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

State: CALIFORNIA

DESCRIPTIVE REPORT

Locality: Monterey Bay;
Vicinity of Pajaro River;

1933

Chief of Party: G. C. Jones
LOCALITY

This sheet covers the area from 1-3/4 miles south to 6 miles north of Pajaro River. It joins with sheet "E" on the southern end and on the northern end with topographic sheet "J", surveyed by party from U.S.C. & G.S.S. GUIDE under original instructions of 1932.

AUTHORITY

Survey was made under the Director's instructions dated April 4, 1932, and Supplemental instructions March 27, 1933. (Project HT-130).

GENERAL DESCRIPTION

At the southern end of this sheet the shore line is part of a long smooth curve, being broken only by the mouth of Pajaro River, while north of this river, the shore line is practically a straight line. For the full length of the sheet a fine-sand beach prevails, with no offlying rocks or reefs.

From triangulation station ELKHORN to topographic station SAN sand dunes 25-30 feet in height parallel the shore; behind these dunes lie McClusky Slough and a general swampy and marshy region. From SAN to triangulation station PAJARO MOUTH 3 a sand beach is broken only by the mouth of Pajaro River. From PAJARO MOUTH 3 to latitude 36°-53' sand dunes, 25-30 feet in height, tapering to a sand beach at their northern end, again parallel the shore.
From PAJARO MOUTH 3 to topographic station RIT the height of these dunes shuts from view all detail in the low land lying back of them and comprising the Pajaro Valley. Just south of topographic station CEN rise sharply-breaking hills gradually becoming steeper to the north until near topographic station WAT they become a steep bluff. Just south of topographic station YEL these hills, which are covered with low, black brush, are broken by a strip of red sand, 100 meters in width. North of WAT the bluff becomes lower, being of an even nature at heights of 40-60 feet as far as topographic station JAP. North of JAP to triangulation station DUNE the bluff gradually increases in height, being at its maximum at DUNE, 173 feet. This bluff is broken at frequent intervals by washes that run as far as 225 meters inland, as shown by the sheet.

Low rolling hills prevail in the region inland of that covered by this sheet; these hills are for the most part cultivated with beans and grain. In the far distance thickly-wooded mountains form a dark background for the full length of the sheet.

**SHORE LINE CHANGES**

Careful comparison between the 1910 and present high water lines shows large discrepancies in some places. Between topographic stations PIT and KAB, the present high water line lies at a maximum of 45 meters inshore from that of 1910, although both north and south of this region the shore lines are identical.
Since the plane table traverse for this section had a negligible closing error, the present high water line is shown correctly on this sheet. Comparison of the shore lines in relation to the pond lying south of topographic station PIT indicates that the shore line has receded for about 1/2 the amount of the discrepancy, the remainder being due to error in the 1910 sheet or to different interpretation in the field of the M.H.W. line. The prevailing north westerlies are the only solution to the receding of the shore line here.

The mouth of the Pajaro River is at present 300 meters north of its 1910 location. This is not surprising as, according to local information, this mouth shifts as much as 1/4 mile from year to year.

At topographic station HUB the present high water line lies 30 meters inshore of the 1910 line and the same belief as above is applicable here. For this region we also have the testimony of local inhabitants who verify the moving inward of the dunes, as evidenced by the covering of roads, etc., lying just inshore of the sand dunes.

From topographic station HIT to triangulation station PARK, the two shore lines show little discrepancy.

North of PARK to triangulation station DUNE the discrepancy is quite variable in amount (0-30 meters) but in no instance does the present shore line lie inside that of 1910. After careful analysis the belief
has been reached that the line indicated on the 1910 sheet as the high water line is in reality the bottom of bluff line. If such be the case, the discrepancy between the two shore lines is not due to any changing of the shore line, but to different interpretation of that line in the field. The following reasons are given for the above theory: first, 4 meters was the maximum closing error in the present plane table traverses; second, the bottom of bluff line on the present sheet checks with the high water line on the 1910 sheet; third, regions that agree on the position of the high water line are those regions at which the present survey shows the bottom of bluff line to be also the high water line; fourth, the nature of these bluffs is such that they would not erode away and move the high water line seaward.

LANDMARKS

Topographic station VAT is a watertank 23 feet in height that stands on a hill sufficiently high to be readily seen from sea and therefore should be charted.

Topographic station HEL also is a watertank 25 feet in height, and, although lying over 600 meters from the shore, it is quite prominently situated on the brow of a hill lying back of the flat region of the mouth of Pajaro River.
The standpipe located by triangulation and marked n.d., called SEWER OUTLET NORTH OF PAJARO RIVER, 1932, should be charted, as it is located on the beach and is of a permanent nature. It is a 10 inch black steel pipe 12 feet in height and serves as an airvent for the city of Watsonville outfall sewer.

Topographic station TAN is a watertank 22 feet in height of sufficient prominence that it should be charted.

Topographic station RED is a red brick chimney 15 feet in height that extends 3 feet above the gable of the brown house with red and green roof in which it is located. As shown by the sheet, other houses also lie at the top of the bluff in this region, but it is thought that the above house is the only one of sufficient prominence to warrant charting.

PREVIOUSLY CHARTED LANDMARKS

The tank shown on charts 5402 and 5403 and that was located on the hillside between topographic stations CEN AND DUS should be removed from the charts, as it has been torn down.

The P.V.C.R.R., a narrow gauge railroad shown on the above two charts should also be removed, as this railroad has been discontinued and its tracks and bridges removed.
<table>
<thead>
<tr>
<th>Latitude</th>
<th>D.M.</th>
<th>Longitude</th>
<th>D.P.</th>
<th>Height</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>28° 50'</td>
<td>5050</td>
<td>121° 47'</td>
<td>4751</td>
<td>51</td>
<td>Slough</td>
</tr>
<tr>
<td>28° 50'</td>
<td>5050</td>
<td>121° 47'</td>
<td>4751</td>
<td>51</td>
<td>Large barn</td>
</tr>
<tr>
<td>28° 50'</td>
<td>5050</td>
<td>121° 47'</td>
<td>4751</td>
<td>51</td>
<td>Water tank</td>
</tr>
<tr>
<td>28° 50'</td>
<td>5050</td>
<td>121° 47'</td>
<td>4751</td>
<td>51</td>
<td>Windmill</td>
</tr>
<tr>
<td>28° 50'</td>
<td>5050</td>
<td>121° 47'</td>
<td>4751</td>
<td>51</td>
<td>Small house</td>
</tr>
<tr>
<td>28° 50'</td>
<td>5050</td>
<td>121° 47'</td>
<td>4751</td>
<td>51</td>
<td>Sewer stand pipe near slough</td>
</tr>
<tr>
<td>28° 50'</td>
<td>5050</td>
<td>121° 47'</td>
<td>4751</td>
<td>51</td>
<td>Barn</td>
</tr>
<tr>
<td>28° 50'</td>
<td>5050</td>
<td>121° 47'</td>
<td>4751</td>
<td>51</td>
<td>Sewer stand pipe third from</td>
</tr>
<tr>
<td>28° 50'</td>
<td>5050</td>
<td>121° 47'</td>
<td>4751</td>
<td>51</td>
<td>Large barn</td>
</tr>
<tr>
<td>28° 50'</td>
<td>5050</td>
<td>121° 47'</td>
<td>4751</td>
<td>51</td>
<td>Airport hanger</td>
</tr>
<tr>
<td>28° 50'</td>
<td>5050</td>
<td>121° 47'</td>
<td>4751</td>
<td>51</td>
<td>Windmill</td>
</tr>
<tr>
<td>28° 50'</td>
<td>5050</td>
<td>121° 47'</td>
<td>4751</td>
<td>51</td>
<td>Small shack Palm Beach</td>
</tr>
<tr>
<td>28° 50'</td>
<td>5050</td>
<td>121° 47'</td>
<td>4751</td>
<td>51</td>
<td>Large barn</td>
</tr>
<tr>
<td>28° 50'</td>
<td>5050</td>
<td>121° 47'</td>
<td>4751</td>
<td>51</td>
<td>Large barn</td>
</tr>
<tr>
<td>28° 50'</td>
<td>5050</td>
<td>121° 47'</td>
<td>4751</td>
<td>51</td>
<td>Barn White house</td>
</tr>
<tr>
<td>28° 50'</td>
<td>5050</td>
<td>121° 47'</td>
<td>4751</td>
<td>51</td>
<td>Water tank</td>
</tr>
</tbody>
</table>

### Plane-Table Positions

<table>
<thead>
<tr>
<th>Object and description</th>
<th>Latitude</th>
<th>D. M.</th>
<th>Longitude D. P.</th>
<th>Height</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brown house</td>
<td>36° 53'</td>
<td>1,112</td>
<td>121° 50'</td>
<td>120</td>
<td>Feet</td>
</tr>
<tr>
<td>Brown house</td>
<td>36° 53</td>
<td>1,174</td>
<td>121° 50</td>
<td>150</td>
<td>16 Top.</td>
</tr>
<tr>
<td>Watertank, galvanized</td>
<td>36° 53</td>
<td>1,231</td>
<td>121° 50</td>
<td>129</td>
<td>8 Do.</td>
</tr>
<tr>
<td>White house</td>
<td>36° 53</td>
<td>1,241</td>
<td>121° 50</td>
<td>150</td>
<td>13 S. E. Corner</td>
</tr>
<tr>
<td>Brown house</td>
<td>36° 53</td>
<td>1,309</td>
<td>121° 50</td>
<td>237</td>
<td>15 Chimney</td>
</tr>
<tr>
<td>Windmill</td>
<td>36° 53</td>
<td>1,440</td>
<td>121° 50</td>
<td>200</td>
<td>22 Top.</td>
</tr>
<tr>
<td>Watertank</td>
<td>36° 54</td>
<td>300</td>
<td>121° 50</td>
<td>597</td>
<td>20 Do.</td>
</tr>
<tr>
<td>Windmill</td>
<td>36° 54</td>
<td>362</td>
<td>121° 50</td>
<td>596</td>
<td>15 Do.</td>
</tr>
<tr>
<td>Stand pipe</td>
<td>36° 54</td>
<td>885</td>
<td>121° 50</td>
<td>1,005</td>
<td>8 Do.</td>
</tr>
<tr>
<td>Windmill</td>
<td>36° 54</td>
<td>925</td>
<td>121° 49</td>
<td>1,458</td>
<td>20 Do.</td>
</tr>
<tr>
<td>Windmill</td>
<td>36° 54</td>
<td>1,008</td>
<td>121° 50</td>
<td>728</td>
<td>22 Do.</td>
</tr>
<tr>
<td>Windmill</td>
<td>36° 54</td>
<td>1,518</td>
<td>121° 50</td>
<td>1,109</td>
<td>20 Do.</td>
</tr>
<tr>
<td>Most northerly of two barns</td>
<td>36° 54</td>
<td>1,629</td>
<td>121° 50</td>
<td>1,122</td>
<td>25 N. Gable.</td>
</tr>
<tr>
<td>Oil Rock</td>
<td>36° 54</td>
<td>1,794</td>
<td>121° 51</td>
<td>94</td>
<td>9 Top of outcropping</td>
</tr>
</tbody>
</table>

CONTROL

A plane table was used throughout. Triangulation stations used in the 1932 network served as a basis of control.

CLOSING ERRORS

All traverses had closing errors well within the allowable of 4 meters per mile of traverse. The maximum closing error amounted to only 4 meters, with the general run being about 2 meters. In all instances the traverses and related topography were adjusted according to the method advised in the Manual.

REVISION DISCREPANCIES

All artificial objects showing discrepancies between this sheet, Reg. #473a, and Reg. #442a, are shown correctly on this sheet, as they are located from closed traverses with very good control, or have been checked by several cuts. All the artificial features, such as houses, wharves, fences, tanks, etc., now in existence within the limits of this resurvey, are shown on this sheet and therefore all such features shown on the above sheets and not on this sheet, should be eliminated.

Previous mention has been made of the removal of the watertank between topographic stations CEN and DUS and of the discontinuing of the Pajaro Valley Consolidated R. R.
Port Rogers, shown on Reg. #442a is no longer existant; the wharf has been torn down and only a few pile stumps remain.

The dance hall located by triangulation and marked n.d., called PAJARO DANCE HALL, NORTH GABLE, 1910, latitude 36° 52' 32.77" longitude 121° 49' 25.18", should be stricken from the list, as it burned down several years ago.

The flagpole located by triangulation and marked n.d., called FLAGPOLE ON HILL BETWEEN BLUFF AND LARK, 1931, latitude 36°53' 40.082", longitude 121°50' 05.049", should be stricken from the list, as it has fallen down.

The windmill located by triangulation and marked n.d., listed as WINDMILL NORTH OF PAJARO RIVER, 1932, is the same as the windmill plotted on this sheet and called WINDMILL SOUTH OF PAJARO RIVER, 1932. It was felt that the wrong direction as noted above was misleading and should be changed.

LOCAL NAMES

The group of buildings between topographic stations HUB and RIT called Camp Goodal on Reg. #442a has been called Palm Beach on this sheet. Palm Beach is the official name for this locality; the name by which it
appears on all road signs and road maps, and the name by which it is known locally. The name Camp Goodal can only be recalled by the oldest of residents.

McClusky Slough is the local name and the name appearing on local maps and on U.S.G.S. maps for the two lakes lying inland from topographic station BAK.

Oil Rock is an outcropping of sandstone more resistant to weathering than the rest of the bluff and is named on this sheet only because it may serve as a reference point for future topographic surveys. The outcrop is 9 feet in height and has the name Oil Rock chiseled on it.

The airport located on this sheet is marked by the word Watsonville in yellow letters on top of the largest hangar. The located point is for the white windsock, also on the largest hangar. The landing field, which lies southwest of the windsock, is not bounded by lights, and there is no beacon at the field.

**AUXILIARY MAPS**

Additional area to be added to this sheet has been indicated on a bromide copy of Reg. #442a, and forwarded with this sheet. The region indicated has been checked in the field as to accuracy of representation and ties in with this sheet.
DECLINATOIRE

There was no nearby station at which the declination was known; therefore the declinatoire error has not been determined. Comparison with the declination as determined with the compass-declinometer at the common station, BLUFF, will give the correction to be applied to the declinatoire.

STATISTICS

Statute miles of shoreline -- -- - - - - 7.7
Area, square statute miles -- -- - - - - 6.7

Respectfully submitted,

Wm. J. Bardin,
Engineer Hand.

Approved and forwarded:

G. C. Jones,
H. & G. Engr., C. & G. S.
The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field Letter ________________

REGISTER NO 4787

State: Central California

General locality: Monterey Bay

Locality: Vicinity Pajaro River

Scale: 1:10,000  Date of survey: April-May, 1933

Vessel: Shore party; project HT-130

Chief of Party: G. C. Jones

Surveyed by: W. J. Bardin

Inked by: W. J. Bardin

Heights in feet above M. H. W. to ground ________________

Approximate contour ________________ 50 feet

Instructions dated: April 4, 1932

Supplemental March 27, 1933

Remarks: ________________

Additional information is to be found on bromide copy of Reg. #442a.
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 Letter: A

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Approximate contour 50 feet

Instructions dated April 4, 1932

Supplemental March 27, 1933

Remarks: Additional information is to be found on bromide copy of Reg. #442a