

SUPPLEMENTAL T

4672

U. S. COAST & GEODETIC SURVEY  
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Ed. June, 1928

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R. S. Patton, Director

State: California

DESCRIPTIVE REPORT

Aero-

Topographic

~~Hydrographic~~

Sheet No. 4672

LOCALITY

San Francisco Bay

Richmond and vicinity

1932.

CHIEF OF PARTY

O. S. Reading

U. S. GOVERNMENT PRINTING OFFICE: 1929

SUPPLEMENTAL T 4672

DESCRIPTIVE REPORT TO ACCOMPANY  
AIR PHOTO TOPOGRAPHIC SHEET NO. 4672  
RICHMOND AND VICINITY, CALIFORNIA.

This is a compilation of five lens aerial photographs made up of one flight, R1-11, taken with T-3 camera No. 30-1, by the U. S. Army Air Corps at 11:30 A.M. April 17, 1931, direction of flight eastward.

High tide in San Francisco Bay on April 17, 1931, occurred at 12:23 P. M. at Point Richmond.

At the eastern end of the sheet, photographs 17-22 of flight B-E were used to strengthen the plot at that end and to extend the length of the sheet. The direction of this flight was northward and was taken December 15, 1931, between 2:00 and 2:15 P. M.

LIMITS OF SHEET

This sheet extends from Point Richmond nearly to Point Isabel, embracing most of the city of Richmond and includes Brooks Island.

CONTROL

The control for this sheet consists of Coast Survey triangulation and topographic stations, Berkeley Water Front Company triangulation, the field inspection party's three point fixes and triangulation station, K R O W, and T-4438 and T-3839. This wealth of control, which was well scattered, and the accurate spotting by the field inspection party, enabled a good plot to be made in a very short time. The six photographs from flight B-E, with the addition of two three-point fixes, tied in extremely well with the main plot.

COMPILATION

A spotting plot was made to determine the scale of the photographs. A projection was laid out on a celluloid sheet using a scale factor of .92795 x 10,000 and all control points plotted. The shoreline of T-4438 and T-3839 was traced in blue ink. A radial plot was then made. Difficulty was experienced, due to elevation, around Point Richmond and with Brooks Island. Brooks Island fell in the wing photographs, which added to the difficulty. After the detail from flight R was traced, flight B-E was plotted and tied in to flight R without difficulty. Blue print No. 24818 was used in locating the breakwater, - to be taken up under "Changes."

CHANGES

The projection of this sheet is of the new 1927 datum. The inter-section projection is of the datum used immediately prior to 1927.

In general the shoreline of this sheet agrees with that of T-4438 and T-3839.

Since T-4438, dredging and filling has been done in and around Ellis Slough, entirely changing the shoreline. At the upper end of the inner harbor, (north of latitude  $37^{\circ} 55'$  and east of longitude  $122^{\circ} 22'$ ), dredging and filling was in progress at the time of the field inspection and since no material as to the final situation has been received to date, the shoreline in this area is shown by a dotted line, as it appeared in the photographs.

The sunken rocks off Point Potrero were transferred from T-4438. At longitude  $122^{\circ} 21\frac{1}{4}'$ , beginning at latitude  $37^{\circ} 54\frac{1}{2}'$  and extending to latitude  $37^{\circ} 55'$ , the east shoreline of the fill on which the Ford Motor Company is located, is in disagreement with T-4438. At the southern end this sheet fixes the shoreline some twenty meters east of T-4438. At the northern end, the two sheets coincide. The island, running north and south, just east of this fill is also moved eastward on this sheet. Triangulation station PMI at the southeast corner of this fill, substantiates the location shown on this sheet.

The eastern shoreline of Brooks Island agrees with the old topographic sheets Nos. 399 and 2245. The shoreline on the other two sides do not agree. The bluff line on this sheet, however, agrees fairly well with the shoreline of T-399 and T-2245 on both the western and southern sides, indicating that this bluff has probably crumbled off and extended the shoreline. On the south side is a quarry which has cut into the bluff quite a bit.

The breakwater west of Brooks Island is as it appears on flight R. To the east of this island the breakwater is shown as it appears in the wing photographs of flight B-E. It was partially complete on flight R and the azimuth as given from this flight fixed its location. The dip and joining point with the mainland is from blue print No. 24818. The coordinates given on this print, coincide with the location established by the radial plot. The angle-breakwater at the eastern end was located from the radial plot of flight B.E. Since these photographs have been taken, the breakwater has been completed and is different in some respects from what is shown on this sheet. As completed, it is shown on charts 5530 and 5532.

It was not possible, by means of the photographs and data furnished by the field inspection, to extend the transmission line farther in either direction than shown. Poles extend up Burlingame Avenue and the line undoubtedly runs to the substation at the extreme eastern end of the sheet, but due to the many poles on various streets in this vicinity, it was deemed advisable not to extend the line.

In the vicinity of latitude  $37^{\circ} 55'$ , longitude  $122^{\circ} 20'$ , chart 5532 shows a black water tower and two windmills. (Chart 5530 shows a land mark symbol at the approximate point of the water tower.) A



DEPARTMENT OF COMMERCE  
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REG. NO. 4672

AIR PHOTO TOPOGRAPHIC TITLE SHEET

JAN 24 1933

Acc. No. \_\_\_\_\_

The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. \_\_\_\_\_

REGISTER NO. 4672

State.....California.....

General locality.....San Francisco Bay.....

Locality.....Richmond and vicinity.....

Scale.....1:10,000..... Date of survey.....Photos taken April 17 and December 15, 1931.

Vessel.....Army Air Corps Aeroplane.....

Chief of Party.....O. S. Reading.....

Compiled  
~~Surveyed by~~.....F. G. Erskine.....

Inked by.....F. G. Erskine.....

Heights in feet above.....- - -.....to ground to tops of trees

Contour, Approximate contour, Form line interval.....- - -.....feet

Instructions dated.....- - -....., 19.....

Remarks:.....Compilation of five lens air-photographs Nos......

.....R-1 to R-11 and B-E 17 to B-E 22, printed by Photolithographic process in Printing Section.

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

T-4672

*Duplicate*

LANDMARKS FOR CHARTS

September 28, 1932.

DIRECTOR, U. S. COAST AND GEODETIC SURVEY:

The following determined objects are prominent, can be readily distinguished from seaward from the description given below, and should be charted.

*O. S. Reading*  
O. S. Reading

Chief of Party.

DESCRIPTION	POSITION						METHOD OF DETERMINATION	CHARTS AFFECTED	
	LATITUDE			LONGITUDE					DATUM
	°	'	D. M. METERS	°	'	D. P. METERS			
Aluminum tank			(763)			(963)	New	5530	
Ford plant	37	54	1087	122	21	503	1927	Photo 5532	
Aluminum stack			(784)			(881)			
Ford Plant	37	54	1088	122	21	585	"	"	
Brick Works Stacks			(512)			(447)			
Higher	37	54	1358	122	22	1019	"	"	
Lower	37	54	(481)			(455)	"	"	
			1369	122	22	1011	"	"	
Tank			(413)			(114)			
Stauffer Chemical Co.	37	54	1437	122	19	1352	"	Photo	
			(396)			(394)			
Brick Stack	37	54	1455	122	19	1072	"	"	

## Report T4672 Supplemental

1. The Bayshore Highway and 55th Street, and the connection to the Breakwater Lot  $37^{\circ}54'$  long  $122^{\circ}19'$  shown in blue on Supplemental T4672 were applied <sup>to the Supplemental 7/20/39</sup> ~~on December 1958~~ from a plan table survey made on a paper print of T4671. The original survey is filed as P.S. 158 in the air photo unit. The descriptive