

83
S.H.A.

3435

C. & G. SURVEY,
LIBRARY AND ARCHIVES
MAY 1-1913
Acc. No.

Dis. 12-48

Department of Commerce and Labor
COAST AND GEODETIC SURVEY

Superintendent.

State:

Fla

DESCRIPTIVE REPORT.

Hyd. Sheet No. 3435

LOCALITY:

Florida Reefs -
North End

1913

CHIEF OF PARTY:

H. C. Hodgkins

11-4046

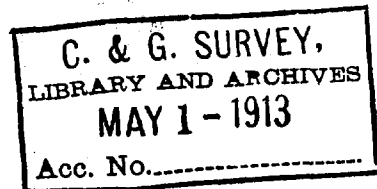
3435

3435

DEPARTMENT OF COMMERCE.

COAST AND GEODETIC SURVEY.

O. H. TITTMANN, SUPERINTENDENT.



Hydrography

Coast of Florida

North End, Florida Reefs.

C. & G. S. STEAMER "BACHE",

W. C. HODGKINS, Chief of Party.

Begun Mar. 20, 1913.

Ended Mar. 31, 1913.

Scale 1:20000

Engineer's Tide Staff at

Miami New Cut.

Positions platted by L. A. POTTER.

On Sheet No.

3435

DESCRIPTIVE REPORT

to accompany Hydrographic Sheet No.

Florida Reefs, North End,

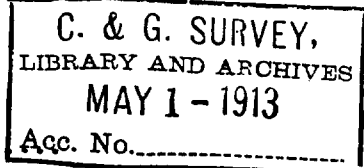
Florida.

Scale 1:20000.

Surveyed between March 20 and 31, 1913.

by the party on the Steamer PACHE,

under the command of Assistant W. C. HODGKINS.



This survey was made in pursuance of instructions dated March 10, 1913, directing the suspension of work on the coast of Georgia, the location of wrecks on the Florida Reefs, and a thorough hydrographic survey of the North End Reef, off Miami, Florida.

The wreck of the British S. S. LUGANO, ashore on Long Reef, was located in the forenoon of March 15 and the PACHE was then ready to begin the hydrography off Miami; but heavy weather came on and delayed operations until the afternoon of Wednesday, March 19, when signal building was begun and angles were measured for locating signals. On the following day that work was continued and a little hydrography was done in the afternoon.

A party was sent to build a signal at "Key Biscayne" Δ 'n station, but the aid in charge could not find the station mark and built a signal at a point nearly half a mile further north. This signal called "New", was therefore determined and was used in this work, but subsequently the same aid found the mark at "Key Biscayne", when making a plane table survey of the shore line.

Soundings were continued on March 21, though the high wind and rough sea prevented the use of a launch and made ^{it} necessary to run the lines N.W. and S.E., on account of the violent rolling of the ship when on other courses. This was the case on almost every day while this work was being done. On the night of March 21, the BACHE went to Key West for coal and supplies. Upon her return from that place, the hydrography was resumed on March 26 and was continued as steadily as the weather and other circumstances permitted until the end of the month, when work was closed.

This survey showed that the shoal water of the North End Reef extends somewhat further north than was heretofore known and that a narrow ridge, with depths of five fathoms or less, lies half a mile to the eastward of the main reef.

There is nothing on these reefs to trouble any vessel which can go to Miami, for which a nine-foot draft seems to be about the limit, but they are a serious menace to deep draft vessels hugging the reefs closely, when south bound, to keep out of the strong current.

At night, careful attention to the red sector of Fowey Rocks Light should avoid any risk, but in the day time a vessel might get in too close if careful attention were not given to the piloting.

It may be mentioned that Buoy "W", marking the North End Reef was considerably out of position (to the southwestward) when the BACHE arrived in that locality. On March 20, the Lighthouse Tender MANGROVE shifted it to a position eastward of the north end of the reef. Both positions of the buoy were determined by cuts from the BACHE.

While this work was in progress, tides were observed upon a staff set up in Miami New Cut, alongside of a gauge of the box type, established by the U. S. Engineers.

While in that vicinity, anchorage at night and in stormy weather was found at several points in the Hawk Channel. While the soft bottom indicated in some places on the chart could not be found in any instance, the hard sand bottom was found to be good holding ground.

The anchorage west of Fowey Rocks was better sheltered than other places farther north, but the sea was a good deal reduced by the reefs in every case and was not found very troublesome.

Miami New Cut is used only by small fishing boats. Larger vessels have to enter by the Biscayne Channel, south of Cape Florida, and the steamers which formerly ran from Miami to Nassau, New Providence, had to make Key West their port of call on account of the shoaling of that channel to Miami.

Respectfully submitted



Chief of Party.

To the Superintendent,

Coast and Geodetic Survey,

Washington, D. C.

April 25, 1913.

3435

STATISTICS.

C. & G. SURVEY,
LIBRARY AND ARCHIVES
MAY 1 - 1913
Acc. No.

Date 1913	Volume.	Letter.	Miles.	Soundings.	Angles.	Positions.	Boat.
Mar. 20	1	A	5.99	147	50	25	BACHE
" 21	1	B	23.00	514	235	114	"
" 26	1	C	28.33	750	298	149	"
" 27	1	D	2.65	83	32	16	"
" 27	2	D	30.60	885	318	159	"
" 28	2	E	8.06	197	86	43	"
" 29	2	F	16.35	447	178	89	"
" 31	2	G	5.99	136	64	32	"
Total	2	7	120.97	3159	1261	627	BACHE
Mar. 20	1	a	4.60	96	52	27	Launch 31..
" 28	1	b	9.79	268	134	67	"
" 31	1	c	10.59	492	260	130	"
Total	1	3	24.98	856	446	224	Launch 31.

RECAPITULATION

BACHE	2	7	120.97	3159	1261	627	
Launch No. 31,1		3	24.98	856	446	224	
Grand Total	3	10	145.95	4015	1707	851	