5952

U. S. COAST AND GEODENTIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey: Air Photo. Compilation
Field No.: Office No.: T-5952

LOCALITY
State: California
General locality: Solano County
Locality: Denveron

1943

CHIEF OF PARTY
Lieut. Comdr. L. D. Graham
Lieut. Comdr. K. G. Crosby

LIBRARY & ARCHIVES
DATE: Mar 8-1948
DATA RECORD

T-5952

Quadrangle (II): Antioch, Calif. Project No. (II): 262


Compilation Office: Tampa, Fla. Chief of Party: K. G. Crosby

Instructions dated (II III): 9-4-44 Copy filed in Descriptive Report No. T-(VI)

Completed survey received in office: 5-14-43

Reported to Nautical Chart Section:
Reviewed: 1-9-48 Applied to chart No. 5539 Date: May 1943

Redrafting Completed:
Registered: 7-4-48 Published:

Compilation Scale: 1:10,000 Published Scale:

Scale Factor (III): 1.00

Geographic Datum (III): N.A. 1927 Datum Plane (III): M.S.L.

Reference Station (III): Denver, 1922

Lat.: 38° 12' 067948 Long.: 121° 54' 187632 Adjusted

State Plane Coordinates (VI):

X = 

Y = 

Military Grid Zone (VI)
### PHOTOGRAPHS (III)

<table>
<thead>
<tr>
<th>Number</th>
<th>Date</th>
<th>Time</th>
<th>Scale</th>
<th>Stage of Tide</th>
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<td>5/18/41</td>
<td>12:48</td>
<td>1:10,000</td>
<td>No tide</td>
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<td>6354</td>
<td>9/3/41</td>
<td>12:14</td>
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<td></td>
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</tbody>
</table>

Tide from (III): No tide

Meins Landing (Reference station San Francisco)

Mean Range: 4.5 ft
Spring Range: 5.9 ft (diurnal)

Camera: (Kind or source) USCGS 9 lens (8½" focal length)

Field Inspection by: Lt. (j.g.) W.J. Chovan
Lt. (j.g.) W.C. Russell

Field Edit by: None

Date of Mean High-Water Line Location (III): Date of photographs

Projection and Grids ruled by (III) C.H.R. Wash.Off. date: 12-2-42

checked by J.C.O’N. date:

Control plotted by: R. Dossett, Sr. Photo. Aid
date: 12-7-42

date: 12-8-42

Radial Plot by: Tampa Office Personnel
date: 12-19-42

Detailed by: J.L. White, Prin. Photo. Aid
date: 12-28-42

Reviewed in compilation office by:
date:

Elevations on Field Edit Sheet
checked by:
date:
STATISTICS (III)

Land Area (Sq. Statute Miles): 20.95 mi.

Shoreline (More than 200 meters to opposite shore): 2.3 mi.

Shoreline (Less than 200 meters to opposite shore): 53.6 mi.

Number of Recoverable Topographic Stations established: 4

Number of Temporary Hydrographic Stations located by radial plot: 6

Leveling (to control contours) - miles:

Roman numerals indicate whether the item is to be entered by, (II) Field Party, (III) Compilation Party, or, (VI) the Washington Office.

When entering names of personnel on this record give the surname and initials (not initials only).

Remarks:
CONTROL

See Review Report

There are 5 triangulation stations within the limits of this sheet. Reference is hereby made to the field inspection report of the Suisun Bay Area in which the triangulation stations used to control this sheet are listed. This report was submitted by Lieut. Comdr. L. D. Graham in 1941.

One station, "Denver Bay Yellow House, South Cable, 1922" could not consistently be held to during the radial plot nor when cutting in additional radial points while detailing. Image distorted on three of four photographs. Index prints probably faulty.

With the exception of "Kirby, 1922" all triangulation stations within the limits of this sheet were recovered by the field inspection party. The field party was unable to identify Station "Kirby, 1922" on the photographs, therefore, Field Inspection Point "Trail", a nearby trail intersection, was identified by the field party. However, this "F.I./P. Trail" was identifiable on only 2 office photographs, of the 6300 series taken in September 1941. The identification on the 2 office photographs being questionable, the Station "F.I./P. Trail" was considered of no value as control and was not plotted on this sheet.

The triangulation station "Grizzly Island Shed, South Cable, 1922", as identified by the field party, is believed to be erroneous. The radial plot indicates that this station is lost. The large, lone shed mentioned in the description of this station is not the recovered station. The geographic position for this station is approximately 67 meters southwest of the building which the field inspection party assumed to be the station. It is recommended that this station be listed as lost.

One triangulation station "NORTH TRANSMISSION LINE CROSSING, 1942" was outside the limits of this project, but was on this sheet, and was used to assist in controlling 2 photographs, 6354 and 6355, in the northern limits of this sheet.

Not of third order accuracy - See Review Report.

MAIN RADIAL PLOT

For a discussion of the radial plot covering this sheet reference is made to the compilation report for Sheet T-5946.

Filing in Div. of Photogrammetry- General Files.

DETAILING

The detailing of this sheet was done in accordance with current instructions pertaining to this project.

The photographs used were clear with the exception of 5574 which was too dark for accurate interpretation of small topographic details. The only difficulty encountered in the interpretation of
vegetation was in distinguishing the limits of marsh and land used
as pasture in some of the low land areas; distinguishing between
pasture and cultivated land, and, in differentiating between marsh
and tule grass along Denveron and Nurse Sloughs.

Additional difficulty was encountered in the delineation of
the shore line in marsh areas, due to the irregularity of the mean
high water line and lack of sufficient field inspection. This is
especially so along the shore line and adjacent to Denveron and
Nurse Sloughs north of Bradmoor Island. Several small marsh islands
appear in the channels of these sloughs. The shore line is composed
mainly of mud flats and marsh with considerable grass in water. Some
dredging has been done in Denveron Slough and in several places new
channels have been cut, straightening the channel and forming islands
bounded by the old and new channels.

Numerous small streams, whose channels are clogged with tule
grass, drain into these two sloughs.

Inland areas, where field inspection was inadequate to cover
cultivated and pasture lands, a comparison was made with other like
areas which had been inspected by the field party. Owing to the
similarity between pasture and cultivated hay fields it was found to
be difficult to distinguish between the two. However, by means of
the above comparison and consultation with other experienced draftsmen
it is believed that an accurate interpretation was made.

Attention is called to a discrepancy in the name of the railroad
traversing this sheet north and south. On Nautical Chart No. 5334
it is labeled S.F. & S. RR. On U. S. Geological Survey "Antioch
California Quadrangle" map, General Highway Map of Solano County
and on Sheet T-5020 formerly compiled by this bureau the name is
shown as "Sacramento Northern". The railroad is labeled on this sheet
as S.F. & S. RR.

Changed to Sacramento Northern Railway by reviewer. See approved
list of Geographic Names (part of this report).

The photograph coverage in the northern and eastern limits of
this sheet is not considered adequate. Only two photographs, 6554
and 6562, covered the extreme northern limits and three photographs,
5556, 5557 and 5574 covered the larger portion of the east boundary
of this sheet. This condition resulted in weak radial points in
these areas, especially so when it was found to be impossible to
identify definite points on all available photographs in the
vicinities where they needed for accurate detailing.

SUPPLEMENTAL DATA

No graphic control survey of this area was available in this
office for comparison. However, the Geological Survey's CALIFORNIA
ANTIOCH QUADRANGLE was used to assist in determining elevations and
the General Highway Map of Solano County used to supplement the
field inspection in numbering and classifying roads and highways.
LANDMARKS AND AIDS TO NAVIGATION

There are neither prominent uncharted landmarks nor non-floating aids within the detailing limits of this sheet.
See revised report for aid to navigation.

HYDROGRAPHIC CONTROL

There are 6 unmarked hydrographic stations on this sheet that may be recovered for future use by the hydrographic party. Reference is hereby made to the Field Inspection Report covering the Suisun Bay Area, in which these stations are listed. This report was submitted by Lieut. Comdr. Graham to the Washington Office in 1941. These stations are also listed at the bottom of this compilation. Form 524 card for 4 USED Bench Marks and 2 recoverable topographic stations are filed in Div. 3 of Photogrammetry-General Files.

GEOGRAPHIC NAMES
Approved list filed in Division of Charts, Geographic Names Section.

Reference is made to a letter from the Acting Director dated December 2, 1942, Reference 28-FPA-1900, in which this office is authorized to omit the geographic names, except those so well established as to be correct beyond question, and that other names will be added by the Washington Office at a later date.

COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES

The U.S. Geological Survey quadrangle map "Antioch California", scale 1:62,500, covers the area included within the limits of this sheet. This quadrangle map, surveyed in 1906-1907, was corrected as of 1936 and is in good agreement except for minor details of small, inland, intermittent streams, all of which are not shown on the Antioch Quadrangle, and several newly dredged channels in Denverton Slough. Some changes are also noted in former marsh areas now converted to pasture or cultivation.

COMPARISON WITH NAUTICAL CHARTS

Visual comparison was made with Coast and Geodetic Nautical Chart No. 5534 (1:40,000 scale), corrected to August 12, 1942. Numerous levees and ditches have been constructed in the western part and the new channels cut in Denverton Slough do not appear on the Nautical Chart.

Three prominent features in shoreline are noted that do not appear on the nautical chart. First, the marsh island on the eastern shoreline of Nurse Slough, opposite the mouth of Cross Slough and in approximate Latitude 38° 10' 25"; Longitude 121° 55' 25"; second, the two small marsh islands, separated by a channel approximately 10 meters wide, and located at the southwest end of
Bradtmoor Island in approximate Latitude 38° 10' 50", Longitude 121° 55' 10"; Third, the peninsula of marsh land extending almost due north and south and jutting out into Nurse Slough on the south side of Bradtmoor Island in approximate Latitude 38° 11', Longitude 121° 54' 40" has completely disappeared.

With the above mentioned exceptions the topographic and cultural features are in general agreement. This map compilation should, however, supersede the charted information.

Respectfully submitted,

John L. White,
Prin. Photo. Aid

Forwarded by:

Kenneth G. Crosby,
Chief of Party...
I recommend that the following objects which have (have not) been inspected from seaward to determine their value as landmarks, be charted on (deleted from) the charts indicated.

The positions given have been checked after listing by ____________________________

<table>
<thead>
<tr>
<th>CHARTING NAME</th>
<th>DESCRIPTION</th>
<th>SIGNAL NAME</th>
<th>LATITUDE</th>
<th>LONGITUDE</th>
<th>METHOD OF LOCATION AND SURVEY NO.</th>
<th>DATE OF LOCATION</th>
<th>CHARTS AFFECTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Francisco - Medford</td>
<td>Air way Beacon No 4</td>
<td></td>
<td>38°14'</td>
<td>113°13.3'</td>
<td>1977 Theob.</td>
<td>1942 x</td>
<td>5534</td>
</tr>
</tbody>
</table>

Copies sent to Nautical Charts + Aeronautical Charts Sections 1-9-48

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.
Division of Photogrammetry  
Review Report of  
Planimetric Map Manuscript T-5952

Subject numbers not used in this report have been adequately covered in other parts of the descriptive report.

26. Control.-

The following triangulation stations were added to the map manuscript:

Kirby, 1922
Low White Tank, 1922

Three stations that were shown as triangulation stations on the map manuscript were changed as follows:

San Francisco-Medford Airway Beacon No. 4, 1922 was changed to a recoverable topographic station. It is also a landmark. A Form 524 card was filed in the Division of Photogrammetry General Files and Form 567 was made out and forwarded to the Nautical Charts and Aeronautical Charts Sections.

North Tower, Transmission Line Crossing, 1922 was changed to a recoverable topographic station and a Form 524 Card was filed in the Division of Photogrammetry General Files.

Sheep, 1922 was removed from the map manuscript since it is unmarked and not recoverable.

The positions of these three stations were established by the field inspection party, with sufficient accuracy for the control of the radial plot but they are of less than third-order accuracy. The computations are filed in the Bureau Library.

44. Comparison with Existing Topographic Surveys.-

<table>
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<tr>
<th>USGS</th>
<th>Antioch Quadrangle</th>
<th>1:62,500</th>
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<tr>
<td>Birds Landing Quad.</td>
<td>1:31,680</td>
<td>1918</td>
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<tr>
<td>Denverton Quadrangle</td>
<td>1:31,680</td>
<td>1918</td>
<td></td>
</tr>
<tr>
<td>T-1974</td>
<td>1:10,000</td>
<td>1888</td>
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</table>

The surveys are in good agreement with the map manuscript with the following exceptions:

Ditches, levees, buildings, roads and power lines that are shown on the map manuscript do not appear on the surveys.
45. Comparison with Nautical Charts.

Chart No. 5534  1:40,000  1946

The map manuscript has been applied to the nautical chart and are in excellent agreement with the following exception:

The sunken barge bridge to Bradmoor Island is not shown on the chart.

Reviewed by:  Reviewed under direction of:

Charles Theurer  S. V. Griffith
1-9-47  Chief, Review Section

APPROVED BY:

J. B. Jones  2/46
Technical Asst. to the Chief, Nautical Chart Br.
Chief, Div. of Photogrammetry Division of Charts

K. T. Adams  C. T. Green
Chief, Div. of Photogrammetry Chief, Div. of Coastal Surveys
<table>
<thead>
<tr>
<th>Name on Survey</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
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<th>F</th>
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Names underlined on red are approved.

1/16/28  2nd Sheet

M 234