

5066

Diag. Cht. No. 1253

Form 504
Ed. June, 1928

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R. S. Patton, Director

U. S. COAST & GEODETIC SURVEY
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State: FLORIDA

Acc. No.

DESCRIPTIVE REPORT

Topographic
Hydrographic } Sheet No. 5066

LOCALITY

WEST COAST

LOSTMANS RIVER AND VICINITY

1930

CHIEF OF PARTY

Benjamin H. Riggs

5066

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

REG. NO. 5066

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. ~~T-4453~~

REGISTER NO. 5066

State FLORIDA

General locality WEST COAST

Locality LOSTMANS RIVER AND VICINITY

Scale 1:20000 Date of survey February, 19 30

Vessel chartered houseboat "MYJO"

Chief of Party Benjamin H. Rigg

Surveyed by Benjamin H. Rigg

Protracted by Fred Natella

Soundings penciled by G. E. Morrid, & Fred Natella

Soundings in ~~fathoms~~ feet

Plane of reference M.L.W.

Subdivision of wire dragged areas by _____

Inked by _____

Verified by _____

Instructions dated December 6, 19 29

Remarks: Smooth sheet and boat sheet furnished to the party
by the Washington office. (T-4453)

D E S C R I P T I V E R E P O R T

to accompany

HYDROGRAPHIC SHEET #~~F4453~~ 5066
(LOSTMANS RIVER)

Date of Instructions,
December 6, 1929,
Project #48.

SURVEY METHODS:

SIGNALS:

Signals for use in the survey of large areas on this sheet were located by picking out topographic features easily recognized and checking the location by sextant cuts to other topographic features, for example, tangents to points, points on range, houses and creek mouths.

At the entrance, LOS and JEN were located by picking them out on the sheet. JEN is the most southern of the group of houses shown on the point. RIG and HOS were located by cuts from anchored positions of the sounding launch and topographic cuts using the boat sheet ^{and} plane table. LEON was located by plane table survey. The table was set up on the high water mark and oriented on LOS and checked on other tangents that were well defined. A short strip of beach was rodded and found to check with the boat sheet before the house was located. The signal BAN, located on one of a group of old pilings, was located by a sextant fix using the signals already mentioned. With these signals, the channel markers were located by sextant fixes. These were taken on the run as their permanency depends on the local guide at Lostmans River and they should not be charted. They were put in by him and have to be renewed from year to year as the worms eat them off.

Smooth sheet positions were obtained by plotting all cuts on tracing paper and fitting them to the topography holding JEN and LOS

fixed. This method is fully described in descriptive report sheet T4454. Final positions on smooth sheet have been plotted and checked and will differ slightly from positions shown on boat sheet.

The signals in the river were located by picking points on the sheet easily recognized from the photographs. Whenever possible three points fixes were taken and plotted. At points where the sounding line could be accurately located by a bearing and distance measured with the rangefinder, this method was used as a three point fix using fast changing angles with tangents for signals when the distance to shore is 10 meters or less, is apt to plot more inaccurately than a rangefinder distance and a bearing.

In the bays and passes lines were run from point to point to determine an average depth. The depths in the bays do not vary as a general rule, and a few lines across give the depth found over the whole bay. The guide with us was familiar with the country and could point out any bars or reef that existed. Through the passes mid-channel lines were run whenever there were no bars to dodge. In many places a wide channel will be surveyed with one mid-channel line. This will indicate that the average depth of the channel is shown by this line. Bars are easily recognized by the swift tidal waters making ripples or by the lighter color of the water. Information given by the guide in every case proved to be correct.

The houses on Wood Key were located by taped distances to recognized topographic features.

All soundings up to 13 feet were taken by means of sounding pole. Soundings over 13 feet, the lead line was used.

DISCREPANCIES:

The oyster reefs as sketched by the draftsman on the

hydrographic boat sheets furnished the party were found to be slightly out of position in Lostmans first bay. This is corrected on the smooth sheet. Channel markers placed by local guides mark the passage through the bars and the location of these mark the edge of the reefs. These markers are not permanent.

A small island marked DUB on the boat sheet was located by sextant cuts.

Location of DUB Island: ✓
Lat. 25 34.83 ✓
✓ Long. 81 08.85 ✓

Also small Island
✓ Lat. 25-35.3
Long. 81-08.88 *W.M.*

Small Island located in ✓
✓ Lat. 25 35.88 ✓
Long. 81 07.61 ✓

Small Island located in ✓
✓ Lat. 25 34.73 ✓
Long. 81 07.08 ✓

Small Island located in *GFF 447 442-50 2-16 08 C.F.M.*
✓ Lat. 25 34.4 ✓
Long. 81 05.4 ✓

CHANNELS:

The channel entering Lostmans River is narrow and crooked and limits the depth carried in the river to two and one-half feet at low water. The main channel and the only one used enters on the north side of the large island lying at the mouth of the river. The depth outside the river is three feet. At the time of this writing, markers consisting of a pole about three inches in diameter with a wooden board nailed horizontal marks all the turns. The group of piling marked by signal BAN (remains of the foundation of an old fish house) can be passed close too on either side, carrying three feet. Inside the river just east of signal GET the channel passes between ~~two~~ large oyster bars. This is the shoalest spot; two and one-half feet at low water. The passage to the south of the

island appears to be the deepest, but shoals on the outside and a mass of oyster bars lying across the channel, makes it impassable to a yacht of any size. These bars are very narrow and so interlaced that an accurate survey of them could not be made on this scale. A local guide, who has lived on the river all his life assured me there was no channel at the south entrance and the north was always used.

Several bars are located at the northeast end of No. 1 Bay, making the best entrance to the river on the north side.

The entrance to the second bay has a large sand bar at the mouth. The channel runs close to the north point at the entrance and follows the west bank close to the bushes. The best water is found on the west side of this bay. No particular channel is needed.

The inside route passes up through Onion Key Bay, average depth four feet, Two Island Bay, three and one-half to four and one-half feet, through one un-named bay into Plate Creek Bay.

The north end of Plate Creek Bay has two canals and Plate Creek running out of it. At the present time the head of the bay is so filled with mud we could not get through. Plate Creek is grown over so, a guide boat could not pass without a day of clearing trees and roots, due to the storms. For this reason line was run no further.

One line was run in Lostmans No. 5 as far as the East end of the bay.

Lostmans No. 2, 3 and 4 were not considered important enough to run. They have the same general depth as No. 5.

Big Lostmans River Bay, commonly call Big Lostmans, ^{Bay} is slightly deeper than the rest of the bays having a general depth of four feet.

→ Don Bacon. OK's this name
FRCC.

ANCHORAGES:

Yachts anchor and wait for high tide to enter the river. They usually run in close to the T-shaped shoal lying in the center of the bay at the river mouth. Several lines were run into this shoal to give an indication of the depth. This spot affords little protection in a blow and is used mainly as a deep spot to wait for tide. During this season a house lighter belonging to a fishing company has been anchored just east of the reef. In any rough weather it was moored inside the bars.

Lostmans second Bay provides a good yacht anchorage with five and one-half feet at low water.

COMPARISON WITH PREVIOUS SURVEYS:

All soundings at the mouth of the river shown on the chart were transferred to the boat sheet and were found to check with the soundings taken this season. Paragraph 11 of Instructions.

WELL ESTABLISHED LOCAL NAMES:

The following new place names were obtained from local men and guides familiar with the country:

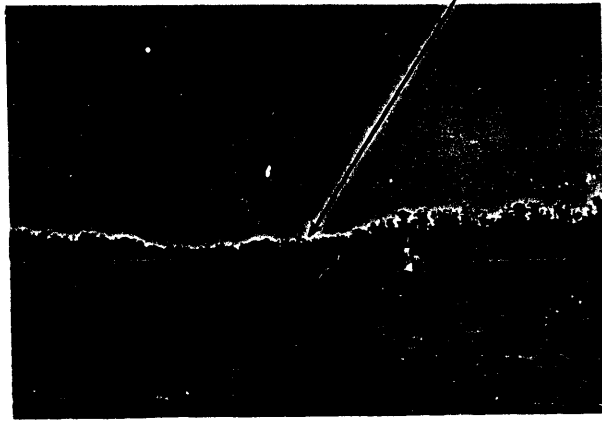
Bird Key - Wood Key
Lostmans 1st Bay called First Bay
Lostmans 2nd Bay called Second Bay
Lostmans River - Onion Key Bay
Two Island Bay
Plate Creek Bay
Plate Creek
Lostmans Creek #5 called Lostmans No. 5
Lostmans Creek #4 called Lostmans No. 4
Lostmans Creek #3 called Lostmans No. 3
Lostmans Creek #2 called Lostmans No. 2

Authority:

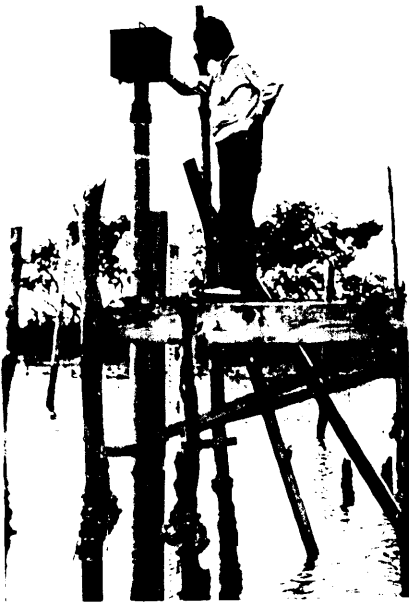
Jean Hamilton, Lostmans River
Jack Daniels, Chokoloskee
Arthur N. Wintle, Fort Meyers

Names of islands shown in red are surveying names and are not new place names.

CHANNEL MARKER



LOSTMAN FIRST BAY LOOKING WEST



TIDE GAUGE LOSTMAN RIVER



TIDE GAUGE ONION KEY

TIDES:

A portable automatic tide gauge was maintained at Lostmans River entrance, Lat. 25 33.06 Long. 81 12.82 and another at Onion Key Lat. 25 36.7 Long. 81 08.02. At Lostmans entrance three bench marks were established and levels run at the beginning and end of the observations. At Onion Key the station mark and reference marks were used for bench marks. Comparisons were made with the standard gauge at Everglades.

The Lostmans River entrance gauge was installed on February 5 and taken up on February 25. The observations were not continuous as considerable difficulty was experienced with the tension spring in the gauge. One stretch of 230 hours is continuous. At Onion Key 243 continuous hours were recorded. The range here was about one foot. M.L.W. on the staff was 2.95.

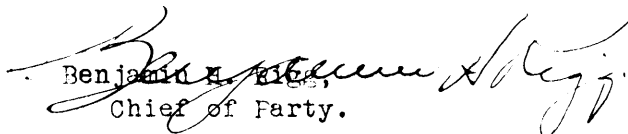
Reducers for hydrography for the outside and Lostmans 1st Bay were taken from the curve at Lostmans entrance gauge. The area of the river and Bays between the east end of the 1st bay and Onion Key was divided into six parts and the reducers for that area were proportioned between Onion Key and Lostmans entrance according to the area the soundings fell in.

From Onion Key north, east and south the reducers from the Onion Key gauge were used.

As the range was only one foot, very little reduction was made. Any extreme tides in these inland waters depend on rainfall and winds.

Statistics attached.

Respectfully submitted,


Benjamin H. King,
Chief of Party.

STATISTICS

HYDROGRAPHIC SHEET ~~#4453~~ 5066

Date	Vol.	Letter	Miles	Soundings	Positions
2-10-30	1	a	11.1	596	65
2-11-30	1	b	28.7	1211	108
2-12-30	1	c	7.8	334	33
	2	c	22.4	906	90
2-13-30	2	d	29.4	1180	126
2-14-30	3	e	2.4	64	10
2-18-30	3	f	30.0	1344	142
2-21-30	3	g	8.8	405	58
	Total		140.6	6040	602

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

Washington, D. C.

February 19, 1931

DIRECTOR, U. S. COAST AND GEODETIC SURVEY:

The following determined objects are prominent, can be readily distinguished from seaward from the description given below, and should be charted.

Benjamin H. Rice
Benjamin H. Rice
Chief of Party.

DESCRIPTION	POSITION					METHOD OF DETERMINATION	CHARTS AFFECTED	
	LATITUDE			LONGITUDE				DATUM
	°	'	D. M. METERS	°	'			
House ✓	25	31	578	81	12	677	Approx. N. Amer. Plane Table	1253 ✓
House ✓	25	31	608	81	12	673	" "	" "
House ✓	25	32	40	81	12	415	" "	" "
House ✓	25	32	643	81	12	503	" "	" "
House ✓	25	32	655	81	12	538	" "	" "
(Remains of old Pilings) Fish House ✓	25	32	1414	81	13	88	" Sextant	" ✓
House ✓	25	34	1707	81	14	278	" Plane Table	" ✓
House ✓	25	34	1689	81	14	422	" "	" ✓
House ✓	25	34	1639	81	14	482	" "	" ✓
House ✓	25	34	1603	81	14	534	" "	" ✓

A list of objects which are of sufficient prominence for use on the charts, together with a description of the same, must be furnished in a special report on this form, and a copy of such report must be attached by the Chief of Party to his descriptive report. The selection, determination, and description of these points are of primary importance. The description of each object should be short, but such as will identify it; for example, standpipe, water tower, church spire, tank, tall stack, red chimney, radio mast, etc. Generally, flagstaves and like objects are not sufficiently permanent to chart.

April 6, 1931
Section of Field Records
Report on H-5066
Lostman's River & Vicinity, Fla.
Surveyed in 1930

Chief of Party - B. H. Rigg
Surveyed by - B. H. R.
Projected by - Fred Natella
Soundings plotted by - F. N., G. E. Morris
Verified & Inked by - Harold W. Murray

1. The records conform to the requirements of the Hydrographic Manual except that no leadman was recorded at the beginning of "e" day.
2. The plan and character of development fulfill the general requirements.
3. The plan and extent of development, though not comprehensive, is nevertheless general.
4. The sounding line crossings and agreements are fair except that more crossings in the bays might be

preferable.

5. The usual depth curves can be completely drawn. The 3-ft. curve has been added by special recommendation. According to the present survey, this curve cannot be as fully and accurately defined as might be desired.
6. The field plotting was completed to the extent prescribed in the Hydrographic Manual except that one small island was overlooked and the minor signals Tan, Gen, Hon and My were not definitely located. Signal Cen was incorrectly named.
7. The junction with adjacent sheets is satisfactory in respect to agreement though the overlap is not as comprehensive as in other surveys.

This sheet (H-5066) is joined on the South East by H-5064. No actual overlap is present and the character of the bottom between the islands at the junction is not known.

Junction on the North is made with H-5056 in the vicinity of Olat.

creek. Since this creek is impassable by virtue of fallen trees, etc., (see photo, description Report of H-5056) no actual overlap exists.

8. Five additional Islands have been located by the field party. These have been plotted in black ink on the smooth sheet. They have also been transferred in red to the Topographic Print and the sheet marked T-4,453 A.
9. While the channel markers at the outlet of Lostman's River have been checked and inked, it is doubtful if they should be transferred to the chart, for their construction is not permanent and besides they are subject to relocation by the local guide.
10. There are no current surveys adjoining or overlapping the work along the coast, particularly at the outlet of Lostman's River. The old sheets adjoining are H-2010 (1890) and H-1826 (1888), an open sheet. General changes have occurred and the islands shown on H-2010 have since been

washed away and at the present time constitute shoals.

11. Comparison with chart #1253:-

The reef extending seaward in lat. $25^{\circ}31'45''$ is verified by this survey but not necessarily in outline.

The two shoals shown in lat $25^{\circ}31'8''$ on the chart are indicated by H-2010 (1890). Little or no verification is offered by this survey (H-5066) as this area is sparsely surveyed.

A depth of $2\frac{1}{2}$ ft. is shown over the shoal in lat. $25^{\circ}32'5''$.

The shoal in lat. $25^{\circ}32'8''$ is surrounded by an average depth of $3\frac{1}{2}$ ft. A change in channel appears to be evident here.

The shoal in lat. $25^{\circ}32'25''$, while not covered by this survey is surrounded by an average depth of $1\frac{1}{2}$ ft.

In general, changes of 1 ft. or more have occurred. The entrance to Loston's River while formerly to the south of the island (at the entrance) has shifted to the north.

It is thought that this area might

have been better surveyed on a scale
of 1-10,000. Even so the shoals could have
been definitely investigated on the present
scale,

Respectfully submitted: - Harold W. Murray

Field Records Section (Charts)

HYDROGRAPHIC SHEET No. 5066

The following statistics will be submitted with the cartographer's report on the sheet:

Number of positions on sheet	.602..
Number of positions checked	.204.
Number of positions revised	..17..
Number of soundings recorded	6040.
Number of soundings revised	..121..
Number of signals erroneously plotted or transferred

Date: *April 6, 1931*

Cartographer: *Harold W. Murray*

IN REPLY ADDRESS THE DIRECTOR
U. S. COAST AND GEODETIC SURVEY
AND NOT THE SIGNER OF THIS LETTER

AND REFER TO No. 80-DRM

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
WASHINGTON

SECTION OF FIELD RECORDS

Review of Hydrographic Sheet No. 5066

Vicinity of Lostmans River, West Coast of Florida

Surveyed in 1930

Pole and hand lead soundings

Instructions dated December 6, 1929 (Lieut. B. H. Rigg)

Chief of Party, B. H. Rigg

Surveyed by B.H.R.

Protracted by F. Natella

Soundings plotted by G. E. Morris

Verified and inked by H. W. Murray

1. The records are generally very well kept, but there are a few single soundings which do not agree with the surrounding depths which should have been O.K.ed or check-marked in the records. A few of the notes are too indefinite, for example, the note at pos. 8d which reads "bar on right" and does not give distance, extent or description of the bar.
2. The survey fully carries out the intent of the instructions.
3. The sounding line crossings are generally satisfactory, but there are some cases where a single sounding does not agree well, such as the 2 ft. sounding at pos. 95 f, lat. 25 32'.4, long. 81 12'.9, and the 3½ ft. sounding at pos 1 e, lat. 25 34'.7, long. 81 08'.9.
4. The information is sufficient for drawing the 3 and 6 ft. curves fairly completely.
5. The junction on the north with the contemporary sheet, H. 5056, is satisfactory, although the work does not actually join since no line was run up Plate Creek, which was found to be impassable.

The junction on the south with the contemporary sheet, H. 5064, is adequate.

The only previous work in this locality is in the area off the entrance where the surveys of 1888 and 1890, H. 1826 and H. 2010, overlap the new work. The agreement is very poor and it is plain that somewhat radical changes have occurred. In some places shoals of 1/2 ft., shown on the old work, fall between sounding lines or in blank areas on the recent survey. The original aerial photographs were examined but show no indication of these shoals. Since the area is known to be changeable it is recommended that the new work as shown on H. 5066 be accepted and shall supersede all previous surveys, except in the area north of lat. 25 34', where the new work is not complete and will have to be used in conjunction with old surveys.

6. Topographic changes:

Changes in the topographic features, which were observed by the hydrographic party, are shown in black on the hydrographic sheet and have been added in red to a copy of the aerial topographic sheet, which is filed as a standard with T. 4453. These changes consist of the location of a few additional small islands. The Compiler should refer again to this standard before disposing of the chart.

7. Hydrographic notes:

Notes furnished by the hydrographic party, which have no value for charting, have been added to the sheet because the information adds to the general knowledge of the locality and may be useful to any one obtaining copies of the original survey.

8. Control:

As the instructions authorized a departure from standard methods of control, the topography from aerial photographs was used as far as practicable for control of the hydrography of a network of narrow, crooked channels navigable only by small boats. The accuracy of the control depends upon the accuracy of the aerial topography and the correct identification of the topographic features. The position of the boat was determined by observations on these objects by either the usual three point fix or by bearings and distances (measured with the range finder) to selected points on shore. Survey methods are discussed more fully in the review of H. 5056, which is intended to be the basic review for this entire project.

9. Character and scope of surveying:

While there is no doubt that the survey lacks the accuracy of the usual hydrographic survey, in view of the unimportance of the locality this survey is considered adequate for the purpose intended. However, it has been decided to classify the work as reconnaissance, lacking a better descriptive term. This will not be stated on the sheet but some note to this effect may be added to any photographic copies sent out of the office.

10. No additional work is recommended.

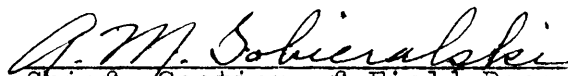
11. Reviewed by R. L. Johnston, August 3, 1931.

Conclusion: (Statement by Chief of Field Records Section)

The surveying and charting of narrow crooked channels used by small boats is a difficult problem, because a complete survey requires more time and expense than the importance of the area warrants and charting on a scale large enough to show the details is objectionable not only because of the work involved in preparing the large number of charts required but also from the standpoint of the user. In this area the preparation of copies of these hydrographic sheets showing the topography and a selection of soundings would probably answer the needs of boats using these channels. For such a substitute for a complete chart and for charting on the 1:80,000 charts, this survey is adequate, but for the preparation of large scale charts the survey can hardly be considered adequate.

Inspected by E. P. Ellis

Approved:


Chief, Section of Field Records


Chief, Section of Field Work

(FOR THE FILES OF THE FIELD RECORDS SECTION)

February 25, 1931

Division of Hydrography and Topography:

Division of Charts:

Tide Reducers are approved in
3 volumes of sounding records for

HYDROGRAPHIC SHEET 5066

Locality West Coast of Florida, Lostmans R. and vicinity

Chief of Party: B. H. Rigg, in 1930
Plane of reference is mean low water, reading
1.2 ft. on tide staff at Lostmans River Entrance
9.0 ft. below B. M. 13.0 ft. on tide staff at Onion Key
1.5 ft. below B.M. 1

Condition of records satisfactory except as checked below:

1. Locality and sublocality of survey omitted.
2. Month and day of month omitted.
3. Time meridian not given at beginning of day's work.
4. Time (whether A.M. or P.M.) not given at beginning of day's work.
5. Soundings (whether in feet or fathoms) not clearly shown in record.
6. Leadline correction entered in wrong column.
7. Field reductions entered in "Office" column.
8. Location of tide gauge not given at beginning of day's work.
9. Leadline corrections not clearly stated.
10. Kind of sounding tube used not stated.
11. Sounding tube No. entered in column of "Soundings" instead of "Remarks".
12. Legibility of record could be improved.
13. Remarks.

Chief, Division of Tides and Currents.

642-5C

At Sunday 7-15-67 Fully appd. after verification
and review.