Form 504
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

State: Florida

DESCRIPTIVE REPORT.

LOCALITY:

Miami, Florida
Northern portion of Key Biscayne,
Bay

CHIEF OF PARTY:

Harry Leyboldt
To The Superintendent -

In accordance with instructions to Harry Leyoldt, Chief of Party, dated Nov. 26, 1918, a topographic survey was made of the shores of Key Biscayne Bay, in the vicinity of Miami, Florida.

**Limits -**

The work on this sheet embraces the mainland shore of Biscayne Bay from Coconut Grove northward to Snake Creek, the fringing keys southward to and including the northern half of Key Biscayne, and the seaward side of Key Biscayne, Virginia Key, and northward to about parallel 25-56-20.

**Control -**

The control for the survey was furnished by triangulation conducted by Harry Leyoldt in December, 1918, and January, 1919, extended from Cape Florida (old tower) - Elliotts Beach as a base.

**Methods -**

The survey was made by plane table, with the exception of the shore from the end of the breakwater north of Belle Isle for about four kilometers, which for lack of time to run in under the exceedingly difficult conditions of dense young mangrove growth and deep water with soft bottom was sketched in from reconnaissance and extant fixes obtained where possible.

At the north end of Key Biscayne Bay, the triangulation was carried on from stations Hco and Mangrove by a combination of plane table triangulation and traverse, and across to the outside. The seaward shore was run in by traverse from locations obtained on the inside shore. Due to the configuration of the shore and the prevailing type of dense mangrove shoreline, it was in most cases impossible to locate features inside the fringing growth from the shoreline survey.
POST-OFFICE ADDRESS:

TELEGRAPH ADDRESS:

EXPRESS OFFICE:

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General description

This region is being rapidly improved, both by the city and by private enterprise. A road near completion, March 1919, extends along the outside shore, across Snake Creek by a swing bridge (through steel truss), toward Ojus.

At the narrowest point of the peninsula, locally known as Baker’s lookout, a cut about 50 feet wide is being made from the bay to the ocean by the City.

South of the coast guard station on the outer beach, streets are being constructed, shown dotted on sheet, and building sites laid out by the Phillips Land Improvement Co. The road along the outside shore is of excellent bituminous material.

A small arms experimental range has been located by the U.S. Ordnance Corps in the south portion of Indian Creek. This range is laid out in meters, and at every 200 meters a white stake is placed with the number of hundred meters marked on it. During the day boats are usually unable to pass through this portion of the creek, on account of the firing. The length of the range is 2800 meters.

A new cut, locally known as Government Cut, at the north end of Virginia Key, dredged by U.S. Engineers, forms at the present time the principal outlet to the open sea. Norris Cut, through Virginia Key, is used only by small boats, as a bar on the seaward side, and numerous shoals, practically close the channel. Bear’s Cut is practicable only for small boats as sand bars have closed off all but a crooked and poorly marked channel. No local name exists for that portion of Virginia Key north of Norris Cut.

No improvements or structures exist on Virginia Key except three bulkheads for machine gun targets on the sand spit at the southwest end.

On the northern half of Key Biscayne the inside shore, fringed by dense mangrove and soft mud, presented a difficult piece of work for the plane table. The major portion is covered with low bushes and palmetto. A private roadway, not surfaced, extends to the north end of the key.
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General Description (cont.)

The channels in the northern part of Key Biscayne Bay, including the main channel into Snake Creek, and that into Indian Creek, are marked by wood stakes, mostly in poor repair and maintained by private enterprise, therefore those stakes are not all located. The white range mark, 600 meters south of Δ Largo, is probably permanent, and is located on the east (hyd. sig. "End").

From Buena Vista northward to Arch Creek, the Dixie and Biscayne Highways, excellent bituminous roads, are main thoroughfares northward. Back of the mangroves along shore the land has been extensively improved, with numerous residences, many orchards, and considerable cultivated land. Rows of Australian pines form a distinctive feature as seen from the bay, and farther back the original growth of native pine remains standing.

South of Arch Creek a drainage canal has made a considerable area of land suitable for cultivation, this area now being indicated as grass land on the sheet.

Just north of Little River a bulkhead has been built as shown on the sheet, which is to be filled in.

Southward from Miami, through Coconut Grove, the land has been elaborately improved. Especially noticeable along shore is the estate of James Deering, and the airplane hangars at the Miami Naval Aviation Station. From lack of time the roads southward from Coconut Grove were not surveyed. The road nearest the shore is in poor repair, not metalled, and is little used. The main travelled road at the present time runs three of four miles back from the shore.
Miscellaneous Notes.

The area embracing the City of Miami, and Miami Beach, has been done on a scale of 1-10,000 by Mr. E.H. Bernstein, Aid. The shoreline was run on the 1-20,000 sheet along the beach in order to locate hydrographic signals, but the location of shoreline for the chart should be from the larger scale sheet, as this sheet gives the details.

From the Deerings Estate northward to Buena Vista, only enough details were located to make it possible to complete the sheet from a large City map which has been sent to the Office. Additional details can be obtained from maps of the Deerings Estate, which have also been sent in.

Due to the fact that the initial azimuth of the base line from Cape Florida to Elliotts Beach was in error, the plotted positions of the signals located by the triangulation were in error as originally used. To correspond with the corrected positions, the projection on the sheet was shifted, the new and correct projection being in red.

Respectfully submitted,

EG. Wilbur

Aid.
Miami River, looking north
12th Street bridge

Plane-table set up in tree, Key Biscayne
Impossible to set up on bottom due to
deep water along mangroves.

Plane-table set up in mangrove
swamp.

Plane-table set up in water, along mangrove
swamp, Virginia Key.