# Descriptive Report

**Type of Survey:** Planimetric  
**Field No.:** CS-262-B  
**Office No.:** T-5932  

**Locality**  
- **State:** California  
- **General Locality:** San Pablo Bay - Novato Creek - Gallinas Creek  
- **Locality:** Hamilton Field and Vicinity  

**1941-'44**  
**Chief of Party:** E.H. Pagenhart  

**Library & Archives**  
**Date:** Sept 12 - 1949
DATA RECORD

T- 5932

Quadrangle (II): Project No. (II): CS-262-B


Instructions dated (II III): 8 February 1944. Copy filed in Descriptive Report No. (VI) Photogrammetry Office Files

Completed survey received in office:

Reported to Nautical Chart Section:

Reviewed: 15 Sept., 1948 Applied to chart No. 5533 Date: 2/7/47

Redrafting Completed: 8 Nov., 1948

Registered: 25 Aug., 1949 Published: July, 1949

Compilation Scale: 1:10,000 Published Scale: 1:10,000

Scale Factor (III): None


Reference Station (III): Hamilton Field 1933

Lat.: 38° 2' 47.848(1475.2m) Long.: 122° 30' 23.059(562.2m) Adjusted

State Plane Coordinates (VI):

Cal. State Grid - Zone 3

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>
</tr>
</thead>
<tbody>
<tr>
<td>6444</td>
<td>9/3/41</td>
<td>3:12 P.M.</td>
<td>1:10,000</td>
<td>3.8</td>
</tr>
<tr>
<td>6445</td>
<td>9/3/41</td>
<td>3:12 P.M.</td>
<td>&quot;</td>
<td>3.8 Above</td>
</tr>
<tr>
<td>6446</td>
<td>9/3/41</td>
<td>3:12 P.M.</td>
<td>&quot;</td>
<td>3.8 MLLW</td>
</tr>
<tr>
<td>6452</td>
<td>9/3/41</td>
<td>3:12 P.M.</td>
<td>&quot;</td>
<td>3.8</td>
</tr>
<tr>
<td>6453</td>
<td>9/3/41</td>
<td>3:12 P.M.</td>
<td>&quot;</td>
<td>3.8</td>
</tr>
<tr>
<td>6454</td>
<td>9/3/41</td>
<td>3:12 P.M.</td>
<td>&quot;</td>
<td>3.8</td>
</tr>
<tr>
<td>6455</td>
<td>9/3/41</td>
<td>3:12 P.M.</td>
<td>&quot;</td>
<td>3.8</td>
</tr>
<tr>
<td>6456</td>
<td>9/3/41</td>
<td>3:12 P.M.</td>
<td>&quot;</td>
<td>3.8</td>
</tr>
</tbody>
</table>

See supplemental list of single lens photographs filed under Acc. No. 1848

Tide from (III): San Francisco

Mean Range: 4.5  Spring Range: 5.4

Camera: (Kind or source) U.S. C. & G. S. 9-lens 8½" focal length

Field Inspection by: Capt. E.H. Pagenhart date: 1944

Field Edit by: None date:

Date of Mean High-Water Line Location (III):
March 1944

Projection and Grids ruled by (III) S. R. date: 3/14/45
" " " checked by: W. R. date: 3/14/45

Control plotted by: Milton M. Slavney date: 3/14/45
Control checked by: B.H. Lyon date: 3/20/45

Radial Plot by: B.H. Lyon date: 3/28/45

Detailed by: E. C. Andrews & B. F. Lampion date: May 1945 and November 1946

Reviewed in compilation office by: J. A. Giles date: Dec 1946

Elevations on Field Edit Sheet None checked by: date:
STATISTICS (III)

Land Area (Sq. Statute Miles): 18.4

Shoreline (More than 200 meters to opposite shore): 6.85

Shoreline (Less than 200 meters to opposite shore): 9.3

Number of Recoverable Topographic Stations established: 54

Number of Temporary Hydrographic Stations located by radial plot: None

Leveling (to control contours) - miles: None

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:
Field Inspection Report

The Field Inspection Report on Air Photographs by E. H. Pagenthart for Projects 262b, sheets T-5926, 5929, 5930, 5932 is filed as a separate report in the Division of Photogrammetry General Files.
26 & 27 CONTROL AND RADIAL PLOT:

See report submitted by B.H. Lyon, Assistant Photogrammetric Engineer, filed in Div. Photogrammetry General Files.

Attention is called to a letter from E. H. Pagenhart dated 27 February, 1945 stating that all necessary notes and forms covering the triangulation and topographic stations have been forwarded to the Washington Office.

28 DELINEATING:

The delineation of this sheet has been done in accordance with current instructions.

The nine-lens photographs were clear and of reasonably good scale. One chamber of photograph 6453 was rejected in the radial plot. This made it difficult to plot detail points in the area covered by this chamber. It was also very difficult to plot detail points in the mountainous areas, due to the heavy woodland.

The field inspection was very sketchy. Field photographs 6451 and 6490 which contain a small amount of field inspection along the north and south edges of the map manuscript, were not in the office. All applicable information provided by the field inspection has been applied to the map manuscript.

No fences were shown on the map manuscript except for those identified on the field inspection photographs.

There have been numerous changes at Hamilton Field since the nine-lens photographs were made. Most of the new detail was applied from a survey of Hamilton Field, listed under paragraph 29. This survey used an arbitrary 1000 foot grid. Sufficient unchanged detail was applied from the nine lens photographs to control the survey sheet. When a sufficient number of points on the survey sheet grid could be positively located, the remainder of the grid was drawn to scale on the map manuscript. This was used to control the detail applied from the survey sheet.

The single lens photographs listed under paragraph 29, were used to apply any changes not covered by the survey sheet. These were chiefly changes in drainage around the boundaries of Hamilton Field and a few new ditches in other areas. Some farm roads on the nine lens photographs were shown to be of a temporary nature on the single lens photographs and were omitted on the map manuscript.
Detail applied to the map manuscript from the single lens photographs was controlled by detail points in unchanged locations, transferred from the nine-lens photographs.

In the area south of the entrance to Hamilton Field, along Highway 101, there is a new housing project which does not show on any source material. Some roads have been shown leading into the area, but are not complete.

Sheet three of the Cordelia-San Rafael Tower Line, listed under paragraph 29, shows that the tower line has been relocated between towers 27 and 169. The new position of the line was located by means of distances and azimuths given on the sheet.

29 SUPPLEMENTAL DATA:

43 1:10,000 single lens contact prints, as follows:

HF-1-1 through 12
HF-1-11B
HF-1-12B
HF-2-1 through 14
HF-3-1 through 15

These photographs were furnished by the San Francisco office. No other data about them is known except that their date is much later than the nine-lens photographs.

Survey of Hamilton Field, 908th Engineer A.F. HQ. Co.

Cordelia-San Rafael Tower Line, drawings number 21162, 28110, and 28111. Pacific Gas and Electric Company.

30 MEAN HIGH WATER LINE:

The mean high water line has been delineated according to field inspection notes.

31 LOW WATER AND SHOAL LINES:

Low water and shoal lines were delineated according to field inspection notes.
32 DETAILS OFFSHORE FROM THE HIGH WATER LINE:

There are several piles and an airplane wreck offshore. These have been located by radial plot methods.

33 WHARVES AND SHORELINE STRUCTURES:

All docks, wharves and other structures noted by the field inspection have been delineated accordingly.

34 LANDMARKS AND AIDS TO NAVIGATION:

The recoverable topographic stations established at the Hamilton Field Standpipe and the tallest tower on St. Vincent's School have been recommended for use as landmarks by the field inspection party.

Four beacons in the channel leading to Hamilton Field have been located by radial plot methods.

The above stations have been recorded on Form No. 567 and are submitted with this report. Copies attached to this report.

Two other beacons in the channel leading to Hamilton Field were recovered by the field inspection party. However, they could be identified on only two photographs and could not be located by radial plot methods.

35 HYDROGRAPHIC CONTROL:

Instructions to field party dated 8 February, 1944 state that no hydrographic stations need be selected.

36 LANDING FIELDS AND AERONAUTICAL AIDS:

The only landing field on the map manuscript is Hamilton Field. This field was delineated as described under paragraph 28. There is no information as to aeronautical aids in the area.

37 RECOVERABLE TOPOGRAPHIC STATIONS:

Recoverable topographic stations were established at 41 transmission towers, at 4 beacons in the channel leading to Hamilton Field, at 5 radio towers at the Army Black Point Transmitting Station, at two pumphouse gables along the shoreline, at the Hamilton Field standpipe, and at the tallest tower at St. Vincent's School.
Five bench marks were pricked on the field photographs for the purpose of establishing recoverable topographic stations; however, the pricking cards could not be found. No attempt was made to show these.

No attempt was made to establish recoverable topographic stations at the relocated transmission towers between towers 27 and 28 on the Cordelia-San Rafael tower line.

The plans of the Cordelia-San Rafael Tower Line listed under paragraph 29 were used to identify the numbers of the transmission towers. These sheets did not give complete coverage for all of the transmission line shown on the map manuscript. However, since the lower part of the tower numbers are in sequence, the towers in these areas have been tentatively numbered in the form until the correct numbers can be ascer-

44 COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES:

Comparison was made with Petaluma, 1914, and Mare Island, 1916, quadrangles, U.S. Geological Survey, scale 1:62,500. There are numerous discrepancies with these maps, especially cultural, due to the age of the maps. There are also minor changes in drainage.

Comparison was also made with Petaluma and Mare Island Quadrangles, Corps of Engineers, U.S. Army, printed 1942, aerial photography 1937, scale 1:62,500. There are very few discrepancies with these maps. They are chiefly changes in culture, especially the addition of Hamilton Field which was not shown on the Corps of Engineers maps.

Due to the smaller scale of the above maps, it was impossible to give an accurate check on discrepancies in position. Any discrepancies other than those already mentioned are minor and are chiefly due to generalization in the smaller scale maps.

45 COMPARISON WITH NAUTICAL CHARTS:

Comparison was made with Chart No. 5533 print date 25 February, 1944, scale 1:40,000
The chief changes are as follows:

Hamilton Field has been added. Much of the marshland north of Gallinas Creek has been reclaimed and ditches and levees have been added. Many of the levees shown on the nautical chart in the cultivated area south of Novato Creek could not be discerned through a stereoscope. Most of the fences shown on the nautical chart were not shown as such on the field inspection photographs. However, this is not a definite change due to the sketchiness of the field inspection. There are minor additions and deletions of buildings, roads, ditches, etc.

Respectfully submitted,

B. F. Lampton, Jr.
Prin. Photo. Aid

Approved and forwarded:

George E. Morris, Jr.
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 W. W. Dawsey

Lieut. Comdr. George E. Morris, Jr.
Chief of Party

<table>
<thead>
<tr>
<th>STATE</th>
<th>Charting Name</th>
<th>Description</th>
<th>Signal Name</th>
<th>Latitude</th>
<th>Longitude</th>
<th>Datum</th>
<th>Method of Location and Survey No.</th>
<th>Date of Location</th>
<th>Charts Affected</th>
</tr>
</thead>
<tbody>
<tr>
<td>California</td>
<td>Standpipe</td>
<td>Hamilton Field standpipe, tall, black, surmounted by a light</td>
<td></td>
<td>38 03</td>
<td>582 122 31</td>
<td>219</td>
<td>N.A. Radial Plot</td>
<td>March</td>
<td>5533</td>
</tr>
<tr>
<td></td>
<td>Tower</td>
<td>Tallest tower on St. Vincent's Catholic School. Has green top surmounted by a cross</td>
<td></td>
<td>38 02</td>
<td>141 122 31</td>
<td>787</td>
<td>N.A. Radial Plot</td>
<td>March</td>
<td>5533</td>
</tr>
</tbody>
</table>

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.
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 R. Dossett

Lieut. Comdr. George E. Morris, Jr.
Chief of Party.

<table>
<thead>
<tr>
<th>CHARTING NAME</th>
<th>DESCRIPTION</th>
<th>SIGNAL NAME</th>
<th>LATITUDE D.M. METERS</th>
<th>LONGITUDE D.M. METERS</th>
<th>DATUM</th>
<th>METHOD OF LOCATION AND SURVEY NO.</th>
<th>DATE OF LOCATION</th>
<th>RANGE CHART</th>
<th>NOTICE CHART</th>
<th>OFFICIAL CHART</th>
<th>CHARTS AFFECTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bn 14</td>
<td>Beacon in channel leading to Hamilton Field</td>
<td></td>
<td>38 02</td>
<td>1601</td>
<td>D. M.</td>
<td>Radial Plot</td>
<td>March</td>
<td></td>
<td></td>
<td></td>
<td>5533</td>
</tr>
<tr>
<td>Bn 16</td>
<td></td>
<td></td>
<td>38 02</td>
<td>1622</td>
<td>D. M.</td>
<td>1927</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bn 18</td>
<td></td>
<td></td>
<td>38 02</td>
<td>1643</td>
<td>D. M.</td>
<td>1927</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bn 20</td>
<td></td>
<td></td>
<td>38 02</td>
<td>1666</td>
<td>D. M.</td>
<td>1927</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.
<table>
<thead>
<tr>
<th>Name on Survey</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>K</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gallinas Creek</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Novato Creek</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Hamilton Field</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>San Pablo Bay</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Gallinas</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Saint Vincent School and Saint Vincent Station</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Miller</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>Dixie School</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>Miller Creek</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>Pacheco Hill</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Ignacio and Ignacio Station</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>11</td>
</tr>
<tr>
<td>De Witt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>U.S. Highway 101</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>13</td>
</tr>
<tr>
<td>Northwestern Pacific R.R.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>14</td>
</tr>
<tr>
<td>Arroyo San Jose</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>N.W.P. Sonoma Valley R.R.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>State Highway 37</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>17</td>
</tr>
<tr>
<td>California</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>18</td>
</tr>
<tr>
<td>Martin County</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>19</td>
</tr>
</tbody>
</table>

September 15, 1948

Division of Photogrammetry

Review Report of

Planimetric Map: Manuscript T-5932

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

28. Detailing:

Necessary additions and corrections were applied to the compilation from the source material available. Several field inspection photographs were not available to the reviewer.

44. Comparison with Existing Topographic Surveys:

<table>
<thead>
<tr>
<th>Survey</th>
<th>Scale</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-472</td>
<td>1:10,000</td>
<td>1854</td>
</tr>
<tr>
<td>T-1827</td>
<td>1:10,000</td>
<td>1887</td>
</tr>
<tr>
<td>T-2447</td>
<td>1:10,000</td>
<td>1897-8</td>
</tr>
<tr>
<td>T-4014</td>
<td>1:10,000</td>
<td>1921</td>
</tr>
</tbody>
</table>

These surveys are superseded by T-5932 in all common areas, except for contours for charting purposes.

45. Comparisons with Nautical Charts:

<table>
<thead>
<tr>
<th>Chart</th>
<th>Scale</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>5533</td>
<td>1:40,000</td>
<td>1940 (48-3/8)</td>
</tr>
</tbody>
</table>

The chart and map manuscript are in good agreement, with the exception of the airport. Hamilton Field had not been constructed when chart 5533 was published in 1940.

51. Application to Nautical Charts:

This map manuscript was partially applied to chart 5533 (2-7-47) prior to review.

52. Classification

There are no classified areas within the limits of this map. K. F. 20-7/26/49
Reviewed by:

J. J. Streefker
15 September 1948

Approved by:

S. V. Griffiths
Chief, Review Section

W.M. Bedinger
Chief, Nautical Chart Branch
Division of Charts

K.T. Adams
Chief, Div. of Photogrammetry

W.M. Scull
Chief, Div. of Coastal Survey
<table>
<thead>
<tr>
<th>DATE</th>
<th>CHART</th>
<th>CARTOGRAPHER</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2/7/47</td>
<td>5533</td>
<td>ME Lamm</td>
<td>Before After Verification and Review Partially</td>
</tr>
<tr>
<td>1953</td>
<td>5533</td>
<td>Burrell</td>
<td>Before After Verification and Review</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.