

5059

Diag. Cht. No. 1253

Form 504
Ed. June, 1928

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

State: Florida

DESCRIPTIVE REPORT

Topographic } Sheet No. 5059
Hydrographic } #48

LOCALITY

West Coast

Shark and Harney

Rivers

1930

CHIEF OF PARTY

B. H. Rigg

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES

FEB 10 1931

Acc. No. _____

5059

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 5059

HYDROGRAPHIC TITLE SHEET

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-4459~~ 48

REGISTER NO. 5059

State Florida

General locality West Coast

Locality Shark & Harney Rivers.

Scale L:20,000 Date of survey April & March, 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. Morris

Soundings in ~~fathoms~~ feet

Plane of reference M.I.W.

Subdivision of wire dragged areas by _____

Inked by _____

Verified by _____

Instructions dated December 6, 19 29

Remarks: Smooth sheet & boat sheet furnished party by the office (T-4459)

Methods of survey explained fuller for sheet ~~T-4459~~ reg. 1/15/31

H-5049

Descriptive Report

to accompany

Hydrographic Sheet No. ~~74459~~ 5059

Instructions dated
December 6, 1929.

LIMITS:

Latitude $25^{\circ} 20'$ to Latitude $25^{\circ} 27'$ Long. $80^{\circ} 56'$ to Long.
 $81^{\circ} 09.30'$. Includes Shark River, Harney River, Little Harney and Tarpon
Bay.

SURVEY METHODS:

Shark River Entrance:

Triangulation stations, JOE, RAY and SHARK were recovered and
signals built. Next hydrographic signals were built at the following
points: SAM, DOG, CAT, SOK, IAC, PIN, RYE, ARK, MID, DON, TEN and MES.
The aerial pictures of this area were clear and the points so well de-
fined that no difficulty was experienced in spotting the points on the
boat sheet. The signals on the smooth sheet are transferred directly
from the boat sheet.

Hydrography in this area was done using three point fixes for
control. For depth up to 14' a sounding pole was used. North and south
lines were first run to determine the channels and then these were devel-
oped by lines parallelling them.

Harney River Entrance:

Entrance to Harney River from the west is blocked by a broad
sand bar; to enter, it is necessary to follow the shore line northward from
Shark Point. The entrance is a complicated mass of oyster bars with a
maximum depth of $3\frac{1}{2}'$ between. A system of criss-cross lines with two
channel lines crossing them give the best water in this area. This en-
trance is little used.

Work in the Upper Rivers:

All the upper river and bay work was controlled by using the range-finder and pelorus. In the main rivers three lines were run, one in the center and one close to either side.

Tarpon Bay was surveyed by running criss-cross lines from point to point, the points being located on the boat sheet from a study of the topography.

It was found that the sheet did not extend as far as Tussock Key, a tiny palm covered island northeast from Tarpon Bay. As this is the anchorage of practically every yacht coming into Shark River a topographic survey was made, adding this area to the sheet. No difficulty was experienced in any of the river work from oyster bars. The only oyster bars on this sheet are at the mouth of Harney River.

CHANNELS:

Shaw River:

There is little choice of channels in entering Shark River; the north or the south branch of the river will carry six feet to Tarpon Bay. From Tarpon Bay to Tussock Key five and one-half feet is the limiting depth. The bottom of the bay is flat and no special channel is used. The south branch of Shaw River leads into Oyster Bay and is the route used up the river, so there is more traffic in this branch than in the north branch. The north branch is defined as the bark factory branch, so named because of the ruins of a bark factory on the third point on the right after entering the river. (Marked ruins on sheet)

Harney River:

Once by the mouth of Harney River six and one-half feet can be carried to Tarpon Bay. The entrance through the bars is so complicated that it is hard to show it on a 1/20,000 scale. This entrance when used is always navigated at high water.

DANGERS:

A three and one-half shoal is ^m Lat. $25^{\circ} 20.6'$ Long. $81^{\circ} 07.67'$ with eight and one-half feet on either side. This is right in the middle of the entrance to the south branch of Shark River. It is coral rock.

A one and one-half foot shoal in Lat. $25^{\circ} 20.70'$ Long. $81^{\circ} 05.25'$. This is a long narrow sand bar with eight feet on either side close to the banks. This area is often used as an anchorage for yachts and is the main pass into Oyster Bay.

SNAGS:

Lat. $25^{\circ} 25.6'$
Long. $81^{\circ} 06.8'$ a tree root partially exposed at all tides.

Lat. $25^{\circ} 21.5'$
Long. $81^{\circ} 06.3'$ a tree root partially exposed at all tides.

TIDE REDUCERS:

Reducers for the outside were taken from the tide gauge at Shark River entrance. When work was first started on the river lines a staff was maintained at Tarpon Bay. The reducers were proportioned between the two gauges for the river lines.

After all of the upper part of the rivers were finished I found it more economical to move the tide staff down to Whitewater Bay. It was assumed that the tides half way up the river and the tides at the point where the tide gauge was established in Whitewater Bay are the same. For the remaining work in the rivers the reducers were proportioned between these two gauges.

PLACE NAMES:

Little Harney River,
Trussock Key,
b(?) Bark Factory,
Gungoat Island.

Authority: Jack Daniels, Guide, Everglades, Fla.
Arthur N. Wintle, Guide, Fort Meyers, Fla.

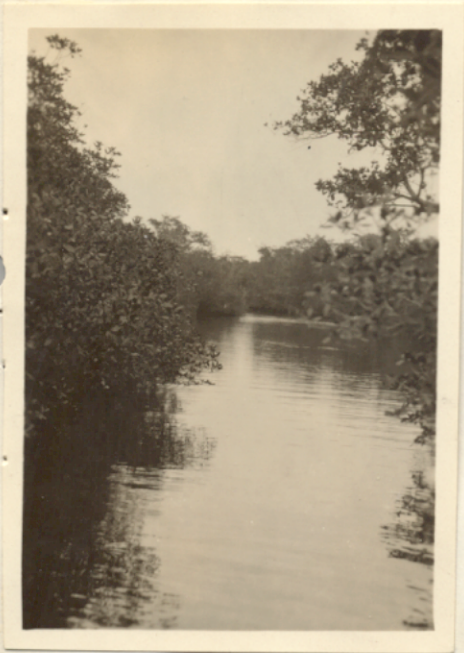
Respectfully submitted,



TYPICAL SHORELINE SHARK AND HARNEY RIVERS



ROOTS OF
THE BLACK
MANGROVE



UPPER SHARK
RIVER



T.G. AT THE MOUTH OF SHARK RIVER



TUSSOCK KEY



UPPER SHARK RIVER

Statistics Sheet #~~4459~~ 5059

Date	Vol.	Letter	Miles	Soundings	Positions.	
Mar. 4	1	a	40.5	1435	160	
	5	1	b	18.7	736	46
		2	b	20.5	743	58
	6	2	c	24.1	974	88
	7	2	d	9.1	391	40
	21	3	e	11.2	386	36
Apr. 1	3	f	25.1	918	87	
	8	3	g	22.7	972	96
		4	g	10.2	385	31
	9	4	h	21.7	850	77
	10	4	k	7.8	324	32
	11	4	l	20.0	626	62
		5	l	5.9	217	34
			<u>237.5</u>	<u>8957</u>	<u>847</u>	

(FOR FILES OF FIELD RECORDS SECTION)

February 20, 1931

Division of Hydrography and Topography: .

Division of Charts:

Tide Reducers are approved in
5 volumes of sounding records for

HYDROGRAPHIC SHEET 5059

Locality Florida West Coast, Shark & Harveys Rivers, Tarpon Bay

Chief of Party: B.H. Rigg in 1930

Plane of reference is mean low water, reading
1.5 ft. on tide staff at Shark River Entrance
4.0 ft. below B. M. 1

2.7 ft. on tide staff at Tarpon Bay
NO BENCH MARKS ESTABLISHED.

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.

pcy

Chief, Division of Tides and Currents.

Field Records Section (Charts)

HYDROGRAPHIC SHEET No. *5059*

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

Number of positions on sheet	<i>.847.</i>
Number of positions checked	<i>.276.</i>
Number of positions revised	<i>.37.</i>
Number of soundings recorded	<i>.8957.</i>
Number of soundings revised	<i>.176.</i>
Number of signals erroneously plotted or transferred	<i>—</i>

Date: *March 27, 1931*

Cartographer: *Harold W. Murray*

March 27, 1931

Section of Field Records
Report on Hydrographic Sheet #5059
Shark & Hamey River, Florida.
Surveyed in 1930

Chief of Party - B. H. Rigg.

Surveyed by - B. H. R.

Protected by - Fred Nestle

Soundings plotted by - J. E. Morris

Verified & inked by Harold Murray

1. The records conform to the requirements of the Hydrographic manual except that no leadman has been recorded at the beginning of b, c and e day.
2. The plan and character of development fulfill the requirements of the Hydrographic manual.
3. The sounding line crossings are adequate and agreement is fair.
4. The usual depth curves can be completely drawn with the exception of the 3-ft curve inland. This curve has been added by

by special recommendation.

5. The field plotting was completed to the extent prescribed in the Hydrographic Manual except that:-

a. no bottom characteristics were added to the smooth sheet.

b. additional topography as islands or shoals, were not transferred to the smooth sheet. Numerous small streams were noted in the records which were not shown by the aerial survey. These were not plotted on the smooth sheet nor on the boat sheet. These streams were plotted by the verifier.

6. Comparison with other surveys:-

The previous surveys which cover this area are H-2009, (1890), an inshore sheet and H-1826 (1888) an offshore sheet. General changes have occurred.

Several distinct changes have occurred by a comparison with chart #1253 at the entrance to Shark River. A shoal exists in the middle of the channel S. W. of signal "Go" and is bounded by a deeper

channel on each side.

The island on which Signal Joe is situated is separated from the mainland. The isolated 6's have shifted southward. The 6-ft curve enclosing a 5 and 4-ft sounding is linked with the major 6-ft curve in latitude $25^{\circ}23'$. General changes exist in the many antennas to the north of the island.

In latitude $25^{\circ}23'$, changes of 1-ft have occurred. The curves on H-5059 are approximated in this area since it is not surveyed sufficiently to depict a more satisfactory curve.

This survey (H-5059) substantiates the two shoals shown on chart #1253 in latitude $25^{\circ}25'$ and longitude $81^{\circ}10'$.

The junction on the South with H-5062 (1930) is satisfactory. ~~In making this transfer, a discrepancy resulted between the projection and topography of the two sheets. The topography was used as a basis in making the adjustment.~~

7. Attention is called to the revised topographic features on this sheet. The accompanying

Topographic sheet should be carefully compared for additional changes.

8. In Shash River (upper branch) latitude $25^{\circ}22'3$, an island has been added at the junction with another channel. In latitude $25^{\circ}22'4$, longitude $81^{\circ}02'5$ a rock is present in mid channel.

9. Respectfully submitted

Harold W. Murray

SECTION OF FIELD RECORDS

REVIEW of Hydrographic Sheet No. 5059
Shark River and Harney River, West coast
of Florida.

Surveyed in 1930

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

Chief of Party - B. H. Rigg
Surveyed by - B. H. Rigg and F. E. Okeson
Protracted by - Fred Natella
Soundings plotted by - G. E. Morris
Verified and inked by - Harold W. Murray.

1. This survey is a part of a special project on the west coast of Florida where the topography from aerial photographs was used for the control of the hydrography. The review of Hydrographic Sheet 5056 gives consideration to the methods employed and the results obtained and is equally applicable to this sheet (H. 5059).

2. The survey carries out the intent of the instructions insofar as the main channels of the Harney and of the Shark rivers are concerned but no sounding lines have been run in some of the minor and the connecting channels of the latter river.

3. Depth curves. The shoal water shown on the chart off this coast with deeper water inshore is confirmed by this survey. (Note statement in Descriptive Report.)

The information at the entrance to the Shark River is sufficient to draw the 6 foot curve fairly completely. In the remainder of the area covered by the survey, the 3 foot and the 6 foot curves are approximate but serve to call attention to the shoaler soundings.

4. Adjacent surveys. The junction on the south with contemporary sheet H. 5062 is satisfactory although some of the minor channels leading toward Whitewater Bay have not been sounded. No contemporary surveys join to the other parts of the sheet.

The surveys of 1888 and 1890 (H. 1826 and H. 2009) overlap this sheet on the west. Southward of Shark Point the agreement is very poor. Two small islands in latitude $25^{\circ}22'.1$ longitude $81^{\circ}07'.7$ have entirely disappeared. A $-\frac{1}{2}$ sounding in the entrance to the river to the northward of the former islands has also disappeared. Details in the main channel entrance to the Shark River have changed, both above and below the water surface. This being a changeable area, it is recommended that this part of the former survey be replaced on the chart by the later survey. Off Shark Point and northward there is a closer agreement

H. O. 5059.

of the two surveys and the present survey may be supplemented with depths taken from the former survey.

Topographic changes and supplementary topographic work done by the hydrographic party, have been noted in red on a standard accompanying T. 4459.

5. Recommendation. In view of the commercial unimportance of the unsurveyed areas, no further work is recommended at this time.

6. Reviewed by R. J. Christman, February 1932.

Conclusion: (Statement by Chief of Field Records Section). The survey 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, the survey is adequate, but for the preparation of large scale charts the survey can hardly be considered adequate.

A. M. Sobieralski
Chief, Field Records Section.

Sheet Inspected by A. L. Shalowitz - February 1932.

NAUTICAL CHARTS BRANCH

SURVEY NO. H 5859

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
12 Mar '53	598	H. E. MacSwain	Before After Verification and Review
Mar '53	599	J. L. L.	Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review

M-2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.