

4646

Form 504
Ed. June, 1928

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R. S. Patton, Director

U. S. COAST & GEODETIC SURVEY
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NOV 4 1932

State: California

Acc. No.

DESCRIPTIVE REPORT

Air-photo
Topographic
Lithographic

Sheet No. 4646

LOCALITY

Jagel Slough to Coyote Creek

San Francisco Bay

California

19 31

CHIEF OF PARTY

O. S. Reading

DESCRIPTIVE REPORT

To Accompany Air Photo Topographic Sheet No. 4646
Jagel Slough to Coyote Creek, San Francisco Bay.

This sheet is a compilation of five lens photographs taken on April 29, 1931. Photographs X 1 to 19 were taken at about 2:50 P. M. and Y 1 to 19 about 3:10 P. M. at about low water according to the tide tables. The photographs were taken with T 3 A Camera No. 30-1. The pilot was Lieutenant Bobzien, the photographer Captain Hill, and the airplane the O-25 type. The nominal altitude was 5000 feet, which was approached quite closely on the Y flight. The plane was apparently low and climbing on the X flight for the scale changes quite rapidly.

CONTROL. The control used for this sheet was triangulation, executed by the party of Lieutenant G. C. Jones, in 1931. A traverse along the road leading south and westward from the town of Alviso, and swung in by three point fixes, was also used, as were a three point fix on photo X 19, and some supplemental intersection stations located by the field inspection party. No mistakes were found in the control but an error in spotting Station Guadalupe of some five meters caused considerable difficulty with the plot until it was found.

COMPILATION. The sheet was compiled with a scale factor of 1.10 x 10,000, which was the average scale of the X flight on which the most detail occurred. Afterward it was found that the scale of this flight varied considerably and it was necessary to make a considerably number of photostats in order to trace off the detail without too large adjustments.

The compilation was made by the radial line method. In general, satisfactory intersections were obtained except that the intersections in the outer half of the wings tended to give positions too far out from the flight line. This was adjusted proportionately between the two flights and by the traverse of the road along the southern limit of the sheet. It was possible by means of the plot to pick up a five meter error in spotting Station Guadalupe on the photographs, but this station occurred near the center of the flight.

The photographs were taken approximately at low water and the edge of the water at the time is shown by dashed lines on the sheet.

AGREEMENT WITH OTHER SURVEYS. In general, good agreement was found with the plane table surveys made by the party of Lieutenant G. C. Jones, in 1931, (Sheets 4626 and 4627). The discrepancies are believed to be due to mistaken rod readings and sketching in the plane table surveys.

DATUM. The sheet is compiled on the 1927 datum, although the triangulation computations had not been adjusted to this datum at the time of compilation.

LANDMARKS. No landmarks or permanent objects were specially marked for charting by the field inspection party.

The prominent objects such as transmission towers, two conspicuous tanks at Alviso and a red tank at the Albrae Gun Club have been located by triangulation. Recommendations for landmarks for charting should have been sent in by Lieutenant G. C. Jones, but nothing has been found in the files of this office.

It is not the function of a photographic compiler to recommend landmarks, but the three tanks mentioned above are high enough to be conspicuous in the area covered by this sheet.

O. S. Reading
O. S. Reading.

APPROVED

K. T. Adams
FIELD RECORDS (C)

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Air Photo - TOPOGRAPHIC TITLE SHEET OCT 24 1932

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. 46 46 4646

State California

General locality San Francisco Bay

Locality Jagel Slough to Coyote Creek
Photographs

Scale 1 : 10,000 Date of ~~Survey~~ April 29, 1931

Vessel Army Air Corps O 25 type aeroplane

Chief of Party O. S. Reading

Compiled O. S. Reading

~~Surveyed~~ by O. S. Reading

Inked by O. S. Reading

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

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

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

Remarks: This sheet has been compiled by the radial line

method from five lens aerial photographs No.s X 1 to 19 and

Y 1 to 19. The sheet was reduced to 1:10,000 and printed on

Whatmans paper by the photo-lithographic process in the

Printing Section.