

# FE 193

Diagram No. 1257-2

NOAA FORM 76-35A

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

## DESCRIPTIVE REPORT (HYDROGRAPHIC)

Type of Survey ... Field Examination  
Field No. .... HY-2.5-1-63  
Office No. .... FE-193

### LOCALITY

State ..... Florida  
General Locality ... Tampa Bay  
Locality ..... Hillsborough River

1963

CHIEF OF PARTY  
CDR R.M. Stone

### LIBRARY & ARCHIVES

DATE .....

☆ U.S. GOV. PRINTING OFFICE: 1978-666-172

NOTE: A new system for registering Field Examinations (FE's) was established in 1980. All FE's are now consecutively numbered as shown hereon. The date shown in the new format is the actual date of survey. This material was previously registered as;

FE No.7 1963

FE 193

# F E No. 7 1963

Diag. Cht. No. 1257-2.

Form 504

U. S. DEPARTMENT OF COMMERCE  
COAST AND GEODETIC SURVEY

## DESCRIPTIVE REPORT

Hydrographic

Type of Survey Pipe Drag

Field No. HY-2.5-1-63 Office No. F.E. #7, 1963

### LOCALITY

State Florida

General locality Tampa Bay

Locality Hillsborough River

1963

### CHIEF OF PARTY

Raymond M. Stone, CDR, C&GS

### LIBRARY & ARCHIVES

DATE \_\_\_\_\_

USCOMM-DC 5087

Ch+ 587

1963

F E No. 7

**HYDROGRAPHIC TITLE SHEET**

*F.E. No. 7, 1963*

**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.

*HY-2.5-1-63*

State Florida

General locality Tampa Bay

Locality Hillsborough River

Scale 1:2,500 Date of survey May 7 - July 1, 1963

Instructions dated 7 June 1962 Project No. SP-15-62

Vessel HYDROGRAPHER Launch HY-2

Chief of party Raymond M. Stone, Commander, C&GS

Surveyed by Clinton D. Upham, LCDR, C&GS  
Donald G. Popejoy, LTJG, C&GS

Soundings taken by echo sounder, hand lead, ~~port Raytheon~~ Raytheon DE-723 Fathometer #217 and hand lead.

Graphic record scaled by ship's personnel.

Graphic record checked by ship's personnel.

Protracted by C. D. Upham, LCDR; D. G. Popejoy, LTJG

Soundings ~~reduced~~ inked by D. G. Popejoy, LTJG

Soundings in ~~WATERS~~ feet at MLW ~~MINW~~

**REMARKS:**

This descriptive report covers both hydrography and pipe drag  
survey specified by instructions for SP-15-62.

Descriptive Report to Accompany  
HYDROGRAPHIC INVESTIGATION  
Special Project 15-62  
Hydrographic Survey Field No. HY-2.5-1-63  
Ship HYDROGRAPHER  
Scale: 1:2,500

Raymond M. Stone, Commander, C&GS ----- Chief of Party

A. Project:

Special Project 15-62, Hillsborough River, Tampa, Florida;  
instructions dated June 7, 1962. ✓

B. Area Surveyed:

This survey covers an area of 0.08 square nautical miles in  
the southern part of the Hillsborough River, Tampa, Florida  
between latitudes  $27^{\circ}56'35''\text{N}$ . and  $27^{\circ}56'45''\text{N}$ . ✓

The hydrography was accomplished on May 7 and July 1, 1963  
and the pipe drag investigation (See para. 0, Miscellaneous)  
was accomplished on July 1, 1963. ✓

This survey falls within the area of prior survey H-8379  
(1:5,000 insert) 1957. ✓

C. Sounding Vessel:

All hydrography was done by the launch HY-2, and is identified  
by red position numbers and day letters. ✓

D. Sounding Equipment:

A Raytheon DE-723 Fathometer (No. 217) was used for all hydro-  
graphy, except for a few detached positions for which a lead-  
line was used. The depth ranges from 3 to 15 feet. Lead-line  
comparisons were made to determine a combined Fathometer cor-  
rection. These comparisons indicated a correction of -1.0 Ft.  
with initial set at 2.0 Ft. ✓

E. Smooth Sheet:

The hydrography was smooth-plotted by ship personnel on a  
letter size tracing cloth overlay of the boat-sheet, in com-  
pliance with instructions. ✓

F. Control:

Hydrography on this sheet was controlled entirely by three-point sextant fixes. Seven topographic signals from H-8379 were recovered, and used in locating four additional signals by conventional hydrographic methods. ✓

G. Shoreline:

The shoreline along the east bank of the river was transferred from Hydrographic Survey H-8379. The shoreline along the west bank of the river shown in red on the smooth sheet was located by the hydrographic party using three point sextant fixes. ✓

H. Crosslines:

Approximately 9% crosslines were run to check the regular sounding lines. They are in excellent agreement with the regular system of lines. ✓

I. Junctions:

See "J", below.

J. Comparison With Prior Surveys:

The comparison with prior survey H-8379 indicates a general deepening of approximately 2 to 3 feet in the river channel in the area covered. The soundings at the limits of this survey are also approximately 2 to 3 feet deeper than those of the prior survey. All soundings on this survey are in good agreement with the U. S. Army Corps of Engineers Survey of September, 1960. ✓

K. Comparison With the Chart:

This survey was compared with Chart 587 (13th Ed., Dec. 17/62). In view of the fact that a closely knit system of sounding lines and subsequent pipe drag (See Sect. "O", this report) failed to verify the existence of the 5 Ft. shoal charted at Lat. 27°56.7' N, Long. 82°27.58' W, it is recommended that this feature be deleted from the chart. ✓  
See Review

The charted 9-foot controlling depth of the channel appears accurate in the area covered by this survey. ✓

L. Adequacy of Survey:

This survey is complete and adequate to supersede prior surveys for charting. ✓  
see Review

M. Aids to Navigation:

There are no aids to Navigation within the area of this survey. ✓

N. Statistics:

On this survey there were <sup>103</sup>~~74~~ positions, and 1.8 nautical miles of sounding lines.

O. Miscellaneous:

On July 1, 1963 a pipe drag survey was conducted in the northern portion of the project area for the purpose of verifying or disproving the existence of the 5 Ft. sounding charted at Lat. 27°56.7' N., Long. 82°27.58' W., which had been added to Hydrographic Survey H-8379 by verifiers in the Washington Office. ✓

Pipe drag equipment consisted of a 27 ft. section of 3/4 inch G.I. pipe supported at each end by uprights (3/16" stainless steel cable) secured to conventional intermediate buoys. Towline consisted of 5/16" diameter stainless steel cable. Two 14 lb. sounding leads were clamped to the top and bottom of the pipe at each end with plumber's tape to provide the necessary weight. ✓

The pipe drag was towed by a single launch at dead slow speed. Lift measurements taken in the usual manner during each drag strip indicated no lift. The distance from the anglemen, at the stem of the launch, to the center of the drag when underway was 31 Ft.. Control was the same as outlined in section "F", this report. The Fathometer was operated continuously during pipe drag operations. ✓

The smooth sheet was plotted on a letter size tracing cloth overlay as in section "E", this report. The following color code was used to designate the effective drag depth in the various areas: ✓

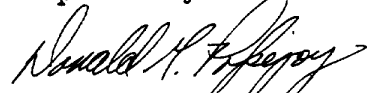
RED - 8 Ft.

GREEN - 7½ Ft.

BLUE - 7 Ft.

The area of the charted 5 Ft. was swept to an effective depth of 7½ Ft.. The majority of the remaining area was swept to a depth of 8 Ft. with one drag strip along the easterly bank of the river swept to an effective depth of 7 Ft. ✓

Respectfully submitted:



Donald G. Popejoy,  
LTJG, USC&GS

Approved and forwarded:



William E. Randall,  
CDR, USC&GS

TIDE NOTE

Hydrographic and Pipe Drag Survey  
(Field No. HY-2.5-1-63)  
Special Project 15-62  
Hillsborough River, Tampa, Florida

Tide corrections originated from inferred hourly heights furnished by Marine Data Division. It is presumed that the inferred values are based on observations at the St. Petersburg tide station as specified in the project instructions.

An abstract of tide corrections is appended to this report.

LIST OF GEOGRAPHIC NAMES

Hydrographic and Pipe Drag Survey  
(Field No. HY-2.5-1-63)  
Special Project 15-62  
Hillsborough River, Tampa, Florida

Tampa

West Tampa

Hillsborough River



ABSTRACT OF TIDE CORRECTIONS

Hydrographic and Pipe Drag Survey  
(Field No. HY-2.5-1-63)  
Special Project 15-62  
Hillsborough River, Tampa, Florida

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MAY 7, 1963

<u>Time (75° W. Time Mer.)</u>	<u>Correction (Ft)</u>
From 1200 to 1400 /	-1.6 /
"    to 1443 /	-1.4 /
to 1516 /	-1.2 /
to 1543 /	-1.0 /
to 1612 /	-0.8 /
to 1640 /	-0.6 /

JULY 1, 1963

From 0819 to 0910 /	-1.4 /
to 1230 /	-1.6 /
to 1319 /	-1.4 /
to 1356 /	-1.2 /
to 1434 /	-1.0 /
to 1512 /	-0.8 /
to 1546 /	-0.6 /
to 1627 /	-0.4 /
to end of day /	-0.2 /

LIST OF STATIONS ON SPECIAL PROJECT 15-62 HYDROGRAPHIC SURVEY (HY-2.5-1-63)

Name used in hydrographic survey:

Origin of Stations:

AZO	-	H-8379
BIG	-	"
DUD	-	"
CUE	-	"
FUN	-	"
GIN	-	"
GAM	-	"
ICE	-	HY-2.5-1-63*
PIE	-	"
RUM	-	"
BED	-	"

\* See page 3, Sounding Volume 1 of 1.

✓

A P P R O V A L

Field work and processing of records for this survey were performed under the supervision of Commander Raymond M. Stone prior to my assuming command on September 27, 1963.

The records and smooth sheets have been reviewed, and are approved.

This survey is complete and adequate and no additional field work is recommended.

*William E. Randall*

William E. Randall,  
Commander, Coast & Geodetic Survey  
Commanding Ship HYDROGRAPHER

TIDE NOTE FOR HYDROGRAPHIC SHEET

April 9, 1964

Nautical Chart Division: R. H. Carstens

Plane of reference approved in  
2 volumes of sounding records for

HYDROGRAPHIC SHEET F. E. No. 7 (1963)

Locality Hillsborough River  
Tampa, Florida

Chief of Party: R. M. Stone (1963)

Plane of reference is mean low water

ft. on tide staff at

ft. below B. M.

Height of mean high water above plane of reference at the  
working grounds is 2.0 feet.

Condition of records satisfactory except as noted below:

*J. M. Symons*  
\_\_\_\_\_  
Chief, Tides and Currents Branch

HYDROGRAPHIC SURVEY STATISTICS  
HYDROGRAPHIC SURVEY NO. F.E.No. 7-1963

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

RECORD DESCRIPTION		AMOUNT	RECORD DESCRIPTION		AMOUNT	
SMOOTH SHEET			BOAT SHEETS			
DESCRIPTIVE REPORT		1	<del>OVERBLATS</del> <i>Tracing cloth sheets enclosed</i>		2	
DESCRIPTION	DEPTH RECORDS	HORIZ. CONT. RECORDS	PRINTOUTS	TAPE ROLLS	PUNCHED CARDS	ABSTRACTS/SOURCE DOCUMENTS
ENVELOPES	3					
CAHIERS						
VOLUMES	2					
BOXES						
T-SHEET PRINTS ( <i>List</i> )						
SPECIAL REPORTS ( <i>List</i> )						

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				103
POSITIONS CHECKED		85		
POSITIONS REVISED		—		
DEPTH SOUNDINGS REVISED		1		
DEPTH SOUNDINGS ERRONEOUSLY SPACED		1		
SIGNALS ERRONEOUSLY PLOTTED OR TRANSFERRED		—		
	TIME (MANHOURS)			
TOPOGRAPHIC DETAILS				
JUNCTIONS				
VERIFICATION OF SOUNDINGS FROM GRAPHIC RECORDS		1/2 hr.		
SPECIAL ADJUSTMENTS				
ALL OTHER WORK		9 1/2 hr.	4 hrs.	
TOTALS		10 hrs.	4 hrs.	
PRE-VERIFICATION BY		BEGINNING DATE	ENDING DATE	
VERIFICATION BY <i>Dale E. Westbrook</i>		BEGINNING DATE 10/9/67	ENDING DATE 10/10/67	
REVIEW BY <i>Dale E. Westbrook</i>		BEGINNING DATE 10/12/67	ENDING DATE 10/13/67	


REVIEW  
Field Examination No. 7, 1963  
Hydrographic and Pipe Drag  
Investigation  
Hillsborough River  
Tampa, Florida

1. This field examination was made in compliance with the instructions for Special Project 15-62, dated June 7, 1962.
2. The purpose of the investigation was to verify or disprove a 5-ft. sounding on a possible obstruction shown on H-8379 (1:10,000) 1957 in Latitude 27°56'.70, Longitude 82°27'.58, on the east side of the river channel.
3. The results of the investigation have been smooth plotted on two tracing cloth sheets enclosed in the Descriptive Report. One sheet shows the depths on sounding lines run during the investigation, and the other shows the area and depths covered by a 27-ft. long pipe drag, utilized to aid in the search.
4. The vicinity of the obstruction was cleared by the pipe drag to a depth of 7-1/2 ft. at MLW in depths of 10-ft. It is believed, therefore, that the 5-ft. obstruction was either a stray on the fathogram of H-8379 (1957), or was subsequently removed by dredging by the U. S. Corps of Engineers in 1960 (BP-60153), and no longer exists.
5. The obstruction is considered adequately disproved. In addition, since dredging and natural changes have occurred in the area since the 1957 survey, the present field examination is considered adequate to supersede the prior survey and the Corps of Engineers survey of 1960 (BP-60153) for charting within the common area.
6. A comparison with Chart 587, 11th Ed., April 17, 1967, shows that the 5-ft. obstruction has already been correctly deleted from the chart, and that the present charted soundings adequately reflect the results of this field examination.

7. The Descriptive Report adequately covers all other matters pertinent to this investigation. No further discussion is considered necessary.

Reviewed by: Dale E. Westbrook  
October 13, 1967

Inspected by: R. H. Carstens

  
Approved: John O. Boyer  
Commander, USESSA  
Chief, Marine  
Chart Division

27° 40"

82° 27' 30"

AZO

BIG

TAMPA

Hillsborough R. CUE

DUD

WEST TAMPA

OPIE

F. E. NO. 7, 1963

56' 40"

SPECIAL PROJECT 15-62  
HYDROGRAPHIC INVESTIGATION  
HILLSBOROUGH RIVER  
TAMPA, FLORIDA  
PIPE DRAG SURVEY  
FIELD NO. HY-2.5-1-63

USC&GS SHIP HYDROGRAPHER  
R. M. STONE, CDR, USC&GS, COMD'G  
JULY 1, 1963

ICE

RUM

FUN

BED

COLOR      LEGEND:  
EFFECTIVE   DEPTH

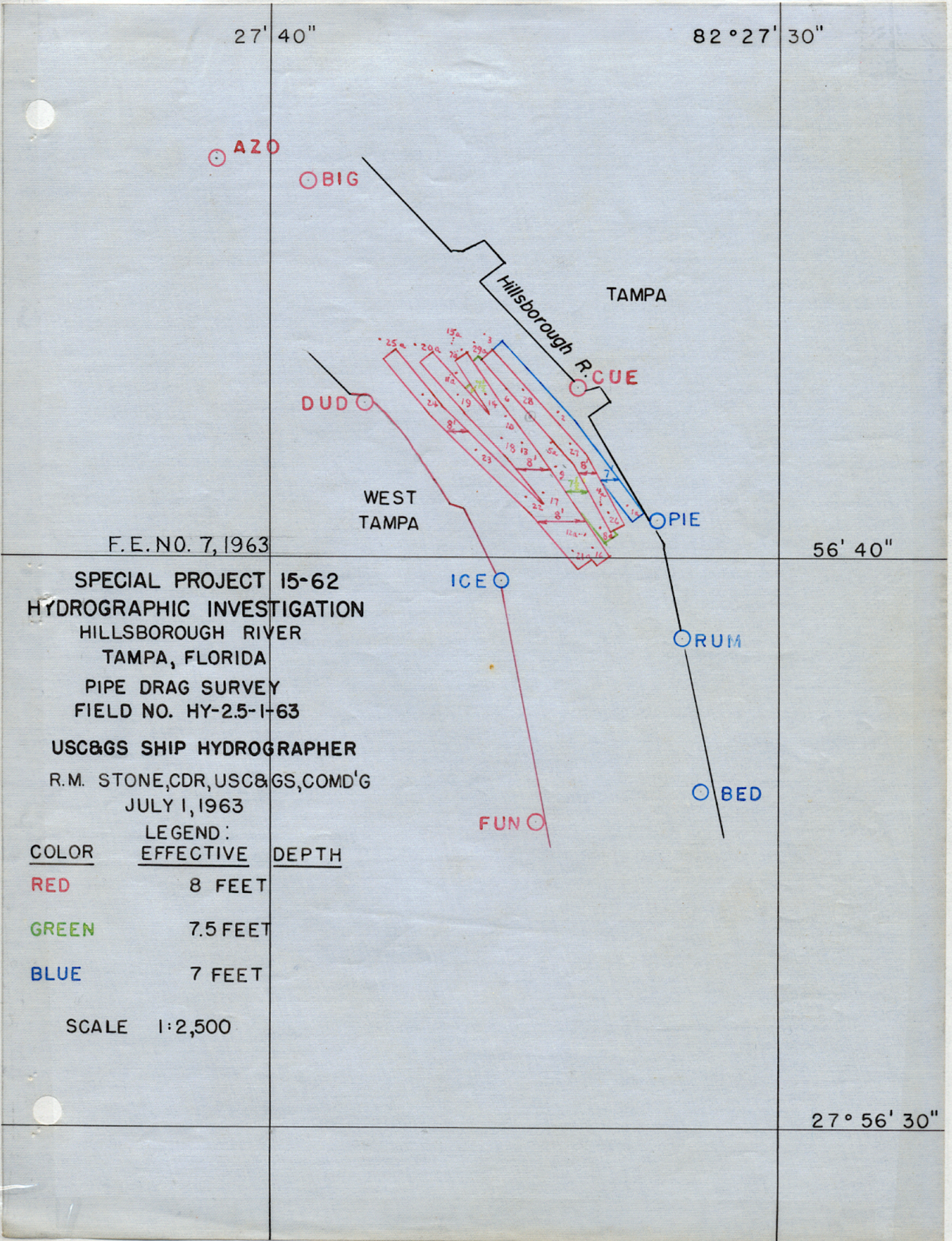
RED            8 FEET

GREEN        7.5 FEET

BLUE         7 FEET

SCALE 1:2,500

27° 56' 30"



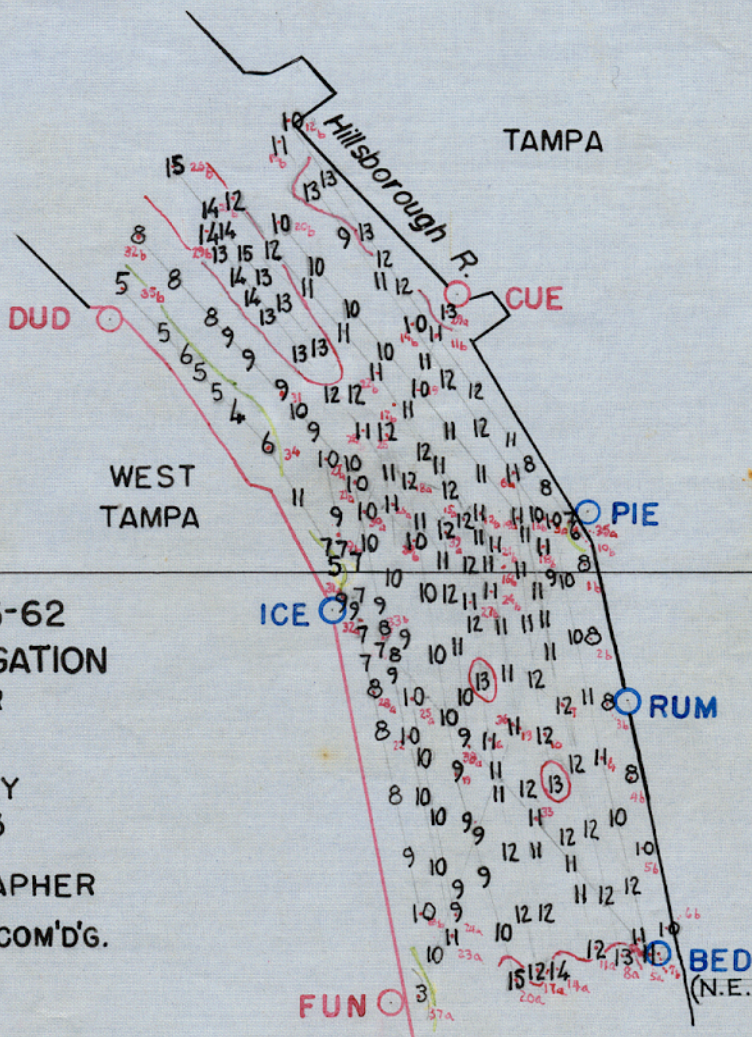


27° 40"

82° 27' 30"

○ AZO

○ BIG



TAMPA

DUD

CUE

WEST TAMPA

PIE

F.E. NO. 7, 1963

56' 40"

SPECIAL PROJECT 15-62  
 HYDROGRAPHIC INVESTIGATION  
 HILLSBOROUGH RIVER  
 TAMPA, FLORIDA  
 HYDROGRAPHIC SURVEY  
 FIELD NO. HY-2.5-1-63

USC&GS SHIP HYDROGRAPHER  
 R. M. STONE, CDR, USC&GS, COM'D'G.  
 MAY 7, & JULY 1, 1963  
 SCALE 1:2,500

ICE

RUM

BED

(N.E. bridge abutment)

FUN

(N.M. 2 JAN 11 1964)

27° 56' 30"

○ GAM

GIN ○

- h. The widening on the northwesterly side at the turn between Cut A and Cut C has a controlling depth of 34 feet.
  - i. The channel has shoaled along the outside edge.
  - j. The widening on the east side of the turn between Cut D and Sparkman Channel has a controlling depth of 28.5 feet.
  - k. The channel has shoaled along the edge; project depths are available in the inside half of the quarter.
  - l. The channel has shoaled along the edge; a depth of 30.5 feet was available in the inside half of the quarter.
  - m. Shoaling across the channel from the Seaboard Railroad Bridge to 165 yards west; depths of 28.3 feet, 29.0 feet, 28.2 feet and 24.2 feet were available in the left outside, left inside, right inside and right outside quarters respectively outside of this area.
  - n. Shoal depth from north end of the quarter to 300 feet south, project depths may be obtained throughout the remainder of the quarter.
- Note - The Corps of Engineers should be consulted for changing conditions subsequent to the above.

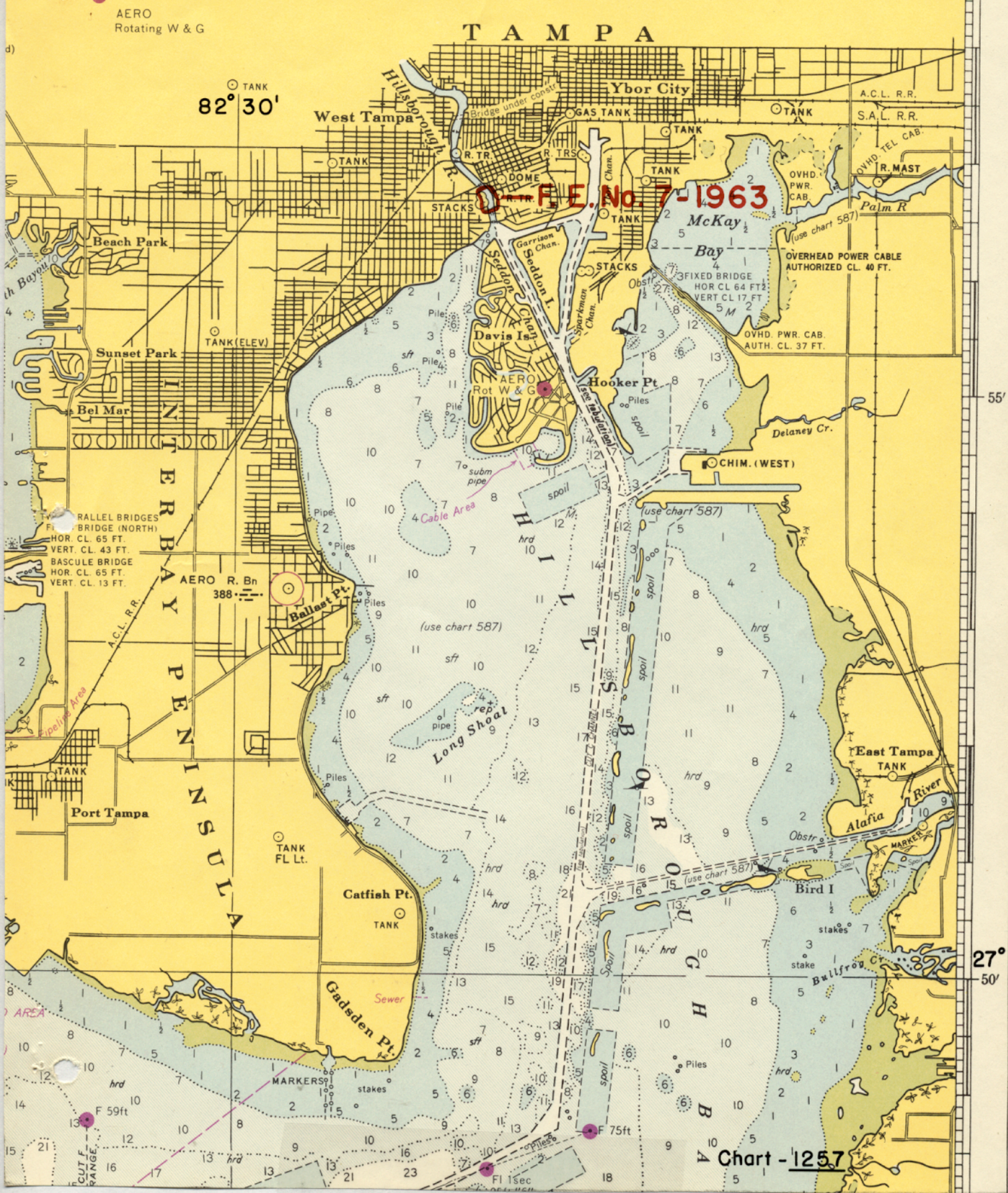


Chart - 1257

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. F.E.No.7-1963

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
587	3/5/64	J. Weir	Full Part Before After Verification Review Inspection Signed Via Drawing No.
HC 587	10/27/70	J. E. Schod	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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