

4477

Form 501
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

State: *Florida*

21-50.3

DESCRIPTIVE REPORT.

Hydro. Sheet No. *4477*

LOCALITY:

East Coast

Ormond Beach Fla

Latitude 28° 58'

1925

CHIEF OF PARTY:

F. J. Engle.

4477

DESCRIPTIVE REPORT TO ACCOMPANY

INSHORE LAUNCH HYDROGRAPHIC SHEETS Nos. 4477

COAST OF FLORIDA

DATE OF ORDERS: NOVEMBER 29, 1924.

ORGANIZATION;--- Lieut. E. W. Eickelberg, right angle and plotting,
" A. Ogram, left angle,
" W. G. Craib, " "
" W. M. Gibson, " "

GENERAL DESCRIPTION OF COAST LINE;--

Coast line is generally low with sand dunes covered with thin growth of cactus and palmetto. There are also some thin woods inland along the river shore (inside passage.) The beach line is rapidly being built up.

PROMINENT LANDMARKS;-- Commencing at the North-eastern limit of the work and working toward the South-west.

COQUINA HOTEL;-- A prominent white building with a low white dome and a tall white tower. To the South-west is the town of Daytona Beach. Prominent objects are Clarendon Hotel -- a large brick structure -- with red roof. Water towers North and South. Wilbur is a low black water tank of large diameter and can be seen well out to sea. At Mosquito Inlet is the large lighthouse and to the Southwest and inland in New Smyrna are two water towers Tal and Low. All the stations mentioned above are triangulation points. In addition any tall hydrographic signals could be added as these signals have been standing up well. There is nothing of importance as a land mark Southwest of Tal and Low at present. Although this section is rapidly developing.

CURRENTS;-- In general the currents follow the tidal shore line. At Mosquito Inlet the ebb tide carries out discolored water a considerable distance outside of the sea buoy -- about a mile offshore--; the water is a whitish color. The current thru the inlet is rather strong --- estimated at from two to three knots, on the bar the sea breaks heavily in an ~~even~~ moderate swell on the ebb tide. The best time to cross the bar is on the flood tide and near high water. The channel is buoyed.

SURVEY METHODS;-- The usual launch methods were used with Standard hand-lead line and other equipment. The control was by topographic work, supplemented by triangulation stations as indicated on sheet.

Respectfully submitted,

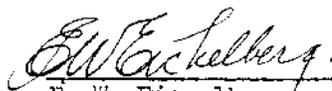

E. W. Eickelberg,
H. & G. Engineer.

TABLE OF STATISTICS

Date	Letter	Volume	Positions	Soundings	Statute miles	Vessel
May 5	A	1	75	348	10.0	Motor Sailer
May 6	B	1	57	278	7.8	" "
May 7	C	1	69	347	9.0	" "
May 8	D	1	60	266	8.0	" "
Totals:-			261	1239	34.8	

TABLE OF STATISTICS

Date 1925	Letter	Volume	Positions	Soundings	Statute miles	Vessel
May 9	A	2	82	377	10.0	Motor Sailer
May 18	B	2	73	296	9.3	" "
Totals:-			155	673	19.3	
			261	1239	34.8	
				1912	54.1	

OCT 30 1925

Division of Hydrography and Topography:

Division of Charts:

Tide reducers are approved in
2 volumes of sounding records for

HYDROGRAPHIC SHEET NO. 4477

Locality: E. Coast Florida

Chief of Party: F. G. Engle in 1925.

Plane of reference is
6.5 ft. on tide staff at Daytona Beach

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.



Chief, Division of Tides and Currents.

Section of Field Records.

Sheet No. 4477 - H

Surveyed in - 1925

Chief of Party. - F. G. Engle.

Surveyed by. - E. W. Eckelberg

Protracted by. - W. M. Gibson and W. J. Turnbull.

Soundings Plotted by. - E. R. McCarthy.

Verified and linked by. - H. E. MacEwan

1. The Records conform to the requirements of the general instructions.
2. The plan and character of the development fulfil the requirements of the general instructions.
3. The plan and extent of development satisfy the specific instructions.
4. There were no sounding line crossings run - none being required.
5. The usual depth curves can be completely drawn.
6. The field plotting was completed to the extent prescribed in the general instructions.
7. The office draftsman did not have to do over any part of drafting done by the field party.
- 8.
9. No further surveying is required to fully develop important areas within the limits of the sheets.

Report H-4477 #2.

10. Remarks: A check of the projection shows slight mechanical defects in construction and great shrinkage: - Latitude 5.5 meters in 1000 average over whole sheet.

at 29° 00'	9.4 meters in 1000.
" 29° 04'	9.8 " " "
" 29° 07'	8.8 " " "
" 29° 09'	8.6 " " "
" 29° 15'	10.9 " " "

9.5 m. average for sheet

This shrinkage together with imperfections in construction of the projection does not allow a good check on one of two of the triangulation points. viz: Δ YEL and Δ HOMER.

11. Rating of work:

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

12. Reviewed by:

Date

Respectfully submitted

H. E. MacEwan

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

WASHINGTON

December 21, 1925.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4477

Ormond Beach to Latitude 28° 58', Florida

Surveyed in 1925

Instructions dated November 29, 1924

Chief of Party, F. G. Engle.

Surveyed by E. W. Eickelberg.

Protracted by W. M. Gibson and W. J. Turnbull.

Soundings plotted by E. R. McCarthy.

Verified and inked by H. E. MacEwen.

1. The records conform to the requirements of the General Instructions.
2. The plan and character of development fulfill the requirements of the General Instructions.
3. The plan and extent of development satisfy the specific instructions except for the omission of a check sounding line which could have been run while proceeding to and from the working ground. It is noted also that the scale of this survey is 1:20,000 while the largest scale called for is 1:40,000. The departure from the instructions in this respect appears to have been justified.
4. There were no sounding line crossings.
5. The junctions with the adjoining sheets are satisfactory.
6. The information is sufficient for drawing the usual depth curves.
7. The usual field drafting was done by the field party, and was found excellent except for some defects in the construction of the projection.

8. No further surveying is required.
9. The character and scope of the surveying and field drafting are excellent.
10. Reviewed by E. P. Ellis, December, 1925.

L.O.R.

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. 4477

State Florida

General locality East Coast of Florida

Locality From Ormond Beach to Wilbar by the Sea
Latitude 28° 58'

Chief of party F. G. Engle

Surveyed by E. W. Eickelberg

Date of survey May 5 and May 18, 1925

Scale 1 -- 20,000

Soundings in Feet

Plane of reference Mean Low Water

Protracted by ^{W.M.G. / on} W. J. T. Soundings in pencil by E. R. McCarthy

Inked by Verified by

Records accompanying sheet (check those forwarded):

Des. report, Tide books, Marigrams, Boat sheets,

Sounding books, Wire-drag books, Photographs.

Data from other sources affecting sheet

Remarks: Topographic Sheets. Both sheets included in one piece of mounted paper. One descriptive report for both sheets, two sounding volumes, one for each sheet. Separate statistics for each sheet.