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U. S. COAST AND GEODETIC SURVEY.

F. M. Thorn, Superintendent.

State: Louisiana.

DESCRIPTIVE REPORT.

Topographic Sheets No. 1762, 1763, 1764, 1765 & 1766.

LOCALITY:

Coast of Louisiana.

1887.

CHIEF OF PARTY:

F. Walley Perkins.

Assist. in Chge F. M. T.

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U.S. Coast and Geodetic Survey
F. M. Thorn, Sup'dt

Descriptive Reports

to accompany

Planetable Sheets

Nos 1762, 1763, 1764, 1765 and 1766

from
Raccoon Pt., Isle Dernière
to
S. W. Base, Grande Isle

Louisiana

1887

Asst.
F. Walley Perkins
Chief of Party

Asst.
C. T. Tardella
and W. C. Hodgkins
Topographers

T 1762

Geological formation and general description of Coast.

The geological formation of the coast of Louisiana from the mouths of the Mississippi to Sabine River is a uniform alluvial deposit hundreds of feet in depth and varying in width from about fifteen miles at the western boundary of the state to something over seventy in the region under consideration.

The country for many miles back from the Gulf is a flat marsh, subject to overflow, boldly indented by large Bays, Lakes & Lagoons, and drained by a network of Rivers, Bayous & Creeks which interlacing separate it into innumerable Islands.

The only relief to the monotony of this flat grassy expanse is a slight levee along the Gulf coast formed

formed of broken shell and sand, rarely more than a metre high than the march upon which it rests, and occasional ridges of similar origin, ranging from one to four metres in height, often wooded, lying farther back and partially marking the encroachments of the land upon the sea.

The water along the shore is shoal deepening very gradually and regularly for some miles out, with a soft mud bottom affording good holding ground; and as there is rarely more than one line of breakers it is generally practicable to ride out a gale at anchor off the open coast. While in case of a vessel being stranded elsewhere than at the mouth of an inlet, the bottom is so soft and the breakers so inconsiderable as to involve but slight danger to the vessel and practically none to the life of passengers & crew.

Moreover

Moreover
There being no danger of her going to pieces it would always be practicable to stay by the ships until the weather moderated.

Owing to the slight coherence of the light particles constituting the soil the shores both of Gulf and inland waters are subject to constant changes, and all bodies of water having slight currents, such as Lakes and Coves silt up very rapidly while many bayous navigable for small craft a few years ago are now barely traceable. Whether there is a corresponding deepening of the remaining water-courses is uncertain.

As the main object in view as the result of the vessel's work was the collection of the material for the immediate preparation of sailing charts, the Topography was confined to as nearly a simple shore-line as the economy of the general or final work would permit. Consequently the area covered was extremely small

small in proportion to the coast surveyed.

All important shore line was mapped by means of the plane table but most of the Lakes and small Bayous were determined by resultant angles at short intervals connected by sketches based upon prismatic compass courses and estimated distances. The results of the latter class of work proved entirely satisfactory both in quality and on account of the large area, otherwise inaccessible, covered by an officer and a single man working from a very light flat bottomed boat.

The statistics are as follows

No. of days devoted to plane table work	43½
Miles of shoreline	202.7
" " " of Creeks and Bayous	117.1
" " " " Marsh	79.4
" " " " Canals	3.4
" " Roads	3.2
" " Ponds	2.0
Square miles	103.

As this was a combined party engaged in reconnaissance, triangulation, signal building and topography on an unexplored coast only about one half the working days during the time that the party was in the field could be made available for topography, but even charging to that branch of the work one half of the season's expenses the cost per acre is only about 2 3/4 cents.

The weather was better than for the same months during past seasons but as the work extended 55 miles in longitude the same degree of economy was not possible as in a more compact section.

Planetable Sheet

Reg. No. 1762

Western part of Isle Dernière

A long, low, Island running East & West for the most part very narrow. A marsh basis covered along its southern edge with a thin layer of sand. Trees about twenty feet high near its Western extremity. There was formerly a popular pleasure resort on this part of the Island which was destroyed by the hurricane of 1856, with great loss of life. At present there are only a few small houses occupied by an indolent mixed population.

There is a good harbor of refuge for vessels of light draft under Raccoon Point.

Caillou Bay has a pretty uniform depth of from 5 to 6 feet.

Lake Pelto is a large body of water with deep holes and an available depth

depth of 5½ to 6 feet. There is a fishing village of some fifteen or twenty houses on its North Western shore of very recent date, probably not more than one or two years.

Storm tides pass over the Island in different places forming new inlets of varying depth which soon fill up again.

Minor changes of shore line are frequent but the absence of reliable surveys of earlier date, of old inhabitants or intelligent resident observers deprives us of the data necessary to judge of any permanent modifications or their direction.

Planetable Sheet

Reg. No. 1703

Eastern part of Isle Dernière & Caillou Island.

The Eastern portion of Isle Dernière is a low narrow strip of marsh with a thin layer of sand on its southern edge. Vine Island which commences about two miles to the Eastward is about three miles long and of similar formation. There is a good pass at the Western end of Vine Island but with only six or seven feet inside.

The Eastern part of Lake Pelto is rather narrow, cut up by long narrow Islands running nearly North and South and with no well defined channels but a pretty general depth of about five feet.

Terrebonne Bay is a very large sheet of water with very regular bottom varying from 6 to 7 feet. It is said to have many islands in its

Northern

Northern part - but is quite open as far as observed.

Planetable Sheet

Reg No 1764

Caillou Island to East Timbalier Island

Caillou Island is a narrow strip of marsh at the Eastern end of Terrebonne Bay with the usual levee of sand on its southern side. It is said to be washing away very fast. There is a bit of hard land on its South East extremity where a clump of trees about its single house makes a prominent land mark.

West Timbalier Island has a rather broader deposit of sand near its Western extremity from which a wide sand shoal extends for some miles completely cutting off the approach to Caillou Island from the Southward and Eastward. The Island is said to be growing rapidly to the Westward. Back of this broad sand beach there are two hard ridges

covered

covered sparcely by a growth of scrub trees. The inner ridge lying along the bank of a lagoon is inhabited by a few families who live by fishing and on the increase of a few cattle.

The Northern and Eastern portion of the Island is faced by innumerable little marsh Islets.

Between East and West Timballier Islands is the main pass into Timballier bay. Six and a half or seven feet may be carried over the outer bar just inside of which and outside of the points of the Islands there is a four fathom hole, soft bottom, with moderate swinging room.

Seven and a half feet can be carried up to the Lt. Ho. where there is good water but scant swinging room. As far as known only about five feet can be carried over the shoal section just North of the Light House back of which the water deepens.

Planetable Sheet

Reg. No. 1705

East Timballier Island to Westend of Pyriac

East Timballier Island is a long, narrow low bit of marsh largely covered by sand subject to overflow in many places and separated from the mainland to the Eastward by shallow inlets subject to constant change. Directly to the Eastward is the Western mouth of Bayou La Fourche barely passable for small boats. About two miles and a half North East is Pass Fourchon the main entrance to the Bayou with a very narrow bar at present carrying about five feet. The Bayou La Fourche has good water as far as Thibodeau above which shoals have been formed by the breaking of the Levees. It does not naturally receive any water except from the Mississippi River but canals have been cut connecting it

it with Timballi and Bavataria Bays near its mouth, and Lake Washa and Bayou Black further North. Its shores are practically uninhabited for the first twenty miles from its mouth above which for many miles they are thickly settled by market gardners and small farmers succeeded higher up by some of the richest sugar plantations in the state

A mile or two above the head of the passes commences a strip of wooded land following the general course of the Bayou and continuing with few breaks throughout its whole length. In places the trees grow close to the edge of the water but as a rule leave a margin of low open land varying from one to several hundred metres — Formerly the Bayou Delta was much wider but the closing of Pass Morean for military purposes during the war of 1812

1812 proved a permanent obstruction to the flow of the waters in that direction and that section has now an independent drainage system based upon this strangulated remnant.

Planetable Sheet

Reg. No. 1766

Peyriac, Chênière Caminada and Bavataria Bay

The system of wooded ridges lying parallel to and about two or three miles back from the coast known as La Peyriac is a marked feature in passing along this coast. It consists of a series of very narrow bands of hard land separated by very soft marsh and is probably an extension of the Chênière Caminada, a Chênière only in name as the trees have wholly disappeared and a fishing village of some sixteen hundred Arcadians has within the past forty years grown up upon the two ridges of which it consists.

The Pass opposite this place has a bar carrying about 5½ feet of water with a 12 ft. anchorage inside but scant swinging room. It is gradually moving to the Eastward and at the same time cutting off the western end of Grande Isle and

and the front of the Peninsula.

The survey was carried north as far as the mouth of the canal leading into Bayou La Fourche but the Bay extends twelve or fifteen miles further north and there are large bodies of water lying to the northward of the present limits of the work.

There is a weekly mail from Grande Isle during the winter months, a small steam tug being employed in the service. During the summer season there is a semi-weekly mail and a small passenger steamer is put on the route for the accommodation of the guests of the Hotel.

The principal transportation points with which connection will be made are well marked and easily recovered.