DEPARTMENT OF COMMERCE
U.S. COAST AND GEOFETIC SURVEY
R. S. PATTON, DIRECTOR

DESCRIPTIVE REPORT

Topographic Sheet No. D 4861

State Texas

LOCALITY

Galveston Bay

(Smith P.)


1933

CHIEF OF PARTY

Earl O. Heaton
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. D

REGISTER NO. 4861

State: Texas

General locality: Galveston Bay

Locality: Smith Pt.

Scale: 1:20,000 Date of survey: Mar. 16 to April 10, 1935

Project: MT-118

Chief of party: Earl O. Heaton

Surveyed by: J. W. Somers

Inked by: J. W. Somers

Heights in feet above m.h.w. to ground expressed in feet

Contour, Approximate contour, Form line interval, 1932

Instructions dated: Nov. 5

Remarks:

...
DESRIPTIVE REPORT
TO ACCOMPANY TOPOGRAPHIC SHEET NO. D
SMITH POINT
Scale 1 : 20,000
Project H.T.-118, Galveston Bay
Surveyed March 15 to April 10, 1933
E. C. Heaton, H. & G. Engrs., Chief of Party
J. W. Somers Topographer
Instructions Dated Nov. 5, 1932

General Description of the Coast:
There is marsh and low prairie from Double Bayou to Smith Pt. with the exception of the area between topographic signals An and Rock. A sand ridge covered with grass and a few bushes extends from signal An to Simp. This ridge drops off gradually to the level of the marsh to the eastward. East and south of signal Simp is a large grove of live oak with a scattering of pines and cedar trees. East of this grove is a large tract of prairie land. South and southwest of this grove the land is under cultivation. A sand ridge rises abruptly from the shore line from a point about 200 meters south of signal Simp to signal Bo. A narrow strip of trees and bushes cover this ridge. A strip of marsh about 70 meters wide and 1½ miles long extends eastward along the East Bay shore from Smith Pt. The north side of this marsh, east of signal Rube, is paralleled by a sand ridge about 4 feet high and covered with grass, mesquite bushes, and salt cedars, behind which is open prairie land. From topographic signal Grove to Mike this sand ridge forms a bluff bank varying in height from 5 to 15 ft. An extensive marsh begins east of signal Mike and extends to and beyond Moody's Ranch. Double Bayou Beacon 2 on the south side of entrance of Double Bayou Channel is a red, square, pyramidal slatted structure on piles with a red light 20 feet above mean high water. Double Bayou Beacon #4 is on the south side of a bend in the Double Bayou Channel and is similar to Beacon 2. Moody's ranch house, located 1 mile east of Stevenson Pt., is the only object on the north shore of East Bay that may be of aid to navigation. It is a two story white structure surrounded by a salt cedar hedge. A wharf extends 290 meters into the bay at this point.

Landmarks:
Moody's Ranch House & the westernmost part of Smith Pt.

Character of Control Used:
The control for this sheet consists of two second order triangulation stations; Moody, 1933, and Smith Pt. 1900-1933; six third order triangulation stations; and plane-table stadia traverse. Two dates are shown on this sheet for station Smith Pt, which was recovered. The date of original establishment is shown (1900) and also the last date of occupation (1933). This was done because the datum was changed in 1927 and the last date (1933) is the one which represents the plotted position.
Closing Errors of Traverse and Methods of Adjustment:

<table>
<thead>
<tr>
<th>Station</th>
<th>Closure (meters)</th>
<th>length of line (miles)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lone Oak to Double Bayou Bn. #4</td>
<td>6</td>
<td>2.4</td>
</tr>
<tr>
<td>Lone Oak to station Whitehead</td>
<td>15</td>
<td>3.1</td>
</tr>
<tr>
<td>Whitehead to station Smith Pt.</td>
<td>10</td>
<td>4.0</td>
</tr>
<tr>
<td>Smith Pt. to station Bed</td>
<td>10</td>
<td>2.9</td>
</tr>
<tr>
<td>Smith Pt. to station Wallis</td>
<td>5</td>
<td>3.0</td>
</tr>
<tr>
<td>Wallis to station Moody</td>
<td>18</td>
<td>3.4</td>
</tr>
</tbody>
</table>

All traverse lines were adjusted as prescribed in parts 1 and 3 of Special Publication #144.

Changes in Off-lying Features Previously Shown:

Considerable change has taken place in Red Fish Reef and the Vinqt’uine Islands. There are no longer any islands between station Red and Red Fish Light. These islands having been washed away by storms, normal wave action and to some extent by shell dredges. Only six of the Vinqt’uine Islands remain and these differ in shape and size from those shown on chart #1282. These changes in the Vinqt’uine Islands are due to wave action both normal and during storms.

List of New Names: (Well Established Local Names) Names examined Sept 29, 1934

1. Lone Oak Bayou.

List of Plane-table Positions:

North – peak of west gable of Plummer’s boathouse.
Rail – tripod of R. R. rails SW of Vinqt’uine Islands.
Pink – reef marker on Red Fish Reef 1/2 mile W of Smith Pt.
Jean – reef marker on Red Fish Reef 0.9 mile SW of Smith Pt.
Stick – reef marker on Red Fish Reef 1.8 miles SW of Smith Pt.
Tit – reef marker on Red Fish Reef 2.3 miles SW of Smith Pt.
Gate – south gate post, near SW corner of White’s ranch on a trail from Smith Pt. to Moody’s ranch.
Moody’s Ranch House – SW corner.

Changes of the Coast Line:

Definite information as to the amount of erosion of these shores is not available, however, it is quite evident that considerable recession has and is taking place eastward from Smith Pt. This is confirmed by local information and searches made for old station marks. Recession is due to wave action both normal and during storms.

Upon comparing Sheet D and chart #1282 the following conditions are found: Double Bayou Bn. #2, triangulation position, as plotted on sheet D is 60 meters south of position as plotted on Chart #1282. The longitude of position on chart agrees with that on the sheet.

Double Bayou Bn. #4, triangulation position as plotted on sheet D is 60 meters north of position as plotted on chart #1282 – the longitude agrees. The shore at the mouth of Lone Oak Bayou is 150 meters East of position as shown on the chart and 105 meters South. The difference in longitude is due to erosion and the difference in latitude is probably due to poor control on the chart. The shoreline in general through this section shows very little erosion difference from the chart. The difference in longitude at a small bayou 1.8 miles SW of Lone Oak Bayou is practically negligible, but the position as shown on the chart is 100 meters south of the position on sheet D. At Smith
Pt. the shore line as shown on the chart is about 30 meters south of and 60 meters west of the position as shown on sheet D. At a point 1 mile south of Smith Pt. the shore as shown on the chart is 170 meters W of the position on sheet D. At longitude 94° 45' West, the shore as shown on the chart is 110 meters south of the position shown on sheet D. At Stevenson Pt. the shore line as shown on the chart is 65 meters south of the position shown on sheet D. At a point where the shore line and the pier at Moody's ranch cross the following differences were noted: the positions of this point as shown on the chart is 100 meters west of and 75 meters south of the position as shown on sheet D. The differences in latitude of points north of Smith Pt. are apparently due to poor control used for making up the chart. The differences of the points east of Smith Pt. are due partly to poor control originally, but principally due to erosion caused by wave action both normal and during storms.

Character of the Marshes:

The marshes from Double Bayou to Smith Pt. are not flooded by normal high tides except a section 400 meters north, 500 meters south and 300 meters east of signal Rod. A section of marsh 700 meters west 800 meters East and 275 meters north of Stevenson Pt. is flooded by normal tides.

Approved:

Earl O. Heaton,
Chief of Party, C.& G.S.

Respectfully submitted,

W. W. Somers,
Observer.
LANDMARKS FOR CHARTS

Corpus Christi, Texas

June 7, 1933

Director, U.S. Coast and Geodetic Survey:

The following determined objects are prominent, can be readily distinguished from seaward from the description given below, and should be charted:

Earl O. Houston

Chief of Party.

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>POSITION</th>
<th>METHOD OF DETERMINATION</th>
<th>CHARTS AFFECTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>SW Corner of Moody's Ranch</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>House - 2 story white</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>29° 32' 1680'</td>
<td></td>
<td>1282</td>
</tr>
<tr>
<td></td>
<td>94° 40' 96'</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A list of objects carefully selected because of their value as landmarks as determined from seaward, together with individual descriptions, must be furnished in a special report on this form, and a copy of such report must be attached by the Chief of Party to his descriptive report.

The selection, determination, and description of these points are an important factor in the value of the chart. Landmarks selected at appropriate intervals can be clearly charted. However, when none is outstanding, a group of two or three objects may by their interrelationship provide positive indentification. A group so selected should be indicated.

The description of each object should be short, but such as will clearly identify it; for example, a standpipe, elevated tank, gas tank, church spire, tall stack, red chimney, radio mast, etc. Assign numerals to landmarks to indicate: (1) Offshore, (2) inshore, (3) harbor, 1, 2, 3 would be a mark useful on all charts. Generally, flagstaffs and like objects are not sufficiently permanent to chart.
<table>
<thead>
<tr>
<th>Status</th>
<th>Name on Survey</th>
<th>Name on Chart</th>
<th>New Names in local use</th>
<th>Names assigned by Field</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>✔</td>
<td>Galveston Bay</td>
<td>Same</td>
<td>-</td>
<td>-</td>
<td>29° 31' 94° 50'</td>
</tr>
<tr>
<td>✔</td>
<td>Red Fish Bar</td>
<td>Same</td>
<td>-</td>
<td>-</td>
<td>29° 32' 94° 48.5'</td>
</tr>
<tr>
<td>✔</td>
<td>Smith Point</td>
<td>Same</td>
<td>-</td>
<td>-</td>
<td>29° 32.9 94° 47.3'</td>
</tr>
<tr>
<td>✔</td>
<td>East Bay</td>
<td>Same</td>
<td>-</td>
<td>-</td>
<td>29° 30' 94° 45'</td>
</tr>
<tr>
<td>✔</td>
<td>Stevenson Pt.</td>
<td>Same</td>
<td>-</td>
<td>-</td>
<td>29° 32.3 94° 41.1'</td>
</tr>
<tr>
<td>✔</td>
<td>Lake Surprise</td>
<td>Same</td>
<td>-</td>
<td>-</td>
<td>29° 33.5 94° 41'</td>
</tr>
<tr>
<td>✔</td>
<td>Double Bayou</td>
<td>Same</td>
<td>-</td>
<td>-</td>
<td>29° 39' 94° 42'</td>
</tr>
<tr>
<td>✔</td>
<td>Vingt'Une Is.</td>
<td>Same</td>
<td>-</td>
<td>-</td>
<td>29° 43.5 94° 45'</td>
</tr>
</tbody>
</table>

From Vingt et un (ván tā ūn) French, twenty and one. Card game...
Section of Field Records

REVIEW OF TOPOGRAPHIC SURVEY NO. 4861 (1933)

Smith Point, Galveston Bay, Texas
Surveyed March - April, 1933
Instructions dated November 5, 1932

Plane Table Survey

Chief of Party - E. O. Heaton.
Surveyed by - J. W. Somers.


The records conform to the requirements of the Topographic Manual.

2. Compliance with Instructions for the Project.

The survey complies with the instructions for the project.

3. Junction with Contemporary Surveys.

Satisfactory junctions were made with T-4822 (1933) and with T-4862 (1933).


a. T-298 (1850).

This survey is in good agreement with the present survey except that considerable change has occurred in Red Fish Bar. The changes are due to wave action and dredging operations (see D. R. page 2).

b. T-329 (1851) and T-330 (1851).

A comparison of these surveys with the present survey shows the changes in shoreline to be as described in the Descriptive Report. The greatest changes have occurred to the eastward of Smith Point and at Lone Oak Bayou. The field party learned from observation and from local information that considerable erosion is taking place at these sections.

5. Field Drafting.

The field inking of the survey is satisfactory.

6. Additional Field Work Recommended.

No additional field work is required.
7. Superseding Old Surveys.

Insofar as the topography actually included on the present survey is concerned, it supersedes the following surveys for charting purposes:

T-298 (1850) in part.
T-329 (1851) " "
T-330 (1851) " "


Examined and approved:

C. K. Green, Acting Chief, Division of Charts.
Chief, Section of Field Records.

K. T. Adams
Chief, Division of Field Work.

G. White
Chief, Division of H. & T.