

FEB 13 1933

Acc. No. _____

4649

Form 504
Ed. June, 1928

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R. S. Patton *Director*

State: California

DESCRIPTIVE REPORT

Air Photo } Topographic } Sheet No. 4649
~~Photographic~~

LOCALITY

San Francisco Bay, California

Alameda Creek to Roberts Landing

1931

CHIEF OF PARTY

O. S. Reading

4649

DESCRIPTIVE REPORT TO ACCOMPANY
SHEET No. T-4649

This sheet is a compilation of five-lens air photographs taken by the Army Air Corps. It is compiled from two separate flights, the "D" and "W" flights. Of the "D" flight photographs, numbers D-6 to D-23, were included within the boundaries of the sheet; of the "W" flight, photographs W-23 to W-41 were included. (Plane-Fairchild; pilot, Lieutenant Wallace; observer, Captain Hill; approximate altitude, 5000 feet; camera, type T-3-A, No. 30-1.)

CONTROL

Triangulation stations used to control this sheet were established by field parties in 1925, 1930 and 1931.

COMPILATION

The projection was made upon celluloid to the average scale of the photographs of flight "D". The average scale factor as determined from the preliminary radial plot of the photographs was .85. In order to transfer the detail from the "W" photographs, photostat copies of alternate photographs of the flight were made to the scale of the projection. The scale factor of this flight was .95. Ordinarily the projection is made to the scale of the flight nearest to 1.00, but since the "D" flight ~~has~~ covered the shoreline, and it has been found that photostats do not always remain true to scale, it was felt that it would be more desirable to depart from this practice in order to assure the greater accuracy near the shoreline.

The shoreline and adjacent detail of sheet 4610 were transferred to the celluloid in blue ink to check the photographic plot. No material discrepancies appeared between this and the photographic plot.

Some difficulty was experienced in plotting the detail north of latitude $37^{\circ} 40'$ and east of $122^{\circ} 07'$. This was partially due to the hilly nature of the country, and is also partially explained by the photographic flight report for flights D and W, particularly the latter. The report states: "Flying fair. The pilot apparently lost and gained considerable altitude during the flight as the camera changed trim materially, also the time interval was not constant, which indicated a material difference in air speed."

SYMBOLS

Standard topographic symbols were used. No symbol distinction was made for grassland areas and reclaimed marsh areas.

REFERENCE

The Sanborn maps in the vicinity of San Lorenzo were used as references in checking the detail.

LAND MARKS - No recommendations for land marks were submitted by the field party.

APPROVED:

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

Respectfully submitted,

J. H. Walther
Jr. Carto. Engineer,
C. & G. Survey

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

U. S. COAST & GEODETIC SURVEY
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FEB 13 1930

Acc. No. _____

REG. NO.

4649

TOPOGRAPHIC TITLE SHEET

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. 4649

State California

General locality San Francisco Bay

Locality Alameda Creek to Roberts Landing

Scale 1:10,000 Date of photographs May 2, 19 31
survey

Vessel Army Air Corps Plane

Chief of Party O. S. Reading

Compiled J. H. Wulbern
~~Surveyed by~~

Inked by J. H. Wulbern

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

Contour, Approximate contour, Form line interval -- feet

Instructions dated --, 19 --

Remarks: This sheet is a compilation of five lens aerial photographs
Nos D6 to 23 and W23 to 41 reproduced to 1:10,000 scale by lithographic
process in the Printing Section.

G P O

APPROVED

K. T. Adams
FIELD RECORDS (C)

L. O. Robert
Chief, Division of Charts

J. S. Borden
Chief, Section Field Work

G. H. Hude
Chief, Div. of Hyd'y and Top'y