

5952

Diag'd. on diag. ch. No. 5534

Form 504

U. S. COAST AND GEODETIC 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 Denverton

1943

CHIEF OF PARTY

Lieut. Comdr. L. D. Graham

Lieut. Comdr. K. G. Crosby

LIBRARY & ARCHIVES

DATE Mar 8-1948

5952

DATA RECORD

T- 5952

Quadrangle (II): Antioch, Cal.

Project No. (II): 262

Calif.

Field Office: San Francisco, Chief of Party: L. D. Graham

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

Instructions dated (II III): 9-4-41

Division of Photogrammetry
Office Files
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. 5534 Date: May 1943

Redrafting Completed:

Registered: T-12-48

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' 06" 948

Long.: 121° 54' 18" 632

Adjusted

~~Unadjusted~~

State Plane Coordinates (VI):

X =

Y =

Military Grid Zone (VI)

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
5556	5/18/41	12:48	1:10,000	No tide +1.6
5557	"	12:49	"	"
5558	"	12:50	"	"
5573	"	1:07	"	"
5574	"	1:08	"	+1.3
6354	9/3/41	12:14	"	"
				+4.6

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) USC&GS 9 lens (8 1/4" focal length)

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

date: Sept.-
Nov. 1941

Field Edit by: None

date:

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

Projection and Grids ruled by (III) J.C.O'N. C.H.R. Wash. Offc. date: 12-2-42

" " " checked by J.C.O'N. " " date: "

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

Control checked by: A.I. Kidwell, Jr. Topo. Engr. 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:

DESCRIPTIVE REPORT
TO ACCOMPANY
SHEET NO. T-5952

CONTROL

4 - 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. Filed in Div. of Photogrammetry-General Files.

One station, "Denverton Yellow House, South Gable, 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. Pricking 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.

} Station "Kirby"
recovered by
field party. Pricking
card in Div. of
Photogrammetry-
General Files.
No card on
station "Low
White Tank." See
review report.

The triangulation station "Grizzly Island Shed, South Gable, 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.

Filed 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 Denverton 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 long the shore line and adjacent to Denverton and Nurse Sloughs north of Bradtmoor 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 Denverton 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, 6354 and 6355, 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 Surveys' 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 review 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. of Photogrammetry - General Files.

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

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Reference is made to a letter from the Acting Director dated December 2, 1942, Reference 28-PFA-1990, 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 $38^{\circ} 10' 25''$; Longitude $121^{\circ} 55' 25''$; 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 $38^{\circ} 10' 50''$, Longitude $121^{\circ} 55' 10''$; 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 $38^{\circ} 11'$, Longitude $121^{\circ} 54' 40''$ has completely disappeared.

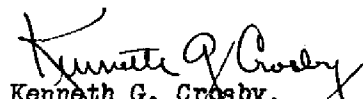
With the above mentioned exceptions the topographic and cultural features are in general agreement. This map compilation should, however, supersede the charted information.

Respectfully submitted,



John L. White,
Prin. Photo. Aid

Forwarded by:



Kenneth G. Crosby,
Chief of Party....

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, 1942 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, 1942 was changed to a recoverable topographic station and a Form 524 Card was filed in the Division of Photogrammetry General Files.

Sheep, 1942 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.-

USGS	Antioch Quadrangle	1:62,500	1908
	Birds Landing Quad.	1:31,680	1918
	Denverton Quadrangle	1:31,680	1918
T-1974		1:10,000	1888

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 ~~it is~~^{therefore} in excellent agreement with the following exception:

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

Added Aug. 1948

Reviewed by:

Reviewed under direction of:

Charles Theurer
C. Theurer
1-9-47

S. V. Griffith
S. V. Griffith
Chief, Review Section

APPROVED BY:

B. G. Jones 2/48
Technical Asst. to the
Chief, Div. of Photogrammetry

H. E. Reidinger
Chief, ~~Nautical Chart Br.~~
Division of Charts

K. T. Adams
Chief, Div. of Photogrammetry

C. K. Green
Chief, Div. of Coastal Surveys

GEOGRAPHIC NAMES

Survey No. T-5952

GEOGRAPHIC NAMES										
Survey No. T-5952										
Name on Survey	On Chart No. On previous survey No. On U. S. quadrangle Maps From local information On local Maps P. O. Guide or Map Rand McNally Atlas U. S. Light List									
	A	B	C	D	E	F	G	H	K	
✓ <u>California</u>									USGB	1
✓ <u>Sacramento Northern Railway</u>			(not S.F. & S R.R.)							2
✓ <u>State Highway No.12</u>										3
										4
✓ <u>Kirby Hill</u>										5
✓ <u>Cross Slough</u>										6
✓ <u>Nurse Slough</u>										7
✓ <u>Bradtmoor Island</u>										8
✓ <u>Denverton Slough</u>										9
✓ <u>Garfield</u>										10
✓ <u>Denverton</u>										11
✓ <u>Denverton Creek</u>										12
✓ <u>Rio Vista Junction</u>										13
✓ <u>Denverton Sta</u>										14
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Names underlined in red are approved.

1/16/48

W. Heck

M 234

Names underlined on
red are approved.
1/16/48 2. Heck