

8426

Diag. Cht. No. 1257-2.

Form 504 U. S. DEPARTMENT OF COMMERCE COAST AND GEODETIC SURVEY DESCRIPTIVE REPORT	
Type of Survey	Hydrographic
Field No.	ECFP-1258
Office No.	H-8426
LOCALITY	
State	Florida
General locality	Tampa Bay
Locality	St. Petersburg Municipal Area
<u>1958</u> CHIEF OF PARTY R.C. Darling, M.J. Tonkel & W.A. Hughes	
LIBRARY & ARCHIVES	
DATE	April 25, 1960

8426

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-8426

Field No. ECFP 1258

State Florida

General locality Tampa Bay

Locality St. Petersburg Municipal Area

Scale 1:10,000 Date of survey June 30 17 July 1958 to 17 Sept. 1958

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

Vessel CS-183, Skiffs #1 and #2 (ECFP), SO-735, and CS-182

Chief of party Robert C. Darling, Miller J. Tonkel, William A. Hughes

Surveyed by J. J. McCoy, D. George, J. S. Baker, L. L. Seal, and J. D. Wingfield, Jr.

Soundings taken by ~~XXXXXX~~ graphic recorder, hand lead, ~~XXXX~~ and pole.

Fathograms scaled by Party Personnel

Fathograms checked by Party Personnel

Protracted by G. F. Trefethen & G. L. Fernandes

Soundings penciled by G. L. Fernandes

Soundings in ~~XXXXXX~~ feet at MLW ~~MLW~~ and are true depths.

REMARKS: Due to frequent personnel changes made while this survey was
being undertaken, several different persons were in charge of hydrography
at various times during the survey. All of their notes are included in
this report.

KW

DESCRIPTIVE REPORT
TO ACCOMPANY

HYDROGRAPHIC SURVEY H-8426, FIELD NO. ECFP 1258
St. Petersburg Harbor, Tampa Bay, Florida

PROJECT 14020

1958

SCALE 1:10,000

EAST COAST FIELD PARTY

CH. OF PTY. Robert C. Darling
Miller J. Tonkel
William A. Hughes

SURVEYED BY: J.J. McCoy
D. George
J.S. Baker
L.L. Seal
J.D. Wingfield, Jr.

A. PROJECT

Work on Project 14020 was executed in accordance with instructions 22/MEK, S-2-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 of St. Petersburg Harbor. Limits are from latitude $27^{\circ}40.25'$ to latitude $27^{\circ}49.0'$; longitude $82^{\circ}33.25'$ to longitude $82^{\circ}38.80'$. This survey makes junction with contemporary survey H-SO-2358 (H-8429) scale 1:20,000 to the south and east; with contemporary survey H-8425 scale 1:10,000 to the north; and along the west by land. Hydrography began 17 July 1958 and ended 17 September 1958.

H-7970 (H-8452) on southwest

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 foot wooden-hull, cabin type with a turning radius of 25 meters at half rudder and standard speed. The standard sounding speed is about $8\frac{1}{2}$ knots at 1800 rpm. Edo type 255 Fathometer, Serial No. 202, with a Kato converter was used exclusively on this launch. Launch 183 is equipped with two transducer hull fittings, one on each side of the keel, in accordance with C&GS Specifications FU-2053.

Four other vessels were used for the inshore work of this survey

Skiffs No. 1 and 2 were lightweight aluminum skiffs transferred from a photogrammetric unit. They were each powered alternately by a 10 h.p. or 25 h.p. outboard motor. Sounding speed for each is estimated generally at $2\frac{1}{2}$ to 4 knots. The speed was kept as consistent as possible with this type of vessel.

Fathometer 808J No. 77 was used on Skiff No. 1 with two transducers mounted on the hull at amidships.

Edo type 255 Depth Recorder No. 202 with a Vibro-Pac converter was used on Skiff No. 2. The transducer was mounted over the port side aft of amidships.

Ship "SOSBEE" Skiff SO-735 was used extensively on the inshore work of this survey. SO-735 is a wooden hull, shallow draft skiff with canopy cover. It was powered alternately by one 25 h.p. or two 10 h.p. outboard motors. Average sounding speed was 3 to 4 knots. Fathometers 808J No. 77 and 808 No. 101s were used on this skiff. The transducers were mounted amidships in wells designed for this purpose.

Ship "SOSBEE" Launch CS-182 was used for one day's work on this survey, (16 September 1958-Vol. #16, "a" day, CS-182). Launch 182 is of fibre-glass hull construction and is similar in construction but slightly smaller than Launch CS-183. Fathometer 808 No. 150 was used on CS-182 this day.

D. CONTROL STATIONS

The following triangulation control was used in this survey; all recovery of triangulation stations was done by the Tampa District Office.

<u>STATION</u>	<u>G.P. PAGE</u>	<u>VOLUME</u>	<u>CH. OF PTY</u>
St. Petersburg Municipal Tank	page 207	Gulf Coast Part VI Tampa Bay vicinity	GLA, 1934 KGC, 1941
St. Petersburg First Methodist Church Carillon Tower, Final	page 207	"	"
St. Petersburg Vinoy Park Hotel, Cupola (Vinoy, 1926)	page 208	"	"
St. Petersburg Florida Power Corp. Red Brick Stack (POW 1925)	page 208	"	"
St. Petersburg Clark's Sunset Golf Course, Red Water Tank, 1934(d)	page 207	"	"
Tampa Bay Cut K Channel Range Rear Light, 1957	No page No.	Unadjusted Field Computation-RLS	
Tampa Bay Cut G Channel Range Rear Light, 1957	"	"	"
Tampa Bay Cut G Channel Range Front Light, 1957	"	"	"

E. TIDE AND CURRENT STATIONS

The basic control tide 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 Pinellas Point, latitude 27°40.23' longitude 82°38.40' controlled hydrography without time or height correction in accordance with letter and accompanying sketch 36-193-15e.2 dated 22 May 1958. When this gage was inoperative tides were referred from Mermaid Point with a -1 hr.20 min. time corr. and 0.91 ratio of hourly heights. Tides referred from Mermaid Point were in accordance with letter 36-275-15e dated 28 July 1958.

Current observations were made in conjunction with the Ship "SOSBEE" during Project 14020. Three stations were occupied simultaneously by the East Coast Field Party and Ship "SOSBEE" personnel using Price Meter equipment. A special report on observations at these current stations has been previously submitted by the Commanding Officer, Ship "SOSBEE". The stations occupied were not within the area limits of this survey.

F. SMOOTH SHEET

The projection was made by the Washington Office using the Ruling Machine. Controls, 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-10558 and T-10560. Triangulation stations were plotted on the smooth sheet according to the standard of d.m.'s and d.p.'s.

It was desirable to conduct hydrography at a 1:5,000 scale within certain areas of this survey in order to conduct the hydrographic investigations more efficiently. The smooth plot for these areas, however, is being plotted at a 1:10,000 scale which is the scale for the rest of the survey sheet. ✓

The transfer of shoreline and topographic details was verified in accordance with paragraph 757 of the Hydro Manual.

All topographic control was located on photogrammetric manuscripts T-10558 and T-10560 using standard photogrammetric methods. This control was located by the Tampa District Office. Eighteen (18) hydrographic signals were located with sextant cuts by this party. Nine (9) of these were topographic signals that were changed to hydrographic signals when it was found that the topo signals had been erroneously located by the signal building crew. The hydro signals are as follows:

ADD	BAT	BUL	FOR	MAN	SEX.
ARF	BED	COY	GUT	NIT	SKI
AST	BOX	CUT	JUG	POL	VIM

One photo signal was located by the survey party on "a" day (blue-SO-735) Vol. # 7 when it was discovered that anglers had been using this object by mistake a good part of the day. The signal was picked off the photograph by hydrographer L.L. Seal and named MUM. (It was mistaken for signal BAH during field work.)
Signal Man (Blue) priv. maintained marker was found to differ from T-10558 (1952) and relocated by this party as a hydro signal. (location date 7/2/58)

G. SHORELINE AND TOPOGRAPHY

(1957) (1957)
Shoreline and topographic details were obtained from photogrammetric manuscripts T-10558 and T-10560. Several changes in shoreline and topographic detail not shown on the above mentioned manuscripts nor on Charts 586 (Rev. 24 May '58) 587 (Rev. 15 March '58) and 1257 (Rev. 29 Mar '58) are as follows:

(1) Approx. latitude $27^{\circ} 48' S$ Longitude $82^{\circ} 37' W$

A housing development, Florida style, is in progress in this area (Smacks Bayou). Each house will have access to a dock area and thus much dredging and filling was going on in the area at the time of the survey. The contractor involved is:

Rader and Associates
611 First Ave. North
St. Petersburg, Florida

*Bp 59513
Air photo Corr. applied Dwg #28
Chart 587*

The contractor has supplied a master plan of proposed developments which is being submitted under separate cover along with drawings of other area projects. *Bp 59513 (Chart 587 Corr. Air Photo Dwg #28)*

(2) Approx. latitude $27^{\circ} 46'$ longitude $82^{\circ} 38'$

The City of St. Petersburg has undertaken an extensive revision of the Municipal Yacht Basin area. A large parking lot is under construction on a fill area which was formerly under water. A breakwater is being constructed as protection for the boats moored in the Yacht Basin and as a result of this breakwater the Yacht Basin Range Lights will be relocated. Dredges were quite active in the area at the time the survey was made and several extensive fill and borrow areas were being created. The City Engineer, through the cooperation of Mr. Bates, supplied this party with the plans for the eventual layout of the area. The drawings are being submitted under separate cover along with drawings of other area projects. A tentative project completion date was set at February, 1959. Future contact may be made with the City Engineer Office at the following address:

Office of the City Engineer
Room 211, Municipal Building
St. Petersburg, Florida

*Bp 59512
accomplished subsequent
to the present survey.*

(3) Approx. latitude $27^{\circ} 44'$ longitude $82^{\circ} 38'$

Dredges have created a beach area along the shoreline at this location. Several deep soundings adjacent to this beach area are a result of borrowing to create this fill project. The fill area is outlined on the smooth sheet and boat sheet. *Air photo revisions applied to chart 586.*

(4) The description of the Municipal Yacht Basin Rear Range Light on the charts for this area was found to be in error. The description reads "South Tower Hotel". Actually, this Rear Range Light is situated on the corner of the roof of this Hotel, about 20 meters south of the south tower of the hotel. A line was run on this range during the progress of this survey (Vol #6, r day, 22 August '58, CS-183, pos. 1 thru 4). However, the Rear Range Light will be relocated as a result of the present construction, it is not deemed necessary to revise the chart description at this time. *See T-10558*

(4) Approx latitude 27°47' longitude 82°37'

(Vicinity of Snell Island and Coffeepot Bayou)

A fill project has been constructed here which consists of sandy fill enclosed by a concrete bulkhead. It extends southward about 500 ft. from the previous shoreline and is approximately 300 ft. wide. The borrow of fill to complete this project has caused several deep areas in the adjacent waters. *in note on p/5*

(5) Approximate latitude 27°44.48' longitude 82°37.6'

The small mangrove island in this vicinity is erroneously located on Charts 586 and 1257 where it is plotted about 200 meters north of its actual position. *Previously Corrected* *Gray note*

(6) Approx latitude 27°42.3' longitude 82°38.3'

(Vicinity of Point Pinellas)

A small peninsula has been created at this location by borrowing fill from the adjacent water area, thus creating several deep holes adjacent to the shoreline.

(7) Approx latitude 27°46.1' longitude 82°37.5'

As a result of the operations described under Article 2 of this section, there is a fill project underway at this location with the sand material from the dredging operations being pumped into this area. *Charted*

H. SOUNDINGS

Soundings on the offshore work were made for the most part with an EDO echo sounder with a KATO converter set at 61.0 cycles. The leadline was used in verification of soundings and bottom samples. The 808 fathometer and sounding pole were used almost exclusively for the inshore work, on shoal flats and in estuaries and creeks. Soundings were generally recorded every 15 seconds ~~and~~ throughout the survey. Line spacing was generally maintained at 100 meters except in areas of development and on the 1:5000 scale "blowup" sections.

I. CONTROL OF HYDROGRAPHY

All hydrographic control was by standard visual method with sextant angles taken on shore objects. Positions were taken at 1½ minute intervals on the regular 1:10,000 survey and at 1 minute intervals on the 1:5,000 blowup sections of this survey. A tag line survey was run along the wharves at Bayboro Harbor (described in Section "U"). Ranges were used for these lines.

J. ADEQUACY OF SURVEY

This survey is considered complete and adequate to supercede all prior surveys for charting purposes. Much of the area covered by this survey has changed considerably since the dates of the prior surveys, primarily because of the ever increasing public works projects, channel dredging, and private contracting of waterfront housing units. Junctions with contemporary surveys are satisfactory and depth curves can be drawn at junctions. *See Review*

K. CROSSLINES AND BOTTOM SAMPLES

The percentage of crosslines run was about 8 to 10 percent. The crosslines were satisfactory throughout the survey. Bottom samples were taken at representative areas throughout the survey.

L. COMPARISON WITH PRIOR SURVEYS

A comparison was made with the following prior surveys:

- (a) H-4565(1926) scale 1:20,000

This is a survey of the area about the Port of St. Petersburg including the entrance channels. Since the time of this survey, considerable changes in shoreline, harbors and channels have taken place. This survey is almost entirely outdated and is completely supergeded by the present survey.

*See Review
for Comparison*

- (b) H-4566(1926) scale 1:5,000

This survey covers the area of Coffeepot Bayou and Smacks Bayou and is outdated and completely supergeded by the present survey.

- (c) H-4575a(1927) scale 1:3,000

The above survey covers the north and south yacht basins in the St. Petersburg municipal area. Considerable changes have taken place in these areas and the old survey is entirely supergeded by the present survey.

- (d) H-7082(1945) scale 1:5,000

This is a survey of the Port of St. Petersburg and vicinity. The depths obtained in the harbor basins from this survey are 3 to 5 ft. deeper than those of the present survey. A general shoaling of the harbors and approaches has taken place since 1945. (See Tag Line Survey, Port of St. Petersburg, Section "U" of this report.) The discrepancies occur for the most part in areas of soft bottom composed of black sticky mud.

- (e) Special Project-Revision Survey, Port of St. Petersburg (1954) scale 1:2500
(Partially completed by USCGS Ship "HYDROGRAPHER". Special report submitted by Captain L. S. Hubbard, Cmdg. Ship "HYDROGRAPHER", 1954)

The present survey agrees for the most part with that portion of the survey completed in 1954. However, shoaling appears to have continued in the Port of St. Petersburg since 1954. Discrepancies of 1 and 2 ft. were found between the present and prior surveys in this area, with the present survey having the shoaler depths.

(f) A comparison was made between the present survey and the following Corps. of Engineer Surveys. The C. E. surveys were sent to the East Coast Field Party as a result of a request made to the Jacksonville, Fla. C. of E. District by LCDR Miller J. Tonkel, Officer-in-Charge. The request was for prints of all up-to-date hydrographic surveys made by the C. of E. in Tampa Bay and particularly about the St. Petersburg waterfront. The prints were received 6 September 1958. They are all on the Florida State Grid System projection.

- (1) D.O. File No. 48A-24,857 Dated January 1958 - BP 59509

This survey is a post-dredge examination of the Bayboro Harbor basin which was dredged in 1956-1957. It is in good agreement with the present survey.

- (2) D.O. File No. 48-23,730-1 Dated January 1956 (2 copies) BP 53760

This survey was of Bayboro Harbor, Port of St. Petersburg and channel approaches to this area. It is in good agreement with the present survey except for the Bayboro area which was subsequently dredged (See item 1)

- (3) D.O. File No. 48-24,671-1 Dated 1957 BP 55559

This survey is an examination of the Port of St. Petersburg Harbor and is in good agreement with the present survey.

L.(cont'd)

It should be noted that drawings ^{Bp 55559} 48-24,671-1 and ^{Bp 59509} 48A-24,857 are up-to-date surveys and provide considerable more detail in the St.Petersburg-Bayboro Harbor area than was deemed practical to obtain during the present hydrographic survey. The C. of E. surveys, therefore, should be applied to the Charts wherever practicable. The above listed drawings are being submitted under separate cover along with drawings of other area projects.

M.COMPARISON WITH CHART

A comparison was made with the following Charts:

- (a) 1257 Revised 29 March 1958
- (b) 586 Revised 24 May 1958
- (c) 587 Revised 15 March 1958

The new survey and the charts were in good agreement with the exceptions noted below and in sections "G", "L", "N" and "V".

(a) Approx latitude $27^{\circ}46.92'$ longitude $82^{\circ}36.68'$ *probably 6 ft sdg.*
The charted depth at this location (originating with survey H-4565-1926) was found out of position during the present survey. It is recommended that this sounding be relocated approximately 200 meters northwest from its charted position toward the forward marker leading to the Coffeepot Bayou Channel. It is also recommended that the 6 ft. depth curve at this same location be straightened out so as not to show a channel indentation. The 9 ft. sounding shown on the chart at the mouth of the channel was not found during the present survey. ✓
✓
Concur

(b) Approx latitude $27^{\circ}45.18'$ longitude $82^{\circ}37.81'$
The pier charted at this position has a channel of $3\frac{1}{2}$ ft. controlling depth leading to it from the deep waters of the bay and a basin of 8 ft. depth around the pier. The channel is well marked by privately maintained markers. None of this information is charted and it is recommended that it be charted since the pier area is a municipal recreational park where boating, swimming and picnicking are common. *Channel depths have been applied only.* 586 ✓
Concur

(c) Approx latitude $27^{\circ}44.6'$ longitude $82^{\circ}37.3'$ *hydrography accomplished by skiff 2 (9-5-58) indicates L.D. 5'*
There has been considerable shoaling at the mouth of the channel leading into Big Bayou, which has extended a bar of 3 ft. depth across the entrance, almost sealing off the channel. The charted control depth of 6 ft. is still good at the mouth of the channel for a width of approx. 20 meters. However, much borrowing has been done in the area adjacent to the shoreline on the north side of the Bayou thus creating deep holes in this vicinity. There are now, in effect, two channels west of the mouth with a bar of 2 ft. depth dividing them. ✓

(d) Approx latitude $27^{\circ}46.2'$ longitude $82^{\circ}37.4'$ to $82^{\circ}37.7'$
The submerged ruins of a railroad trestle extension charted at this location were found to be submerged with a least depth of $5'$ ft. at a position of latitude $27^{\circ}46.2'$ longitude $82^{\circ}37.55'$. This least depth occurs in an area with average depth of 10 ft. the length of the ruins was found to be as charted. ✓

* A 5 ft depth was found on Bp 59570
see also CL 1017 (59)
CL 892 (61)

see CL 1017/59

M.(cont'd)

(e) Port of St.Petersburg

The results of this survey indicate a shoaling up of silt deposits in the harbor area particularly on the east side of the harbor adjacent to the Coast Guard Air Station ramp. The 18 ft. curve extends further into the harbor than is shown on Chart 587. Evidence of silt deposits was found during the tag line survey described under section U of this report.

(f) Approx latitude $27^{\circ}45.44'$ longitude $82^{\circ}37.6'$ to $82^{\circ}37.73'$

The jetty charted at this location was not found during the present survey. It is recommended that it be deleted from the chart. *retain*
See Review

(g) Approx latitude $27^{\circ}45.32'$ longitude $82^{\circ}37.7'$

The fence charted at this location has been removed and should be deleted from the chart.

(h) Approx latitude $27^{\circ}46.56'$ longitude $82^{\circ}37.62'$

The charted 10 ft. sounding at the entrance to the North Yacht Basin was found to be in error. The depth at the entrance is a least depth of 13 ft. as determined by the present survey. *from Sp 21871 (1928)*

(i) The Central Yacht Basin at St.Petersburg (Approx latitude $27^{\circ}46.3'$ longitude $82^{\circ}37.8'$) is charted as having a deep of 23 ft. The deepest sounding from the present survey is 21 ft. However, since dredging operations were being intermittently conducted during the survey of this basin, this may not be the final depth. The entire basin was being dredged and generally deeper depths than those charted were found. *CL 865/59 and CL 538/59 are subsequent to present survey.*

(j) Approx latitude $27^{\circ}46.05'$ longitude $82^{\circ}37.76'$

The deep of 31 ft. charted in the South Yacht Basin is believed to be 6 ft. in error. The deep obtained by this survey in the same location is 25 ft. However, extensive dredging had been conducted in this basin prior to the present survey and while the basin is now deeper overall, some filling in might have taken place during dredging operations. In the process of dredging, one peak (least depth of 10 ft.) was not removed. It is located at approximate latitude $27^{\circ}46.08'$ longitude $82^{\circ}37.7'$ and juts out into the deeper waters of the basin. *See review*

(k) Approx latitude $27^{\circ}48.2'$ longitude $82^{\circ}36.5'$

As described in sections "G" and "O" of this report, dredging operations have been underway in Smacks Bayou. The depths obtained from the present survey are 12 to 15 ft. in some places as compared to 1 and 4 ft. charted depths in the same area.

N. DANGERS AND SHOALS

Latitude & Longitude	Pos. & Vol.	Description
Lat: 27° 42' 00.3 ⁰ ✓ Long: 82° 38' 00.8 ¹ ✓	Skiff SO-735 Volume 10 "j" day (blue) Pos. 48j	Broken-off piling submerged at high water. ✓ DANGER TO NAVIGATION Bares 2 ft. @ MLW <i>Charted through CL 637(58) Awash @ MHW on present survey.</i>
Bearing 1000 yards 047° from Boca Ciega Light 7		

A broken-off piling (not charted) was found at the above location on 7 August 1958. The above location data was furnished to the Executive Officer, U.S. Coast Guard Depot, St. Petersburg, Fla. This officer stated that his office would take all further steps necessary including the removal of the obstruction. The Tampa District Office was notified of the obstruction by telephone. At the time the East Coast Field Party left the Tampa Bay area (September 20 1958) the obstruction had not yet been removed. The piling was originally intended as a channel marker into the Pinellas Point boat slip.

O. COAST PILOT REPORT

There are several changes to the Coast Pilot to report within the limits of this sheet. Two copies of these notes are contained under Appendix G of this report. One copy is marked for the Coast Pilot section.

P. AIDS TO NAVIGATION

Following is a list of all floating aids to navigation:

NAME	LOCATION	DEPTH	VOL. & POS	DATE LOCATED
Boca Ciega Bay Buoy #3	Lat: 27° 41.7 ⁰ ✓ Long: 82° 37.7 ⁸ ✓	12' ✓	Vol. 10, j day SO-735, pos. 76j	17 July 1958
Point Pinellas Channel Buoy 7	Lat: 27° 43.50' ✓ Long: 82° 36.73' ✓	24' ✓	Vol. 3, f day CS-183, pos. 113f	24 July 1958
St. Petersburg Outer Cut Lighted Buoy #9	Lat: 27° 44.34' ✓ Long: 82° 36.74' ✓	19' ✓	Vol. 2, d day CS-183, pos 13d	22 July 1958
St. Petersburg Outer Cut Buoy #10	Lat: 27° 44.36' ✓ Long: 82° 36.65' ✓	21' ✓	Vol. 3, e day CS-183, pos. 57e	23 July 1958
St. Petersburg Channel Lighted Buoy #1	Lat: 27° 45.36' ✓ Long: 82° 36.77' ✓	19' ✓	Vol. 1, a day CS-183, pos. 94a	17 July 1958
St. Petersburg Channel Lighted Buoy #3	Lat: 27° 45.50' ✓ Long: 82° 36.87' ✓	20' ✓	Vol. 1, a day CS-183, pos. 32a	17 July 1958
St. Petersburg Channel Buoy #2	Lat: 27° 45.57' ✓ Long: 82° 36.97' ✓	19' ✓	Vol. 1, a day CS-183, pos. 54a	17 July 1958
St. Petersburg Channel Buoy #4	Lat: 27° 45.55' ✓ Long: 82° 37.27' ✓	14' ✓	Vol. 1, a day CS-183, pos. 55a	17 July 1958

AIDS TO NAVIGATION (PRIVATELY MAINTAINED)

NAME	LAT. & LONG.	DEPTH	POSITION	DATE LOCATED	DESCRIPTION
Channel Marker	27° 47.51' ✓ 82° 36.38' ✓	3 ✓	Vol. 7 13b	July 1, 1958	1/2" Pipe
Channel Marker	27° 47.45' ✓ 82° 36.38' ✓	2 ✓	Vol. 7 14b	July 1, 1958	1/2" Pipe
Channel Marker	27° 47.44' ✓ 82° 36.39' ✓	3 ✓	Vol. 7 15b	July 1, 1958	1/2" Pipe
Channel Marker	27° 47.46' ✓ 82° 36.39' ✓	2 ✓	Vol. 7 16b	July 1, 1958	1/2" Pipe
Channel Marker	27° 47.38' ✓ 82° 36.37' ✓	6 ✓	Vol. 7 17b	July 1, 1958	55 gal. Drum
Channel Marker (Signal OBI)	27° 47.05' ✓ 82° 36.83' ✓	6 ✓	Vol. 7 20-21b	July 1, 1958	
Channel Marker	27° 47.03' ✓ 82° 36.84' ✓		Vol. 7 20-21b	July 1, 1958	
Channel Marker (Signal MID)	27° 47.12' ✓ 82° 36.93' ✓	5 ✓	Vol. 7 20-21b	July 1, 1958	
Channel Marker (Signal NEW)	27° 47.10' ✓ 82° 36.94' ✓	3 ✓	Vol. 7 20-21b	July 1, 1948	
Channel Marker (Signal KEY)	27° 47.20' ✓ 82° 37.09' ✓	4 ✓	Vol. 7 21-22b	July 1, 1958	
Channel Marker (Signal LIP)	27° 47.19' ✓ 82° 37.10' ✓		Vol. 7 21-22b	July 1, 1958	
Channel Marker (Signal JAY)	27° 47.28' ✓ 82° 37.25' ✓		Vol. 7 22-23b	July 1, 1958	
Channel Marker	27° 47.27' ✓ 82° 37.11' ✓	4 ✓	Vol. 8 70b	July 1, 1958	2" x 2" with red pointer
Channel Marker # 6	27° 44.63' ✓ 82° 37.43' ✓	5 ✓	Vol. 10 7k	July 18, 1958	File with pointer
Channel Marker # 4	27° 44.65' ✓ 82° 37.39' ✓	4 ✓	Vol. 10 8k	July 18, 1958	File with pointer

AIDS TO NAVIGATION (PRIVATELY MAINTAINED)
(CONT'D)

NAME	LAT. & LONG.	DEPTH	POSITION	DATE LOCATED	DESCRIPTION
Channel Marker # 1	27° 44.63 ⁹ ✓ 82° 37.34 ✓	4 ✓	Vol. 10 9k	July 18, 1958	File with pointer
Channel Marker # 7	27° 44.57 ✓ 82° 37.49 ✓	2 ³ *	Vol. 11 7L	July 21, 1958	File with pointer
Channel Marker # 8	27° 44.56 ✓ 82° 37.53 ✓	7 ⁴ *	Vol. 11 8L	July 21, 1958	File with pointer
Channel Marker	27° 44.57 ✓ 82° 37.56 ✓	4 ⁵ *	Vol. 11 9L	July 21, 1958	File with pointer
Channel Marker # 10	27° 44.58 ✓ 82° 37.62 ✓	4 ✓	Vol. 11 10L	July 21, 1958	File with pointer
Channel Marker # 12	27° 44.59 ✓ 82° 37.68 ✓	4 ⁵ *	Vol. 11 11L	July 21, 1958	File with pointer
Channel Marker # 14	27° 44.60 ✓ 82° 37.76 ✓	4 ✓	Vol. 11 12L	July 21, 1958	File with pointer
Channel Marker # 15	27° 44.62 ✓ 82° 37.86 ✓	3 ⁴ *	Vol. 11 13L	July 21, 1958	File with pointer
Channel Marker # 17	27° 44.65 ✓ 82° 37.91 ✓	3 ⁴ *	Vol. 11 14L	July 21, 1958	File with pointer
Channel Marker	27° 44.38 ✓ 82° 38.20 ✓	3 ⁴ *	Vol. 11 17L	July 21, 1958	No pointer
Channel Marker # 19	27° 44.58 ✓ 82° 37.97 ✓	4 ⁵ *	Vol. 11 35L	July 21, 1958	File with pointer
Channel Marker	27° 43.27 ✓ 82° 36.18 ✓	9 ✓	Vol. 3 112f	July 24, 1958	Red day marker
Channel Marker	27° 43.10 ✓ 82° 37.61 ✓	2 ¹ *	Vol. 11 33m	July 22, 1958	4" x 4"
Channel Marker	27° 42.41 ✓ 82° 38.24 ⁵ ✓	2 ✓	Vol. 10 54k	July 18, 1958	small marker with red ref.
Channel Marker	27° 42.38 ✓ 82° 38.25 ⁶ ✓	2 ✓	Vol. 10 55k	July 18, 1958	small marker with red ref.
Channel Marker	27° 42.33 ✓ 82° 38.27 ⁴ ✓	2 ✓	Vol. 10 56k	July 18, 18, 1958	small marker with red ref.

* depths changed due to tide correction.

AIDS TO NAVIGATION (PRIVATELY MAINTAINED)
(CONT'D)

NAME	LAT. & LONG.	DEPTH	POSITION	DATE LOCATED	DESCRIPTION
Channel Marker	27° 42.29' ✓ 82° 38.23' ✓	1 ✓	Vol. 10 57k	July 18, 1958	small marker with red ref.
Channel Marker	27° 42.27' ✓ 82° 38.22' ✓	2 ✓	Vol. 10 58k	July 18, 1958	small marker with red ref.
Channel Marker	27° 42.24' ✓ 82° 38.23' ✓	2 ✓	Vol. 10 59k	July 18, 1958	small marker with red ref.
Channel Marker	27° 42.22' ✓ 82° 38.26' ✓	1 ✓	Vol. 10 60k	July 18, 1958	small marker with red ref.
Channel Marker	27° 42.21' ✓ 82° 38.30' ✓	2 ✓	Vol. 10 61k	July 18, 1958	small marker with red ref.
Channel Marker	27° 42.22' ✓ 82° 38.32' ✓	2 ✓	Vol. 10 62k	July 18, 1958	small marker with red ref.
Channel Marker	27° 42.15' ✓ 82° 38.32' ✓	3 ✓	Vol. 10 49j	July 17, 1958	single pile with orange ref.

Q. LANDMARKS FOR CHARTS

All landmarks for charts and non-floating aids to navigation for the entire Tampa Bay area have previously been submitted on Form 567's by the Tampa District Office to the Washington Office. This party has a copy of the transmittal letter from the Tampa D.O. to the Director dated 26 May 1958, as well as copies of all the form 567's that were submitted at that time. These forms are dated 1 May 1958. We also have a copy of Form 567 dated 27 August 1958 and submitted by the Tampa D.O. referring to the new Weedon Island Channel in Old Tampa Bay. Since this Party has no additions or deletions to make concerning the forms already submitted by the Tampa D.O. for the entire project, it is considered unnecessary to resubmit any form 567's with this report. All reference to landmarks for charts and non-floating aids to navigation is directed to the previously submitted forms mentioned above, with the exception of the comments made below.

There is one correction to be made concerning the erroneous designation of Boca Ciega Light 2 as Light 4. This error is contained in one of the form 567's submitted by the Tampa D.O. The position data is correct for Light 2 but it is called Light 4 on the form. Light 4 has been destroyed as noted in Notice to Mariners No. 16, April 1958.

There were two prospective landmarks for charts within the limits of this survey that were listed for investigation under the Preliminary Review for the Project. They are both judged inadequate as suitable landmarks and should not be considered in this respect.

- (a) Radio Tower (KII) approx latitude $27^{\circ}46.1'$ longitude $82^{\circ}39.63'$

This tower could not be seen at all from Tampa Bay.

It was obscured by tall buildings near the waterfront area.
Beyond the limits of present survey.

- (b) Flagpole (in 1948) approx latitude $27^{\circ}43.35^{\prime}$ ³² longitude $82^{\circ}38.15^{\prime}$ ₁₆

This object was used as a hydrographic signal throughout the survey and was located by sextant cuts for this purpose. However, it was not at all outstanding beyond its immediate area, could not be seen for a very long distance, and was mostly obscured by taller trees between the pole and the water line.

Signal cut, West shore of Little Bayou.

R. GEOGRAPHICAL NAMES

There are no new geographical names to report.

S. SILTED AREAS

An attempt to use a leadline during the undertaking of a tag-line survey along the wharves in St. Petersburg Harbor disclosed an unusually thick layer of black mud and silt covering the bottom. The leadline (16 pound) sunk an average of 2 to 4 ft. throughout the harbor and in several places sunk 5 ft. It was necessary to use a depth recorder for the tag-line survey because of this soft bottom.

T. BY-PRODUCT INFORMATION

Not Applicable

U. TAG LINE-IMPORTANT WHARVES

A special tag-line survey was run along the major wharves of the Port of St. Petersburg in addition to the regular system of hydrography in the area. The U.S. Naval Reserve Base and U.S. Coast Guard Base were both interested in obtaining large scale surveys of the area. It was decided that a tag line survey would be the best means of obtaining the information desired.

The survey was made using photo skiff No. 2 (red "b" day, Vol. 15) with the Edo type 255, Serial No. 202, fathometer. An attempt to use a leadline had to be abandoned when it was found that the lead (16 lb.) sunk into the bottom a distance of 2 ft. to more than 5 ft. The bottom of the harbor is covered with soft black mud and silt. Lines were run along the wharf 15 ft. from the dock (the average keel line), 75 ft. from the dock and 150 ft. from the dock. The hydrography was controlled by range markers set up on the shore and the position data was recorded in the record volume (Vol. 15, "b" day, red). The results of this survey were plotted on a scale of 1"=90' using predicted tides, and several copies were reproduced by the Tampa District Office. This Party furnished one copy each of this tag line survey plus a copy of the 1:5,000 blow-up section of the regular survey (All marked ADVANCE COPY SUBJECT TO REVISION) to the Commanding Officers of the Naval Reserve Base and Coast Guard base, respectively. They expressed their appreciation for receipt of this information and requested that copies of the final verified work be furnished to them, if possible.

Copies of the data furnished to these commands and the transmittal letters accompanying them, plus a copy of their letter of appreciation are included under Appendix E of this report. Any further information should be addressed to:

Commanding Officer
US Naval Reserve Base Or US Coast Guard Depot
Bayboro Harbor, St. Petersburg, Fla.

They would be interested in obtaining a final copy of the smooth sheet of the entire survey.

V. PRELIMINARY REVIEW *Items*

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

ITEM No. 4 Investigation verified the 9 ft. sounding listed as originating with a Corps of Engineer investigation C.L. 285 (1936). However, it was found at latitude $27^{\circ}45.5'$ longitude $82^{\circ}36.38'$, 110 meters east of the charted position. This sounding is the least depth of a shoal approximately 75 to 100 meters in diameter. The shoal borders on the northern limits of a charted spoil area, least depth of which was found to be 9 ft. at several locations in the spoil area. *chart the present survey information*

A PILE shown on the Preliminary Review at latitude $27^{\circ}45.72'$ longitude $82^{\circ}37.38'$ and originating with Survey H-7082 was not found during investigation. A marker buoy was dropped at the charted position and dragging operations were conducted in criss-cross pattern by two skiffs 20 meters apart. (Vol. 14, "e" day, Skiff No. 1, 18 Sept. 1958) It is recommended that this piling be deleted from the chart. The piling was originally intended to mark a sewer outlet but has probably been removed by the Coast Guard Air Station, since the area is sometimes used for seaplane maneuvering.

V. PRELIMINARY REVIEW (continued)

This group of piling is not charted. 47.30'
The group of 3 pilings, latitude 27°46.80' longitude 82°36.78' were found, ~~as shown on the preliminary review.~~ However, the offshore piling of the group was found broken off and bares 1 ft. at MLW. It is submerged at high water and should be considered harmful to small boat navigation in this area. (Vol. 15, skiff No. 2, pos. 23a, brown). ~~The group of pilings originated with Survey O.L. 255 (1948).~~ *The preliminary Review item from CL 255 (1948) are substantiated by the present survey (Vol 2, Pos 29-30c)*

The controlling depth of the channel leading into ^{Little} Bayou, charted at 9 ft., was found to be 8 ft. Beginning at the bend in the channel and on into Little Bayou, the controlling depth is 6 ft. There has been considerable shoaling at the entrance to Little Bayou and the 10 ft. deep private yacht basin charted at the south end of the Bayou was found to have shoaled to a depth of 6 ft. and is not well defined.

The channel delineation is inadequate, see review.

*Channel delete from chart 536
Used 50g curves - eff. 11/28/61*

A statement on the preliminary review reads:

"Local authorities have called attention to uncharted alongshore deeps ----- where drownings have occurred"

It is a common practice in Florida for project builders and contractors to scour out fill from adjacent water areas in order to build up shoreline areas. This results in a great number of alongshore deeps and subsequent shoaling of nearby channels. The location of the alongshore deeps found during this survey are discussed under sections G and M of this report.

The present survey reveals more such alongshore deeps.

W. MAGNETICS

In conjunction with Ship SOSBEE personnel, magnetic observations with transit magnetometer were made at stations indicated by project instructions. Only one of the stations occupied falls within the limits of this survey. That station is located in the vicinity of the Pinellas Point Tide Gage.

X&Y MISCELLANEOUS

Contact was made with the Corps of Engineers in order to obtain copies of their latest surveys in the project area. These surveys are listed and discussed under section L of this report. The drawings are being submitted under separate cover along with drawings of other area projects.

Z. TABULATION OF APPLICABLE DATA

The bar check tabulation, velocity curves, and fathometer information ~~are~~ being transmitted as a separate report (See Fathometer Report, 1958 Season, Project 14020, Tampa Bay, Fla.) An abstract of velocity corrections which were applied to the echo soundings is included under Appendix D of this report.

Respectfully submitted,

John J. McCoy

x

Use A.L.S.

Attachments:

APPENDIX

- | | |
|-------------------------------------|---------------------------------|
| A. List of Control | E. Tag Line Survey Drawings |
| B. Statistics | F. Index of Hydro Sheets |
| C. Tidal Note | G. Coast Pilot Notes (2 copies) |
| D. Abstract of Velocity Corrections | H. Approval Sheet |

APPENDIX A

LIST OF SIGNALS TO ACCOMPANY HYDROGRAPHIC SURVEY H-8426 (E.C.F.P. 1258)

ABE	T-10558	FIT	T-10558
ACE	T-10558	FLY	T-10560
ADD	Hydro	FOR	HYDRO
AID	T-10560	FRON	T-10558 (Triangulation)
ANN	T-10560	FRY	T-10560
ANT	T-10558	GAD	T-10558
ARF	Hydro	GAG	T-10558
ARM	T-10560	GAL	T-10558
AST	Hydro	GAM	T-10558
BAG	T-10558	GAS	T-10558
BAH	T-10558	GEM	T-10560
BAT	Hydro	GET	T-10560
BED	Hydro	GUS	T-10560
BEN	T-10558	GUT	Hydro
BIG	T-10560	GUY	T-10558
BOB	T-10558	HAG	T-10558
BOX	Hydro	HAT	T-10558
BUL	Hydro	HEM	T-10558
BUM	T-10560	HER	T-10558
CAB	T-10558	HID	T-10558
CAR	T-10560	HIS	T-10558
CAT	T-10558	HOE	T-10560
CHAN	T-10558 (Triangulation)	IDA	T-10558
COD	T-10558	ICE	T-10558
CON	T-10558	ION	T-10558
COP	T-10558	IRK	T-10560
COW	T-10558	ITS	T-10558
COY	Hydro	IVY	T-10558
CUT	Hydro	JAP	T-10558
CRY	T-10560	JAR	T-10558
DAN	T-10560	JAW	T-10558
DAW	T-10558	JAY	T-10558
DAY	T-10558	JIM	T-10558
DEB	T-10558	JOB	T-10560
DIM	T-10558	JOE	T-10558
DOC	T-10560	JOY	T-10560
DOM	T-10558	JUG	Hydro
DON	T-10560	KED	T-10558
DUD	T-10558	KEN	T-10558
EEL	T-10558	KEY	T-10558
EGG	T-10558	KID	T-10558
EGO	T-10560	KIM	T-10558
END	T-10558	LAD	T-10558
EVA	T-10558	LAM	T-10558
FAR	T-10558	LAY	T-10558
FAT	T-10558	LAX	T-10560
FIG	T-10558	LET	T-10558

LIST OF SIGNALS
(CONT'D)

LIND	T-10558	(Triangulation)	RAG	T-10558	
LION	T-10558	(Triangulation)	RAM	T-10558	
LIP	T-10558		RAT	T-10560	
LIZ	T-10558		REAR	T-10558	(Triangulation)
LOG	T-10558		REV	T-10558	
LUX	T-10558		RIG	T-10560	
MAN	Hydro		RIM	T-10560	
MAG	T-10558		RIO	T-10558	
MAL	T-10558		RUM	T-10560	
MAR	T-10560		SAG	T-10560	
MID	T-10558		SAM	T-10558	
MOP	T-10558		SAX	T-10560	
MUM	Photo		SET	T-10558	
NAT	T-10558		SEX	Hydro	
NED	T-10558		SIP	T-10558	
NEW	T-10558		SKI	Hydro	
NIG	T-10558		SUB	T-10560	
NIP	T-10558		SUD	T-10560	
NIT	Hydro		SUE	T-10560	
NOD	T-10558		SUNS	T-10558	(Triangulation)
QAK	T-10558		TAN	T-10558	
OBI	T-10558		TANK	T-10558	(Triangulation)
OHM	T-10558		TAP	T-10558	
OIL	T-10558		TOM	T-10560	
OID	T-10560		TOY	T-10558	
OWL	T-10558		TRY	T-10560	
PAD	T-10558		TUB	T-10560	
PAL	T-10558		USE	T-10558	
PAR	T-10560		VAL	T-10558	
PAW	T-10558		VAM	T-10558	
PET	T-10560		VET	T-10558	
PIE	T-10560		VEX	T-10560	
PIL	T-10558		VIM	Hydro	
PIN	T-10560		VINO	T-10558	(Triangulation)
PIT	T-10560		WAG	T-10560	
PLY	T-10558		WAR	T-10558	
POL	Hydro		WHO	T-10558	
PUP	T-10560		WIT	T-10560	
QUO	T-10558		YAM	T-10558	
			YES	T-10558	
			YET	T-10558	
			ZAG	T-10558	
			ZIG	T-10558	
			ZOO	T-10558	

appendix B
Statistics

Date	Vol. No.	Day Ltr.	No. D. P.	Positions Fath.	Sta. Mi. Sdg.
Launch CS-183 <i>pupe</i>					
7-17-58	1	a	4	158	31.0
7-18-58	1-2	b	0	73	16.1
7-21-58	2	c	0	88	17.5
7-22-58	2-3	d	1	139	27.1
7-23-58	3	e	2	55	11.5
7-24-58	3	f	2	120	23.8
7-29-58	4	g	0	42	9.4
7-30-58	4	h	7	10	1.0
7-31-58	4	j	1	71	12.4
8-1-58	4	k	4	75	14.6
8-4-58	5	l	Tag Line This Date		
8-6-58	5	m	3	81	6.6
8-13-58	5	n	0	93	6.6
8-15-58	6	p	5	82	9.9
8-21-58	6	q	0	103	Tag Line this date
8-22-58	6	r	0	197	Tag Line this date
8-26-58	6	s	0	124	Tag Line this date
Totals			29	1,511	187.5

Square statute miles of sounding 7.5

Appendix B
Statistics

Date ****	Vol No.	Day Ltr.	No. D.P.	Positions Fath.	Sta. Mi. Sdg.
Skiff SO-735	<u>Blue</u>				
6-30-58	7	a	1	121	20.6
7-1-58	7-8	b	18	92	11.0
7-2-58	8	c	4	55	6.4
7-3-58	8	d	0	50	4.3
7-7-58	8	e	0	5	0.6
7-11-58	9	f	1	20	2.5
7-15-58	9	g	11	43	7.8
7-16-58	9	h	0	88	14.8
7-17-58	10	j	5	99	20.1
7-18-58	10	k	12	72	10.9
7-21-58	11	l	24	14	1.3
7-22-58	11	m	6	42	3.9
7-29-58	11	n	0	72	10.3
7-30-58	12	p	0	76	11.0
			82 ✓	849 ✓	125.5 ✓

Totals

Square statute miles of sounding 1.2

Appendix B.
Statistics

Date	Vol. NO.	Day Ltr.	No. D. P.	Positions Fath.	Sta. Mi. Sdg.
Skiff NO.1 <i>Red</i>					
7-23-58	13	a	1	47	5.2
9-12-58	13	b	0	61	8.5
9-15-58	13	c	0	82	9.1
9-17-58	14	d	0	18	1.5
9-18-58	14	e	2	0	0.0
Totals			3	208	24.3

Square statute miles of sounding 0 (negligible)

Appendix B
Statistics

Date	Vol. No.	Day Ltr.	No. D.P.	Positions Fath.	Sta. Mi. Sdg.
Skiff NO. 2 <i>Brown</i>					
9-3 -58	15	a	1	39	5.9
9-5 -58	15	b	0	43	5.0
9-17-58	15	c	settlement & squat test		
Totals			<u>1</u>	<u>82</u>	<u>10.9</u>
Square statute miles of sounding					<u>0</u> (negligible)

Appendix B
Statistics

Date	Vol. No.	Day Ltr.	No. D.P.	Positions Fath.	Sta. mi. Sdg.
Launch CS-182		<i>aw</i>			
9-16-58	h6	a	0	30	2.3
		Totals	<u>0</u>	<u>30</u>	<u>2.3</u>
Square statute miles of sounding					<u>0 (negligible)</u>

APPENDIX C

TIDAL NOTE FOR HYDROGRAPHIC SURVEY H-8426 (E.C.F.P. 1258)

Tidal data for reducing soundings was obtained from a portable tide gage at Pinellas Point and one at Mermaid Point, Florida.

PINELLAS POINT, FLA.

Gage Location:

latitude: $27^{\circ} 40.23'$ ⁴²
longitude: $82^{\circ} 38.40'$ ✓

Staff:

Mean low water corresponds to 1.5 ft. on staff

MERMAID POINT, FLA.

Gage Location:

latitude: $27^{\circ} 49.32'$
longitude: $82^{\circ} 35.60'$ } *Not on sheet.*

Staff:

Mean low water corresponds to 2.5 Ft. on staff

The tide gage at Pinellas Point (without time or height correction) controlled hydrography over the entire sheet in accordance with letter and accompanying sketch 36-193-15e.2 dated 22 May 1958.

On days when the Pinellas Point gage was inoperative, tides were referred from Mermaid Point with a -1 hour 20 min. time correction and 0.91 ratio of hourly heights, applied to Mermaid Point. Tides referred from Mermaid Point were in accordance with letter 36-275-15e dated 28 July 1958. A sketch of the various tide zones used on Project 14020 is attached.

APPENDIX D

Abstract of Velocity Corrections to Accompany Survey H-8426(ECFP 1258)

(A) Fathometer EDO 202

- (1) Launch CS-185: From 17 July thru 22 August 1958, "a" day thru "r" day
Vol.No.1 thru No.6

<u>Depth</u>	<u>Corr.</u>
0.0 to 8.0 ft.	0.0
8.1 to 13.0 ft.	+0.2 ft.
13.1 to 19.0 ft.	+0.4 ft.
19.1 to 23.0 ft.	+0.6 ft.
23.1 to 40.0 ft.	+0.8 ft.

- (2) Skiff No.2: On 5 September 1958, "b" day, Vol.No.15

<u>Depth</u>	<u>Corr.</u>
0.0 to 2.0 ft.	0.0
2.1 to 7.0 ft.	-0.2 ft.
7.1 to 16.0 ft.	-0.4 ft.
16.1 to 20.0 ft.	-0.2 ft.
20.0 ft. and deeper	0.0

(B) Fathometer 808-77

- (1) Launch SO-735: From 30 June thru 10 July 1958, "a" day thru "f" day,
Vol.No.7 thru No.9

<u>Depth</u>	<u>Corr.</u>
0.0 to 15.0 ft.	0.0
15.1 to 20.0 ft.	+0.2 ft.
20.1 to 30.0 ft.	+0.4 ft.

- (2) Skiff No.1: From 12 September thru 18 September 1958, "b" day thru
"e" day, Vol.14 and 15.

Same corrections as for (1) above.

(C) Fathometer 808-101s

- (1) SO-735 from 15 July thru 30 July, "g" thru "p" day.
(2) Skiff No.1 on 23 July 1958 only, "a" day

All corrections for these two periods are zero up to 18.0 ft. This work was done in shoal water and there were no bar checks taken beyond 18.9 ft.

(D) Fathometer 808-150 (Ship SOSBEE fathometer)

This fathometer was used for only one day on this survey. No bar check was taken this day. SOSBEE previous bar checks show zero correction for the depths in which this fathometer was used this day.

APPENDIX E

STANDARD FORM NO. 64

Office Memorandum • UNITED STATES GOVERNMENT

TO : Commanding Officer
U.S. Naval Reserve Center
Bayboro Harbor, St. Petersburg, Fla.

FROM : Officer - in-Charge, East Coast Field Party
U.S. Coast and Geodetic Survey
~~SUBJECT:~~ P.O. Box 3561, St. Petersburg, Fla.

DATE: 19 September, 1958

Subject: Recent Survey of Bayboro Harbor as part of Tampa Bay Project #14020

Sir:

You will find enclosed four (4) Advanced Copies of recently completed field data concerning the Bayboro Harbor section of Tampa Bay. These are rough advanced copies which will later be revised and corrected to smooth form, and subsequently become part of up-to-date C&GS Nautical Charts for this area. We understand that you are interested in this advanced data and trust that it will be of some assistance to you. If any further information is desired, we may be reached at the above address. This unit is relocating to the Jacksonville on 22 September, but any correspondence to the above Box# will be forwarded.

William A. Hughes
LTJG, USCGS
O - in - C, East Coast Field Party

Copies Filed with figures

Office Memorandum • UNITED STATES GOVERNMENT

TO : Commanding Officer
U.S. Coast Guard Depot
Bayboro Harbor, St. Petersburg, Fla.

DATE: 19 September, 1958

FROM : Officer -in- Charge, East Coast Field Party
U.S. Coast and Geodetic Survey
P.O.Box 3561, St. Petersburg, Fla.

SUBJECT:

Recent Survey of Bayboro Harbor as part of Tampa Bay Project ECFP # 14020

Sir:

You will find enclosed four (4) Advanced Copies of recently completed field data concerning the Bayboro Harbor section of Tampa Bay. These are rough advanced copies which will later be revised and corrected to smooth form, and subsequently become part of up-to-date C&GS Nautical Charts for this area. We understand that you are interested in this advanced data and trust that it will be of some assistance to you. If any further information is desired, we may be reached at the above address. This unit is relocating to the Jacksonville area on 22 September, but any correspondence to the above Box # will be forwarded.

William A. Hughes
LTJG, USC&GS
O-in-C, East Coast Field Party

Office Memorandum • UNITED STATES GOVERNMENT


TO : Officer in Charge, East Coast Field Party DATE: 19 September 1958
U. S. Coast and Geodetic Survey
P. O. Box 3561, St. Petersburg, Florida

FROM : Commanding Officer
Coast Guard Depot, St. Petersburg, Florida

SUBJECT: Recent Survey of Bayboro Harbor as part of Tampa Bay Project ECFP
#14020

Reference: (a) Your memo dtd 19 September 1958

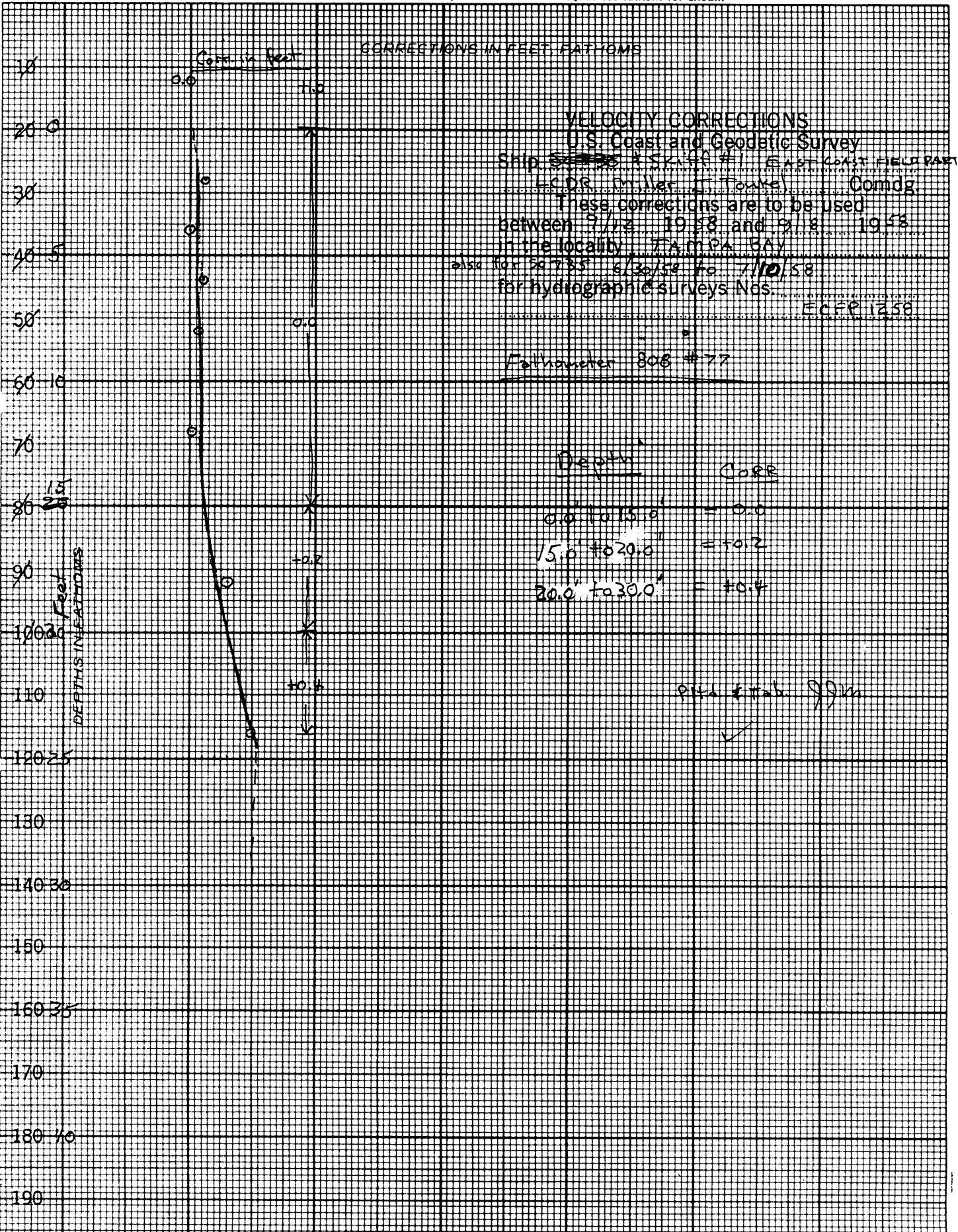
1. Your transmittal of four (4) advanced copies of recently completed field data concerning Bayboro Harbor is greatly appreciated.
2. It is requested that if it is of no trouble that revised and final copies be forwarded to this unit when available.


R. W. RAINOR, JR.
LT., USCG
Commanding Officer

1258 Skiff work

Form No. J-100-5

(Let 1 inch equal 4 fathoms for deep water and 1 inch equal 0.4 fathom for shoal.)



(For deep water add a 0 to these fig. s.)

FEET
DEPTHS IN FATHOMS

CORRECTIONS IN FEET FATHOMS

VELOCITY CORRECTIONS

U.S. Coast and Geodetic Survey
 Ship 1258 & Skiff #1 EAST COAST FIELD PAT
 E.C.P.R. Miller Comdg.
 These corrections are to be used
 between 7/12 1958 and 9/8 1958
 in the locality TAMPA BAY
 also Nov. 28 7/58 8/30/58 to 7/10/58
 for hydrographic surveys Nos. E.C.P.R. 1258

Fathometer 806 #77

Depth	Core
0.0 to 15.0	= 0.0
15.0 to 20.0	= +0.2
20.0 to 30.0	= +0.4

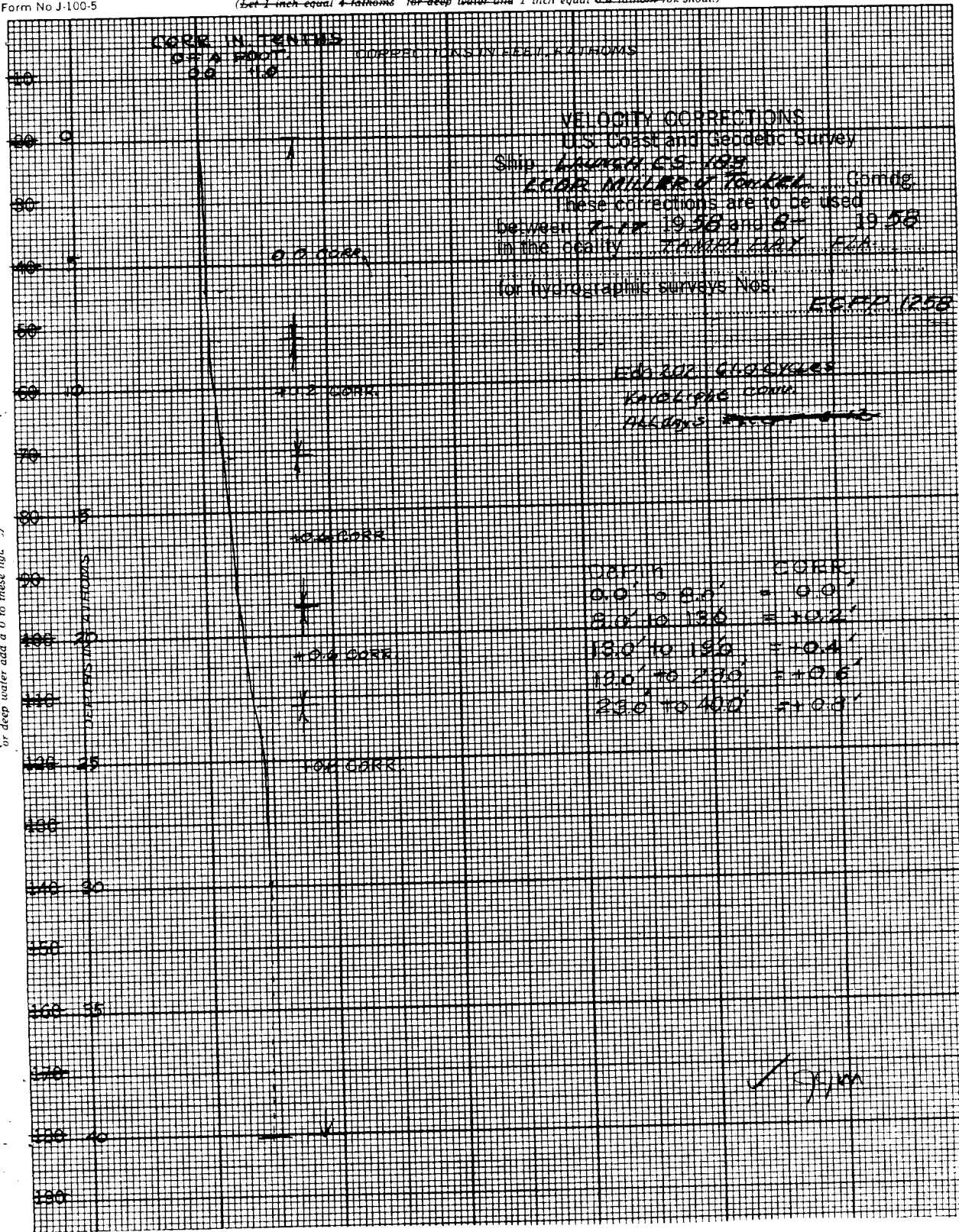
Data tab. 99m
 ✓

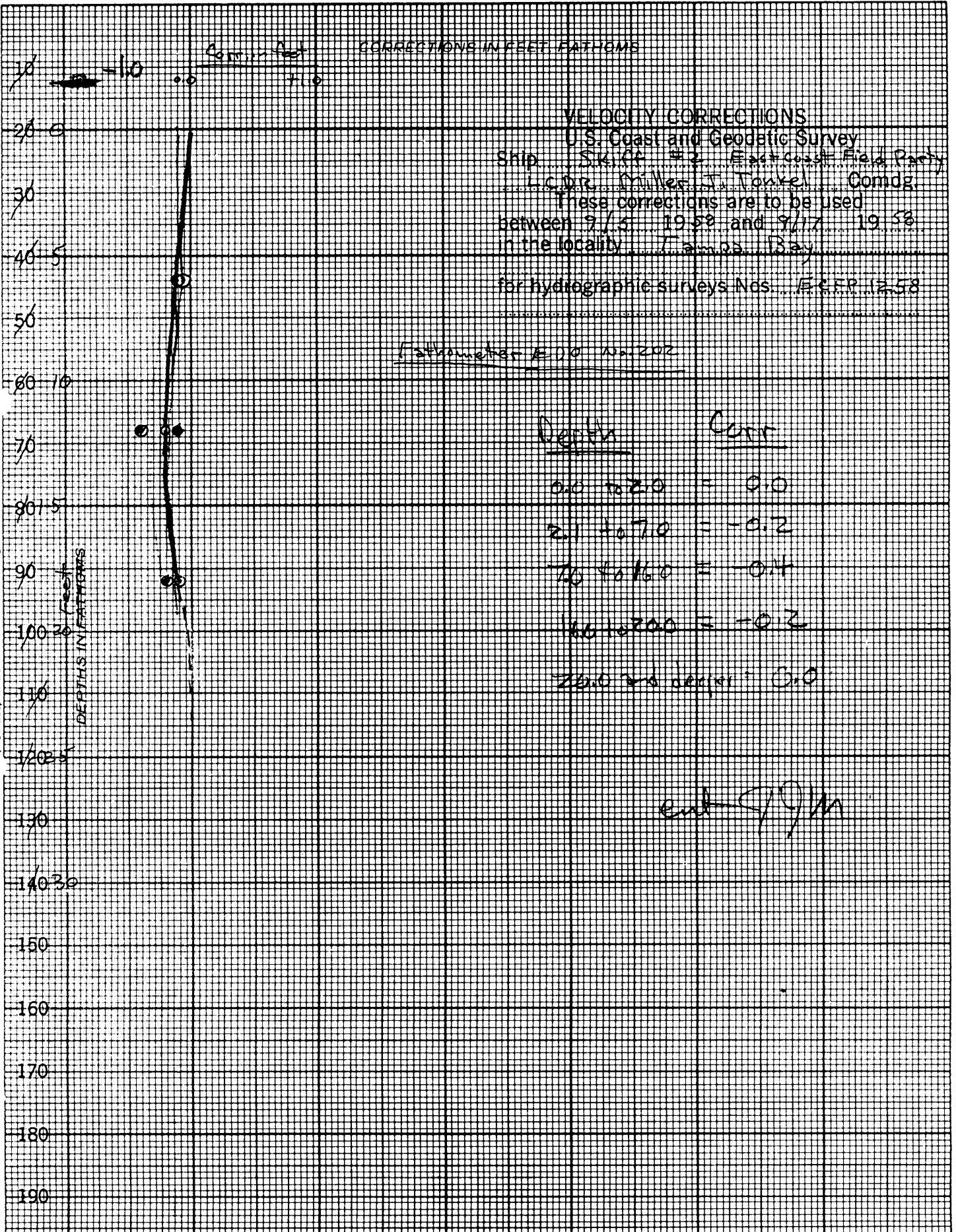
1258 Launch CS 103 WORK

2.0 FT.

Form No J-100-5

(Set 1 inch equal 4-fathoms for deep water and 1 inch equal 0.4 fathom for shoal.)





APPENDIX H.

APPROVAL SHEET TO ACCOMPANY
HYDROGRAPHIC SURVEY H-8426 (E.C.F.P. 1258)

The hydrographic survey of sheet H-8426 is approved and is complete to the best of my knowledge.

Field work was accomplished under the supervision of LCDR Robert C. Darling, LCDR Miller J. Tonkel, and LT(jg) William A. Hughes.

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



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

GEOGRAPHIC NAMES
Survey No. H-8426

Name on Survey	<i>See note</i>										B.G.N.
	A	B	C	D	E	F	G	H	K		
Big Bayou	a										1
Coffeepot Bayou	b										2
Lewis Island	a										3
Little Bayou	a										4
Point Pinellas	a										5
St. Petersburg	a								x		6
Salt Creek	a										7
Smacks Bayou	b								x		8
Snell Isle	b										9
Snell Isle Harbor	b										10
Tampa Bay	b										11
<i>Note:</i>											12
a is chart #586											13
b is chart #587											14
											15
											16
											17
											18
											19
											20
											21
											22
											23
											24
											25
											26
											27

George D. Free
GEOGRAPHIC NAMES SECTION
10 JUNE 1960

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. ⁸⁴²⁶

Records accompanying survey: Smooth sheets ¹.....;
 boat sheets ¹...; sounding vols. ¹⁶...; wire drag vols.;
 Descriptive Reports ¹...; graphic recorder envelopes ¹⁹...;
 special reports, etc.

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

Number of positions on sheet		2680
Number of positions checked		288
Number of positions revised		0
Number of soundings revised (refers to depth only)		180
Number of soundings erroneously spaced	6	25
Number of signals erroneously plotted or transferred		0
Topographic details	revisions and additions	Time 32 hrs. 3 hrs.
Junctions		Time 8 "
Verification of soundings from graphic record		Time 4 hr.
Special adjustments	hydrographic details revisions after verification 4 hrs.	Time 0

Verification by *J. C. Chamber* Total time ⁵²~~244~~ hrs. Date ⁷⁻¹⁶⁻⁶²

Reviewed by *E. E. Thomas* Time ⁸⁸ Date ^{9/25/62}

RHC

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Coastal Surveys~~

11 July 1960

Division of Charts: R. H. Carstens

Plane of reference approved in
16 volumes of sounding records for

HYDROGRAPHIC SHEET 8426

Locality Tampa Bay, Florida

Chief of Party: R. C. Darling, M.J. Tonkel & W.A. Hughes in 1958
Plane of reference is mean low water, reading
1.5 ft. on tide staff at Point Pinellas
7.6 ft. below B. M. 1 (1952)

Height of mean high water above plane of reference is 1.2 feet,

Condition of records satisfactory except as noted below:

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

<u>Vol.</u>	<u>Positions</u>
2 11	411 - 35 1 ✓
	1 m - 48 m ✓
4	1 j - 58 j ✓

William Hughes
Chief, Tides Branch

Corrected 4/7/62
g.p.c.

~~CHIEF, DIVISION OF TIDES AND CURRENTS~~

Vol 4 pg. 50 positions 24, 25 & 26
 These buoys shown on boat sheet as following
 24 - as naval buoy
 25 - " " "
 26 - " mooring "
 all shown on 55 as mooring buoys

DEPARTMENT OF COMMERCE
 COAST AND GEODETIC SURVEY
 10th April 1928

TIDE NOTE FOR HYDROGRAPHIC SHEET

Launch 185 recorded in purple - vol's 1-6 (purple on sheet)
 50 735 " " blue - " 7-12 (blue " " "
 skiff #1 " " red - " 13-14 (red " " "
 skiff #2 " " red - " 15 (brown " " "
 CS 182 " " green - " 16 (green " " ")

Plane of reference used in
 is volumes of sounding records for

HYDROGRAPHIC SHEET 6186

Locality Tampa Bay, Florida

Chief of Party: R. C. Darling, M. J. Tonnell & W. A. Harwood
 Plane of reference is mean low water, reading
 1.5 ft. on tide staff at Point Pinellas
 7.6 ft. below B. M. 1 (1922)

Height of mean high water above plane of reference is 1.5 feet.

Condition of records satisfactory except as noted below.

NOTE: Tide readers for the positions listed below have been
 revised in red and verified.

Vol.	Positions
2-11	111 - 35 I
	111 - 48 M
	111 - 50 J

Chief, Hydrographic Office

Division of Hydrography, U.S. Coast and Geodetic Survey

OFFICE OF CARTOGRAPHY

REVIEW SECTION -- NAUTICAL CHART DIVISION

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-8426

FIELD NO. ECFP-1258

Florida, Tampa Bay, St. Petersburg Municipal Area

SURVEYED: June - September 1958

SCALE: 1:10,000

PROJECT NO. CS-402

SOUNDINGS: 808 Depth Recorder
EDO Depth Recorder
Handlead
Sounding Pole

CONTROL: Sextant Fixes
on shore objects.

Chief of Party-----R. C. Darling
M. J. Tonkel
W. A. Hughes
Surveyed by-----J. J. McCoy
D. George
J. S. Baker
L. L. Seal
J. D. Wingfield, Jr.
Protracted by-----G. F. Trefethen
G. L. Fernandes
Soundings plotted by-----G. L. Fernandes
Verified and inked by-----J. Chambers
Reviewed by-----E. Thomas
Inspected by-----R. H. Carstens

Date: 9/27/62

1. Description of Area

The present survey is located in the western portion of Tampa Bay and covers the alongshore area from Pt. Pinellas northward to the vicinity of the entrance to Smacks Bayou.

The alongshore area, excluding the numerous artificial alterations and dredged deeps, is generally shallow with mud flats outlined by the 6-ft. curve extending as much as .6 mile offshore.

The offshore bottom is generally smooth and slopes gradually to a natural deep of 20 to 24 ft., except in those areas where prior spoiling has created shoals.

The bottom in the vicinity of the spoil areas are characterized by scattered ridges rising 3 to 7 ft. from the normal bottom.

2. Control and Shoreline

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

The shoreline originates with the reviewed photogrammetric surveys T-10558 and T-10560 of 1957, with revisions by the hydrographer in red.

Attention is directed to the low-water bars on T-10560 in lat. $27^{\circ}44.25'$, long. $82^{\circ}38.25'$ and lat. $27^{\circ}44.34'$, long. $82^{\circ}38.15'$ which fall in general depths of 17 to 20 ft. on the present survey and apparently have been removed by dredging during the interim between the two surveys.

The visible wreck in lat. $27^{\circ}45.49'$, long. $82^{\circ}38.05'$ on T-10558 is erroneous. The details shown on Bp 59509 (1955-59) and the present survey for the foreshore area along the south side of Bayboro Harbor are the best representation of existing conditions.

3. Hydrography

- a. Depths at crossing are in good agreement except a few minor instances where sounding lines cross areas dredged in the interim between the periods of hydrographic development. The latest information was shown on the smooth sheet during review.

- b. The usual depth curves are adequately delineated, except for minor portions of the low-water curve, and portions of curves in small harbor areas where numerous docking facilities exist.
- c. The 3-ft. curve was added to accentuate the many shoal features and small channels which characterize portions of the bottom.
- d. The development of bottom configuration and investigation of least depths are considered adequate except as follows:
 - (1) The channel development in lat. $27^{\circ}43.05'$, long. $82^{\circ}37.87'$ is inadequate to reveal the charted channel previously shown in this area.
 - (2) The development of areas adjacent to docking facilities in the vicinity of lat. $27^{\circ}44.1'$, long. $82^{\circ}38.4'$.
 - (3) The areas adjacent to the numerous docking facilities in the vicinity of the marked channel of Big Bayou.
 - (4) The sparse hydrography in Salt Creek in lat. $27^{\circ}45.4'$, long. $82^{\circ}38.02'$ is inadequate to define completely the bottom configuration.

4. Condition of Survey

- a. The field plotting, sounding records, and Descriptive Report are adequate and conform to the requirements of the Hydrographic Manual.

5. Junctions

Adequate junctions were effected on the north with H-8425 (1958); H-8429 (1958) on the east, and with H-7970 (1952) on the southwest, except where a butt junction was made for a small area in which alterations by dredging has occurred since 1952.

6. Comparison with Prior SurveysA. General offshore areas

H-478 (1855) 1/60,000
 H-1235b (1874-83) 1/20,000
H-4565 (1926) 1/20,000

Extensive maintenance dredging and spoiling has been done in the interim between these prior and the present surveys. Outside the maintained channels, differences are most pronounced on the shoal bank in the vicinity of lat. $27^{\circ}.44.4'$ to lat. $27^{\circ}45.7'$ along long. $82^{\circ}36.4'$ where spoiling has apparently exceeded the designated dumping limits. Generally, in this shoal area, depths are from 1 to 2 ft. shoaler, whereas in the areas adjacent depths deeper than the 18-ft. curve, little or no shoaling has occurred.

B. Inshore and foreshore area

H-1235b (1874-83) 1/20,000
 H-1273 (1975) 1/20,000
 H-4565 (1926) 1/20,000
 H-4566 (1926) 1/5,000
 H-4575 (1926) 1/3,000
 H-4575a (1926) 1/3,000
H-7082 (1945) 1/5,000

These surveys taken together comprise the prior coverage of the inshore area for comparison with the present survey. Radical depth and shoreline changes have occurred since the 1926 surveys in most all of the bayou and port areas. Artificial changes have been so extensive in this area that there is little resemblance between depths on the prior and present surveys and a comparison would consequently provide little value for a comparative study.

Attention is directed to the following items:

- (1) The piling brought forward to H-7082 (1945) from H-4575 (1926) in lat. $27^{\circ}46.54'$, long. $82^{\circ}37.65'$ was not adequately investigated by the present survey and is not considered disproved, either by this survey information or by similiar information from other sources available in our files.

- (2) The single pile charted in lat. $27^{\circ}46.14'$ long. $82^{\circ}37.80'$ from H-7082 was not specifically investigated on the present survey and a questionable fathogram trace does appear in the vicinity. The pile is not considered disproved and is recommended for retention on the chart as a submerged pile.
- (3) The 6-ft. sounding charted in lat. $27^{\circ}46.0'$ long. $82^{\circ}37.81'$ from H-4575a and supported by H-7082, falls in present depths of 18 to 20 ft. on both the present survey and Bp 59510 (Corps of Eng., 1956). The 6 is considered to have been removed by dredging.

The present survey, together with the additions noted here, is considered adequate to supersede these prior surveys within the common area.

7. Comparison with Chart 586 (latest print 7/2/62)
587 (latest print 5/14/62)

A. Hydrography

The charted hydrography originates principally with the 1926 surveys discussed above supplemented by partial application of the present survey through the boat sheet (Bp 57519), and the unverified smooth sheet by application of critical information from preliminary hydrography of ship HYDROGRAPHER (Bp 52480 of 1954); and by critical information applied from surveys of other agencies:

Bp 21871 (1928) a municipal city print
Bp 59510 (1957) City of St. Petersburg, Dept. of
Eng.
Bp 53760 (1956) Corps of Engineers
Bp 55559 (1957) Corps of Engineers

- (1) The charted housing development and canal in the vicinity of Smacks Bayou was applied through air photographic revisions which are subsequent to the present survey. (See also Bp 59513)

- (2) The charted information for the privately maintained entrance channel into Coffeepot Bayou originates with chart letter 255 (1948) and a comparison with the present survey information indicates changes which are assumed to be the result of maintenance dredging.
- (3) Many charted alongshore features, together with random portions of the shoreline, on both charts 586 and 587 are not in agreement with present survey information.
- (4) Minor differences in locations exist for the common positions of several landmarks on 586 and 587 (and the insert on 587) and result in location differences with the present survey.
- (5) The 17 ft.-sounding charted in lat. $27^{\circ}45.63'$, long. $82^{\circ}37.72'$ through advance information of the present survey (Bp 57519) was revised to 18 ft. during verification.
- (6) The 5-ft. sounding charted in lat. $27^{\circ}46.2'$, long. $82^{\circ}37.49'$ from Bp 59510 (1955-59) is not considered disproved by special Project CS-3-61 (chart letter 892/61) and should be charted. This was brought to the attention of the Chief Compiler.
- (7) The 12-ft. sounding charted in lat. $27^{\circ}46.32'$, long. $82^{\circ}37.82'$ from the present survey is not considered superseded by Bp 59510 (1955-59) and should be charted.
- (8) The piling charted on 586 only in lat. $27^{\circ}45.79'$, long. $27^{\circ}37.42'$ through Bp 40480 (a revision survey of T-5830) of 1939-41 were not specifically investigated by the present survey and are not considered disproved.
- (9) The Pile charted in lat. $27^{\circ}45.76'$ long. $27^{\circ}37.40'$ was disproved and should be deleted.

- (10) The groin charted in lat. $27^{\circ}45.44'$, long. $82^{\circ}37.6'$ to $82^{\circ}37.73'$ from 1926 (T-4199) is carried on subsequent surveys T-5830 (1941), T-8387 (1943) and appears revised on Bp 59509 (55-59). The feature is not considered adequately disproved and should be retained on the chart.
- (11) The sparse hydrography on the present survey is inadequate to supersede Bp 59509 (Corps of Engineers) of 1958 in Salt Creek. (Approx. lat. $27^{\circ}45.49'$ long. $82^{\circ}38.02'$)

Except for those items above, the present survey is considered adequate to supersede the charted hydrography within the common area.

B. Controlling depths

The present survey depths for the marked channels are deeper than the charted controlling depths. Attention is directed to the 8-ft. shoal adjacent to the Port of St. Petersburg Entrance Channel Beacon "6" in lat. $27^{\circ}45.55'$, long. $82^{\circ}37.57'$, and the 16-foot shoal in lat. $27^{\circ}44.57'$, long. $82^{\circ}36.72'$ approximately 445 meters north of Cut A channel buoy "9" which were developed on the present survey.

C. Aids to Navigation

Those charted aids which have not been relocated since the present survey are in substantial agreement with the present survey positions and adequately mark the features intended.

Many of the privately maintained aids, charted through prior outside information are not in agreement with those of the present survey in either quantity or location.

8. Compliance with Instructions

This survey adequately complies with project instructions, except as indicated in items 3 and 7.

9. Additional field work

This is considered to be a basic survey except for incomplete coverage in some of the creeks and bayous.

Adequate coverage in the following areas has not been obtained:

- A. Salt Creek in the vicinity of lat. $27^{\circ}45.35'$, long. $82^{\circ}38.05'$
- B. Big Bayou in the vicinity of lat. $27^{\circ}44.8'$, long. $82^{\circ}37.65'$,
lat. $27^{\circ}44.65'$, long. $82^{\circ}37.6'$, lat. $27^{\circ}44.70'$, long. $82^{\circ}37.8'$,
and lat. $27^{\circ}44.1'$, long. $82^{\circ}38.4'$.
- C. Little Bayou in the vicinity of lat. $27^{\circ}43.1'$, long. $82^{\circ}37.85'$
where a dredged channel was previously charted.

Examined and Approved:


Chief, Marine Chart Division


Associate Director
Hydrography and Oceanography

channel	35.9	35.5	35.5	36.0	6.11-59	400	1.2	34
channel	35.0	35.3	35.5	34.7	6.11-59	400	.9	34
basin	36.6	37.6	37.8	35.9	6.11-59	400	2.0	34
						750	5	34

Plans of Engineers should be consulted for changing conditions subsequent to the above.

LINE AREAS
 The areas having white light scale charts are not shown.
HNS PASS
 Johns Pass is subject to change and is not charted because of shifting in position.
 Horizontal clearance 59 feet
 Vertical clearance 7 feet
 Power cable Authorized

