1984 1985 2157
2159 2160 2187
2188 2189

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Topographic

Field No. 1984 2159 2188
1985 2160 2189
2157 2187

Office No.

LOCALITY

State Florida

General locality Pensacola

Locality Bay

1895

~~194~~

CHIEF OF PARTY

P. A. Welker

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U. S. Coast and Geodetic Survey.
MAY 21 1896
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U. S. COAST AND GEODETIC SURVEY.

W. W. Duffield, Superintendent.

State: Florida

DESCRIPTIVE REPORT.

Topographic Sheets Nos. 1984-1985-2157-2159-2160-2187-2188 & 2189

LOCALITY:

Pensacola Bay and Tributaries

1895

CHIEF OF PARTY:

P. A. Welker, Assistant

FORM 65.—Field Letter.

Write me at: C. & G. Survey Office, Washington, D.C.

Telegraph me at: .....

My Express Office is: .....

U. S. Coast and Geodetic Survey,

Washington, D.C.

May 15th, 1896.

2–517

General W. W. Duffield

Superintendent U.S.C. & G. Survey

Washington, D.C.

Sir:

In compliance with instructions and Memoranda for Descriptive Report, 1887. I herewith submit the following report for Topographic Sheets Nos. 1984-1985-2157-2159-2160-2187-2188 and 2189, covering a large portion of Pensacola Bay and Tributaries, Florida, which were completed during the season of 1895, by the party under the direction of Assistant P. A. Welker.

The topography covered by sheet No. 1985- Extends from Fort San Carlos De Barrancas to the entrance of Bayou Chico. (For description of "Bayou Grande", see Report for 1889). The shore line consists entirely of a fine white sand beach, while the interior is sandy, there are portions mixed with clay which gives it a yellowish

appearance. The surrounding country is generally low and swampy, totally unfit for agricultural purposes and is covered with heavy timber, spruce, pitch and yellow pine, with scattering live oak, water oak and scrub oak, in the swamps there is a thick growth of scrub oak, underbrush, magnolias & briars - The pines grow from 20 to 100 feet high. Warrington is the most important town in this section, being the second in size in Escambia County. This town was originally built by the employees of the Pensacola Navy Yard - but of late years has been inhabited mostly by negroes and fishermen - It is immediately west of the Navy Yard and in 1890 had a population of about 1300. The Pensacola Terminal Railway passes through this town and continues on to the U.S. Barracks, which are about one mile West of Warrington, There is a company of U.S. troops always stationed at these Barracks, The Naval Hospital and Naval cemetery are near by. Adjoining the U.S. Barracks on the West is old Fort San Carlos De Barrancas, built by the Spanish about 1784 - It completely commands the entrance to

Pensacola Bay. Fort Redoubt built by the Confederates during the Rebellion is about one half mile north of and interior from Fort Barrancas. Both of these forts are well preserved. There are numerous roads, the principal one running from the Pensacola Light House to the City of Pensacola and passing through Warrington - Most of the roads are in poor condition. Traveling is made difficult by the deep sand.

Topographic Sheet No 1984 consists of a portion of Pensacola Bay, Florida, from a point about one mile west of the Bayou Chico to Gaberonne. The City of Pensacola is situated about the middle of this sheet. The contours, shore line and all of the latest improvements on the water front of Pensacola were surveyed with the plane table. There is now a new bridge built across the Bayou Chico, near its mouth and to the eastward of the wagon road bridge, over which the Pensacola Terminal

Railway crosses - There is no draw in this bridge, which is built of piling. From Bayou Texa to the end of the sheet, Gaberonne, the topography was finished during this season. (See Report of P.A.W. for 1890). This Bayou is not navigable on account of the shallow water at its entrance. A sand bar about one half mile long extends into the bayou as far as the highway bridge and about the same distance into Pensacola Bay. At very low tide there would be no water over much of the surface of this bar, so the entrance to the bayou is practically closed. The highest land in this section, is the bluff running from the head of Bayou Texa and along the coast towards Gaberonne, The Atlantic & Pensacola Railroad runs under this bluff, which is about 90 feet high, close to the shore line. The character of the soil is sandy, with a slight mixture of clay of a Yellowish color - The beach is a clean white sand, where the bluff is close to the shore line it is much eroded & broken by deep gullies. The Pensacola Terminal Railway has been built since 1890 - It runs from the

City of Pensacola to the U.S. Barrack at Fort Barrancas. The surrounding country is heavily wooded with pine, and an undergrowth of live oak, water oak and scrub oak. The various roads on this sheet all lead to Pensacola, Most of these are in such bad condition, they are almost impassible on account of the deep sand - The roads outside of the city are generally poorly defined.

Sheet No. 2157 covers a portion of Escambia Bay, Florida, The small village of Bohemia about 7 miles above Pensacola, is shown on the southeastern edge of the sheet, is a station on the Pensacola and Atlantic Railroad, here is located a section House, shingle mill, general merchandise store, post office, telegraph station and a small collection of houses occupied chiefly by railroad hands and employees from the mill. There are no wharf facilities. Boats drawing eight feet of water can approach within about a quarter of a mile

of the beach. Roads lead from Bohemia to Pensacola and to the interior of the county, but are not much traveled and are of little consequence. About ¼ of a mile North of Bohemia is another small collection of houses of little importance, it is the railroad Station called Jniestra. A high bluff follows the beach closely to within about 400 meters of West Escambia, thence it turns abruptly back from the shore and follows around a large swamp. The average hight of the bluff is about 40 feet and when it is close to the shore line it is much broken and cut up by large gullies - Springs of water leak out from these places, some of which disappear in the sand before reaching the shore. At Devil's Point there is a long shoal extending from the point, East to the old beacon. This shoal shifts from North to south with the prevailing wind. The general character of the soil along the bluff shows a mixture of sand & clay of a yellowish color. The beach is a clean white sand, very little of the soil is good for agricultural purposes, on a small portion of the low

land near the shore oranges, peaches, plums and vegetables are produced

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The topography represented on sheet No. 2159 adjoins that on sheet no. 2157. The general character of the country is similar to that already described for the latter sheet. A narrow strip of sand beach follows around the whole length of the large grass swamp represented and there is no difficulty in walking around it except in crossing the bayous. At the south end of the sheet is a resurvey of a portion of the shore line of East Bay.

Sheet No. 2160 covers the topography of a portion of East Bay, Florida. The shore line is a white sand beach, with a sand ridge from 10 to 12 feet high extending from Gurley Δ^{m} to Rogers Δ^{m} The surrounding country is low and swampy and covered with a heavy growth

of timber such a yellow + pitch pine live oak, scrub oak, magnolia + palmettos. The marshes are frequent and are filled with thick under brush. A few fishing huts are scattered along the shore. The soil is of little value and not fit for agricultural purposes.

The topography covered by Sheet No. 2187 embraces the Big Lagoon, and the interior, from Perdido Bay to Bayou Grande, Florida. The Big Lagoon is a beautiful sheet of salt water, just west of the entrance to Pensacola Bay. There are only a few houses scattered along the North shore, occupied entirely by negros. About 1/4 of a mile West of Red Bluff ⊿ station, on the north shore are the "Bubbling Springs", noted for many miles, for the excellence + purity of the water. These springs are on the sand beach just about high water line and the flow is quite extensive, While surveying in this locality the Govt. Engineers were examining these springs, with the view of carrying the

water by pipes, or conduit to the Pensacola Navy Yard. Only a narrow strip of beach separates the Lagoon from the Gulf of Mexico which is exceedingly low with numerous sand dunes in places, but during heavy southwest storms the seas break over the beach into the Lagoon. The entrance to the Big Lagoon is very narrow, shoal and dangerous, especially during a heavy swell. The shoal runs out into Pensacola Bay for about ½ mile from the entrance and it changes frequently with every storm. There is not more the 28 or 30 inches over the bar, with deep water just inside of the Lagoon. The ruins of old Fort McRae are on the East Spit at the West entrance to Pensacola Bay, near here the Government Engineers have built two jetties for the purpose of protecting and deepening the channel over the Bar at the entrance to Pensacola Bay, as no dredging has been done for several years. A ditch about six feet wide connects Perdido Bay with the Big Lagoon. This was built by the Lumber Companies interested in this section - by which logs of timber are floated from the Bay into the Lagoon, they are then made into rafts

or Coons and towed by light draft steamers from the Lagoon to the saw mills at Pensacola. Great numbers of logs are carried through the lagoon every year. The shore line of the Gulf Coast, Pensacola Bay and Big Lagoon is a fine white sand beach - The surrounding country is low & marshy and a large swamp extends almost the entire length of the sheet, from Perdido Bay to Bayou Grande - This swamp is impenetrable except at points near the Eastern & Western ends, where Corduroy roads have been built through it. It is filled with a dense growth of timber, pine, cypress, spruce, scrub oak, Live oak and dense underbrush. The surrounding country generally is filled with timber Yellow & pitch Pine, live oak & scrub oak. The pines are from 20 to 100 feet high. The soil in the interior is sand, some portions of which are mixed with a yellowish clay. No agriculture is carried on in this section, There are numbers of small swamp & ponds around the lagoon, filled with fresh water. There are a great many roads running through the piney woods, most of them are poorly defined and hard to travel on account of the

deep sand. The principal road is one leading from Perdido Bay to Pensacola & Warrington. The Red and White Beacons at the entrance to Pensacola Bay were determined with the plane table.

The topography covered by Sheet No. 2188 is a portion of Pensacola Bay opposite the City of Pensacola, and extending from Deer Point near north entrance of Santa Rosa Sound to Hickory Sig. Station on Pensacola Bay - The entire shore line consists of a fine white sand beach - while in the interior the soil is sandy, with a mixture of clay, in some portions. The old "Government Live oak Plantation" is covered by this sheet. It is no longer a reservation, having been thrown open to the public several years ago. The Marine Ways are in old Navy Cove near "Town Point", Here a small number of persons are employed in repairing schooners and other small Craft. There are several small fruit orchards along the coast, where peaches, plums and pears are

grow in small quantities - The surrounding country is generally low and swampy and is heavily timbered - the timber consisting principally of live oak, water oak, scrub oak, & pines, while the marshes are filled with magnolia and palmetto and a heavy growth of underbrush. The few houses along the beach are inhabited mostly by fishermen. Only a small portion of this country is more than 20 feet above the ordinary high water mark of the Bay, this is the space within the curves represented. Long sand bars or shoals extending from a quarter to half mile into the Bay, run from the shore line at Town Point, Fair Point and Deer Point.

Sheet No. 2189 embraces the topography of a portion of Pensacola Bay, Florida, including the Pensacola Light House, the U.S. navy yard and a part of Santa Rosa Island from the entrance of Pensacola Bay to the eastward. The Pensacola Light House is situated on the north shore of Pensacola Bay about one mile West of Fort Barrancas.

It is a conical brick tower 160 feet high, standing upon a sandy knoll about 30 feet above mean high water and is visible for about 20 nautical miles.

The entire shore line represented on this sheet, consists of a hard, white sand beach- A sand bluff about 20 feet high runs close to the beach, from the Light House to Fort Barrancas. There are numerous roads running through the piney woods, most of them are poorly defined and of little importance, the principal road runs to Warrington and Pensacola, they are all difficult to travel on account of the deep sand - The surrounding country is low and marshy, and it is covered timber, such as pine, live oak - scrub oak and in the marshes a dense growth of underbrush & briars. The soil in the interior is rather sandy, with a slight mixture of clay.

The Pensacola Navy Yard is about 2 miles from the entrance of Pensacola Bay, on the North shore. It has been abandoned by the Government for several years as a Navy Yard, although the large machine shops, and stone dry dock are still

standing and in good condition. There are only sufficient Officers and men stationed here to protect the property - There is no anchorage for vessels at this point, small craft can find shelter behind the breakwater adjoining the stone dry dock. The shore line continuing from the Navy Yard to the entrance of Bayou Grande consists of a white sand beach, with a growth of pines and scrub oak back of the beach. Woolsey is a small town adjoining the Navy Yard on the north, it has about 135 inhabitants, who subsist chiefly by fishing. There are no mills, nor manufactories in this locality. The Pensacola Terminal Railway passes through Woolsey and around the north and West sides of the Navy Yard.

The re-survey of a portion of Santa Rosa Island extends from the entrance of Pensacola Bay to about 2 miles East of the Life Saving Station. Fort Pickens is on the West end of this Island and Commands the entrance to Pensacola Bay. Although this fort has been abandoned, it is still in a fair State of preservation. The Life Saving Station is situated on the Gulf beach, about 3 miles East of Fort Pickens and 9 miles from

the city of Pensacola - This place is a great resort for the people of Pensacola - for bathing - with fine surf on the Gulf beach - The shore line consists of a hard white beach, on all sides of the Island - There are innumerable sand dunes on the Gulf beach, and a light growth of scrub pines and underbrush. The Island is rather low with quite a number of salt ponds and small marshes. The Quarantine Station is situated about 4 miles East of the Life Saving Station. The climate on Santa Rosa Island is mild & pleasant all the year.

Very respectfully
John Nelson
Assist. C. & G. Survey

1984

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Topographic

Field No. ..... Office No. 1984

LOCALITY

State Florida

General locality .....

Locality .....

1890

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CHIEF OF PARTY

P. A. Welker

LIBRARY & ARCHIVES

DATE .....

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U.S. Coast and Geodetic Survey,
T.C. Mendenhall, Superintendent,

State: Florida.

Descriptive Report,
Topographic Sheet, No. 1984.

Locality,
A Portion of Pensacola Bay,
Bayou Chico, The City of Pensacola and Bayou Texar.

1890.

Chief of Party: P.A. Welker.

U.S. Coast and Geodetic Survey
DEC 26 1890
ARCHIVES

1984

Write me at: Office, Washington, D.C.

Telegraph me at:

My Express Office is:

U. S. Coast and Geodetic Survey,

Washington, D.C.,

Dec. 17th, 1890.

2—567

Prof. T.C. Mendenhall,
Superintendent, U.S. Coast & G. Survey,
Washington, D.C.,

Dear Sir:

In obedience to Instructions and Memoranda for Descriptive Reports, 1887, I beg leave to submit the following report of Topographic Sheet No. 1984.

The work consists of a survey of a portion of Pensacola Bay, Florida, from a point about one mile west of the mouth of Bayou Chico to Galveronne. It was made on a scale of $\frac{1}{10000}$ and includes Bayou Chico, the City of Pensacola, and Bayou Texar.

The central portion of the sheet shows Pensacola, the county seat of Escambia County, Florida, which is a city of about 12000 inhabitants, situated on Pensacola Bay, about six miles above the entrance. It is the

most important shipping place of the gulf, east of New Orleans. Pensacola Bay is a safe, well sheltered harbor, land-locked by Santa Rosa Island. Vessels drawing 21½ feet of water can safely be taken across the bar at any time of the year. At an extreme high tide 23 feet can be carried. The harbor has about 10 square miles of good anchorage for the largest vessels.

Lumber and fishing are the chief sources of trade. They are carried on quite extensively and trade is rapidly increasing. During the winter season an immense amount of lumber is brought by rail and water from the interior of the surrounding country. At Pensacola it is loaded into vessels, mostly foreign, and carried away. During the year ending June 30th, 1889, 622 vessels, with a tonnage of 430331 entered the harbor, and 603 vessels, with a tonnage of 420909 cleared. The vessels entering had in crews 7801 men.

Snapper fishing is carried on extensively. Numerous saw mills are scattered about the

bay and surrounding country; but manufacturing is not carried on to any great extent. A marine railway, for repairing the smaller class of vessels is on the bay, but no dry dock or other means for repairing the larger vessels is nearer than Key West. A life saving station is on the gulf shore of Santa Rosa Island, about three miles east of the entrance to the bay.

Two important railroads enter the city; the "Louisville and Nashville" and the "Pensacola and Atlantic. These bring the harbor into close connection with New Orleans, Jacksonville, Savannah, Atlanta, Montgomery and Birmingham. The Pensacola and Perdido R.R. was built from Pensacola to Millview, at the head of Perdido Bay for the purpose of bringing to port the immense amount of timber that is cut in that locality.

In the event of a war the importance of Pensacola as a base of supply and operation could not be overlooked. By far the greater part of the surrounding country

is high and dry and communication with the interior is very easy. Near the entrance to the harbor are Fort Pickens, Fort Barrancas, and the Pensacola Navy Yard. Santa Rosa Island is admirably situated for purposes of defense.

The city is supplied with good pure water by an excellent system. The climate is good; but the locality is not entirely free from the malarial fever which is so common in most of the country surrounding the gulf. There is a U.S. Marine Hospital at the Pensacola Navy Yard and a Hospital for sailors at Pensacola.

Dockage facilities are good for the largest ocean vessels. Pilots rates are compulsory. The headquarters for the Pilots Association are at Pensacola. Tow boats are generally used and can be had at Warrington or Pensacola. General supply and ship chandler's stores are numerous. Bituminous coal is abundant and is put on board of vessels at the wharves.

The custom office is in the Post Office Building on Palafox Street. Weather signals are displayed from this place.

At Fort McRee, near the entrance to the bay, jetties are being built by the U.S. Engineers, for the purpose of protecting and deepening the channel. No dredging has been done for nearly six years.

The surrounding country is heavily Timbered. The percentage of swamp land is small and it usually extends only a short distance from the water courses, the larger swamps being near the heads of the fresh water streams entering the bay. Close to the bay shore the soil is a fine clean white sand. Interior the sand is mixed with a clay of a yellow color. A few peaches, plums and vegetables are raised, though generally the soil is not good for agricultural purposes. The timber ranges from 10 to 100 feet in height, but very little of this is of any value at present. Most of that which was valuable

and near to the city has been taken out. It consists mostly of spruce, pitch and yellow pine, scattering live oak, water oak and scrub oak. The heaviest timber is found in the small stretches of scattering swamps; magnolias and palmettos are scattered about. In the swamps there is a very thick growth of underbrush and briers, ranging from 1 to 10 feet in height. To the west of Bayou Chico the country is generally low; to the north and east there is a gradual rise in the land, which extends for a long distance interior, and ends in bluffs from 60 to 100 feet high on the west shore of Escambia Bay.

The various roads on the sheet all lead to Pensacola. Most of these are not in a good condition for travel on account of the deepness of the sand. The roads outside of the city are generally poorly defined.

Bayou Chico is a salt water stream emptying into Pensacola Bay about one mile west of the city. The stream is not navigable

on account of the shallow water at its mouth. It is irregular in shape; about 1¼ miles from the mouth there are two forks, one to the north and one to the west. The north fork has two small branches near its head. All of these forks head in narrow strips of fresh water swamps, which extend several miles inland.

Near the mouth of the bayou there is a sand bar about 1½ miles long with only from one to three feet of water over it. In this locality there are also two Turtle bridges without draws; the lower one leads to Brent's saw mill at the mouth of the bayou, and the other which is only about 200 meters farther up is used for the crossing for the main road from Pensacola to Warrington. There is only about four feet between the floor of these bridges and the water at an ordinary tide.

Seven and one half feet of water can be carried from the second or highway bridge to the Pensacola and Perdido R.R. bridge, which crosses the north fork of the bayou about 1½ miles from the mouth. The greatest depth

in the channel after passing the highway bridge is 12½ feet and the least 7½ feet.

Bayou Texar is the salt water stream entering Pensacola Bay a little north east of the city and is not navigable on account of the shallow water at its mouth. It is a beautiful stream with high and dry land on all sides. It is about four miles long. Near the mouth there is a sand bar about ½ mile long, extending into the bayou as far as the highway bridge. At a very low tide there would be no water over much of the surface of this bar and the entrance to the bayou is practically closed. The Pensacola and Atlantic R.R. bridge crosses the bayou at the mouth and the highway turtle bridge crosses only a short distance farther up. Neither of these bridges have draws and there is only about four feet between the floor of the highway bridge and the water at an ordinary tide. From a short distance beyond the highway bridge to within ½ mile of the head, 6 feet of water can be carried. The greatest depth in the channel

after passing this bridge is 10½ feet, the lowest is 6¼ feet.

Mullet, Trout and other salt water fish are found and also a few oysters.

The system of execution of the hydrography was of zigzagging across the bayous and running longitudinal lines through the channel. The general character of the bottom was hard; mud was found in places.

Only the high water line and marsh limits are shown on the sheet.

The mean range of tides for the few days was 1.6 feet and the difference between the highest and lowest tide was 3.2 feet.

Statistics will be found appended.

Very respectfully yours,

P. A. Welker,

Sub-Assist., C. & G. Survey.

Statistics.

Number of Plane Table and Hydrographic Signals	45.
" " miles of shore line surveyed	37.3
" " " " roads "	46.3
Approx. area of (sq. miles) country "	155
Area sounded in sq. miles	1.2
Number of miles of sounding	21.5
" " angles measured	78.
" " Soundings	3719.
" " Tidal Stations established	1.