not reach RICHARD (1932). The position of BELL NO. 1 may be incorrectly listed as a small bell was found at the southwest corner of the drydocks and is shown on this sheet as

topographic signal "Bell". No bell was found on the shore corresponding to BELL NO. 2 but the whole shoreline of this area including Santa Fe channel was heaped high with debree, wreckage and junk left over from shipyard activities. ✓

The Kaiser Shipyards were mostly in a caretaker status and their disposition undecided or unknown. Some of them have since been purchased from War Assets by Parr Richmond Terminal Corporation. ✓

During the progress of this survey planimetric sheets, ^{T-5927, 5928 (1941-46)} scale 1/10,000 were received. Much interior detail shown on those sheets were omitted from this survey in as much as this survey was primarily for control for hydrography. The railroad shown on T-5928 as stopping about 470 meters south of RICH (1929) should be extended west to the old Brickyard closely paralleling the beach and passing close to the rock crusher (Signal "WAX"). ✓

Landmarks shown on T-5928 are judged to be satisfactory with the addition of the radio tower on top of Nicholl Knob at station RICHARD (1932). Nicholl Knob is a name in local usage for the high prominent hill on which RICHARD (1932) is located. Authorities for "NICHOLL KNOB" are Edward A. Hoffman, Director of Public Works, City of Richmond, John Galvin, Editor and Publisher, Richmond Independent, Bertel K. Peterson Auditor, City of Richmond. Nicholl Knob is in itself the most prominent landmark, and its geographic name appears to have been overlooked by the Air Photo party. A separate report on Geographic names for the 1947 Project area is being submitted. ✓

The line of poles extending southward from the Ford Motor Company Assembly Plant have no wires. ✓

There are numerous dolphins west of the Santa Fe Ferry slip at Point Richmond that were not located on this sheet. Hydrographic locations of them were obtained on sheet BO-05347. (H-7623, 1947) ✓

A list of recoverable topographic stations on form 524 accompany this report. (filed in Div. of Photogrammetry under T-7066b) ✓

A set of plans showing details of the Kaiser Yard at Point Potrero accompanies the topographic sheet. (See Bp. 40030, 1945) ✓

Wm Gibson
W.M. Gibson
Lieut. Comdr. U.S.C. & G.S.
Topographer

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 15 January, 1948

I recommend that the following objects which have ~~been~~ been inspected from seaward to determine their value as landmarks, be charted on ~~(insert system)~~ 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	CHARTS AFFECTED		
				LATITUDE		LONGITUDE				HARBOR CHART	INSHORE CHART	OFFSHORE CHART
				° ' "	D. M. METERS	° ' "	D. P. METERS					
	Tower	FM Radio Tower top of Nicholl Knob	Mast	37 55	407	122-22	1285	N.A. 1927	1947 Triang.	X		5532
	Light	Small light on south tip of east Ferry Fog wall of Farr canal Ferry slip	Dud	37 55	61	122-21	968	N.A. 1927	Topo	X		5532
	Tank (Elev)	Ford Motor Co. Water Tank		37 54	1087	122-21	505.9	N.A. 1927	Tri	X	1942	5532
	# 439 Light	Small light at S. tip of west wall of Richmond Shipyard Ferry	Rat	37 54	1318	122-21	1186	N.A. 1927	Topo	X	1947	5532
	S 10	Spar beam about 104 meters S. of S.W. corner Ford Motor Co. Property		37 54	951	122-21	848	N.A. 1927	Topo	X	1947	5532
	Stack	Square brick stack at old brickyard (Higher of two)	Val	37 54	1342	122-22	1020	N.A. 1927	Topo	X	1947	5532
	Stack	Slender stack over Power House at A.T. & S.F.R.R. Ferry Terminal	Hbb	37 54	1069	122-23	542	N.A. 1927	Topo	X	1947	5532
	EN	P.C. Light No. 433	End	37 54	426	122-23	671	N.A. 1927	Topo	X	1947	5532
	EN 2A	P.C. Light No. 435	Dlx	37 54	278	122-21	1394	N.A. 1927	Topo	X	1947	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.

GEOGRAPHIC NAMES

Survey No. T-7066ab

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
<u>California</u>								USA-B	1
<u>San Francisco Bay</u>								"	2
<u>a:</u>									3
<u>Castro Point</u>									4
<u>Molate Point</u>									5
<u>Winchaven</u>									6
<u>Point Orient</u>									7
<u>b:</u>									8
<u>Point Richmond</u>									9
<u>Patrero Point</u>									10
<u>Richmond Inner Harbor:</u>									11
(incorrectly placed, lies to eastward of sheet)									12
<u>Harbor Channel</u>									13
(instead of Richmond Inner Harbor)									14
<u>Santa Fe Channel</u>								U.S. 68	15
<u>Also, if it is desired</u>									16
<u>to apply them:</u>									17
<u>Ford Channel</u>									18
<u>Inner Harbor Basin</u>									19
<u>Parr Canal</u>									20
<u>Lauritzen Canal</u>									21
<u>Richmond Yacht Harbor</u>									22
<u>Outfitting Dock</u>									23
<u>Piers 1, 2, 3.</u>									24
<u>Municipal Wharf</u>									25
<u>No. 2</u>									26
Names underlined in red are approved									27
4-10-50. L. HECK									28

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF TOPOGRAPHIC SURVEY

REGISTRY NO. T-7066b

FIELD NO. BO-C-47

California, San Francisco Bay, Richmond Inner Harbor
Surveyed in April - May 1947 & Sept., 1948 Scale 1:5,000
Project No. CS-256

Plane Table Survey

Aluminum Mounted

Chief of Party - W. M. Gibson
Surveyed by - W. M. Gibson and L. F. Woodcock
Inked by - W. M. Gibson and P. A. Weber
Reviewed by - T. A. Dinsmore, 7 April 1950
Inspected by - R. H. Carstens

1. Control

Previously established triangulation stations furnished the basic control for this survey.

The purpose of the survey was to establish supplementary control for hydrographic surveys in the vicinity and to show such waterfront improvements or shoreline changes that have taken place in the area.

2. Adjoining Surveys

The present survey falls within the area covered by planimetric shoreline surveys T-5927 and T-5928 (1941-46). Adequate junctions were effected with these earlier surveys except in lat. $37^{\circ} 54.5'$, long. $122^{\circ} 21.0'$, where the marsh line on T-5927 falls about 100 meters offshore from the shoreline shown on the present survey. The outer limits of the marsh area were not determined on the present survey.

3. Comparison with Prior Surveys

a. T-399 (1853) 1:10,000	T-3654 (1917) 1:20,000
T-1621 (1881) 1:10,000	T-3839 (1921) 1:10,000
T-2245 (1895) 1:10,000	T-4438 (1929) 1:10,000
T-2445 (1898) 1:10,000	T-4672 (1931) 1:10,000
T-2941 (1909) 1:10,000	<u>T-6301 (1934) 1:10,000</u>
<u>T-3653 (1917) 1:20,000</u>	

These prior surveys have been previously compared with and superseded by T-5927 and T-5928 (1941-46) and therefore need no further consideration.

b. T-5927 and T-5928 (1941-46) 1:10,000

These prior surveys cover the area of the present survey.

The most noticeable difference between the present and prior surveys occurs in lat. $37^{\circ} 54.37'$, long. $122^{\circ} 22.17'$, where the present survey shows an accretion in the shoreline of about 100 meters. Also in this vicinity, two large finger piers have been constructed since the prior surveys. Many other shoreline and waterfront changes of a more minor nature are noted throughout the surveyed area.

The present survey supersedes the prior surveys in shoreline and waterfront detail within the common area.

4. Comparison with Chart 5532 (Latest print date 9/26/49)a. Topography

The charted shoreline originates with the surveys discussed in par. 3b supplemented by corrections and additions shown on Bp. 40030 (1945) and Chart Letter 486 (1945). The present survey supersedes the charted shoreline.

b. Aids to Navigation

Aids to navigation located on the present survey are in agreement with the charted positions and adequately serve the purpose intended.

c. Magnetic Meridian

The magnetic meridian observation at triangulation station RICHARD in lat. $37^{\circ} 55.23'$, long. $122^{\circ} 22.86'$, revealed a strong local disturbance in that locality where a reading of $32^{\circ} 48'$ E. is $15^{\circ} 03'$ greater than the value of $17^{\circ} 45'$ E. charted in this general vicinity.

5. Condition of Survey

The Descriptive Report and drafting are satisfactory.


6. Compliance with Project Instructions

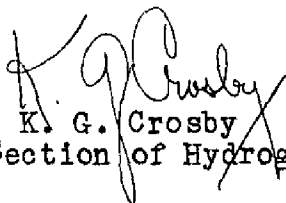
The survey adequately complies with the Project Instructions.

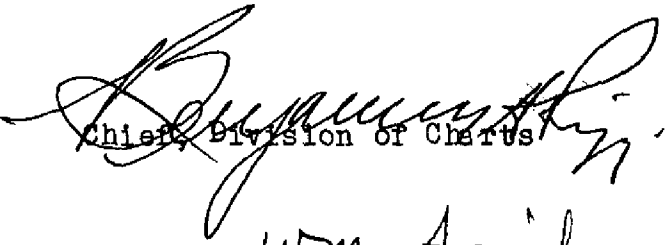
7. Additional Field Work

The survey serves the purpose intended and no additional field work is required.

Examined and approved:


H. R. Edmonston
Chief, Nautical Chart Branch


K. G. Crosby
Chief, Section of Hydrography


W. M. Scaife
Chief, Division of Coastal Surveys