

# 3711

Diag'd. on diag. ch. No. 3711

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

## DESCRIPTIVE REPORT

Type of Survey Topographic

Field No. \_\_\_\_\_ Office No. T-3711

### LOCALITY

State Alabama

General locality Mississippi Sound

Locality Eastern end of Miss Sound

1914 1917

CHIEF OF PARTY

F.B.T. Siems

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DATE \_\_\_\_\_

# 3711

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET

The finished Topographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

U. S. Coast and Geodetic Survey.

Register No. **3711**

State . . *Alabama* . . . . .

General locality . . *Mississippi Sound* . . . . .

Locality . . *Eastern end of Miss. Sound* . . . . .

Chief of party . . *F. B. T. Siems* . . . . .

Surveyed by . . *E. H. Bernstein* . . . . .

Date of survey . *Oct. - Dec. 1917* . . . . .

Scale . . . . . *1:40,000* . . . . .

Heights in feet above . . . . .

Contour interval . . . . . feet.

Inked by *E. H. Bernstein* Lettered by *E. H. B.* . . . . .

Records accompanying sheet (check those forwarded): Photographs,

Descriptive report, ☒ Horizontal angle books, Field computations,

Data from other sources affecting sheet . . . . .

Remarks:

DATE OF INSTRUCTIONS.

October 30, 1916.

GENERAL DESCRIPTION.

For the better utilization of the personnel and time available, a second projection (1:40,000) was made for topographic sheet "E", and the topography of the eastern end of Mississippi Sound done thereon by a party from the ship.

All the land, shown on the sheet, on the north side of Mississippi Sound is a continuous marsh, fringed only on Mississippi Sound proper by a narrow strip of sand. This marsh has a dense and very regular growth of pines as a background to the north. The southern limit of these woods is shown on the east on topographic sheet "G" (Mobile Bay) and on the west on sheet "E". These limits define a practically straight line running east and west, broken only by the course of Fowl River.

The marsh is broken only at two places by small clumps of trees. One of these is about half a mile west of the west shore of Heron Bay and south of Heron Bayou as shown on the sheet; the other is on Cedar Point. Triangulation station "Pear", which is a prickly pear tree in this group, is somewhat of a landmark, it being the tallest tree of a small clump sloping down towards the south.

The railway line shown running from Cedar Point northward is a branch of the Mobile & Ohio Railroad, built for excursion travel, designed to develop certain property the railroad company holds on Dauphin Island. A line of small power boats is to be used for transport across to the island.

To the south, Grant's Pass house, the four red beacons, and three red day marks marking the channel in Pass aux Herons were made triangulation stations, furnish the most prominent artificial land marks.

On the south side of Mississippi Sound the land is as shown on the sheet. The narrow strip of Dauphin Island to the west of longitude  $88^{\circ} - 10'$  is absolutely devoid of all vegetation except marsh grass, about four feet high, in the marshy areas. The glare of the sun on the sand and the breakers along the south shore furnish the better aspect of the island except at very close distance. The part of Dauphin Island to the east of the above strip is rendered very conspicuous by the dense pine woods on it. The group of houses near Fort Gaines is very conspicuous because of the absence of trees in the immediate neighborhood, and can be seen from all directions, except where shut off by the woodson Dauphin and Little Dauphin Islands. The group of houses to the south of the entrance to Dauphin Bay can be seen from directly north only when outside of Dauphin Bay. The waterway running inland and south of the mouth of Dauphin Bay carried four feet. Some dredging is to be done to allow the carrying of four feet to Cedar Point for the transportation between these points as later mentioned.

To the northwest of Little Dauphin Island and between it and Pass aux Herons Channel there are breakers at nearly all times.

The change in the shore line on the north side has been slight. In nearly all places, however, the shore has been eroded from ten to fifty feet since the last survey, as is evidenced by the fact that the center marks at such triangulation stations as Drury, Cedar, Heron, Bar and Murder were found washed loose and lying ashore.

Page Two.

A most radical change has taken place on Dauphin Island, in that part of the island has been separated and is "traveling" westward.

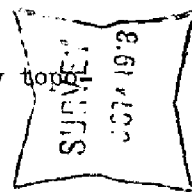
The neck of land north of Cedar Point has been washed through, and the cut which has a depth of over eight feet affords an entrance into Heron Bay for small boats which are not more than three feet above the water to allow passage beneath the railway trestle, shown on the sheet.

SURVEY METHODS. All of the work was done by plane table. No long traverses were run and in no case was the closing error on the traverses great enough to warrant adjustment. There was a sufficient number of triangulation points with signals to give almost continuous control of all work. In places where no triangulation point was available as the starting point the collocation of triangulation points was such as to give a good determination by "three point fixes".

LIST OF PLANE TABLE POSITIONS TO ACCOMPANY TOPO. SHEET 21.

Object	Latitude	D. M.	Longitude	D.P.	Description.
Wreck	30° - 13'		88° - 13'		Three masted bark aground.
Do.	30° - 13'	566 1018	86° - 16'	1779 68	Two white flags on pole. Positions marked by 2 x 2" driven in sand.
Pc.	30° - 14'	917 687	88° - 15'	431 1416	Pole with white flag. Marked by stake.
Flag	30° - 14'	52 1552	88° - 14'	902 945	Black & white flag on pole; marked by stake.
Top	30° - 14'	1226 378	82° - 12'	1262 582	Braced pole with black & white banners; marked by stake.
Dur	30° - 15'	462 1136	88° - 05'	1158 683	Braced pole with white & black flags near old Drury; Unmarked.
Pine	30° - 15'	1083 541	88° - 07'	91 1756	Tall pine tree, clump above stem, absolutely clear of other trees. First tall pine to eastward of Dau. W. B.
Pavillion	30° - 15'	1237 337	88° - 06'	753 1094	Small pavillion, peaked roof, painted green. Only visible from Dauphin Bay.
Tree.	30° - 15'	751 953	88° - 03'	739 1103	Isolated dead pine tree. Two white banners attached.
Lane	30° - 19'	1035 566	88° - 09'	1574 273	Lone pine with tall straight stem and small clump at top; totally isolated.
Pie	30° - 19'	953 650	88° - 08'	1249 598	A pile (2"), evidently part of old shed. Two flags attached.

Supplemental Descriptive Report to accompany topographic sheet 3711.



Date of Instructions:

June 19, 1917, and October 30, 1917, Supplemental.

J. & G. ENGINEER IN CHARGE IS

Subsequently to the writing of the report on sheet 3711, <sup>the</sup> shore of Dauphin Island on the south from Ft. Gaines westward to latitude  $88^{\circ} 08' 30''$ , was run by plane table, in June, 1918. The closing error of the traverse was within the allowable limits; no adjustment was necessary.

The island is generally wooded as shown. The symbols for palmetto found on this sheet are to be understood to stand for a bushy growth which attains a height of about five feet at the most. It was an open question whether these symbols should be used, ~~and~~ they can well be left out in that they furnish no necessary data for the chart.

Topographic station "Tan" found in the above stretch is a wooden water tank about fifteen ft. high, to the west of a small house. These two objects are the only two visible artificial ones on the island west of Ft. Gaines.

The stretch of road shown on Dauphin Island, was run out by plane table without check. It was impracticable to re-run the road, shown running westward from Ft. Gaines on the old chart. The old course of this road seems perfectly suitable for any new charts.

All of the roads on the island are unimproved and in poor condition.

It was learned that Ft. Gaines is to be abandoned as an army post.

What now exists of Pelican and Sand Islands, is shown on this sheet. The shorelines here were determined by sextant angles.

As indicative of the great changes to which the western end of Dauphin Island is subjected, it seems worth while to state that in November, 1917, triangulation station Dauphin Island, East Base, 1847, was in about four feet of water; in June, 1918, the same place was forty meters inside of the high water line.

Respectfully submitted,

*Ch. Bernstein*

Aid, C. & G. Survey.