4580

4580

Form 504

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

State: Florida

11—5613

DESCRIPTIVE REPORT.

Sheet No. 4580 B

LOCALITY:

Gulf Coast

Pass a Grille to

Indian Rocks - Offshore

1924 - '25 - '26

CHIEF OF PARTY:

G.C. Jones, R.P. Eyman

(11)

January 7, 1927.

Division of Hydrography and Topography:

Division of Charts:

Tide reducers are approved in
16 volumes of sounding records for

HYDROGRAPHIC SHEET NO. 4580

Locality: FLORIDA WEST COAST

Chief of Party: C. C. Jones in 1924 and R. P. Lyman in 1925-26.

Plane of reference is MLW
2.9 ft. on tide staff at Egmont Key.

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 in 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.

G Rude

Chief, Division of Tides and Currents.

DESCRIPTIVE REPORT TO ACCOMPANY

1530

HYDROGRAPHIC SHEET "B"

APPROACHES TO TAMPA BAY

EGMONT KEY TO INDIAN ROCKS

INSTRUCTIONS DATED JUNE 3, 1924

STEAMER HYDROGRAPHER

RAYMOND P. EYMAN

Chief of Party

DESCRIPTIVE REPORT TO ACCOMPANY HYDROGRAPHIC SHEET "B"

1. Instructions.

The work on this sheet was done in accordance with instructions dated June 3rd, 1924.

2. Limits.

This sheet comprises the hydrography in the approaches to Tampa Bay from the northward and extends from Lat. 27° 40' northward to Lat. 27° 54' and from Long. 82° 46' westward to Long. 83° 02'. The scale of this sheet is 1:40,000 and joins on sheet "A" at the southern end and sheet "C" at the northern end and extends from launch work near the beach, (done by a party from the Str. "Bache") to Long. 83° 02' the western limits of the project.

3. General.

The shoreline along this section of coast is low and cpmposed generally of smooth sand beach with a background of bushes and trees with no natural distinguishing features; however, several tall tanks and buildings can be easily identified and in clear weather little difficulty should be had in locating a ships' position before a too close approach to the beach.

Work on this sheet was started in October 1924 by the "Hydrographer", G. C. Jones, Chief of Party, and lines were run 1/4 mile apart to the limits of the sheet whenever weather permitted; hazy weather set in soon and it was impossible to extend the lines further offshore than about 4 or 5 miles, and this system was carried northward to about the limits of the sheet. In January 1925 when the present Chief of Party took charge it was found that so much hazy weather was occuring that it was impossible to continue work on this sheet at this time and consequently work was temporarily discontinued and operations were confined to Tampa Bay.

In June 1925 work was resumed on this sheet and was soon completed with the exception of certain development work which was done at various times thruout the season when traversing this section to and from the working grounds to the northward. Due to the fact that the large part of the work remaining was on the outer section of this sheet, no attempt was made to carry on the small boat inshore work at this time, and full advantage of the clear weather was taken by operating the ship hydrographic party thruout the daylight hours.

4. Dangers.

The southern section of the sheet generally shows good water with no marked irregularities, but the northern section in this vicinity from Johns Pass to Indian Rocks Beach is very irregular with numerous shoal spots extending out to the westward to the neighborhood of Highlands shoal about 4-1/3 miles W.xN. of Indian Rocks Beach which was found to check the chart with a least depth of 17 ft. A red nun buoy # 20 marks this shoal, but should not be relied upon too closely as it is moved about by storms thru a considerable area. At the time the survey was made the buoy was inside the shoal about 1/3 mile E.S.E. from the least water which was reported to a Light House Tender then engaged in placing buoys along this coast. Ships drawing 18 ft should give this area a good wide berth until at least three miles to the southward as another 18 ft spot was found about two miles to the southward of Highland shoal.

A 30 ft spot was developed about 2-1/2 miles N.W. of the whistle buoy at entrance to Tampa Bay. This area is shown on sheet "A" with but little indication of any shoal spots.

Several shoal spots were found comparatively close inshore. A shoal of rather large extent having a least depth of 9 ft about 2 miles S.W. x W. of tri. sta. Gulf and 10 ft 2-3/4 miles W.S.W. of tri. sta. Gulf

were developed. A 10 ft spot about 1-1/4 mile W.N.W. of Indian Rocks Beach of very small extent was examined with the launch showing 14 ft close by but on one side only and no check sounding exactly over the spot due to differences in the boat sheets and smooth sheet.

A 13 ft spot about 2-1/3 miles W. x N. of Indian Rocks Beach was checked with launch work. Lat 27°-53' Long 82°-53'

Another 13 ft spot of small extent 2-3/4 miles W.S.W. of tri. sta. Vec is surrounded by 15 to 18 ft soundings. Lat 27°-51' Long 82°-54'

An 11 ft sounding was recorded about 2-3/4 miles S.S.W. of tri. sta. Vec but this appears to be a mistake of one fathom in recording as it was checked over by a later sounding line showing a depth of 17 ft. least

About 10 miles off Indian Rocks Beach near the outer end of a line between positions 22-23 A' day is shown a 36 ft sounding surrounded by deeper water. On P' day an attempt was made to develop this area but with little definite results, as the sea had picked up an a general haze made signals very indistinct. Five lines were run back and forth in this general vicinity giving depths from 37 to 44 ft showing that the 36 was very likely correct. The positions on P' day were very uncertain and could not be plotted, in there true sequence due, as stated above, to the low visibility of signals and the very slim angles obtainable being unduly warped by any slight error of observing. No later opportunity was had to thoroly check this spot, but it is believed that the sounding of P' day served as a check that there was no shoaler water in this vicinity.

In general the bottom samples were a dark gray sand, being fine inshore and coarse offshore with a few specimens of broken coral.

5. Tides and Currents.

Little current effect was noticed over the larger area of the sheet under normal conditions. Usually the flood current had a tendency

to set to the northward and the ebb to the southward. However near the shoals the current was more marked and likewise near the beach. Strong currents were also noticed near the 30 ft spot 2-1/2 miles N.W. of the whistle buoy being due probably to the mass of water entering or leaving Tampa Bay.

The tide reducers for this sheet were obtained from a portable automatic field gauge maintained at Egmont Key. The plane of reference used was M.L.W. which corresponded to a reading of 2.6 ft on the tide staff. This data was from previous observations. Later observations on this gauge placed the M.L.W. plane at the 2.9 ft mark on the tide staff, but inasmuch as a large portion of the sheet had been plotted with the old plane this same plane was continued thruout the sheet for the sake of uniformity.

6. Landmarks.

A number of tall tanks form prominent landmarks that can be fairly easily identified. The tall tank on Egmont Key is one of the most outstanding ojects being visible for about 15 miles under ordinary conditions; however it's color (light gray) is such that under some conditions it is not visible until well above the horizon.

A new hotel to the northward of the town of Pass-a-grille (shown as tri. sta. Don) is probably the most important feature of this section of coast as it shows up well under all conditions for distances up to 18 miles and even further under favorable circumstances. This hotel is probably more definitely described for the topographic sheet of this vicinity executed by a party on the Steamer "Bache".

A group of three tall slender water tanks shown as "Slim", "Dav", and "Jungle" show for distances of about 14 miles and are usually all seen about the same time.

To the northward the tanks and tall buildings in the vicinity

of Clearwater are very prominent; these will be listed with the report for sheet "C".

A number of houses are grouped on the beach at Indian Rocks, but these can not be seen far off shore as they all are at about the same height (or lower) than the tree line in the background.

7. Survey Methods.

No unusual methods were employed in making this survey. All soundings, except for some slight development near the north end of the sheet, were taken with the hand lead from the ship which was run at a speed of 4-1/2 to 5 knots. All fixes were from prominent signals on shore which, in clear weather, could be carried to the limits of the sheet altho extra height had to be obtained by constructing a temporary platform above the bridge awning for the section near the S.W. corner of the sheet.

Respectfully Submitted,

Raymond P. Eyman,
H. & G. Engr.

STATISTICS SHEET NO. 1

Date (1924)	Letter	Volume	Positions	Soundings	Miles Statute	Vessels
October 1st....	A	1	118	920	46.6	Ship
October 3rd....	B	1	103	810	55	Ship
October 10th....	C	2	37	248	15	Ship
October 28th....	D	2	31	270	12.6	Ship
October 30th....	E	2	82	666	36	Ship
October 31st....	F	2-3	96	792	42	Ship
November 12th...	G	3	90	795	46	Ship
November 13th...	H	4	149	1163	59	Ship
November 14th...	J	5	87	767	43	Ship
November 18th...	K	5	95	870	50	Ship
November 20th...	L	6	49	417	22	Ship
December 2nd...	M	6	34	280	15	Ship
December 4th...	N	6	31	260	16	Ship
December 5th... (1925)	P	6-7	112	923	56	Ship
January 20th....	Q	8	48	341	15.5	Ship
January 21st....	R	8	72	426	16.1	Ship
January 26th....	S	8	24	184	8	Ship
January 27th....	T	8-9	94	523	35	Ship
June 17th.....	U	9	27	104	7.6	Ship
June 18th.....	V	9	143	716	59.2	Ship
June 22nd.....	W	9	84	379	28.2	Ship
June 23rd.....	X	9-10	196	950	73.8	Ship
June 24th.....	Y	10	178	861	70.7	Ship
June 25th.....	Z	11	179	1255	72	Ship
June 26th.....	A'	11	68	438	26.5	Ship
June 30th.....	B'	11-12	220	813	47	Ship
July 1st.....	C'	12	11	84	3.9	Ship
July 2nd.....	D'	12	37	231	15.3	Ship
July 3rd.....	E'	12	24	407	20.2	Ship
August 3rd.....	F'	12	53	260	12.9	Ship
August 4th.....	G'	12-13	184	1038	76.0	Ship
August 5th.....	H'	13-14	205	944	63	Ship
August 6th.....	J'	14	225	1222	62.5	Ship
August 7th.....	K'	14-15	59	299	19.4	Ship
August 10th.....	L'	15	21	103	3.2	Ship
September 18th..	M'	15	12	73	4	Ship
October 23rd....	N'	15	28	191	8.9	Ship
October 27th.... (1926)	O'	15	28	164	8	Ship
September 7th.	P'	16	11	35	1.2	Ship
September 11th.	Q'	16	60	357	15.8	Ship
September 11th.	a	15	57	352	6.8	Launch
Totals	41	16	3362	21,931	1294.9	

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

AND REFER TO No. 11-DRM

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

WASHINGTON

November 5, 1927.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4580

Pass a Grille to Indian Rocks, Florida

Surveyed in 1926

Chief of Party, G. C. Jones, R. P. Eyman.

Surveyed by G. C. J., R. P. E.

Protracted by G. J. Danielson, P. A. Smith, H. J. Healy.

Soundings plotted by G. J. D., P. A. S., L. M. Zeskind.

Verified and inked by G. Risegari.

1. The records conform to the requirements of the General Instructions.

2. The plan and character of development satisfy the requirements of the General Instructions.

3. The plan and extent of the survey satisfy the requirements of the specific instructions.

4. The sounding line crossings are adequate.

5. The information is sufficient for drawing the usual depth curves.

6. The field party completed the usual plotting of the soundings. A considerable amount of reprotracting had to be done, particularly at the southwestern section of the sheet. Some variances in the shifts of positions are as much as 140 meters, especially where long shots are used. The source of this type of error is undoubtedly the protractor's fiducial edges or its need of adjustment. This condition is further borne out by the work on Hydrographic Sheet 4379.

7. The junctions with 4379, 4569, 4570, 4571, 4572 and 4581 are satisfactory.

8. Attention is called to a 10-foot sounding one and a quarter miles west of signal Ro, latitude 27° 52', longitude 82° 52'. The soundings adjacent to this 10-foot spot are 14, 15, and 16 feet and the condition indicates the possibility that a shoaler depth might be obtainable in this area -- the character of the bottom being more or less lumpy.

9. The entire area of this sheet seems to be sufficiently developed.

10. The character and scope of the surveying - good.
Field drafting - fair.

11. Reviewed by G. Risegari, October, 1927. Last inspected. G.R.S.

Approved:

_____
Chief, Section of Field Records (Charts)

_____
Chief, Section of Field Work (H. & T.)

Report on Hyd. Sheet 4580

Records:-

Satisfactory.

Protracting:-

A considerable amount of reprotracting had to be done particularly at the southwestern section of the sheet. Some variances of the field party protracting and reprotracting are as much as 140 meters where the extreme long shots were used. The protracting nearest to shore was found sufficiently accurate with only a few exceptions.

Plotting:-

Satisfactory.

Miscellaneous:-

Attention is called to two 13 foot soundings, also referred to in the Des. Rept. p.3 which may require further development. Lat 27°-53' Long. 82°-53'
" 27°-51' " 82°54'

Reference is made in the Des Rept., page 3, to a 36 foot spot (Lat. 27°-53' Long. 83°-01'). The plotted 36 ft sdg. was checked in the rejected work of P' day in by two 37 feet soundings which plot very close. The P' days' work was rejected chiefly on account of indistinct signals and weak fixes.

S. Risigari

Form 537
11—5812

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

C. & G. SURVEY
L. & A.
DEC 24 1926
Acc. No.

REG. NO. 4580

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. "B"

REGISTER NO. 4580

State Florida.

General locality Gulf ~~Coast of Florida.~~

Locality Pass a Grille to Indian Rocks~Offshore ~~Tampa Bay to Indian Rocks.~~

Scale 1/40,000 Date of survey Oct. 1924, Sept. , 1926

Vessel Steamer Hydrographer.

Chief of Party G. C. Jones and Raymond P. Eyman.

Surveyed by G. C. Jones and Raymond P. Eyman.

Protracted by G. J. Danielson, H. J. Healy & P. A. Smith.

Soundings penciled by G. J. Danielson, L. M. Zeskind & P. A. Smith.

Soundings in ~~fathoms~~ feet

Plane of reference M.L.W.

Subdivision of wire dragged areas by

Inked by

Verified by

Instructions dated June 3rd , 1924

Remarks:

GPO

Applied to extension of Cht. 586 12-4-42 K.R.

Applied to extension of Chart 586 6/17/65 John Irwin

Appld Sdgs-curves for ncatline extention (supplement to H-7793 in part) Cht 586 dHelmer 8/2/67