DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R. S. Patton, Director

State: California

DESCRIPTIVE REPORT
Topographic | Sheet No. 4649

LOCALITY
San Francisco Bay, California
Alameda Creek to Roberts Landing

1931

CHIEF OF PARTY
O. S. Reading
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-5 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, 1929 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 .95. 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 became 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° 40' and east of 122° 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 Senborn 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
Chief of Party

Respectfully submitted,

J. H. Williams
Jr. Carto. Engineer,
C. & G. Survey
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

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. Alamada Creek to Roberts Lending

Scale 1:10,000 Date of photographs May 2, 1931

Vessel. Army Air Corps Plane

Chief of Party. O. S. Reading

Compiled by. J. H. Wulbern

Inked by. J. H. Wulbern

Heights in feet above to ground to tops of trees

Contour, Approximate contour, Form line interval.

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.

K. T. Adams
FIELD RECORDS (O)

L. O. Scott
Chief, Division of Charts

J. E. Borden
Chief, Section Field Work

Chief, Div. of Hydro and Topo