

# 9338

Diag. Cht. Nos. 1257-2 & 1114

NOAA FORM 76-35A

U.S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
NATIONAL OCEAN SURVEY

## DESCRIPTIVE REPORT (HYDROGRAPHIC)

Type of Survey ..... HYDROGRAPHIC  
..... AHP-20-1-75  
Field No. ....  
Office No. .... H-9338

LOCALITY  
State ..... FLORIDA  
General Locality ..... WEST COAST  
Locality ..... APPROACHES TO TAMPA BAY

1975

CHIEF OF PARTY  
J. O. ROLLAND

LIBRARY & ARCHIVES

DATE ..... 2-28-77

☆ U.S. GOV. PRINTING OFFICE: 1975-668-353

*Chits*  
586 - applied 9-13-77  
1256 - applied 9-28-77  
1257 - applied 9-27-77  
1114 - applied 9-29-77  
1113

9338

*Area 3+4*

To C322

This Q.C. survey H- 9338  
is submitted for final indication  
on the Standards and examination  
for chart corrections and should  
be returned to Vault. Area Chief,  
please send chargeout slip to  
Vault.

Chief, Marine Surveys Division

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**HYDROGRAPHIC TITLE SHEET**

H-9338

INSTRUCTIONS - The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

FIELD NO.

AHP-20-1-75

State Florida

General locality West Coast

Locality Approaches to Tampa Bay

Scale 1:20,000 Date of survey 31 Jan. thru 2 April 1975

Instructions dated 20 August 1974 Project No. OPR-508

Vessel NOAA Launch 1257 and NOAA Launch 1255

Chief of party Lt. Cdr. John O. Rolland

Surveyed by Lt. Cdr. J. O. Rolland, Lt. D.W. Yeager, Lt.(jg) R. P. Floyd  
Lt.(jg) Craig P. Berg

Soundings taken by echo sounder, ~~hand lead, etc~~ DE-723-D

Graphic record scaled by Launch officers and party personnel

Graphic record checked by Verification Branch - AMC

Protracted by N/A CALCOMP 618 EDP-AMC Automated plot by CALCOMP-618-EDP-AMC PDP-8 computer

Verification by N/A L.G. Cram

Soundings in ~~unknown~~ feet at MLW ~~MBKW~~

REMARKS: All correction in red ink by L.G. Cram

*Applied to vtds 6/16/77*  
*UC*

1.

DESCRIPTIVE REPORT  
TO ACCOMPANY  
HYDROGRAPHIC SURVEY H-9338  
AHP-20-1-75

A. Project

This survey was accomplished under project instructions OPR-508-AHP-74, Northwest Coast of Florida, dated 20 August 1974. The following supplemental instructions were issued:

Attachment, Chart Deficiency Requiring Investigation,  
February 10, 1975. (Letter from C3x4)

B. Area Surveyed

The area surveyed includes the "Safety Fairway" approaches to Egmont Channel at the entrance to Tampa Bay, and Egmont Channel within the limits of hydrography. It extends from longitude  $082^{\circ} 50' 00''$  to the 11-fathom depth curve, and  $027^{\circ} 30' 00''$  to  $027^{\circ} 40' 00''$  N. This area junctions with the following surveys:

H-9350, 1972, at a scale 1:20,000  
H-7793, 1950, at a scale 1:100,000

This survey was commenced on 31 Jan 1975. Field work was completed 1 April 1975.

Greatest depth obtained was 71 ft. while least depth was 19 ft.

C. Sounding Vessels

This survey was accomplished with Atlantic Hydrographic Party Launches 1255 and 1257. All soundings and fix numbers were plotted on the boat-sheet in black, regardless of by which launch they were obtained. Other survey records, however, were annotated with different identifying colors. Launch 1255 used red and Launch 1257 used black. In addition, all records may be identified by vessel number. Fix numbers used by launches are as follows:

position 5000 through 8269, Launch 1255  
position 0001 through 1968, Launch 1257

#### D. Sounding Equipment

Both launches were equipped with Raytheon Fathometers, Units 723-40 of Model DE 723; Raytheon Digital Depth Monitors, Units 723-41 of Model DE 723-D; and Raytheon Electronic Cabinet Units, Units 723-42 of Model DE 723. Serial numbers for this equipment were as follows:

Launch 1255	Fathometer	SN 2924
	Digital Depth Monitor	SN 1045
	Electronic Cabinet Unit	SN 2781
Launch 1257	Fathometer	SN 37024
	Digital Depth Monitor	SN 37016
	Electronics Cabinet Unit	SN 1910

Analog to digital corrections were applied while scanning depths on both launches. The corrections were made daily by comparing the exact digitized depth with the exact analog depth for several soundings. Digitized values were assumed correct as they are not affected by initial adjustment, stylus adjustment, instrument error, or phase error. Analog to digital corrections rarely exceeded one to two tenths of a foot.

Velocity corrections on Launches 1255 and 1257 were determined by averaging and graphing of all bar checks taken by both launches.

#### E. Smooth Sheet

The smooth sheet will be plotted by Processing Division of the Atlantic Marine Center, Norfolk, Virginia.

#### F. Control

This survey was controlled using Raydist in the range-range mode. Launch 1257 used a first party system, Navigator S/N 59, Transmitter S/N 37, operating at a frequency of 3306.400 Khz.

Launch 1255 operated with a fourth party system, Navigator S/N 58, Transmitter S/N 45, at a frequency of 3306.520 Khz.

Only one pair of shore station locations was required to accomplish this survey.

They were:

Left Station: RUSCOE, 1972  
Red Raydist, Mod. AA60, SN 54  
Lat.  $27^{\circ} 42' 28.830$   
Long.  $82^{\circ} 44' 16.510$

*Off survey sheet*

Right Station: Bean, 1975  
Green Raydist Mod. AA60, SN 119  
Lat. 27° 32' 18.545"  
Long. 82° 44' 35.942"

*off survey sheet*

Station location and calibration signals were either published triangulation stations or points located by third-order methods by Mr. Jim Shea of Operations Division, Atlantic Marine Center. The exception to this is station Bean, 1975 which was located by Party personnel using third order methods.

Field notes for the traverse are located in Sounding Volume #1 and the position computation included in the appendix of this report.

Calibration of the Raydist System was accomplished by means of 3-point sextant fixes, with at least one object changed during each series of calibrations.

Corrections were determined by computer using program RK561.

An abstract of electronic correctors is appended to this report.

#### G. Shoreline

There is no shoreline within the project limit.

#### H. Crosslines

Crosslines were run to the extent of 14% of the principal system of sounding lines agreement was excellent 0'-1' in most cases. Apparent disagreement in a few instances can be attributed to relatively steep slopes or irregular relief in the area of disagreement.

#### I. Junctions

This survey junctions with prior survey H-9350 (1972), scale of 1:20,000, accomplished by NOAA Launch 1257.

Junction was with the northeast corner of H-9338. Agreement was very good, generally 0'-1'-ft.

#### J. Comparison with Prior Surveys

There are no pre-survey review items required for this survey.

The area surveyed lies in an area surveyed in 1950 at a scale of 1:100,000 (H-7793). Comparison was made with representative soundings from this survey offshore of the western edge of Chart 11130(C&GS 1257). Approximate velocity corrections have been added to the boatsheet soundings while the comparison was made. The boatsheet itself, however, was not plotted with velocity corrections.

At  $27^{\circ} 37.3'$ ,  $83^{\circ} 03.6'$  a 66 foot depth was obtained during the 1950 survey. The general depths in that area determined during this ~~area~~ <sup>survey</sup> are 59<sup>52</sup> to 61 feet.

A 68 foot depth taken from H-7793 at  $27^{\circ} 36.6'$ ,  $83^{\circ} 03.0'$  lies in an area where the depths from this survey are 62 to 66 feet.

At  $27^{\circ} 36.5'$ ,  $83^{\circ} 02.5'$  the general depths are 57 to 58 feet. The prior survey indicates 61 feet there.

The depth obtained during this survey at  $27^{\circ} 38.1'$ ,  $83^{\circ} 02.5'$  is about 59 feet. According to H-7793, the depth there is 53 feet. *comparable depths are 2 mile south*

#### K. Comparison with the Chart

Comparison with prior survey H-7793 was made from the western limit of this survey in to  $83^{\circ} 02'$ . From there into  $82^{\circ} 56'$ , the survey was compared to Chart 11130 (C&GS 1257) 19th Edition, Nov. 3, 1973. From  $82^{\circ} 56'$  into the inshore limit of the survey, comparison was made with Chart 11414 (C&GS 586) 19th Edition, August 31, 1974. As with "Comparison with Prior Surveys" approximate velocity corrections (one foot in twenty) were applied to all soundings from the boatsheet. The boatsheet was not plotted with velocity corrections.

In general, there has been a lot of shifting of minor features in the area surveyed. In some cases the controlling depths for an area are not adequately depicted by the chart.

Comparison with Chart 11414 follows:

The charted 21 at  $27^{\circ} 35.6'$ ,  $82^{\circ} 51.2'$  should be a 24. One half mile west southwest of that position is a charted 28 where the actual depth is 32 feet. *represent depths adequate for charting*  
Similarly, at  $27^{\circ} 35.2'$ ,  $82^{\circ} 51.5'$  the actual depth is <sup>32</sup> ~~33~~ feet where the chart shows 28.

At  $27^{\circ} 35.1'$ ,  $82^{\circ} 52.3'$  the actual depth is <sup>38</sup> ~~40~~ feet but the chart shows 35. Three tenths of a mile northwest of that position is a charted 37 foot depth where the actual depth is <sup>31</sup> ~~39~~ feet. *32 at 2 mi NW*

The area with a radius of roughly 1/2 mile centered about  $27^{\circ} 35.4'$ ,  $82^{\circ} 53.1'$  is very rugged with depths ranging from <sup>30</sup> ~~31~~ to 43 feet. Most of the charted depths are very near the positions of like depths obtained during this survey; however, this area should be closely inspected by office personnel to determine if the charted depths are truly representative. The least depth in this area is ~~30~~ <sup>31</sup> feet at  $27^{\circ} 35.1'$ ,  $82^{\circ} 52.95'$ . This depth is not charted.

At  $27^{\circ} 36.0'$ ,  $82^{\circ} 52.7'$  there is a charted depth of 37 feet where the actual depth is 43 feet. *38 is 1 mi east*

A <sup>44</sup> ~~43~~ foot sounding was obtained at  $27^{\circ} 35.7'$ ,  $82^{\circ} 54.2'$ . The chart shows 47 feet 0.1 mile northwest of that point.



There are a 40, and two 43 foot depths charted on a line between 27° 36.9', 82° 53.4' and 27° 36.4', 82° 53.0'. The actual depths in that area are 3 to 4 feet shoaler than what the chart indicates.

There is a 22 foot depth charted at 27° 36.4', 82° 51.3' where the depth determined during this survey is 28 feet. There is another 22 charted 0.3 mile east of that position and a 23 charted south southeast of it. The depths in those two areas are 26 feet and 27 feet respectively. *Relatively shoaler charted depths*

At 27° 37.3', 82° 51.8', the charted 34 is not correct. The actual depth there is about 28 feet. *26 15.2 mi SW*

There is a 31 foot depth charted at 27° 37.3', 82° 52.6'. This charted depth is approximately correct for the surrounding area but it is plotted at a position where the actual depth is 40 feet. *32 ft closeby*

A charted 40 is located at 27° 37.3', 82° 54.1'. The actual depth there determined during this survey is about 36 feet.

The area bounded by 27° 38.0', 82° 54.9'; 27° 37.6', 82° 54.9'; 27° 37.6', 82° 56.0'; and 27° 38.0', 82° 56.0' is relatively rugged and the chart represents this area poorly. A better representation might be as follows:

Depth(ft)	Latitude	Longitude	
37	27° 37' 58"	82° 54' 54"	<i>see smooth sheet for final depths</i>
42	27° 37' 40"	82° 54' 56"	
34	27° 37' 36"	82° 55' 09"	
40	27° 37' 48"	82° 55' 13"	
37	27° 37' 55"	82° 55' 20"	
42	27° 37' 40"	82° 55' 21"	
35	27° 37' 42"	82° 55' 43"	
44	27° 37' 52"	82° 55' 46"	
41	27° 37' 33"	82° 55' 56"	

At 27° 38.4', 82° 55.2' the depth obtained during this survey is 36<sup>5</sup> feet. A 39 is charted there. Two tenths of a mile northeast of that position, a 33 is charted where the actual depth is 36 feet. *Present depths adequate*

A 29 foot depth is charted at 27° 38.5', 82° 54.1'. The actual depth there is 36<sub>5</sub> feet.

The 29 charted at 27° 39.4', 82° 51.1' was not found in the regular line spacing. A 29 foot depth was found, however, 0.1 mile southeast of that position. *Present depths are adequate*

There is a charted 29 at 27° 39.2', 82° 53.1' and a 27 two tenths of a mile north northwest of that position. The depths at those positions obtained during this survey are 34 to 35 feet and 34 feet respectively.

At 27° 39.1', 82° 54.0' the actual depth of the water is 38<sup>8</sup> to 40 feet. The charted depth there is 35 feet.

The 42, 43, and 44 foot depths charted around 27° 35.2', 54.4' are actually 3 to 4 feet shoaler than what is indicated. One half mile northwest of that point, a depth of 40 feet was obtained where the chart shows 46.

At 27° 36.1', 82° 55.2' a depth of 47 feet is charted. The actual depth there is 44 feet.

There is a 44 charted at 27° 36.2', 82° 55.8'. The least depth in that area is 40 feet. Four tenths of a mile north, and northeast of that position are a charted 38, and 40 respectively. The actual depths in these areas range from 44 to 46 feet. *similar present depths nearby*

A 37 is charted at 27° 36.9', 82° 55.8'. The depths obtained in that area during this survey range from 41<sup>40</sup> to 43 feet. The least depth in the area is 38 feet 0.1 mile south of the charted 37.

The note "Shoaling to 30 feet reported 1972-1974" from 27° 35.7', 82° 55.6' to 27° 35.9', 82° 54.1' should be deleted from the chart. There was no indication of this shoaling during this survey, the shoalest sounding being 39 feet. *Concur*

At 27° 36.5', 82° 55.1' is a charted 42 foot depth. This depth is good; however, 0.1 mile north of that position is a 36 foot depth which is not charted. This 36 lies on a shoal which runs roughly north northwest, gradually curving around to the west. A 30 is charted on the shoal but a least depth of 28 feet was obtained during this survey at 27° 36.9', 82° 55.25'.

The area with a radius of 0.3 mile roughly centered about 27° 36.7', 82° 54.5' is quite rugged. Depths range from 30 to 41 feet with some differences of 7 feet between adjacent soundings. Within this area lie a charted 36, 42, 30 rep (1972), and 39. Rather than these soundings, the bottom might better be represented by the following:

Depth (ft)	Latitude	Longitude
42	27° 36' 49"	82° 54' 52"
<del>30</del>	27° 36' 53"	82° 54' 44"
31	27° 36' 41"	82° 54' 32"
40	27° 36' 37"	82° 54' 37"
<del>30</del>	27° 36' 28"	82° 54' 21"
41	27° 36' 49"	82° 54' 27"
40	27° 36' 37"	82° 54' 18"
33	27° 36' 43"	82° 54' 12"

*see smoothly sheet*

This is rather dense for the chart but necessary to adequately delineate the bottom for navigation purposes. Note that the reported 30 foot depth was found and may now be plotted accurately.

At 27° 36.0', 82° 53.5', the charted 35 *present 36 is 0.1 mi. south* should be deleted. The actual depths there are 40 to 41 feet. Two tenths of a mile east northeast of that position the actual depth is 41 feet where the chart shows 38. *present 37 is 0.1 mi. west*

*comparable present depths nearby*

A 33 foot depth is charted at  $27^{\circ} 39.6'$ ,  $82^{\circ} 53.8'$ . The depth obtained there during this survey is 37 feet. Two tenths of a mile north northwest of that position, a 28 is charted where the depth was found to be about 33 feet.

The charted 36 at  $27^{\circ} 39.6'$ ,  $82^{\circ} 55.9'$  is in an area where the depth obtained during this survey is 40 feet. *similar depths nearby*

Disagreements between Chart 11130 and the survey include those soundings already mentioned in "Comparison with 11414 (C&GS 587)" which also fall on Chart 11130, and the following:

At  $27^{\circ} 39.7'$ ,  $82^{\circ} 57.7'$  a depth of 38 feet was obtained. This depth is the shoalest in quite a large area and is not charted. There is a charted 39 three tenths of a mile east of that position, however, which should be 42 feet.

A 39 foot depth is charted at  $27^{\circ} 39.7'$ ,  $82^{\circ} 58.7'$ . The actual depths obtained during this survey in that area are 44 to 45 feet. One mile west of that position the depth is actually 47 feet but the chart shows another 39. *comparable depths nearby*

At  $27^{\circ} 39.5'$ ,  $83^{\circ} 00.3'$  a shoal depth of 39 feet was obtained. A 46 is charted at that position.

There is a charted 36 at  $27^{\circ} 38.3'$ ,  $82^{\circ} 56.8'$ . The <sup>present</sup> actual depth in this area is 44 feet.

At  $27^{\circ} 38.9'$ ,  $82^{\circ} 56.4'$  there is a charted 43. It is near a 43 foot depth obtained during this survey, but it is also near a 37. To better represent the bottom, it could be replaced with a 41 at  $27^{\circ} 38' 53''$ ,  $82^{\circ} 56' 40''$  and a 36 at  $27^{\circ} 38' 40''$ ,  $82^{\circ} 56' 19''$ . *see smooth sheet for present depths*

A depth of 35 feet was obtained at  $27^{\circ} 37.7'$ ,  $82^{\circ} 56.1'$ . This depth is not charted but should be. The charted 45 four tenths of a mile west of that position lies in an area where the depth is actually about 41 feet.

Rather than the 47 charted at  $27^{\circ} 37.5'$ ,  $83^{\circ} 01.9'$ . It might be better to chart a 59 at  $27^{\circ} 37' 45''$ ,  $83^{\circ} 01' 58''$ , and a 45 at  $27^{\circ} 37' 21''$ ,  $83^{\circ} 01' 49''$ . *see smooth sheet*

The 54 charted at  $27^{\circ} 36.9'$ ,  $83^{\circ} 01.9'$  is in an area where the actual depths determined during this survey are 60 to 64 feet. There are some 56 to 57 depths 0.1 to 0.2 miles south of that position though. *adequate*

At  $27^{\circ} 36.5'$ ,  $83^{\circ} 01.1'$  there is a 59 charted where the depth is actually about 56<sup>A</sup>. This charted sounding would be more representative if it were moved two to three tenths of a mile west northwest of that position.

The charted 41 at  $27^{\circ} 36.9'$ ,  $82^{\circ} 58.5'$  lies in an area where the depths are actually 47 to 48 feet. However 0.5 mile east of that position is an uncharted 37 foot depth and 0.5 mile southeast of that position is a 42 which is not charted.

The 47 charted at about  $27^{\circ} 36.2'$ ,  $82^{\circ} 57.6'$  is very near a 47 obtained during this survey but it is also within 0.1 mile of a 41.

A depth of 43 feet was obtained at  $27^{\circ} 35.1'$ ,  $82^{\circ} 58.3'$ . The chart shows 53 feet at this location. One half mile north of this position is an uncharted 43.

The charted 45' sounding at  $27^{\circ} 33.8'$ ,  $83^{\circ} 00.5'$  appears to have deepened with depths ranging from 50' - 58' within 0.2 mi. radius of this sounding.  
*Comparable depths 0.3 mi to SW*

The charted 56' sounding at  $27^{\circ} 33.8'$  and  $82^{\circ} 59.6'$  is now within 200 meters of sounding of 50' - 51' feet. 150 meters SW of the charted sounding the least depth obtained is 50 ft. after velocity corrections have been applied.  
<sub>49</sub>

Soundings in the vicinity of the charted 53 ft. at lat.  $27^{\circ} 31.8'$ , long.  $83^{\circ} 00.1'$  appears to have deepened, with depths ranging from 54 to 59 ft., after approx. velocity corrections were applied, within 0.2 mi. of the charted sounding. *No conflict*

The charted 45' sounding at  $27^{\circ} 31.6'$ ,  $82^{\circ} 58.5'$  now appears deeper with depths of 47 to 50 ft. within a radius of 0.1 mile of the charted sounding.

The charted 32 ft. sounding at  $27^{\circ} 32.6'$ ,  $82^{\circ} 52.2'$  now appears to have deepened to 37-39 ft.  
*From H-4379 (1929)*  
<sub>38-40</sub>

General shoaling within limits  $27^{\circ} 32.7'$  to  $27^{\circ} 33.0'$  and  $82^{\circ} 57.6'$  to  $82^{\circ} 58.6'$  now shows a controlling depth of 43 ft. whereas charted depth is 54 ft.  
<sub>44</sub> *Present development more detailed*

In this same general area soundings of 49' ft. (velocity correction added) appear 300 meters east of a chart 58 ft. sounding at lat.  $27^{\circ} 32' 38''$  and long.  $83^{\circ} 00' 22''$ .

There appears to be general shoaling within the limits of lat.  $27^{\circ} 30.6'$  to  $27^{\circ} 30.9'$  and  $82^{\circ} 58.8'$  to  $82^{\circ} 59.5'$ . The controlling depths in this area appears to be 46 ft. according to depths obtained during this survey.  
<sub>42</sub> *present development more detailed*

The charted 53' sounding at lat.  $27^{\circ} 35' 04''$ , long.  $82^{\circ} 58' 21''$  appears to have shoaled with soundings in the immediate vicinity (50 to 150 meters) of 42' to 44 ft.  
<sub>41</sub> *present development more detailed*

A charted 55 ft. sounding at lat.  $27^{\circ} 33.6'$ , long.  $82^{\circ} 56.8'$  has shoaled within a radius of 0.1 mi. to depths of 49' to 52'.  
*present development more detailed*

In an area bounded approximately by  $27^{\circ} 33.0'$ ,  $27^{\circ} 34.0'$  and  $83^{\circ} 01.0'$ ,  $83^{\circ} 02.0'$  the chart shows a controlling depth of 57'. This appears to be erroneous as soundings as shoal as 48 ft. were found at lat.  $27^{\circ} 33' 31''$ , long.  $83^{\circ} 01' 08''$ . In this same area a charted 61 ft. at  $27^{\circ} 33.2'$ ,  $83^{\circ} 01.7'$  is shown while depths obtained during this survey less than 0.2 mi to the East are 55 ft.  
<sub>5A</sub>

The charted 37 ft. sounding at lat.  $27^{\circ} 34.8'$ , long.  $82^{\circ} 51.3'$  has shoaled to 33 ft. *Present development more detailed*

The charted 32 ft. sounding at lat.  $27^{\circ} 33.05'$ , long.  $82^{\circ} 51.4'$  has shoaled, a 27 ft. sounding was obtained 0.2 mi. NE of the charted sounding. *present development more detailed*

The area surrounding the charted 43 ft. sounding at lat.  $27^{\circ} 35' 06''$ , long.  $82^{\circ} 54' 17''$  has shoaled with a depth of 37 ft. appearing 100 meters east. *present development<sup>38</sup> more detailed*

#### L. Adequacy

This survey is complete and adequate to supersede prior surveys for charting purposes.

#### M. Aids to Navigation

Floating Aids to Navigation within the survey limits were located by Launches 1255 and 1257.

There positions are as follows:

<u>Description</u>	<u>Latitude</u>	<u>Longitude</u>
BWM. "A" Pos <sup>#</sup> 119 day 034 Rec. No. 12950 Whistle Buoy	27/35/44.26	82/55/32.31
Buoy "1" Fl G 4 sec. Whistle Pos <sup>#</sup> 86 day 034 R.N. 12265	27/36/13.78	82/52/12.14
R "2", Fl R 4 sec. Bell Pos <sup>#</sup> 87 day 034 R.N. 12766	27/36/03.71	82/52/07.34
Fl G 4 sec. "3" Whistle Pos <sup>#</sup> 1584 day 077 R.N. 22511	27/36/22.01	82/50/46.33
RN "4" Pos <sup>#</sup> 1585 day 077 27512	27/36/13.55	82/50/47.18
RN "18" Pos <sup>#</sup> 8267 728264 day 091 R.N. 12265	27/34/46.97	82/50/08.38

#### N. Statistics

	<u>1255</u>	<u>1257</u>	<u>Total</u>
Total NM of Sounding Line	614	636	1250
Nautical Miles Crossline	116	58	174
Nautical Miles of Development	17	43	60
Misc Distance Run	196	129	325
Nautical Miles To & From	450	170	620
Bottom Samples	40	24	64

O. Miscellaneous

The 36 ft. depth reported to have been found 21 Jan 1975 at lat.  $27^{\circ} 34'.4$ , long.  $82^{\circ} 56'.5$  was investigated and verified. A depth of ~~37~~ ft. (after applying velocity corrections) was found after 50 meter development by Launch 1255 at lat.  $27^{\circ} 34' 27''$ , long.  $82^{\circ} 56' 22''$ .

On Day 058, Launch 1255 ran with the Navigator off by 3 lanes (high) which resulted in an end result of a corrector of -2.42 lanes.

This occurred due to setting wrong lane count in interface.

During calibration, interface contained the proper whole lane values while the raydist navigator was 3 lanes too high. This was unnoticed until enroute to the working area when it was noticed that navigator and interface did not agree, interface was set at this time to agree with navigator. Consequently all work on 058 day was run with all PII values (green) 3 lanes too high.

Evening calibrations bore this out and resulted in a net corrector for the day of -2.42 lanes for the day. No lane loss or gain was noted on the strip chart for the day.

P. Recommendations

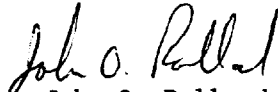
None

Q. References to Reports

Corrections to Echo Soundings, OPR-508 AHP-20-1-75, H-9338.

APPROVAL SHEET

This survey is complete and adequate to supersede prior surveys for charting. The field work was accomplished under my direct supervision. All records have been inspected and checked. All known discrepancies have been noted and reported to the field party.



Lt. Cdr. John O. Rolland  
Chief, Atlantic Hydrographic Party

TC/TI TABLE FOR OPR 508, H-9338 ... VESNO 1257

144535 0 0000 0001 034 125700 009338

VELOCITY TABLE FOR OPR 508, H-9338 ... VESNO 1257

000101 0 0002 0001 000 125700 009338

000145 0 0004

000183 0 0006

000225 0 0008

000265 0 0010

000307 0 0012

000345 0 0014

000389 0 0016

000427 0 0018

000468 0 0020

000510 0 0022

000553 0 0024

000593 0 0026

000633 0 0028

000672 0 0030

000715 0 0032

999999 0 0034



TC/TI TABLE FOR OPR 508, H-9338 ... VESNO 1255

181710 0 0001 0002 031 125500 009338

VELOCITY TABLE FOR OPR 508, H-9338 ... VESNO 1255

000101 0 0002 0002 000 125500 009338

000145 0 0004

000183 0 0006

000225 0 0008

000265 0 0010

000307 0 0012

000345 0 0014

000389 0 0016

000427 0 0018

000468 0 0020

000510 0 0022

000553 0 0024

000593 0 0026

000633 0 0028

000672 0 0030

000715 0 0032

999999 0 0034

SIGNAL LIST

OPR 508

AHP 20-1-75

H 9338

001	7	27	42	28830	082	44	16570	000	0000	330640	RUSCOE RAYDIST - TRAVERSE
002	7	27	32	18545	082	44	35942	000	0000	330640	BEAN RAYDIST - TRAVERSE
010	7	27	48	06058	082	47	59187	000	0000	000000	MADERIA BCH. TK. - TRIANG.
020	7	27	45	23273	082	45	33432	000	0000	000000	ST PETE BCH. TK. - TRIANG.
030	7	27	42	32360	082	44	14770	000	0000	000000	DON CESAR HOT. CUP. - TRAVERSE
040	7	27	37	54672	082	43	08043	000	0000	000000	DESOTO PARK TK. - TRIANG.
060	7	27	36	01739	082	45	39079	000	0000	000000	EGMONT KEY L.H. - TRIANG.

ATLANTIC MARINE CENTER  
ELECTRONIC CONTROL PARAMETERS

1. Project # OPR-508 2. Reg. # H-9338 3. Field # AMP-20-1-75  
 4. Type of Control RAYDIST (Hi-Fix, Raydist, EPI, etc.)  
 5. Frequency 3306.520 (for conversion of electronic lanes to meters)  
 6. Mode of Operation (check one):

Range-Range

Range-Visual

Range One (R<sub>1</sub>)  
 Station I.D. RUSCOE, 1972  
 Range Two (R<sub>2</sub>)  
 Station I.D. BEAN, 1975

Lat. 27 ° 42 ' 28.830"  
 Long. 82 ° 44 ' 16.570"  
 Lat. 27 ° 32 ' 18.545"  
 Long. 82 ° 44 ' 35.942"

Hyperbolic (3-station)

Hyper-Visual

Slave One  
 Station I.D. \_\_\_\_\_  
 Master  
 Station I.D. \_\_\_\_\_  
 Slave Two  
 Station I.D. \_\_\_\_\_

Lat. \_\_\_\_\_ ° \_\_\_\_\_ ' \_\_\_\_\_ "  
 Long. \_\_\_\_\_ ° \_\_\_\_\_ ' \_\_\_\_\_ "  
 Lat. \_\_\_\_\_ ° \_\_\_\_\_ ' \_\_\_\_\_ "  
 Long. \_\_\_\_\_ ° \_\_\_\_\_ ' \_\_\_\_\_ "  
 Lat. \_\_\_\_\_ ° \_\_\_\_\_ ' \_\_\_\_\_ "  
 Long. \_\_\_\_\_ ° \_\_\_\_\_ ' \_\_\_\_\_ "

7. Location of Survey:

Range-Range

Imagine an observer is standing at R<sub>1</sub> Station and looking directly at R<sub>2</sub> (check one):

Survey area is to observer's Right  A=0

Survey area is to observer's Left  A=1

Hyperbolic

Looking from survey area toward Master Station:

Slave One must be to observer's Left.

Slave Two must be to observer's Right.

8.  This form is submitted as an aid in preparing a boat sheet.

This form applies to all data on this survey.

This form applies to part of the data on this survey.

Vessel EDP #	From Time	Day	To Time	Day	Position Numbers (inclusive)
<u>1255</u>	<u>181710</u>	<u>031</u>	<u>195459</u>	<u>091</u>	<u>5000</u> to <u>8269</u>
_____	_____	_____	_____	_____	to _____
_____	_____	_____	_____	_____	to _____

9. Remarks: \_\_\_\_\_

ATLANTIC MARINE CENTER  
ELECTRONIC CONTROL PARAMETERS

- 1. Project # OPR-508 2. Reg. # H-9338 3. Field # AHP-20-1-75
- 4. Type of Control RAYDIST (Hi-Fix, Raydist, EPI, etc.)
- 5. Frequency 3306.400 (for conversion of electronic lanes to meters)
- 6. Mode of Operation (check one):

Range-Range

Range One (R<sub>1</sub>)  
 Station I.D. RUSCOE, 1972  
 Range Two (R<sub>2</sub>)  
 Station I.D. BEAN, 1975

Range-Visual

Lat.	<u>27</u> °	<u>42</u>	<u>28.830</u>
Long.	<u>82</u> °	<u>44</u>	<u>16.570</u>
Lat.	<u>27</u> °	<u>32</u>	<u>18.545</u>
Long.	<u>82</u> °	<u>44</u>	<u>35.942</u>

Hyperbolic (3-station)

Slave One  
 Station I.D. \_\_\_\_\_  
 Master  
 Station I.D. \_\_\_\_\_  
 Slave Two  
 Station I.D. \_\_\_\_\_

Hyper-Visual

Lat.	_____ °	_____	_____
Long.	_____ °	_____	_____
Lat.	_____ °	_____	_____
Long.	_____ °	_____	_____
Lat.	_____ °	_____	_____
Long.	_____ °	_____	_____

7. Location of Survey:

Range-Range

Imagine an observer is standing at R<sub>1</sub> Station and looking directly at R<sub>2</sub> (check one):

Survey area is to observer's Right  A=0

Survey area is to observer's Left  A=1

Hyperbolic

Looking from survey area toward Master Station:

Slave One must be to observer's Left.

Slave Two must be to observer's Right.

- 8.  This form is submitted as an aid in preparing a boat sheet.
- This form applies to all data on this survey.
- This form applies to part of the data on this survey.

Vessel EDP #	From		To		Position Numbers (inclusive)	
	Time	Day	Time	Day		
<u>1257</u>	<u>144535</u>	<u>034</u>	<u>194227</u>	<u>091</u>	<u>0001</u>	to <u>1968</u>
_____	_____	_____	_____	_____	_____	to _____
_____	_____	_____	_____	_____	_____	to _____

9. Remarks:

\_\_\_\_\_

CAM3-1  
1/31/74

ATLANTIC MARINE CENTER

PROJECTION PARAMETERS

POLYCONIC OR MODIFIED TRANSVERSE MERCATOR

1. Project No. OPR-508 4. Requested By R.G. Cram  
2. Reg. No. H-9338 5. Ship or Office Verification Branch  
3. Field No. AHP-20-1-75 6. Date Required A.S.A.P.

7. Polyconic  Modified Transverse Mercator

8. Central Meridian of Projection 82 ° 58 ' 00 "

9. Survey Scale: 1: 20,000

10. Size of Sheet (check one):

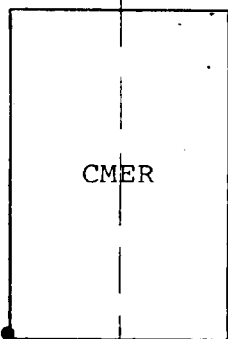
36 x 54  36 x 60  Other  Specify 40 x 56

11. Sheet Orientation (check one):

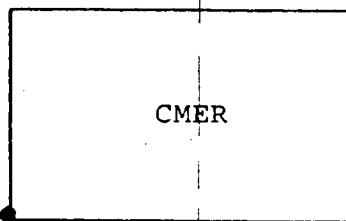
NYX = 1

NYX =  $\emptyset$

N



N



12. Plotter Origin: S.W. Corner of Sheet (not necessarily a grid intersection)

Latitude 27 ° 29 ' 00 "

Longitude 83 ° 05 ' 30 "

13. G.P.'s of triangulation and/or signals attached

14. Material Desired: Tracing Paper  Mylar

Smooth Sheet  Other  Specify \_\_\_\_\_

15. Remarks: \_\_\_\_\_  
\_\_\_\_\_

Tide Note

Predicted Tides, based on reference station at St. Petersburg, Fla., corrected to Egmont Key, were applied to all soundings on this survey. *field sheet*

A Tide Station was established at Egmont Key, as per project instructions, to obtain smooth tides for this survey.

Station was established at Egmont Key, lat.  $27^{\circ} 36' 00''$ , long.  $32^{\circ} 46' 00''$  on 16 Jan. 1975 and removed 2 April 1975.

Continuous records were obtained for the period 22 Jan. 1975 through 2 April 1975 a total of 71 days.

Marigrams were scanned by party personnel and hourly heights were recorded on NOAA form 77-29.

All marigrams, level records and report on tide stations are forwarded to Chief, AHP, CAM 11, under separate cover.

No zoning is required.

11/26/75

U. S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
NATIONAL OCEAN SURVEY

TIDE NOTE FOR HYDROGRAPHIC SHEET

Processing Division: Atlantic Marine Center:

Hourly heights are approved for

Tide Station Used (NOAA Form 77-12): Cedar Key

Period: January 31-April 1, 1975

HYDROGRAPHIC SHEET: H-9338

OPR: 508

Locality: Egmont Channel, outside Tampa Bay

Plane of reference (mean ~~lower~~ <sup>diurnal</sup> low water): 1.75 ft.

Height of Mean High Water above Plane of Reference: 2.1 ft.

Remarks: Recommended zoning:

Time correction

-2hr. 35 min.

Range ratio

x0.64

  
Chief, Tides Branch

ATLANTIC MARINE CENTER  
APPROVAL SHEET  
FOR  
AUTOMATED SURVEY H- 9338

- A. All revisions and additions made on the smooth sheet during verification have been entered in the magnetic tape records for this survey. A new final position printout has/~~has not~~ been made. A new final sounding printout has/~~has not~~ been made.

Date: 1-31-77

Signed: William L. Jones

Title: Chief, Verification Branch

- B. The verified smooth sheet has been inspected, is complete, and meets the requirements of the Hydrographic and AMC Manuals. Exceptions are listed in the verifier's report.

Date: 1-31-77

Signed: Robert A. Russell

Title: Chief, Processing Division



GEOGRAPHIC NAMES

Name on Survey	Source of Name										
	A	B	C	D	E	F	G	H	K		
EGMONT CHANNEL											1
GULF OF MEXICO											2
PALATINE SHOAL											3
											4
											5
											6
											7
											8
											9
											10
											11
											12
											13
											14
											15
											16
											17
											18
											19
											20
											21
											22
											23
											24
											25

APPROVED

*Chas. E. Harrington*

STAFF GEOGRAPHER *CSKZ*

16 March 1977

**HYDROGRAPHIC SURVEY STATISTICS**  
**HYDROGRAPHIC SURVEY NO. H-9338**

RECORDS ACCOMPANYING SURVEY: To be completed when survey is registered.

RECORD DESCRIPTION	AMOUNT	RECORD DESCRIPTION	AMOUNT
SMOOTH SHEET with smooth PNO & excess overlays	1	BOAT SHEETS (2 parts, paper & mylar)	1
DESCRIPTIVE REPORT	1	OVERLAYS (preliminary)	6 1/2

DESCRIPTION	DEPTH RECORDS	HORIZ. CONT. RECORDS	PRINTOUTS	TAPE ROLLS	PUNCHED CARDS	ABSTRACTS/SOURCE DOCUMENTS
ENVELOPES	7					
CAHIERS	2 *		1			
VOLUMES	2					
BOXES			1-smooth			

T-SHEET PRINTS (List) \* fathograms, printouts, sawtooth rec., tides, & misc. data

SPECIAL REPORTS (List)

Fathometer Report

**OFFICE PROCESSING ACTIVITIES**

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

PROCESSING ACTIVITY	AMOUNTS			
	PRE-VERIFICATION	VERIFICATION	REVIEW	TOTALS
POSITIONS ON SHEET				5237
POSITIONS CHECKED		52		
POSITIONS REVISED		6		
DEPTH SOUNDINGS REVISED		50		
DEPTH SOUNDINGS ERRONEOUSLY SPACED		0		
SIGNALS ERRONEOUSLY PLOTTED OR TRANSFERRED		0		
	TIME (MANHOURS)			
TOPOGRAPHIC DETAILS		0		
JUNCTIONS		2		
VERIFICATION OF SOUNDINGS FROM GRAPHIC RECORDS		40		
SPECIAL ADJUSTMENTS		0		
ALL OTHER WORK		120		
<b>TOTALS</b>		<b>162</b>		
PRE-VERIFICATION BY W.H. Guy, R.G. Roberson, L.G. Cram	BEGINNING DATE 05/29/75	ENDING DATE 03/21/76		
VERIFICATION BY L.G. Cram	BEGINNING DATE 07/16/76	ENDING DATE 12/29/76		
REVIEW BY QUALITY CONTROL BY <i>X. W. Wellman</i>	BEGINNING DATE 3-1-77	ENDING DATE 3-15-77		

*Cardano 5/3/77 15 hr*  
*Baumgardner 4 hrs 5-11-77*

REGISTRY NO. \_\_\_\_\_

The Computer and Excess Sounding Cards for this survey have not been corrected to reflect the changes made to the Computer Card and Excess Card Printouts at this time of the review.

When the cards have been updated to reflect the final results of the survey, the following shall be completed:

CARDS CORRECTED

DATE \_\_\_\_\_ TIME REQUIRED \_\_\_\_\_ INITIALS \_\_\_\_\_

REMARKS:

REGISTRY NO. H-9338

The magnetic tape containing the data for this survey has not been corrected to reflect the changes made during evaluation and review.

When the magnetic tape has been updated to reflect the final results of the survey, the following shall be completed:

MAGNETIC TAPE CORRECTED

DATE 12/9/80 TIME REQUIRED \_\_\_\_\_ INITIALS PEK

REMARKS:

Revise record #10118 as indicated  
Revise record #21715 as indicated  
Revise record #21988 as indicated

H-9338

Items for Future Presurvey Reviews

None

<u>Position</u>	<u>Index</u>	<u>Bottom Change</u>	<u>Use</u>	<u>Resurvey</u>
<u>Lat.</u>	<u>Long.</u>	<u>Index</u>	<u>Index</u>	<u>Cycle</u>
273	0831	2	2	50 years
273	0830	4	6	25 years

ATLANTIC MARINE CENTER  
VERIFIER'S REPORT

REGISTRY NO. H-9338

FIELD NO. AHP-20-1-75

West Coast of Florida - Approaches to Tampa Bay

SURVEYED: January 31, 1975 through April 2, 1975

SCALE: 1:20,000

PROJECT NO.: OPR-508

SOUNDINGS: Raytheon DE-723D

CONTROL: Raydist  
(Range-Range)

Chief of Party .....	LCDR J.O. Rolland
Surveyed by .....	LCDR J.O. Rolland
.....	LT D.W. Yeager
.....	LTJG R.P. Floyd
.....	LTJG C.P. Berg
Automated Plot by .....	Calcomp Plotter #618 (AMC)
Verified and Inked by .....	L.G. Cram

1. Introduction

No unusual problems were encountered during verification.

2. Control and Shoreline

- a. The control is adequately described in the Descriptive Report.
- b. There ~~was~~<sup>is</sup> no shoreline available for this survey.

3. Hydrography

- a. Depths at crosslines appear to be in fair agreement (within one to two feet, and in some cases three feet.)
- b. The standard depth curves and the 36 foot supplemental curve adequately delineate the bottom configuration.

4. Condition of Survey

The Smooth Sheet and accompanying overlays, hydrographic records, and reports are adequate ~~to~~<sup>to</sup> conform to the requirements of the Provisional Hydrographic Manual.

### 5. Junctions

There was one junction with contemporary survey H-9350 (1972) on the north end of this sheet. Agreement in junctioning was fair. Differences were between two and three feet. These differences are usually in areas where the junction lines from H-9350 (1972) split lines on H-9338 (1975), so the depths on both are believed to be good.

### 6. Comparison With Prior Surveys

H-4379 (1924)	1: <sup>40</sup> <del>100</del> ,000	H-7934 (1951)	1:80,000
H-7793 (1950)	1:100,000	H-8427 (1958)	1:20,000

The agreement with both prior surveys was fair. Two problems were incurred during comparisons. The first was that H-4379 had no datum adjustment ticks for 1927. The other was the extreme scale variation between H-4379 (1:100,000) and the present survey, H-9338 (1:20,000). Making allowances for both problems, it appears that the area is shoaling slightly (two feet) by natural means. (See Q.C. Report-item1)

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

### 7. Comparison with Charts 11414 (586), 19th Edition, August 31, 1974 and 11412 (1257), 20th Edition, January 11, 1975

#### Aa. Hydrography

The hydrography appears to cover the areas of these two charts well. There are some minor differences, generally between two and three feet. There is one area on both charts with the note, "shoaling to 30 feet reported." This area lies between the sea buoy at Egmont Channel and the entrance buoy R"2". The shoalest depth in the area on either chart is 35 feet. The shoalest depth from the present survey is a 31 foot sounding at approximate latitude 27° 36.4', longitude 82° 54.3'. Recommend plotting 31 feet on future charts.

There are about 70 depths in the Descriptive Report under Section K. While most of these depths appear to be deeper than the chart, it would appear that a more accurate presentation could be made by including them on future charts of the area.

The present survey is adequate to supersede the charted information.

B. Controlling Depths (See Q.C. Report-item 2)  
C. Aids to Navigation

There are six aids to navigation on this survey. They appear adequate to depict the features intended.

8. Compliance With Instructions

This survey adequately complies with the Project Instructions.

9. Additional Field Work


There are some areas that should have been developed by the field unit:

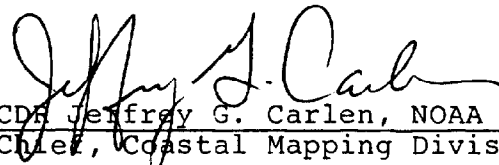
- 28 foot sounding at approximately 27° 34.2', 82° 52.3'
- 37 foot sounding at approximately 27° 36.4', 82° 56.0'
- 30 foot sounding at approximately 27° 38.7', 82° 55.9'

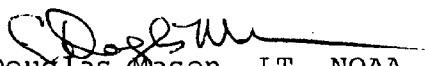
These areas are not "danger areas", but would have made a more complete survey.


Approval Sheet for H-9338

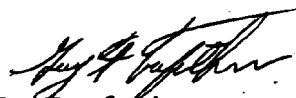
Examined and Approved:  
Hydrographic Inspection Team  
Date: **Jan. 26, 1977**

  
CDR Robert A. Trauschke, NOAA  
Chief, Processing Division

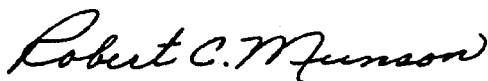
  
CDS Jeffrey G. Carlen, NOAA  
Chief, Coastal Mapping Division

  
Douglas Mason, LT, NOAA  
Chief, EDP Branch

  
William L. Jonns  
Chief, Verification Branch

  
Guy F. Trefethen  
Verification Branch

Approved/ Forwarded



Robert C. Munson  
RADM, NOAA  
Director, Atlantic Marine Center





UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL OCEAN SURVEY  
Rockville, Md. 20852

C352

March 15, 1977

TO: *A. J. Patrick*  
A. J. Patrick  
Chief, Marine Surveys Division

THRU: Chief, Quality Control Branch

FROM: K. W. Wellman *K. W. Wellman*  
Quality Evaluator

SUBJECT: Quality Control Report for H-9338 (1975), Florida, West Coast,  
Approaches to Tampa Bay

A quality control inspection of H-9338 has been accomplished to evaluate the accuracy and adequacy of the survey with respect to data acquisition, delineation of the bottom, determination of least depths and navigation hazards, junctions, decisions and actions by the verifier, and cartographic presentation of data.

In general, the present survey was found to conform to National Ocean Survey standards and requirements except as follows:

1. The scale of H-4379 (1924) in section 6 of the Verifier's Report was misidentified. Additional prior surveys H-7934 (1951) 1:80,000 and H-8427 (1958) 1:20,000 were not listed. A comparison between these additional prior surveys generally confirms the verifier's statements. Several soundings have been carried forward from H-8427 to supplement present depths.

It is considered important to note, however, that, within the area common to the present survey, H-4379 is almost entirely superseded by the more recent prior surveys with which comparison was made. In such cases it is only necessary to compare the present survey with that portion of a particular survey not superseded by any later surveys, thus obviating the need for a comparison with the entire, previously superseded, prior survey.

2. Section 7 of the Verifier's Report (Comparison with Charts) is lacking any reference to the results of a comparison between the present survey and the controlling depths of the charted channel in the survey area (Egmont Channel).

Section 7 of the Verifier's Report is supplemented by the following:

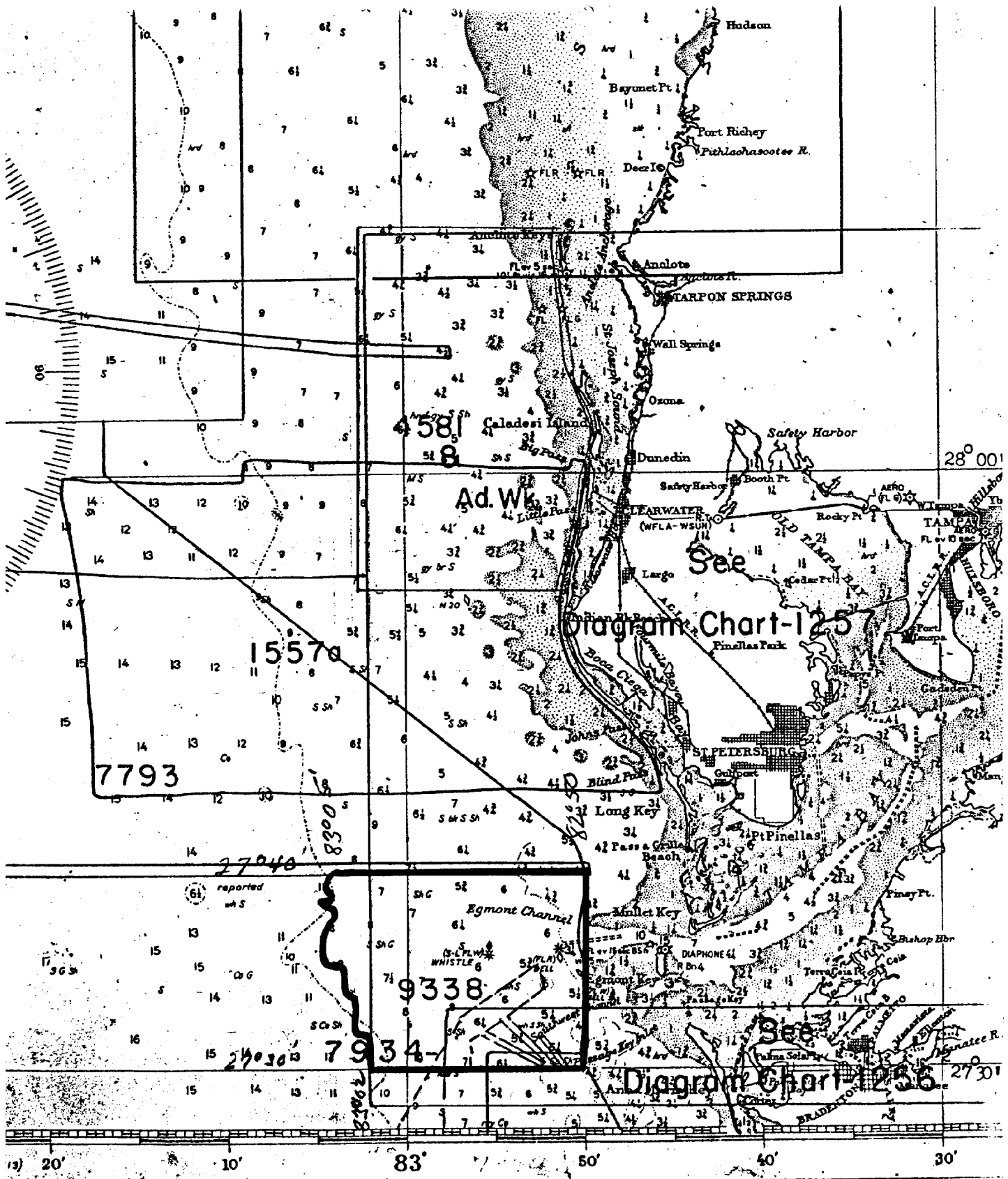


B. Controlling Depths

The controlling depths of Egmont Channel on the present survey (38 feet) exceed those indicated in the charted tabulation.

3. The Verifier's Report is not accompanied by a Hydrographic Inspection Team Report as required by section 8.1 of the provisional manual.
4. Aside from junctional survey H-9350 (1972) on the northeast, no contemporary surveys junction with the present survey on the east, south, west, or north; however, charted soundings are in general harmony with the present survey in those areas.
5. Charte depths along the edge of the dredged portion of Egmont Channel are 3 to 6 feet shoaler than present depths. The present survey does not disprove these shoaler depths and they should be retained as charted.
6. Most soundings charted in the area of the present survey originate with H-7793 (1950), scale 1:100,000. This survey was controlled by EPI. Conflicts between prior and present depths probably are caused by bottom changes, scale differences, and the less accurate control on the prior survey. Except as previously noted, the present survey is considered adequate for charting the area.
7. Two of the Raydist Arcs on the Final Position Overlay were misidentified, necessitating revision during quality control inspection.

cc:  
C351



TS, BEACONS, BUOYS, AND DANGERS CORRECTED  
 INFORMATION RECEIVED TO DATE OF ISSUE

(Tampa Bay to Cape San Blas)

Chart 1114

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. 9338

INSTRUCTIONS

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.

1. Letter all information.
2. In "Remarks" column cross out words that do not apply.
3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

CHART	DATE	CARTOGRAPHER	REMARKS
586	9-13-77	J. OWYANG	Full <del>Part Before</del> After Verification Review Inspection Signed Via Drawing No. #42
1257	9-27-77	J. OWYANG	Full <del>Part Before</del> After Verification Review Inspection Signed Via Drawing No. 48
1256	9-28-77	J. OWYANG	Full <del>Part Before</del> After Verification Review Inspection Signed Via Drawing No. 27 applied thru cht 1257
1114	9-29-77	J. OWYANG	Full <del>Part Before</del> After Verification Review Inspection Signed Via Drawing No. 27 applied thru CHT 1257
1113	12/4/78	JAY SHERMAN	Full <del>Part Before</del> After Verification Review Inspection Signed Via Drawing No. applied thru CHT 1114
			Full Part Before After Verification Review Inspection Signed Via Drawing No.
			Full Part Before After Verification Review Inspection Signed Via Drawing No.
			Full Part Before After Verification Review Inspection Signed Via Drawing No.
			Full Part Before After Verification Review Inspection Signed Via Drawing No.
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