

4379

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

State: Florida

11-5813

DESCRIPTIVE REPORT.

Hydrog. Sheet No. 4379

LOCALITY:

Gulf of Mexico

Approaches to Tampa Bay

1924

CHIEF OF PARTY:

G. C. Jones

DESCRIPTIVE REPORT

To Accompany

HYDROGRAPHIC SHEET NO

(FIELD NO. A)

APPROACHES TO TAMPA BAY,

FLORIDA.

INSTRUCTIONS DATED JUNE 3, 1924.

STEAMER HYDROGRAPHER.

G. C. JONES, COMMANDING.

AREA INCLUDED.

This sheet includes the area off the entrance to TAMPA BAY from Latitude 27° 29' to 27° 39.5' and from a junction with launch work near the beach to Longitude 83° 02' west.

CURRENTS.

As no actual current observations were made this information is necessarily indefinite.

Offshore the currents are principally caused by any sustained wind. At a sufficient distance offshore so that no influence is felt from the currents in the Bay entrance a slight set to northward is usually noted in calm weather.

Currents in the Bay entrance are quite strong (ebb current estimated 1 to 3 km.) especially in the north channel. The ebbing current from that channel is often noticeable as far out as the Seabow about Longitude 82° 54'.

LANDMARKS.

Some prominent buildings on Anna Maria Key and Mullet Key are visible some distance offshore. These marks will be located when the shore work is done and listed in the descriptive report accompanying the launch sheet.

Aside from Egmont Key Lighthouse the only prominent and permanent mark located is the large water tank on Egmont Key. The tank now shown on the chart has been removed and a larger tank erected only about thirty (30) meters from the old location. The new tank is visible (in a clear atmosphere) several miles farther than the Lighthouse.

The correct position of the tank now is :-

Latitude	27° 35' 39.970"	(1230.3 M)
Longitude	82° 45' 45.404"	(1245.1 M)

ANCHORAGES.

As the area covered by this sheet lies entirely offshore no anchorages are described in this connection.

CHANGES.

The changeable areas in this locality are alongshore and will be described in the descriptive report of the launch sheet when that work is done.

SHALLOW DEPTHS LOCATED AND SPECIAL DEVELOPMENT.

Report has already been made of important shoal spots located and developed.

In Latitude $27^{\circ} 33.2'$ Longitude $82^{\circ} 54.7'$ a single shoal sounding of 36 feet was recorded. On account of the fact that all observers and leadsmen are in the habit of watching for any indication so marked this sounding is considered doubtful. One attempt was made to develop the spot but was unsuccessful due to thick haze. It was hoped to make another attempt before the completion of the sheet but on account of continued hazy weather this has been impossible. Some positions were secured at the inner ends of the development lines and it is believed that the area was covered by soundings, but not enough angles were taken to show conclusively that such was the case. No further indication of shoal water was found.

It is thought that some development should be made of the 33 ft. sounding in Latitude $27^{\circ} 38.8'$ Longitude $82^{\circ} 56.1'$. It is the present intention to develop this spot on the adjoining sheet to northward as the date when it can be done is doubtful due to continued thick weather.

The development in Latitude $27^{\circ} 39'$ Longitude $82^{\circ} 53'$ was made on account of the report by a pilot that a load of ballast had been dumped near that spot and by the leadsmen of rocky bottom on one sounding. No further indication of shoal water or rocky bottom was found.

CONTROL.

The topography of the shore admitted of strong fixes for all the work done on shore objects. For that reason it is thought that the locations of bouys is sufficiently rigid. (See below)

TIDAL REDUCERS.

Tides were observed at Egmont Key Lighthouse Dock and the datum secured by level to old bench marks accepted. No correction for time or range outside was made. The plane of reference is mean low water which from the above mentioned levels was taken as 2.6 on the staff.

Due to use of incorrect base Δ Tank + ~~A~~ ^{Palm} are incorrect. Δ Tank being out only 7 meters will not affect the protracted positions. The correct position of A Palm is below

$\phi = 27^{\circ} 32' 12.841''$

S.M.
1456.5
(390.3)

Respectfully submitted,

$\lambda = 82^{\circ} 44' 21.227''$

582.21
(1063.23)

G.C. Jones
G.C. JONES, Chief of Party.

HYDROGRAPHIC STATISTICS

To Accompany

Descriptive Report on

Sheet "A"

APPROACHES TO TAMPA BAY, FLORIDA.

DATE	LETTER	VOL.	STAT. MILES	SOUNDINGS	POSITIONS.	ANGLES.	VESSEL
Aug. 5, 1924.	A	1	70.5	976	145	290	Ship
" 6, 1924	B	1-2	86.0	1275	179	358	"
" 7, 1924	C	2	61.2	900	132	264	"
" 19, "	D	3	27.1	358	56	121	"
" 20, "	E	3	13.4	167	20	41	"
" 21, "	F	3	45.7	733	103	206	"
" 22, "	G	4	24.5	432	54	110	"
" 26, "	H	4	65.4	794	105	210	"
" 27, "	J	5	45.6	583	83	160	"
" 28, "	K	5	70.8	792	109	218	"
" 29, "	L	6	26.9	374	48	96	"
Sept. 2, "	M	6	19.5	285	39	78	"
" 3, "	N	6	67.3	932	134	268	"
" 8, "	P	7	10.0	123	20	40	"
" 9, "	Q	7	80.1	1244	165	330	"
" 10, "	R	8	12.2	247	25	50	"
Oct. 28, "	S	8	28.7	614	92	184	"
" 31, "	T	8	12.3	217	37	74	"
TOTALS		8	767.2	11046	1546	3098	

January 14, 1925.

Division of Hydrography and Topography:

Division of Charts:

Tide reducers are approved in
8 volumes of sounding records for

HYDROGRAPHIC SHEET No. 4379

Locality: Approaches to Tampa, Florida.

Chief of Party: G. C. Jones in 1924.

Plane of reference is mean low water, reading
2.5 ft. on tide staff at Lighthouse Wharf, Egmont Key, Fla.

For reduction of soundings, 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 wrong column.
7. Field reductions entered in "Office" column.
8. Location of tide gauge not given at beginning of each 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.

Section of Field Records

Sheet No. 4379. Surveyed in 1924

• Chief of Party - G. C. Jones

Surveyed by - Field Party.

Protracted by - R. C. Wilson

Soundings plotted by - R. C. W.

Verified and inked by - H. E. Mac Ewen

1. The records conform to the requirements of the general instructions, except that bottom characteristics were not included in sufficient number to give a complete record of the nature of the bottom. On several days the recorder gave the bottom characteristic on or near the first sounding and none others throughout the days work. The field draftsman, as indicated by the number of bottoms plotted, apparently constructed this one entry to apply to the whole days work. Since the office draftsman was unable to find any support for this in the general instructions, bottom characteristics were omitted in every case except where actually recorded.
2. The character and extent of the development satisfy the general instructions and conform to the specific instructions.
3. The sounding line crossings are adequate for the most part. However no cross lines were run on the extreme eastern portion of the sheet nor in a large area in the southeastern portion, nor in a smaller area in the northwestern portion of the sheet.

4. The usual depth curves can be completely drawn
5. The field plotting was completed to the extent prescribed in the general instructions. See Remarks.
6. No recent surveys join this sheet.
7. No further surveying is required to fully develop important areas within the limits of this sheet except possibly a sounding of 36' surrounded by depths in Lat. $27^{\circ} 33.2'$ and Long $82^{\circ} 54.7'$ (approx). This sounding was questioned in the records by the field party but plotted by the field draftsman. (See Descriptive Report, page 2)
8. Remarks:

The field draftsman in plotting this sheet apparently used an erroneous protractor. Evidence of this is supported by the fact that, when using a corrected protractor, a progressive error was noted, tending to the northward and increasing in proportion to the distance from the control. On the work near shore this error was evident but not appreciable. Beyond the six mile limit however the error was such that the office draftsman had to replot all the fixes and soundings. The error was increased in the offshore work due to the erroneous plotting of offshore signals. Three signals were buoys planted by the field party and located by sights from positions fixed by shore triangulation signals and plotted.

8. Remarks - (Continued)

in error, apparently by a faulty protractor. The shift in position was in some cases in excess of 150 meters. None of the field plotting controlled by these survey signals could be retained.

9. Rating of work

- (a) Character and scope of surveying - Excellent
- (b) Field drafting - Poor.

Respectfully submitted

H. E. Mac Ewan

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

WASHINGTON August 14, 1925.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4379

Approaches to Tampa Bay, Florida

Surveyed in 1924

Instructions dated June 3, 1924

Chief of Party, G. C. Jones.

Surveyed by party of Steamer HYDROGRAPHER

Protracted and soundings plotted by R. C. Wilson.

Verified and inked by H. E. MacEwen.

1. The records conform to the requirements of the General Instructions except for the omission of bottom characteristics throughout a considerable portion of the survey.
2. The plan and character of development conform to the requirements of the General Instructions.
3. The plan and extent of development satisfy the specific instructions.
4. The sounding line crossings are adequate.
5. The information is sufficient for drawing the usual depth curves.
6. The usual field plotting was done by the field party. Except for a narrow strip close to the shore signals the protracting was erroneous throughout and had to be done over in the office. The shift in position was so great (as much as 200 meters) that nearly one-half of the soundings required re-plotting. The error in protracting was uniformly in one direction and was evidently due to the use of a protractor out of adjustment. The buoy signals were all in error about 110 meters in the same direction.

The field draftsman showed faulty judgement in plotting bottom characteristics at frequent intervals where the sounding records showed only one or two bottoms for the entire day.

7. There are no contemporary surveys adjoining this one.
8. The entire area of this sheet seems to be sufficiently developed

with the exception of the 33 foot shoal in Lat. $27^{\circ} 39'$,
Long. $82^{\circ} 56'$.

9. The character and scope of the surveying are excellent and the field drafting poor.
10. Reviewed by E. P. Ellis, August, 1925.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

The finished Hydrographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

U. S. Coast and Geodetic Survey.

Register No. (A) 4379

State . . . FLORIDA

General locality . Gulf of Mexico

Locality . . Approaches to Tampa Bay

Chief of party . . G. C. Jones

Surveyed by Party of Str. Hydrographer

Date of survey . August 5, to October 31, 1924

Scale . . 1:40,000

Soundings in . . . Feet

Plane of reference . . Mean Low Water

Protracted by . R. W. Wilson Soundings in pencil by . R. S. W.

Inked by Verified by

Records accompanying sheet (check those forwarded):

- 1 Des. report, 1 Tide books, 5 Marigrams, 1 Boat sheets,
8 Sounding books, Wire-drag books, Photographs.
 Data from other sources affecting sheet 1 Carrier Tidal Data.

Remarks:

586 8/2/67 Helmer - app'd few days to Supplement H-7934 + H-7793 in area of
nealline extension to 82°56'