

8425

Diag. Cht. No. 1257-2.

Form 504

U. S. DEPARTMENT OF COMMERCE  
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. ECEP-1158 Office No. H-8425

LOCALITY

State Florida

General locality Tampa Bay

Locality South of Gandy Bridge

1958

CHIEF OF PARTY

R. C. Darling

LIBRARY & ARCHIVES

DATE October 4, 1960

USCOMM-DC 5087

8425

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

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.

REGISTER No. H-8425

Field No. ECFP 1158

State Florida

General locality Tampa Bay

Locality South of Gandy Bridge

Scale 1:10,000 Date of survey 13 May 1958 to 20 August 1958

Instructions dated 22/MEK, S-2-SO, 13 February 1957

Vessel CS-183, Skiff #1 and Skiff SO-735

Chief of party Robert C. Darling

Surveyed by J.J.McCoy, J.S.Baker, L.L.Seal

Soundings taken by ~~fathometer~~ fathometer, graphic recorder, hand lead, wire and pole

Fathograms scaled by Party Personnel

Fathograms checked by Party Personnel

Protracted by A.G.Davis

Soundings penciled by A.G.Davis

Soundings in ~~fathoms~~ feet at MLW ~~MLW~~ and are true depths

REMARKS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

*4/16*

DESCRIPTIVE REPORT  
TO ACCOMPANY  
HYDROGRAPHIC SURVEY H-8425, FIELD NO. E.C.F.P.-1158

Tampa Bay, Florida

PROJECT 14020

SCALE 1:10,000

EAST COAST FIELD PARTY

1958 Robert C. Darling, CH. OF PTY.

SURVEYED BY- J.J. McCoy, J. S. Baker, L. L. Seal

\* \* \* \* \*

A. PROJECT

Work on Project 14020 was executed in accordance with instructions 22/MEK S2-SO dated 13 February 1957 and Hydrographic Instructions 1 thru 11. The work was divided between the Ship SOSBEE and the EAST COAST FIELD PARTY, each unit assuming a certain portion of the work area.

B. SURVEY LIMITS AND DATES

The area covered by this survey is Tampa Bay, Florida, Vicinity south of the Gandy Bridge. Limits are from latitude 27° 48'.5" to latitude 27° 52'.5"; longitude 82° 30'.5" to longitude 82° 38'.3". This survey makes junction with contemporary survey H-8424 (ECFP 2158) to the north; contemporary survey H-8429 (SO-2358) to the east and south; contemporary survey H-8426 (ECFP 12580) to the south; and along the west by land. Hydrography began 13 May 1958 and ended 20 August 1958.

*to H-8424 (1958)  
to the SE*

C. VESSELS AND EQUIPMENT

Launch CS-183 was used for the offshore section of the survey. The launch was based at the Municipal Yacht Basin in ST. Petersburg. Launch 183 is a 33 ft. wooden-hull, cabin type with a turning radius of 25 meters at half rudder and standard speed. The standard sounding speed is about 8½ knots at 1800 rpm. Edo type 255 Depth Recorder, Serial No. 202 with a Kato converter was used exclusively on this launch except for ½ days work (6/12/58, Vol. #6, " " day CS-183 from pos. 72m to end of day). No. 209 was used for this half day work. Launch 183 is equipped with two transducer hull fittings, one on each side of the hull in accordance with C&GS specification FU-2055.

Two other vessels were used for the inshore work of this survey:

Skiff #1 was a lightweight aluminum skiff transferred from a photogrammetric unit. It was powered alternated by a 10 h.p. or 25 h.p. outboard motor. Sounding speed is estimated generally at 2½ to 4 knots. The speed was kept as consistent as possible with this type of vessel. The skiff was moored at the American Legion Port, Port Tampa and later moved across the Bay to Smith's Fish Camp at St. Petersburg. Fathometer 808j No. 77 was used on Skiff #1 with two transducers mounted on hull at amidships.

Ship SOSBEE SKIFF SO - 735 was used for one day on the inshore work of this survey (6/27/58, Vol.#19 "a." day, blue). SO-735 is a wooden hull shallow draft skiff with canopy cover. It was powered by two 10 h.p. outboard motors. Average sounding speed was 3 to 4 knots. Fathometer 808J No. 77 was used on this skiff. The transducers were mounted amidship in wells designed for this purpose.

D TIDES AND CURRENT STATIONS

The basic control station at St. Petersburg was checked before, during and at the completion of the survey and was operating satisfactorily at all times.

A tide gage at Mermaid Point, lat: 27° 49' 35" long: 82° 35' 65", controlled hydrography without time or height correction in accordance with letter and accompanying sketch 36-193-15e dated 22 May 1958. Days this tide gage was inoperative, tides were referred from Pinella Point with a plus 1 hr. 20 min. time correction and 1.1 ratio of hourly heights. Tides referred from Pinellas Point were in accordance with letter 36-275-15e dated 28 July 1958;

E SMOOTH SHEET

The projection was made by the Washington Office using the Ruling Machine. Control, soundings and the plotting of hydrography was done by the East Coast Field Party. The shoreline and topographic control were transferred from photogrammetric manuscripts (blue-line tracings) T-10554, T-10555 and T-10558, T-10550. Triangulation stations were plotted on the smooth sheet according to the standard method of d.m.'s and d.p.'s. The transfer of shoreline and topographic details was verified in accordance with paragraph 757 of the hydrographic Manual.

All topographic control was located by the Tampa District Office on the manuscripts listed, by standard photogrammetric methods.

F CONTROL STATIONS

The following triangulation control was used in this survey. All recovery of triangulation stations was done by the Tampa District Office, Description of triangulation station on Manuscript and Boat Sheet not in agreement with one another. (Port Tampa Shell Oil Co. Conc. Stack, 1934)

<u>STATION</u>	<u>G.P. PAGE</u>	<u>SOURCE</u>
CUT K CHannel Range Front Light, 1957		The positions for these three range lights are from form 567 submitted to the Washington Office by the Tampa District Office May 1 1958.
Cut K Channel Range Rear Light, 1957		They were located in August of 1957 by the Tampa District Office. The positions are from unadjusted field computations. Ch.of Pty.was R.L.S.
Cut F Channel Range Rear Light, 1957		
Port Tampa Gulf Refining Co. Silver Water Tank, 1934	209	Book No.338, Gulf Coast Part VI Tampa Bay

<u>STATION</u>	<u>G.P. PAGE</u>	<u>SOURCE</u>
Port Tampa Shell Oil CO. concrete stack, 1934	209 ✓	Book No. 338, Gulf Coast Part VI Tampa Bay and vicinity, Florida
Port Tampa Black Water Tank, 1945	<del>209</del> 828	This station is a traverse station. Ch. of Pty: L.W.S.
Picnic Island, 1908	722 ✓	Book No. 338, Gulf Coast Part VI, Tampa Bay and vicinity, Florida
MacDill Field Control Tower, 1946	868 ✓	" " "
MacDill Field Checkered Water Tank, 1946	868 ✓	" " "
Weedon Island, Florida Power Co. white concrete stack, 1957	✓	Position from form 567 submitted to the Washington Office by the Tampa D.O. May 1 1958. This stack was located in August of 1957 by the Tampa District Office.
St. Petersburg, Radio Sta. WSUN North Tower	✓	These two towers were not located by radial plot as stated on the form 567 submitted 1 May 1958 by the Tampa D.O. These two towers were located by tri angulation in 1951. However, this location did not reach third order accuracy so they were reported as topo stations. They are located on Photo Manuscript T- 10554
ST. Petersburg, Radio Sta. WSUN South Tower	✓	

of 1957  
 All topographic control was located on photogrammetric manuscripts T-10550, T-10554, T-10555 and T-10558 using standard photogrammetric methods. The control was located by the Tampa District Office. The control was checked and verified by hydrographic sextant fixes. The following discrepancies were found:

- ✓ (1) Hydro signal TIP (lat. 27° 50.199" long. 82° 33'.31") was cut in by sextant location when it was found that the signal building crew had built the signal in the wrong location (not on the photo point) (Vol. 12, page 20, "b" day, red, Skiff #1)
- ✓ (2) Light 6K (Signal RUN; lat. 27° 51.27' long. 82° 33.39') located on the Port Tampa channel, was made a hydro signal (RUN-2) after the Coast Guard rebuilt the light 8 meters NNE of the original location (Vol. 12, page 46, "c" day, red, Skiff #1)
- ✓ (3) Daybeacon No. 5 1957 (signal JET) was made a hydro signal when it was found that it had been destroyed and rebuilt approx. 100 meters NW of the old position. (new location: lat. 27° 52.30' long. 82° 36.23') Notice of the removal was published in Notice to Mariners "1, 4 January 1958. See Notice to Mariners "11, 15 March 1958 for re-establishment. (VOL. 15, page 29, "k" day, red, Skiff #1)

JP 7  
 Review

- (4) A discrepancy was found between the photogrammetric and hydrographic sextant location of three daybeacons at the entrance to the South Gandy (Snug Harbor) channel. These daybeacons are:

Daybeacon No. 2 1957 (Signal SAP) ✓

Daybeacon No. 3 1957 (Signal RAT) ✓

Daybeacon No. 4 1957 (Signal IVY) ✓

Daybeacon No. 1 1957, (not a signal) located in this area, was found to be located in error by photo methods. The hydrographic location plots about 40 meters SE of the photo location. ✓

Hydro location was used (VOL. 11, page 42, "da" day, violet CS-183)

PP7C  
Review

#### G. SHORELINE AND TOPOGRAPHY

Shoreline and topographic details were <sup>of 1957</sup> obtained from photogrammetric manuscripts T-10550, T-10554, T-10555 and T-10558. The major shoreline change encountered during the survey is the Weedon Island Florida Power Co. development (lat.  $27^{\circ} 51. 7'$  long.  $82^{\circ} 35. 9'$ ). New dock and channel facilities were being established at this location at the time of the survey. These shoreline changes are shown on the recent blue-line manuscript T-10554 and the Florida Power Co. has furnished this party with a plan drawing for the entire project. This drawing will be submitted under separate cover to be applied to the Chart wherever applicable. The project was complete at the time of the survey except for the dock inlet on the north side of Weedon Island with a channel leading from Snug Harbor channel. The project drawing includes this dock. ✓

#### H. SOUNDINGS

Soundings on the offshore work were made entirely with an EDO. echo sounder, with a KATO converter set at 61.0 cycles. The leadline was used in verification of soundings and for the bottom samples. The 808 fathometer and a sounding pole were used for the inshore work, on shoals, flats and in estuaries and creeks. Soundings were generally recorded every 15 seconds throughout the survey. Line spacing was generally maintained at 100 meters except in areas of development. ✓

#### I. CONTROL OF HYDROGRAPHY

All hydrographic control was standard visual method with sextant angles taken on shore objects. Positions were taken at  $1\frac{1}{2}$  minute intervals throughout most of the survey. ✓

#### J. ADEQUACY OF SURVEY

This survey is considered complete and adequate to supercede all prior surveys for charting purposes. Junctions with contemporary surveys are satisfactory and depth curves can be drawn at junctions. The survey was carried inshore, into the winding bayous, as far as was practical, up to the head of navigation. A housing project with dredged channel at lat:  $27^{\circ} 51. 5'$ , long:  $82^{\circ} 38. 0'$  (the northern part of Papy's Bayou) was in progress and hydrography was not carried into this area. ✓

#### K. CROSS LINES

K. CROSSLINES

The percentage of crosslines run was about 8 to 10 per cent. The crosslines were satisfactory throughout the survey.

L. COMPARISON WITH PRIOR SURVEYS (P6 Review)

A comparison was made with the following prior surveys:

(1) H-4566, Papy's Bayou, scale: 1:5,000, date: 1927

(a) The delineation of the shoreline in this area has changed considerably from the prior survey but most likely it was only estimated during plan-table work at that time.

Review  
P6B

(b) The soundings are in fair agreement except for the following discrepancies:

There is a narrow channel, least depth 3 feet, leading from Tampa Bay all the way to the uppermost part of Papy's Bayou. The channel width narrows to 15 to 20 meters in some spots. The channel was not developed on the prior survey although some isolated soundings give an indication of its existence at that time. The channel is not well marked and local knowledge is necessary to navigate to the head of the Bayou. There is a waterfront housing development at the head of the Bayou however, and the channel is used by private boat owners.

(2) H-4562, and H-4565, scale: 1:20,000, date: 1926-1927

The depth curves of the prior surveys are in excellent agreement with those of the present survey with the exception of the two channels which have been dredged since the time of the prior survey:

- (a) Port Tampa Channel ✓
- (b) Weedon Island Channel ✓

There are several aids to navigation on the prior surveys which have been destroyed or relocated. These changes have been incorporated on the Chart (587), however.

See Chart  
Letter 4 (1961)  
10 Jan 61 - M

Review  
P7C

(3) FE 2 1948 (2 sheets) Sheet #1 (1:5,000) and Sheet #2 (1:40,000)

This prior survey is of the Snug Harbor Channel leading from Tampa Bay south of the Gandy Bridge into Snug Harbor. The channel delineation and depth are in very good agreement with that of the prior survey. The prior survey on Sheet #1, being of larger scale, shows more detail of the channel than the present survey but the general agreement is satisfactory. The least depth of 8 feet in that portion of the channel shown on Sheet #2 is in agreement with the present survey.

A new channel has been recently dredged from the Snug Harbor Channel south to the Florida Power Co. project (lat: 27° 52' long: 82° 36'). This channel has a least depth of 6 feet. The shoreline about this area has also changed from the date of the prior survey. These changes were discussed under Section G. of this report.

M COMPARISON WITH CHART

A comparison was made with the following charts:

- (a) 1257 Revised 29 March 1958
- (b) 587 Revised 15 March 1958

The new survey and the chart were in good agreement with the exceptions noted below and in Section D, G, L, and U.

*Daybeacon as charted is in agreement with the smooth sheet.*

- (a) Port Tampa Shoal Buoy 1 (lat:27° 51.60' long: 82° 33.66') This buoy is approx. 150 to 200 meters north of the charted position.
- (b) Port Tampa Swash Channel Daybeacon 8 (signal CAR lat: 27° 51.03' long:82° 33.40') The position of this daybeacon from this survey is approx. 350 meters NNW of the charted position. The charted position should be corrected.
- (c) The area adjacent to the new Weedon Island Channel (on the west side of the channel from lat: 27°50' to lat: 27°51') has been used as a spoil area for the dredging operations of the project. Several 2 and 3 ft. depths were found where 13 to 17 ft. depths are charted. This area should be charted as a spoil area.
- (d) The new Weedon Island Channel should be delineated on the charts for the area and the controlling depth published. A controlling depth of 32 ft. was obtained from this survey for the area from the Cut K channel to the Florida Power Co. dock.

TP7C  
Re-view

TP6  
Re-view

TP6B  
Re-view

N. DANGERS AND SHOALS

There are no uncharted dangers or shoals to report within the limits of this survey. However, the location of Port Tampa Shoal Buoy 1 (lat:27° 51.60' long:82°33.66') from the present survey shows that it is out of position and in such a case is a danger to navigation since it is not marking the shoal for which it was intended. It should be relocated to mark the southern limit of this shoal.

F. G Reports by phone 1/20/62 Buoy on Sta- 1107.

Notice to Mariners #24, June 14 1958 states that a survey by the Corps of Engineers in September, 1957 shows a depth of 22 Ft. at M.L.W. about 5,575 yards 70°30' from Tank (27°47.8'N 82°37.2'W) close eastward of the improved channel. This position was plotted on the boat sheet and found to land on a 22 ft. sounding. It is not a danger to navigation as it is approx. 50 to 75 meters east of the channel and is located in an area of similar depth.

O. COAST PILOT REPORT

There are several changes to the Coast Pilot to report within the limits of this sheet. These notes are contained under Appendix G of this report.



P. AIDS TO NAVIGATION (PTC Review)

Following is a list of all floating aids to navigation within the limits of this sheet:

<u>NAME</u>	<u>LOCATION</u>	<u>DEPTH</u>	<u>VOL&amp;POS</u>	<u>DATE LOCATED</u>
Tampa Bay Cut J Channel Buoy 3J	lat:27°48.62 <sup>3</sup> long:82°34.49'	25	Vol.6,page 63 pos.10p,CS-183	18 June '58
Tampa Bay Cut J Channel Lighted Bell Buoy 4J	lat:27°48.65 <sup>2</sup> long:82°34.38'	25'	Vol.6,page63 Pos.9p,CS-183	18 June '58
Tampa Bay Cut J Channel Lighted Buoy 1JK	lat:27° 48.97' long:82° 34.39'	28	Vol.11, page 51 pos.1ea,CS-183	20 August '58
Tampa Bay Cut K Channel Buoy 1K	lat:27° 49.83 <sup>4</sup> long:82° 34.17'	29'	Vol.6, page35 pos.93m,CS-183	12 June '58
Tampa Bay Cut K Channel Lighted Bell 2K	lat: 27°49.77' long:82° 34.06'	28	Vol.6,page 35 pos.94m,CS-183	12 June '58
Tampa Bay Cut K Channel Buoy 3K	lat:27° 50.64' long:82° 33.80'	24'	Vol.11,pagel5 pos.9ba,CS-183	15 July '58
Tampa Bay Cut K Channel Lighted Bell Buoy 4K	lat:27° 50.60' long:82° 33.71'	33	Vol.11,pagel4 pos.8ba,CS-183	15 July '58
Port Tampa Shoal Buoy 1	lat:27°51.60' long:82° 33.67'	18'	Vol.10,page 36 pos.19y,CS-183	9July '58
Port Tampa Shoal Buoy 3	lat:27° 51.73 <sup>2</sup> long:82° 33.53'	17	Vol.10,page36 pos.20y,CS-183	9 July '58
Weedon Island Channel Lighted Buoy 1	lat:27° 49.73' long:82° 34.27'	37'	Vol.10,page 25 pos.88x,CS-183	7 July 58
Weedon Island Channel Lighted Buoy 2	lat:27°49.75' long:82°34.22'	38'	Vol.10,page 25 pos.89x,CS-183	7 July '58
Weedon Island Channel Lighted Buoy 3	lat:27°50.64' long:82°34.72'	26'	Vol.10,page 24 pos.83x,CS-183	7 July '58
Weedon Island Channel Buoy 4	lat:27°50.66' long:82°34.65'	37	Vol;10,page 25 pos.84x,CS-183	7 July' 58
Weedon Island Channel Lighted Buoy 5	lat:27°51.54' long:82°35.15'	35'	Vol.10,page 23 pos.81x,CS-183	7 July8 58
Weedon Island Channel Buoy 6	lat:27°51.62 <sup>57</sup> long:82°35.09'	35'	Vol.10,page 24 pos.82x,CS-183	7 July 88
Weedon Island Channel Lighted Buoy 7	lat:27°51.66' long:82°35.35'	34'	Vol.10,page 23 pos.80x,CS-183	7 July'58
Weedon Island Channel Lighted Buoy 8	lat:27°51.70' long:82°35.36'	32'	Vol.10,page 23 pos.79x,CS-183	7 July '58

Two new fixed aids to navigation were established for the Weedon Island Channel. They were located by triangulation by the Tampa District Office in 1958, and submitted on form 567

(1) Weedon Island Channel Range Rear Light (lat: 27°52'06.007" long: 82°35'23.089") ✓

(2) Weedon Island Channel Range Front Light (long: 82°35'12.220" lat: 27°51'43.263") ✓

One fixed aid was relocated (Daybeacon No. 5, 1957) See Notice to Mariners #1, 4 January 1958 and #11, 15 March 1958. This aid is discussed under Section D of this report.

#### Q. LANDMARKS FOR CHARTS

All landmarks for Charts and non-floating aids to navigation for the entire Tampa Bay area were submitted on form 567 by the Tampa District Office

#### \*\*GEOGRAPHICAL NAMES

*JCB* There are no new geographical names to report. ✓

#### S. SILTED AREAS

Not applicable ✓

#### T. BY PRODUCT INFORMATION

Not applicable ✓

#### U. PRELIMINARY REVIEW

The items listed under the Preliminary Review within the limits of this survey were investigated thoroughly and are reported as follows:

(1) the area circled "Spoil 1940" (lat: 27°51'.6" long: 82°33".6") charted as having a 10 ft. and a 12 ft. sounding was verified during the present survey. As mentioned in Section M of this report. ✓

(2) The 6 ft. shoal circled on the preliminary review at Lat: 27°50'.8" long: 82°34.1', was verified by the present survey. This shoal runs north-south for approx. 300 meters and is 50 meters wide. The 12 ft. depth curve surrounding this shoal extends southward to lat: 27°50.5'. At lat: 27°50.5' long: 82°34.0' is located an east-west line of markers: These are wooden tripod triangular shaped structures approx. 10 to 15 ft. above high water. It is not clear what they are intended to mark, the shoal to the north or the explosive anchorage area 400 meters south-southwest. There are seven (7) markers in all. ✓

(3) There were no charted depths for the upper head of Pappys Bayou and one of the items of the review required soundings in this area. ✓

Hydrography was accomplished to the upper end of Pappys Bayou in compliance with the project instructions. ✓

(4) Two pilings shown on the preliminary review and originating with C.E. Survey C.L.255(1948) were listed for investigation during the present survey. The results are as follows:

*left in pencil on 55*

(a) lat:27°50.12' long:82°34.56', Apiling bare 5 feet at M.L.W was found at this location (Vol.9, page 12, pos.20v)

(b) lat:27°50.08' long:82°33.90'. As search was made at this location for a charted piling. The piling was not recovered and it is recommended that it be deleted from the Chart. An investigation was begun 7 July (VOL.10, x day, page 26) when a preliminary examination was made for 1/2 hour by drifting in pinwheel pattern over the charted location. Frequent fixes were plotted but not recorded. On 9 July (Vol.10, y day, page 56, CS-183) a buoy was dropped on the charted location of the piling and a pinwheel was run over the buoy at a 150 meter radius. This investigation was carried on for 45 minutes. On 18 September a buoy was dropped on the charted location and a drag operation was conducted by two skiffs, 25 meters apart, using weighted line set about 15 feet in depth. The fathometer was also kept in operation during this time. This operation was kept up for more than an hour with negative results. Frequent fixes were taken but the positions were not recorded. As a result of these investigations it is concluded that the piling has been removed and it is recommended that it be deleted from the chart. *Do not chart 1151 Obstr - Steg 12/14/60*

*Delete from chart*

(5) The spoil area (1940 depths) lat:27°49.90' long:82°33.8', shown as having a least depth of 2 feet. on the chart, actually is a bare shoal at M.L.W. It is approx. 100 meters by 50 meters in area and is unmarked.

*delete from chart*

(6) The bare shoal (1940 spoil depths) charted at lat:27°50.6' long:82°33.4' and marked by Port Tampa Swash Channel Daybeacon 7, is actually a shoal of least depth 2 feet, and is not bare as charted.

*→ Hey Zee How about D 59495 (1959) showing bare shoal*

V. MAGNETICS

There were no magnetic observations made within the limits of this survey.

W. X. & Y MISCELLANEOUS

(a) Detached positions were taken on several markers found in Tampa Bay whose locations are not charted. These markers are similar to daybeacons in structure but are crowned with wooden "target" triangles. They appear to be range markers or survey markers for the Corps of Engineers, which agency frequently dredges and resurveys the channels of Tampa Bay. It is not recommended that these markers be charted since they evidently were not intended as aids to navigation and do not mark any particular danger areas.

(b) In shoal areas the skiffs frequently were dragging the bottom, causing the spacing of positions to be erratic in some areas. A note was generally made in the record book to this effect. This erratic spacing should not be construed as bad control or poor fixes.

Z. TABULATION OF APPLICABLE DATA

The velocity curves and abstract of velocity corrections which were applied to the echo soundings is included under Appendix D of this report. ✓  
Fathometer report is included under Appendix F of this report.

Respectfully submitted,

*Allen G. Davis*

Allen G. Davis

Surveying Technician

Approved and forwarded

Howard S. Cole  
CDR., C&GS  
Chief of Party

Appendix

ATTACHMENTS

- A. LIST OF CONTROL STATIONS
- B. STATISTICS
- C. TIDAL NOTE
- D. ABSTRACT OF VELOCITY CORRECTIONS
- E. COAST PILOT NOTES
- F. FATHOMETER REPORT
- G. APPROVAL SHEET

APPENDIX A  
LIST OF CONTROL STATIONS

ACE	T-10554	INK	T-10555	SHEL	Tria.
AGE	T-10554	IRK	T-10554	SHO	T-10554
AIR	T-10555	IVY	Hydro, Vol. 15	SIP	T-10554
ALL	T-10554			SKI	T-10554
ALM	T-10554	JET	Hydro, Vol. 15	SKY	Hydro, Vol.
ALP	T-10554				
AMP	T-10555	KAY	T-10554	TACK	Tria.
ANDY	T-10554	KIN	T-10554	TAMP	Tria.
APE	T-L)554			TAN	T-10555
ANN	T-10554	LAND	Tria.	TAP	T-10554
		LAW	T-10554	TIE	T-10554
BAD	T-10554	LEG	T-10555	TON	T-10554
BAS	T-10555	LEO	T-10554	TOP	T-10554
BIG	T-10554	LOG	T-10554	TOT	T-10554
BUS	T-10554	LOT2	T-10555	TOY	T-10554
	<i>Hydro</i>			TUB	T-10554
CAM	<del>T-10555</del>	MAL	T-10555	TIP	Hydro, Vol.
CAN	T-10555	MAN	T-10555		
CAR	T-10555	MEN	T-10554	VAL	T-10554
CON	T-10554	MOO	T-10554	VET	T-10554
COM	T-10554	MOP	T-10554		
COT	T-10554	MIT	T-10554	WED	T-10555
COW	T-10554			WEE	T-10555
CUT	T-10555	NIG	T-10554	WER	T-10554
		NOR	T-10554	WHY	T-10554
DAY	T-10555	NORT	T-10554	WIT	T-10554
DILL	TRIA.				
DAG	T-10554	OAT	T-10554	ZIG	T-10554
DOG	T-10554	OHM	T-10554		
DOT	T-10555	OLA	T-10554		
DUD	T-10554	ONE	T-10554		
EAR	T-10554	PAL	T-10554		
EAT	T-10554	PAR	T-10554		
EGG	T-10554	PIE	T-10554		
ELF	T-10554	PIG	T-10554		
EMO	T-10555	PIL	T-10554		
EVA	T-10554	POW	T-10554		
FLA	T-10554				
		REAR	Tria.		
GAT	T-10554	RAD	T-10554		
GIN	T-10554	RANG	Tria.		
GULF	TRIAN.	RAT	Hydro, VOL. 15		
GUM	T-10554	RONT	Tria.		
		RUN	T-10555		
HAT	T-10555	RUN2	Hydro, Vol. 12		
HER	T-10555				
HOE	T-10555	SAP	Hydro, Vol. 15		
HOO	Hydro. VOL. 15	SEN	T-10555		
		SEA	T-10554		

*Signal BEA Bn #7  
recorded in Vol #11 as BET  
Boat sheet cannot be  
read. When signal used as  
control sta. it is recorded  
as BEA*

APPENDIX B

STATISTICS  
To Accompany

Hydrographic Survey Sheet H-8412, Field No. ECFP-1158

DATE 1958	VOL NO.	DAY LTR.	POSITIONS NO.	NAUT. MI. SDG. LINE
Launch CS- 183				
13 May	1	a	44	10.5
26 "	1	b	50	9.1
27 "	1	c	32	5.8
28 "	1	d	21	4.2
29 "	1	e	15	3.0
2 June	2	f	135	23.3
3 "	2&3	g	124	18.5
4 "	3	h	186	30.0
5 "	4	j	157	25.8
6 "	4&5	k	139	25.9
11 #	5&6	l	180	30.5
12 "	6	m	94	11.3
16 "	6	n	74	10.4
18 "	6&7	p	56	6.5
23 "	7	q	32	6.1
24 "	7	r	110	17.0
25 "	7&8	s	133	13.5
26 "	8	t	135	16.7
27 "	8&9	u	97	11.1
30 "	9	v	93	10.7
2 July	9	ww	108	12.9
7 "	10	x	101	12.0
9 "	10	y	97	14.3
10 "	10&11	z	56	6.0
14 "	11	aa	10	0.9
15 "	11	ba	80	8.8
16 "	11	ca	17	1.5
28 "	11	da	39	2.2
20 August	11	ea	31	3.3
TOTAL for CS-183			2446 pos.	341.8 naut. miles

APPENDIX B  
STATISTICS

DATE 1958	VOI. NO.	DAY LTR.	POSIT. NO.	NAUT. MILES SDG. LINE
<u>Skiff No. 1</u>				
28 January	12	a	16	1.0
30 "	12	b	58	4.7
31 "	12	c	46	2.3
23 May	13	d	46	7.0
27 "	13	e	33	3.6
2 June	13	f	91	13.9
3 "	14	g	88	11.3
6 "	14	h	43	8.3
9 "	14&15	j	93	13.6
10 "	15	k	84	7.7
11 "	15	l	81	8.5
13 "	15&16	m	126	14.9
16 "	16	n	116	11.5
17 "	17	p	114	14.4
23 "	17	q	71	5.9
24 "	17	r	12	1.3
25 "	18	s	38	5.2
24 August	18	t	45	2.6
18 September	18	u	3	0.0
TOTAL for SKIFF No.1			1204 positions	137.7 nautical mi. sdg. line
<u>Skiff SO-735</u>				
27 June	19	a	63	8.0 naut. mi.
CS-183			2446	341 .8
TOTALS for Sheet H-8425			3713 positions	487.5 naut. mi. sdg. line





APPENDIX D

COAST PILOT NOTES

To Accompany

Hydrographic Survey H-8425 (ECFP- 1158)

The following changes are reported for the Coast Pilot Section 5, Gulf Coast, for the area within the limits of this survey:

CHART 587

Page 230 - line 31: read: A branch of the main ship channel leads through the shoals at the entrance to Old Tampa Bay to the wharves and turning basin at Port Tampa, and another branch to the Florida Power Company terminal on Weedon Island. The Weedon Island channel and terminal were constructed in 1957-58, and the controlling depth in the channel was 32Ft. in July 1958. The channels are well marked by buoys and lighted ranges. Spoil banks border the east side of the north-south reaches of the Port Tampa Channel and the west side of the Weedon Island Channel; several spoil islands 5 to 10 ft. high are just south of Port Tampa.

Page 231 - line 39: read: The controlling depth into Snug Harbor was 8 ft. in June 1958.

APPENDIX E

AVSTRACT OF VELOCITY CORRECTIONS

To Accompany

Hydrographic Survey H-8425 (ECFP 1158)

Launch CS-183

- (a) For all days from 5/13/58 thru 8/20/58 except "m" day,  
12 June 1958 from position 72m to end of day. EDO #202 used here.

<u>Depth</u> (ft.)	<u>Corr.</u> (ft.)
0.0 to 6.0	+ 0.0
6.1 " 11.0	+0.2
11.1" 13.0	+ 0.4
13 .1" 20.0	+ 0.6
20.1 " 21.5	+ 0.8
21.6 " 23.0	+ 1.0
23.1 " 27.0	+ 1.2
27.1 " 40.0	+ 1.0

- (b) For "m" day, 12 June 1958, from position 72m to end of day  
EDO #209 used

<u>Depth</u> (ft.)	<u>Corr.</u> (ft.)
0.0 to 17.0	+ 0.0
17.1 " 19.0	+ 0.2
19.1 " 19.5	+ 0.4
19.6 " 20.5	+ 0.6
20.6 " 21.5	+ 0.8
21.6 " 22.5	+ 1.0
22.6 " 27.5	+ 1.2
27.6 " 29.5	+ 1.0
29.6 " 30.5	+ 0.8
30.6 " 31.5	+ 0.6
31.6 " 32.5	+ 0.4
32.5 " 33.5	+ 0.2

Skiff No. 1

( Fathometer 808J #77) There is no velocity correction to be applied.

Skiff SO-735

(Fathometer 808J #77) There is no velocity correction to be applied.

CORRECTIONS IN FEET, FATHOMS

VELOCITY CORRECTIONS

U.S. Coast and Geodetic Survey  
 Ship East Coast Field Party  
 LCDR. Miller J. Tenkel Comdg.  
 These corrections are to be used  
 between 15 May 1958 and 20 Aug. 1958  
 in the locality Tampa Bay, Florida  
 for hydrographic surveys Nos. H-2424  
 (HCP-1158)

Edo # 202  
 Launch CS-183  
 All day of entire sheet  
 (except "m" day) 61215 from  
 Pos 72m to end of day

EDO FATHOMETER # 202  
 Launch CS-183

CORRECTIONS

DEPTH (ft.)	CORR. (ft.)
0.0	0.0
6.1	+ 0.2
11.1	0.4
13.1	0.6
20.1	0.8
21.5	1.0
23.0	1.2
27.0	1.0

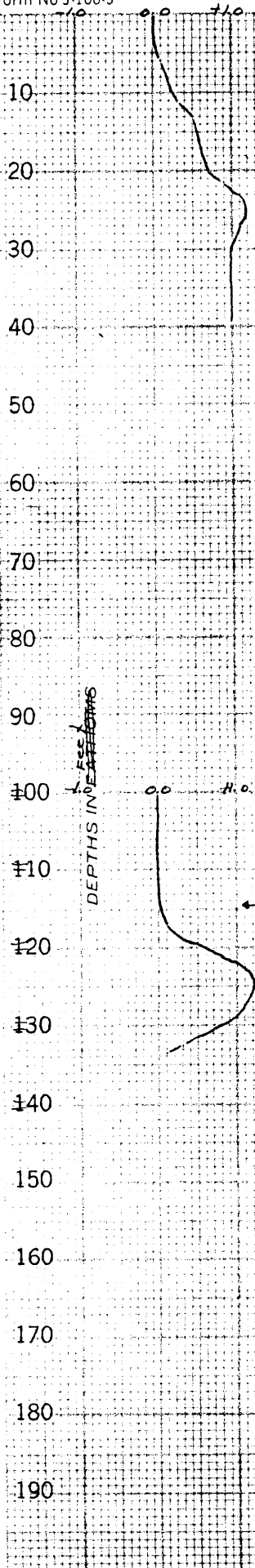
EDO FATHOMETER # 209  
 Launch CS-183

Corr. for "m" day 12 June from 72m to end of day

DEPTH (ft.)	CORR. (ft.)
0.0	0.0
17.0	+ 0.2
19.0	0.4
19.5	0.6
20.5	0.8
21.5	1.0
22.5	1.2
27.5	1.0
29.5	0.8
30.5	0.6
31.5	0.4
32.5	0.2

(For deep water add a 0 to these figures)

DEPTHS IN FEET, FATHOMS



## APPENDIX F

### FATHOMETER CORRECTIONS To Accompany

Hydrographic Survey H-8424 (ECFP 1158)

#### DESCRIPTIVE REPORT

Project instruction 22/MEKS2-SO dated 13 February 1957, directed that a hydrographic survey be made in Tampa Bay, Florida.

Hydrography on sheet H-8424, which is a portion of this project, was accomplished during the period 13 May 1958 to 20 August 1958.

Numerous fathometer bar checks were taken during the season, the results of these checks were tabulated for the computations of the fathometer for this sheet.

#### METHOD

The fathometer corrections were determined in accordance with Hydrographic Manual, Section 55, Page 507-542. To obtain instrumental correction, bar checks were taken, these checks were taken at anchor or drifting, Shoal water comparisons were made between leadline, sounding pole, 808J or EDO 255 fathometers. The depth of the transducers were measured before the beginning of the season and initial set to this depth. The bar used was constructed of aluminum 8 inches wide, 10 feet long  $\frac{1}{4}$  inch thick, mounted on galvanized pipe, with the bar check cables attached to an eye in both ends, cables were carefully measured at the beginning of the season, and checked throughout the season for any error.

A Kato converter was used for power supply for the EDO 255 fathometers. Speed of the 808J fathometer were kept at a constant 123/66 so the depth could be checked and corrected if needed to be.

The velocity curves and abstracts are submitted in the Appendix of this report.

APPENDIX G

APPROVAL SHEET  
- To Accompany

Hydrographic Survey H-8425 (ECEF 1158)

The hydrographic survey of sheet H-8425 is approved and is complete to the best of my knowledge.

Field work was accomplished under the supervision of LCDR. Robert G. Darling

The smooth plotting was accomplished by East Coast Field Party under the general supervision of the Officer-in-Charge

*Howard S. Cole*

Howard S. Cole, CDR., C&GS  
Officer-in-Charge  
East Coast Field Party

RHC

### TIDE NOTE FOR HYDROGRAPHIC SHEET

~~DIVISION OF COASTAL SURVEYS~~

21 October, 1960

Division of Charts: R.H. Carstens

Plane of reference approved in  
19 volumes of sounding records for

HYDROGRAPHIC SHEET 8425

Locality Tampa Bay, Florida

Chief of Party R.C. Darling  
Plane of reference is mean low water, reading.  
2.5 ft. on tide staff at Mermaid Point, Fla.  
3.6 ft. below B. M. 1 (USE) 1956

Height of mean high water above plane of reference is: 1.4 ft.

Condition of records satisfactory except as noted below:

Note:

Tide reducers for the positions listed below have been revised  
in red and verified:

Volume	Positions	
6	1m to 46m	} corrected in Vol.
6	84m to 94m	

Burt W. Wilcox  
Chief, Tides and Currents Branch.  
~~Chief, Division of Tides and Currents.~~

GEOGRAPHIC NAMES

Survey No. H-8425

Name on Survey	587									
	A	B	C	D	E	F	G	H	K	BGN
	On Chart No.	On previous survey No.	On U. S. quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List		
Benjamin Island	x									1
Christmas Island	x									2
Christmas Pass	x									3
Coon Hammock Creek	x									4
Googe Island	x									5
Interbay Peninsula	x							x		6
Masters Bayou	x									7
Mermaid Point	x									8
Mud Hole Island	x									9
Papys Bayou	x							x		10
Papys Point	x									11
Picnic Island	x									12
Picnic Island Creek	x									13
Riviera Bay	x									14
Ross Island	x									15
Snake Island	x									16
Snug Harbor	x									17
South Gandy Channel	x									18
Tampa Bay	x									19
Weedon Island	x									20
										21
										22
										23
										24
										25
										26
										27

*George M. Bace*  
GEOGRAPHIC NAMES SECTION  
20 OCTOBER 1960

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. ...8425...

Records accompanying survey: Smooth sheets 1....;

boat sheets ..1..; sounding vols. .19..; wire drag vols. ....;

Descriptive Reports ..1..; graphic recorder envelopes .20..;

special reports, etc. ....

.....

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

Number of positions on sheet		3713
		.....
Number of positions checked		395
		.....
Number of positions revised		10
		.....
Number of soundings revised (refers to depth only)		60
		.....
Number of soundings erroneously spaced		0
		.....
Number of signals erroneously plotted or transferred		0
		.....
Topographic details	Time	120 hrs
Junctions	Time	0
Verification of soundings from graphic record	Time	4
Special adjustments	Time	0

Verification by *J. B. Chambers* Total time 464 Date 5/29/62

Reviewed by *Jim Jeske* Time 80 Date 6-20-62



OFFICE OF CARTOGRAPHY

REVIEW SECTION -- NAUTICAL CHART DIVISION

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-8425

FIELD NO. ECFP-1158

Florida, Tampa Bay, South of Gandy Bridge

SURVEYED: May - August 1958

SCALE: 1:10,000

PROJECT NO. 14020

SOUNDINGS: Edo Depth Recorder  
308 Depth Recorder  
Sounding Pole

CONTROL: Sextant  
fixes on shore  
signals

Chief of Party -----R.C. Darling  
Surveyed by -----J.J. McCoy, J.S. Baker, and L.L. Seal  
Protracted by -----A.G. Davis  
Soundings plotted by -----A.G. Davis  
Verified and inked by -----J.C. Chambers  
Reviewed by -----I.M. Zeskind  
Inspected by -----R.H. Carstens

Date: 7/20/62

1. Description of the Area

This is a survey of that portion of Tampa Bay which is located south and west of Port Tampa. It also includes Papys Bayou. The bottom is very irregular, except for several flats which extend as much as 1/2 mile from either shore.

2. Control and Shoreline

The source of the control is adequately described in the Descriptive Report.

The shoreline originates with reviewed photogrammetric surveys T-10550, T-10554, T-10555 and T-10558 of 1957.

3. Hydrography

Depths at crossings are in good agreement. The usual depth

curves were adequately delineated. The 3-ft curve was drawn to better delineate the bottom configuration. The bottom configuration and least depths are adequately developed.

The 2 rocks awash referred to in paragraph 6B-2 below were not adequately developed to confirm or disprove their existence. These rocks, therefore, have been carried forward to the present survey.

#### 4. Condition of Survey

- a. The Descriptive Report and sounding records are complete and comprehensive.
- b. The smooth plotting was accurately done.

#### 5. Junctions

An adequate junction was effected with H-8429 (1958) on the south. The junctions with H-8424 (1958) on the north, with H-8426 (1958) on the southwest, and with H-8411 (1957-58) on the southeast will be considered in the reviews of those surveys.

#### 6. Comparison with Prior Surveys

- A. H-478 Rec. (1855), 1-20,000  
H-1273 (1875), 1-20,000

These surveys together cover the area of the present survey. A comparison between the prior and present surveys reveals changes in the bottom configuration and the shoreline which are attributed to artificial and natural causes, such as the dredging of channels, canals and turning basins, the construction of docks, piers, and the Gandy Bridge and the reclaiming of land.

The greatest changes in depths occurs in the vicinity of the dredged channels or basins, as for example in the vicinity of lat.  $27^{\circ}50.3'$ , long.  $82^{\circ}32.7'$  where dredging has occurred for a fill. Here former depths of 1-2 ft fall in present depths of 9-17 ft. Elsewhere only minor differences in depths of 1-3 ft are noted.

The present survey is adequate to supersede the prior surveys within the common area.

- B. H-4562 (1926), 1-20,000  
H-4563 (1926), 1-20,000

H-4566 (1926), 1-20,000
<u>FE 2, 1948, 1-10,000</u>

These surveys together cover the area of the present survey. A comparison between the prior and present surveys reveals changes in shoreline and bottom configuration which are attributed to causes similar to those enumerated in paragraph A above. Land has been reclaimed on Weedon Island. Here several slips have been built and channels leading to them have been dredged. The southeast end of the slip in the vicinity of lat.  $27^{\circ}51.65'$ , long.  $82^{\circ}33.2'$ , on the Port Tampa dock has been straightened and several small piers have been removed. Land has also been reclaimed in the vicinity of lat.  $27^{\circ}50.2'$ , long.  $82^{\circ}32.0'$ . The controlling depth in Papy's Bayou from its entrance to the highway bridge in lat.  $27^{\circ}50.6'$ , long.  $82^{\circ}36.7'$ , was formerly 1 ft., whereas, now it is  $3\frac{1}{2}$  ft. Only minor differences of 1-2 ft. in depths are generally noted, except in those areas where dredging operations have occurred. Here greater differences are found.

1. The pile charted in lat.  $27^{\circ}52.55'$ , long.  $82^{\circ}35.50'$ , from FE 2, 1948 was not located on the present survey. The area of the present survey in which this pile falls is considered to be adequately developed to disprove the existence of the pile. The pile should, therefore, be deleted from the chart.
2. The 2 rocks awash charted in lat.  $27^{\circ}52.6'$ , long.  $82^{\circ}35.0'$  from FE 2, 1948, were not located on the present survey. The area in which the rocks are located on the present survey is not considered adequately developed to confirm or disprove the existence of these rocks. The rocks have been carried forward to the present survey and should be retained on the chart.
3. The pile charted in lat.  $27^{\circ}52.20'$ , long.  $82^{\circ}36.47'$ , from FE 2, 1948, is described on the present survey as a concrete slab which covers 2 ft at MLW. The charted feature should be revised to a rock awash.

The present survey is adequate to supersede the prior surveys within the common area.

7. Comparison with Chart 587 (Latest print date 5-14-62)

A. Hydrography

The charted hydrography originates principally with the previously discussed prior surveys which need no further

consideration supplemented by a few soundings from the present survey. Attention is directed to the following differences between the charted and smooth sheet data:

1. The canals charted on the northeast end of Shore Acres in lat. 27°49.2', long. 82°35.8', originate with chart letter 518 (1961). These canals which are not shown on the smooth sheet, were dredged subsequent to the present survey.
2. The peninsula which projects from the west end of the Port Tampa Dock in lat. 27°51.3', long. 82°33.1', originates with air photographs of 1960. This feature which is not shown on the smooth sheet was created subsequent to the present survey.
3. The charted location of beacon No. 5 in lat. 27°52.3', long. 82°36.23' originates with HON to M 11, 1958, dated March 15, 1958. The present survey establishes the location of this beacon in June 1958 to be about 45 meters to the southwestward of its charted position where a pile is charted from FE 2, 1948. The pile, therefore, should be deleted from the chart and the location of the charted beacon should be revised to agree with that shown on the present survey.
4. The pile located on the present survey in lat. 27°52.25', long. 27°36.5', has not been charted.

The present survey is adequate to supersede the charted hydrography within the common area.

#### B. Dredged Channels

The charted information for dredged channels J-2 and Cut K falling within the limits of the present survey originate with after-dredging surveys (Bp 59494-95) of the U. S. Corps of Engineers of 1960. These surveys were accomplished subsequent to the present survey.

The charted depths in the turning basin at Weedon Island and the channel leading to it, originate with chart letter 784 (1961). These depths originate with surveys accomplished subsequent to the present survey

#### C. Aids to Navigation

A comparison between the chart and the present survey indicates new aids to navigation have been established and the locations and nomenclature of others have been changed. These changes or additions were made subsequent to the present survey in accordance with HON to M 25, 1961. The charted positions of the aids adequately mark the features intended.

8. Compliance with Project Instructions

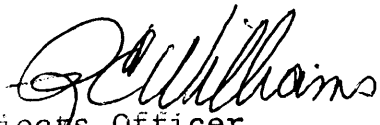
The survey adequately complies with the project instructions.

9. Additional Field Work


This is a good basic survey and no additional work is recommended.

Examined and Approved:

  
Chief,  
Nautical Chart Division

  
Projects Officer,  
Operations Division

  
Assistant Director,  
Office of Cartography

  
Assistant Director,  
Office of Oceanography

