

# 8751

Diag. Cht. No. 1282-2.

Form 504

U. S. DEPARTMENT OF COMMERCE  
COAST AND GEODETIC SURVEY

## DESCRIPTIVE REPORT

Type of Survey ..... Hydrographic  
Field No. EGFP-20-2-62 Office No. H-8751

### LOCALITY

State ..... Texas  
General locality Texas Outer Coast  
Locality Vicinity of Galveston Bay  
Entrance .....

1962-65

### CHIEF OF PARTY

S. L. Hollis .....  
P. A. Stark ..... R. E. Alderman

### LIBRARY & ARCHIVES

DATE ..... July 6, 1965

USCOMM-DC 5087

NOAA  
12-8 B

10708

HYDROGRAPHIC TITLE SHEET

H-8751

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.

ECFP 20-2-62

State TEXAS

General locality TEXAS OUTER COAST

Locality VICINITY of GALVESTON BAY ENTRANCE

Scale 1:20,000 Date of survey 10 Sept. 1962-3 May 1963  
4 March 1965-21 April 1965

Instructions dated 25 April 1962-4 June 1964 Project No. OPR-428

Vessel Launch CS 1177, Launch CS 183, Skiff 758

Chief of party LCDR.S.L.HOLLIS, ~~LT.W.V.HILL~~, LCDR.P.A.STARK, LCDR.R.E.AIDERMAN

Surveyed by ROBERT A.LEWIS, LT.(jg) RONALD W.ELONEN

Soundings taken by echo sounder, hand lead, pole \_\_\_\_\_

Graphic record scaled by PARTY PERSONNEL

Graphic record checked by PARTY PERSONNEL

Protracted by LT.(jg) RONALD W. ELONEN

Soundings penciled by \_\_\_\_\_

Soundings in 4/4/4/4 fathoms feet at MLW MLW

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

WFS

(1964)

UNITED STATES GOVERNMENT

966 ②

(1964)

121A  
14  
ABZ

# Memorandum

TO : The Director  
Coast & Geodetic Survey

THRU: New Orleans Field Office

FROM : Commanding Officer  
WAINWRIGHT & HILGARD  
P. O. Box 245, Galveston, Texas

SUBJECT: Obstruction, Menace to Navigation.

DATE: July 22, 1964

An obstruction, covered 12' (twelve feet) mean low water (MLW) has been located; 2250 yards (twenty two hundred fifty) 040° True from Galveston South Jetty Lighthouse.

See FE #1 ('65)  
for wire drag of  
area affected 3/5/65-

Obstruction co ordinates Latitude 29° 20' 30"  
Longitude 94° 40' 44"

Obstruction was located by wire drag (visual control) verified by SCUBA diver, and subsequently cleared to a depth of 11' MLW.

Charts affected; C&GS 886 and 1282, & 518 & 152 SC. See Pos. 2-3 "g" (purple) Vol. 9, P. 31 H-8751

Obstruction is the top of a 3" diameter metal rod or pipe which projects above a wreckage which appears to be that of a barge or dredge. Wreckage is badly broken up. See FE # 1 ('65) P 39

Recommended for release to Local Notice to Mariners, Eighth District.

*Edwin K. McCaffrey*  
Edwin K McCaffrey

RETURN TO NAUTICAL  
CHART DIVISION FILES

July 24, 1964

Copy furnished Eighth Coast Guard District this date.

Form CHT's 1282 - app'd thru chf. 518 11-4-64 HR  
" 886 - app'd thru 518 ch 5/12/66  
518 app'd 9/23/64  
152-5C

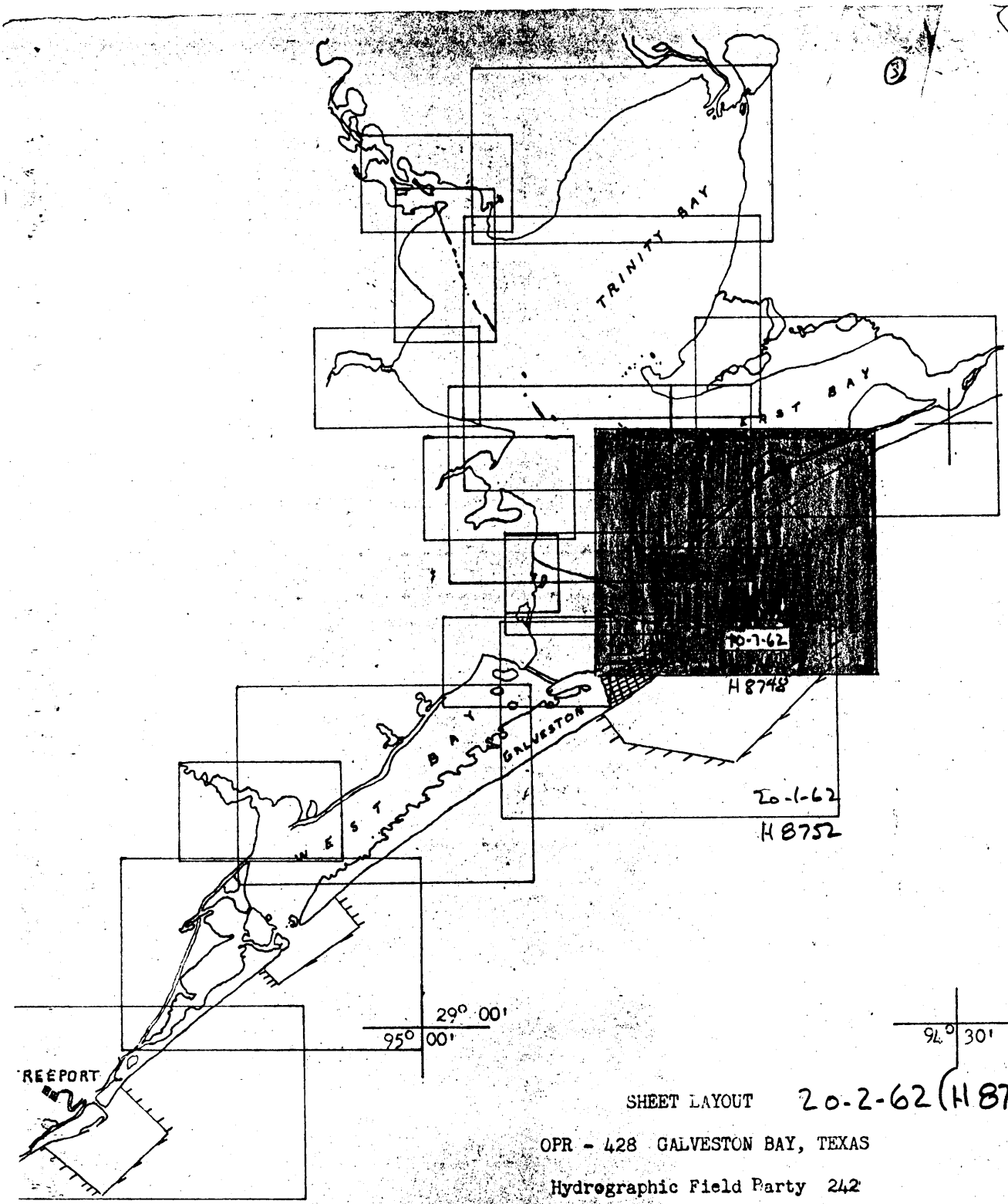
*H.D. Reed, Jr.*  
H.D. Reed, Jr.  
New Orleans Field  
Officer

JUL 29 1964

JUL 28 1964 966

Processed by 1428 2.24 1964

*ME*



SHEET LAYOUT 20-2-62 (H 8751)

OPR - 428 GALVESTON BAY, TEXAS

Hydrographic Field Party 242

UNITED STATES GOVERNMENT

# Memorandum

U.S. DEPARTMENT OF COMMERCE  
COAST AND GEODETIC SURVEY

53 (R)

In reply refer to: (1963)  
2221-20-13e

DATE: January 25, 1963

TO : Chief, Nautical Chart Division

FROM : Chief, Marine Data Division

SUBJECT: New Charts 518 and 519, Galveston Bay, Texas

Submitted is information for use in the office and not for publication or release to the general public.

Low water datum of the Corps of Engineers is 1.2 feet lower than the present C&GS low water datum (1941--59). Add 1.2 feet to the soundings on the Engineers' surveys to refer them to our present datum.

C&GS low water datum of the 1933--36 hydrographic surveys is 0.4 foot lower than the present C&GS low water datum (1941--59). Add 0.4 foot to the soundings on C&GS 1933--36 surveys to refer them to our present datum.

*Kenneth S. Ulm*  
Kenneth S. Ulm

*Charts 518  
11/2/63  
revised 6/25/63  
1282  
Corr 1-28-63 152-B*

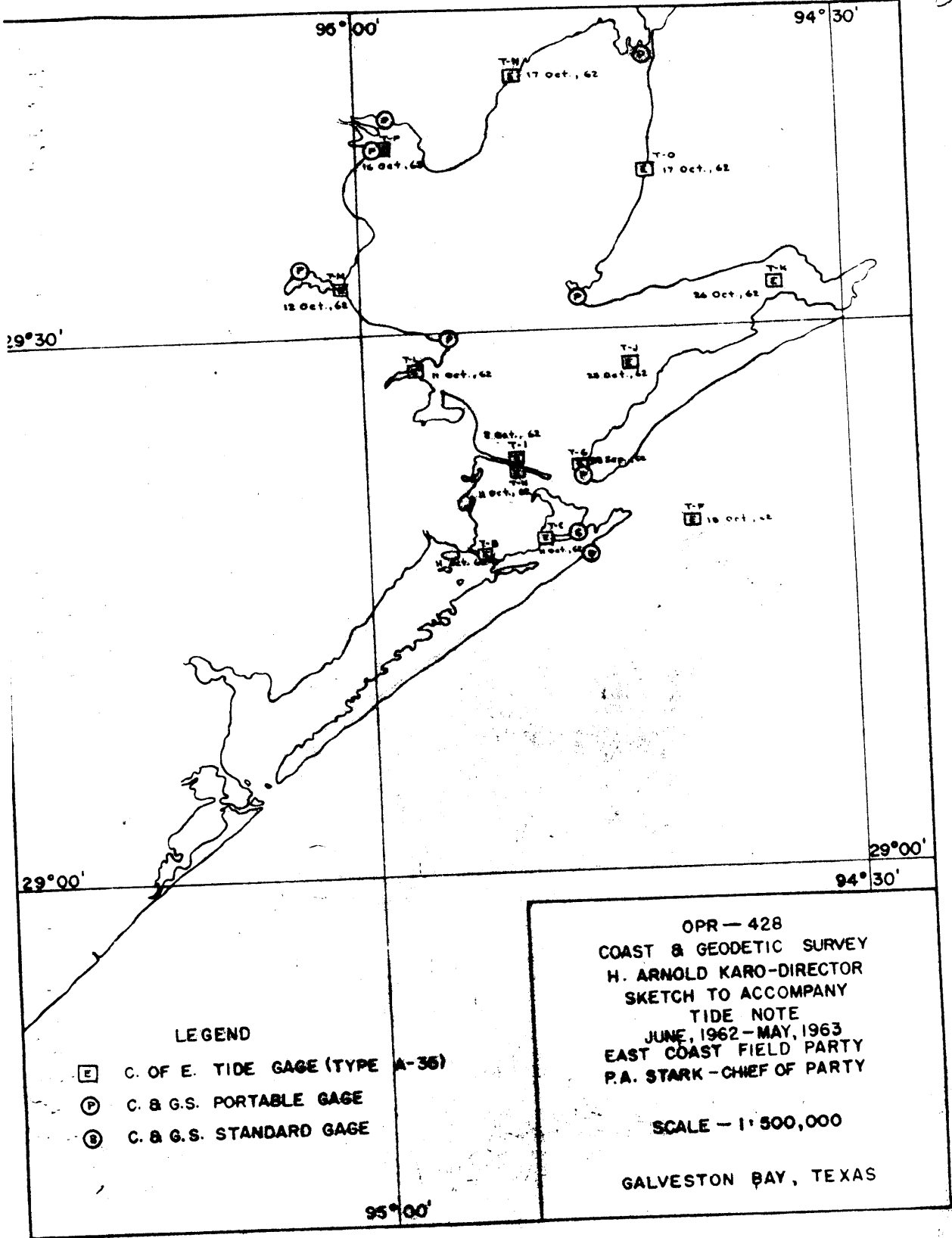
*Note: Above Morgan Pt:  
Accept C of E soundings and depths  
on channel surveys  
legends as given - make no correction  
to them before application to charts,  
except as necessary to bring HFS  
them into agreement with our  
modern field hydro.*

*In Galveston Bay  
south of Morgan Pt.  
Accept CE Reference  
datum for channel  
legends, tabulations, and  
as adjacent to channel  
channel surveys. Apply  
1.2 ft correction to CE area surveys  
and bring them into agreement with modern C&GS datum.*

RETURN TO NAUTICAL  
CHART DIVISION FILES

*(Tides gauges  
tidal data in Houston Ship Channel  
above Morgan Pt - Tabbs Bay.  
They recommend above treatment.)*

*charted dredged  
in channels,  
HFS  
JAN 25 1963*



**LEGEND**

- E** C. OF E. TIDE GAGE (TYPE A-35)
- P** C. & G.S. PORTABLE GAGE
- S** C. & G.S. STANDARD GAGE

OPR - 428  
 COAST & GEODETIC SURVEY  
 H. ARNOLD KARO-DIRECTOR  
 SKETCH TO ACCOMPANY  
 TIDE NOTE  
 JUNE, 1962 - MAY, 1963  
 EAST COAST FIELD PARTY  
 P.A. STARK - CHIEF OF PARTY

SCALE - 1:500,000

GALVESTON BAY, TEXAS

(6)

A. PROJECT

Work on project OPR-428 was done in accordance with basic instructions 211-pt., S-2-ECFP, dated 25 April 1962 and supplemental instructions C-211, S-2 HFP-219, dated 4 June 1964.

B. AREA SURVEYED

The area covered by this survey is in the general vicinity of Galveston, Texas and covers that portion of the Gulf of Mexico north of latitude 29°19.00" to Bolivar Peninsula and extends approximately four miles east of the Galveston Bay entrance jetties.

In accordance with a memorandum from the Chief of Operations Division, dated 18 December 1964 that portion of the project east of longitude 94°37' was eliminated from the survey. This area was too far offshore to obtain good three point sextant fixes.

The boat sheet projection extends from latitude 29°18.00" to latitude 29°28.00" and from longitude 94°32.00" to longitude 94°49.00".

Field work on this sheet commenced on 10 September 1962 and was completed on 21 April 1965. Work was interrupted from 20 May 1963 to 25 October 1964 because of a special project at Lake Mead, Nevada.

This survey junctions with C&GS contemporary survey H-8752 (ECFP 20-1-63) on the south and H-8748 (ECFP 10-7-62) on the west. Corps of Engineers sheet #2 and #3 junction on the south and east and sheet #9 junctions on the north. The Corps of Engineers sheets are 1:10,000 scale, dated July-October 1962.

US Engineers Print No. 2 = Bp 63134  
 " " " No. 3 = Bp 63135  
 " " " No. 9 = Bp 63137  
 Offshore Raydist, Inc. Bp 63327  
 Additional Dredging Bp 70190 (Letter 1008 [66])

✓  
✓  
✓  
✓  
✓  
✓

WRS

①

C.SOUNDING VESSELS

Vessels used for sounding were launch CS 183, Launch CS 1177 and Skiff 758. The following colors and day letters were used.

Launch 183	Violet	a thru g
Launch 1177	Blue	a thru s
Skiff 758	Red	a & b

D.SOUNDING EQUIPMENT

A Raytheon fathometer, model DE-723, no. 549, 20 KC was used to obtain soundings on Launch CS 183 for "a" day. A Raytheon fathometer, model DE-723, no. 265, 200 KC was used for "b-g" days.

On Launch CS 1177 an EDO graphic recorder, model 255C, serial no.16, 20 KC was used for "a thru f" day. A Raytheon fathometer, model DE-723, no.543, 20 KC was used for "g thru l" days. For "m thru s" days a Raytheon fathometer, model DE-723, no. 549, 200 KC was used.

On Skiff 758 a sounding pole was used for "a " day. A Raytheon fathometer, model 808J, no.5734 was used for "b" day.

Corrections to be applied to echo soundings were determined from daily bar checks. An abstract of these corrections is tabulated in Appendix B of this report.

An armed lead was used to obtain bottom samples.

No unusual difficulties were encountered with the sounding equipment.

E.SMOOTH SHEET

The smooth sheet projection was made in <sup>the</sup> Washington office with <sup>the</sup> projection ruling machine. Smooth plotting will be accomplished by Hydrographic Field Party 242.

F.CONTROL

Horizontal control was obtained by standard visual three-point sextant fix methods.

The photo-hydro signals used were located from advance manuscripts no. T-10785, T-10786, T-10788, and ~~T-10789~~

(1957-62) (1957-62) (1957-60) T-12236 (1962-66)  
T-12231 (1962-64)



8

F. CONTROL (cont)

Triangulation stations OUT, RAN and ANN were destroyed in September, 1961 by hurricane Carla and were rebuilt in 1962. They were relocated by triangulation in 1963 while hydrography was in progress. The new positions were so close to the previous positions that the differences could not be plotted on the smooth sheet. ✓

Signal NOR ( north jetty light ) was also destroyed by the hurricane and rebuilt in 1962. Signal NOR is a triangulation station but was used as a topographic signal to be located by triangulation at a later date. ✓

Appendix A of the report contains a complete list of control and the quality and source of control. ✓

G. SHORELINE

Shoreline was transferred from blue line prints of advance manuscripts listed in Section F of this report. The manuscripts were compiled previous to Hurricane Carla. These prints were the latest 1:20,000 prints available. ✓

The shoreline on the Bolivar Peninsula south of 29°-24'-00" does not agree with the shoreline on the 1:10,000 manuscripts which were compiled after Hurricane Carla. The shoreline is sandy and marshy and can be considered as changeable. ✓

The remaining shoreline was verified by the hydrographer using hydrographic methods. ✓

H. CROSSLINES

Crosslines were run in excess of 9% with good agreement on all crossings. ✓

I. JUNCTIONS

This survey was bounded on the south by contemporary survey H-8752 ( ECFP 20-1-62 ). There was good agreement ~~at~~ the junctions. ✓

This survey was bounded on the west by H-8748 ( ECFP 10-7-62 ). The soundings on both sheets were in good agreement. Unverified as of 10-13-66 ✓

Corps of Engineers sheets no. 2, 3, & 9 overlap and are generally in good agreement. ✓

Junction with H-6252 (1937) and H-5511 (1934) not made.

J. COMPARISON WITH PRIOR SURVEYS

Comparison with prior survey sheet H-6252, dated 1937, scale 1:20,000 shows good agreement except in the area east of the jetties bounded by latitude 29°-19'-00" and 29°-21'-00". This is in the vicinity of the Galveston Bay entrance channel where dredging has taken place. In the extreme southeast corner of the area the ~~contemporary~~ <sup>present survey</sup> soundings are 2-4 ft. shoaler than those on sheet H-6252.

Comparison with prior survey sheet H-5511, dated 1934, scale 1:20,000 shows the ~~contemporary~~ <sup>present survey</sup> soundings to be generally one ft. shoaler than those on sheet H-5511.

Pre survey review items no. 20, 21 and 22 were located by the Coast and Geodetic Survey ships Hilgard and Wainwright. These items are described in the 1964 OPR-450 descriptive report (attachment no. 5) by LCDR Edwin K. McCaffery. They are listed as items 39, 39a and 40a in the report. FE No. 1, 1965, W.D.

The wreck at latitude 29°-22'-45"N, longitude 94°-42'-48"W was located on sheet H-8748 (ECP-10-7-6X<sup>2</sup>). "E" on previously review, OPR-428 (1952) H-8748 unverified as of 10-13-66

The wreck bearing 4 ft. MHW at latitude 29°-24'-54"N, longitude 94°-40'-48" on sheet H-5511 was searched for visually and not found. No wire dragging was done. It is recommended that this position be retained with a symbol of a sunken ship wreck which may be dangerous to surface navigation. "B" on previously review, OPR-428 (1952). No. 37, FE-1-1965, W.D.

Gradually being covered under fill and trash in Pumping Ground.

The wreck, stern post, bearing 3 ft. MHW at latitude 29°-24'-55"N, longitude 94°-41'-10"W was searched for visually and was not found. No wire dragging was done. It is recommended that this position be retained with a symbol of a sunken wreck which may be dangerous to surface navigation. (H-5511) 1982-on as (H-5511) 8-2-65 HR 047516

The wreck bearing 6 ft. MHW at latitude 29°-24'-48"N, longitude 94°-41'-24"W was found to be in the same position bearing 4 ft. MHW. It is recommended that this position be retained. pos. 38, 39 "d" (blue) (Probably same as on H-5511) 1982-Retained

Two old boilers covered 0.6 ft. MHW were found 400 meters southwest of this wreck which was not shown on the prior survey. pos. 41 "d" (blue) MHW (approx) 1982-Added (wash at MHW)

K. COMPARISON WITH CHART

A comparison was made with C&GS chart no. 886, 3rd edition dated September 17, 1962, scale 1:40,000 and C&GS chart no. 152-sc 1st edition dated December 12, 1964, scale 1:80,000. Reviewer made comparison with Chart No. 518, scale 1:25,000

K. COMPARISON WITH CHART (cont)

Good agreement was found with the charted features except as noted in Section J of this report and the following:

In the vicinity of the north jetty light latitude 29°-20'-30"N longitude 94°-40'-30"W, this survey indicates soundings 2-6 ft. deeper than those shown on charts no. 886 & 152-SC. It is recommended that the most representative soundings be charted. Soundings correctly charted on chart No. 518, Second Ed. Nov. 29, 1965

L. ADEQUACY OF SURVEY

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

M. AIDS TO NAVIGATION

There are three floating aids to navigation maintained by the U.S. Coast Guard within the limits of the survey. These aids adequately serve the purpose for which they were established. Galveston Bay Channel relocated, and buoys added and renumbered since this survey.

N. STATISTICS

	<u>Positions</u>	<u>Nautical Miles</u>
Skiff	81	11.4
Launch CS 183	404	87.7
Launch CS 1177	<u>1166</u>	<u>290.6</u>
	1651	389.7

The total area surveyed was 26.4 square nautical miles. 32 bottom samples were taken.

RESPECTFULLY SUBMITTED,

Ronald W. Elonen

Ronald W. Elonen, Lt. (jg), USC&GS

APPENDIX A

List of Signals

Hydrographic Survey H-8751 (ECFP-20-2-62)

- AIM T-10785
- ANN Galveston Bay Entrance Channel Range, front light, 1963
- ARE T-10786
- ARK T-10785
- EEL T-10789 *Galveston Entrance South Side Dredging Range Rear Beacon*
- GAB T-10785
- GAL Galveston Municipal Water Tank, 1960
- LIG South Jetty Light, 1933
- LON T-10785
- NAT T-10785
- NOR T-10789 *Galveston North Jetty Light*
- NOT T-10785
- OUT { Galveston Bay Entrance Channel Range, rear light, 1963  
*Bolivar Roads Outer Range, Rear Light*
- PAT T-10789 *Galveston Ent. South Side Dredging Range Front Beacon*
- PEA T-10785
- POD P ( USE ), 1933
- RAN Bolivar Roads Outer Range, front light, 1963
- RED Hydro - Vol.#1, page 54-55
- TOW T-10789 *Galveston Entrance North Side Dredging Range Front Beacon*
- USE Bolivar Point Lighthouse, 1900.
- WER T-10789 *Galveston Ent. North Side Dredging Range Rear Bn.*



FATHOMETER CORRECTIONS  
HYDROGRAPHIC SURVEY H-8751 (ECFP-20-2-62)

Vessel: Skiff 758  
Day Letters: b ( a day-sounding pole )  
Fath. No. 808J#5734

0.0 to 12.0      0.0

Vessel: Launch CS 1177  
Day Letters: a,b,c,d,e,f  
Fath. No. EDO 255C #16

0.0 to 6.9      -0.4  
7.0 to 14.9      -0.2  
15.0 to 19.9      0.0  
20.0 to 23.9      +0.2  
24.0 to 26.9      +0.4  
27.0 to 29.9      +0.6  
30.0 to 33.9      +0.8  
34.0 to 38.0      +1.0  
38.1 to deeper      +1.2

Vessel: Launch CS 1177  
Day Letters: m,n  
Fath. No. DE-723 #549  
(cont)

27.8 to 31.4      +1.2  
31.5 to 36.2      +1.4  
36.3 to 42.0      +1.6  
42.1 to deeper      +1.8

Vessel: Launch CS 1177  
Day Letters: p,q,r,s  
Fath. No. DE-723 #549

3.0 to 6.2      -1.0  
6.3 to 8.2      -0.8  
8.3 to 10.5      -0.6  
10.6 to 12.9      -0.4  
13.0 to 15.6      -0.2  
15.7 to 18.3      0.0  
18.4 to 21.3      +0.2  
21.4 to 24.4      +0.4  
24.5 to 28.0      +0.6  
28.1 to 31.3      +0.8  
31.4 to 34.2      +1.0  
34.3 to 36.6      +1.2  
36.7 to 39.0      +1.4  
39.1 to 41.3      +1.6  
41.4 to deeper      +1.8

Vessel: Launch CS 1177  
Day Letters: g,h,j,k  
Fath. No. DE-723 #543

0.0 to 8.0      -0.2  
8.1 to 22.0      0.0  
22.1 to deeper      +0.2

Vessel: Launch CS 1177  
Day Letter: l  
Fath. No. DE-723 #543

0.0 to 18.0      -0.4  
18.1 to 34.4      -0.2  
34.5 to 39.0      -0.4  
39.1 to deeper      -0.6

Vessel: Launch CS 1177  
Day Letters: m,n  
Fath. No. DE-723 #549

3.0 to 6.0      -0.2  
6.1 to 8.4      0.0  
8.5 to 10.3      +0.2  
10.4 to 12.5      +0.4  
12.6 to 16.0      +0.6  
16.1 to 22.5      +0.8  
22.6 to 27.7      +1.0

Vessel: Launch CS 183  
Day Letter: a  
Fath. No. DE-723 #549

deeper than 29.0      +1.0

FATHOMETER CORRECTIONS (cont)  
HYDROGRAPHIC SURVEY H-8751 (ECFP-20-2-62)

Vessel: Launch CS 183  
Day Letters: b,c,d,e,f,g  
Fath. No. DE-723 #265

0.0 to 6.0	-0.6
6.1 to 11.3	-0.4
11.4 to 16.4	-0.2
16.5 to 23.8	0.0
23.9 to 28.7	+0.2
28.8 to 33.4	+0.4
33.5 to 40.8	+0.6
40.9 to 52.5	+0.8
52.6 to deeper	+1.0

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APPENDIX C

TIDAL NOTE

Hydrographic survey H-8751 (ECFP 20-2-62) tide control for the survey was furnished by the following tide gages:

Gage Location:	Pleasure Pier, Galveston, Texas
	Latitude 29°-17.1'
	Longitude 94°-47.3'
Gage Type:	Standard Gage 1962-1963 Punch tape recorder gage-1965
Staff:	Vitrified scale-MLW corresponds to 2.6' on the staff. Tape gage staff scale corresponds to 21.8'.
Corrections:	No time or height corrections were applied.
Time Meridian:	90th

For certain days in March and April 1965 the pleasure pier gage was inoperative. For these days hourly heights for the Freeport, Texas gage were used. This data was furnished by the Washington office.

A correction of +0.3' and minus 22 minutes was applied to the ~~Freeport values.~~ *high water heights for the Freeport values.*

✓

APPENDIX D

Approval Sheet to Accompany  
Hydrographic Sheet H-8751 (ECFP 20-2-62)

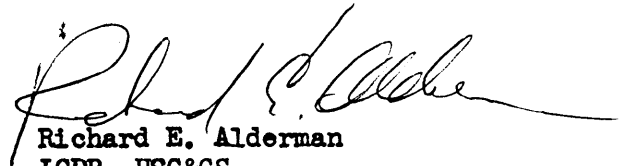
Approximately 50% of the field and office work was accomplished under the supervision of LCDR. Steve L.Hollis, Jr. and LCDR. P.A. Stark in 1962-63.

The remaining work was accomplished under my supervision in 1965. Records and processing during this time were directly supervised.

The descriptive report was written and the 1965 Hydrography performed by Lt. (jg), Ronald W. Elonen.

The report and records for this survey are complete and adequate to the best of my knowledge.

Approved and forwarded



Richard E. Alderman  
LCDR., USC&GS  
Officer-in-charge



ADDENDUM TO REPORT

The crosslines were in good agreement except for the following. Positions 27-29 "a" day, Launch CS-1177 and positions 57-61 "a" day were not plotted because they were 2 ft. deeper than the other lines. The fathometer appeared to be operating erratically on "a" day.

PSI#24 was stated in the descriptive report as located in 1964 by the USC&GS ships Hilgard and Wainwright. It is to be located in 1965 by the Hilgard and Wainwright. No. 42, FE-1-65 WD

The Pleasure Pier tide gage was inoperative for certain periods during March and April 1965. The tides used were furnished by the Washington Office, using Freeport, Texas tides. For April 20, 1965, "r" day, Launch CS-1177, the Freeport tides appeared to be somewhat erratic.

The 30 foot depth curve has moved approximately one mile North when compared to chart no. 886. This curve could be affected by the Freeport Tides used for April 20, 1965. Unstable bottom. Note comparison with previous surveys in area. Introducing corrections to move 30-ft. curve Southward would be incorrect and would not change survey significantly.

Ronald W. Elonen  
RONALD W. ELONEN  
Lt. (jg), USC&GS



TIDE NOTE FOR HYDROGRAPHIC SHEET

6/28/66

Nautical Chart Division: R. H. Carstens

Plane of reference approved in  
9 volumes of sounding records for

HYDROGRAPHIC SHEET 8751

Locality: Vicinity of Galveston Bay Entrance, Texas

Chief of Party: S. L. Hollis, P. A. Stark, W. V. Hull, R. E. Alderman  
1962-63, 65

Plane of reference is mean low water

Tide Station Used (Form C&GS-681):

Pleasure Pier, Galveston, Texas  
Freeport, Texas

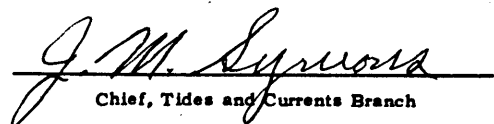
Height of Mean High Water above Plane of Reference is as follows:

2.1 feet Pleasure Pier  
1.8 feet Freeport

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

Vol.      Pos.

7      1b to 66b  
    ↙ (skiff)

  
Chief, Tides and Currents Branch

GEOGRAPHIC NAMES

Survey No. H-8751

Name on Survey	Source										No.	
	A	B	C	D	E	F	G	H	K			
Bolivar Peninsula												1
Galveston Bay Entrance (in title)												2
Gulf of Mexico												3
Outer Bar Channel												4
Texas												5
												6
												7
												8
												9
												10
												11
												12
												13
												14
												15
												16
												17
												18
												19
												20
												21
												22
												23
												24
												25
												26
												27

Names approved,  
8-9-65  
A. J. Wright

(7)

**HYDROGRAPHIC SURVEY STATISTICS**  
**HYDROGRAPHIC SURVEY NO. 8751**

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

RECORD DESCRIPTION		AMOUNT	RECORD DESCRIPTION		AMOUNT	
SMOOTH SHEET		1	BOAT SHEETS		1	
DESCRIPTIVE REPORT		1	OVERLAYS			
DESCRIPTION	DEPTH RECORDS	HORIZ. CONT. RECORDS	PRINTOUTS	TAPE ROLLS	PUNCHED CARDS	ABSTRACTS/ SOURCE DOCUMENTS
ENVELOPES						
CAHIERS	1					
VOLUMES	9					
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				1651
POSITIONS CHECKED		165	15	
POSITIONS REVISED		0	0	
DEPTH SOUNDINGS REVISED		10	7	
DEPTH SOUNDINGS ERRONEOUSLY SPACED		0	0	
SIGNALS ERRONEOUSLY PLOTTED OR TRANSFERRED		0	0	
	TIME (MANHOURS)			
TOPOGRAPHIC DETAILS		1	9	
JUNCTIONS		2	1	
VERIFICATION OF SOUNDINGS FROM GRAPHIC RECORDS		2	2	
SPECIAL ADJUSTMENTS		0		
ALL OTHER WORK		135		
<b>TOTALS</b>		140	93 hrs.	
PRE-VERIFICATION BY	BEGINNING DATE		ENDING DATE	
VERIFICATION BY	BEGINNING DATE		ENDING DATE	
REVIEW BY	BEGINNING DATE		ENDING DATE	

Insp. by *D.E. Wetbank* 48 hrs. 9/1/72 *Carstens* USCOMM-DC 6641-P64 7

OFFICE OF MARINE SURVEYS AND MAPS

MARINE CHART DIVISION

HYDROGRAPHIC SURVEY REVIEW

REGISTRY NO. H-8751

FIELD NO. ECFP-20-2-62

Texas -- Texas Outer Coast -- Vicinity of Galveston Bay  
Entrance

SURVEYED: September 10, 1962, through May 3, 1963  
March 8, 1965, through April 21, 1965

SCALE: 1:20,000

PROJECT NO.: OPR-428

SOUNDINGS: Raytheon and Edo  
Depth Recorders  
Sounding Pole

CONTROL: Sextant Fixes  
on Shore Signals

Chief of Party.....	S. L. Hollis
.....	P. A. Stark
.....	R. E. Alderman
Surveyed by.....	R. A. Lewis
.....	R. W. Elonen
Protracted by.....	R. W. Elonen
Soundings Plotted by.....	R. W. Elonen
Verified and Inked by.....	Doris M. Taylor
Reviewed by.....	S. Rose
.....	Date: October 31, 1966
Inspected by.....	D. E. Westbrook

1. Description of the Area

This survey covers a portion of the Gulf of Mexico north of the north jetty at the entrance to Galveston Bay. The shoreline and bottom are subject to frequent changes due to hurricanes, and, in recent years, due to shipping channel relocation and changing positions of spoil areas and dumping grounds. The bottom slopes gently and evenly, and is composed primarily of mud and sand.

2. Control and Shoreline

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

Most of the shoreline originates with the final compilations of Photogrammetric Manuscripts T-10,784 (1957-60), T-10,785 (1957-62), T-10,786 (1957-62), and T-10,788 (1957-60). Severe changes in the shoreline in the immediate vicinity of both the north and south jetties of Galveston Bay Entrance were caused by Hurricane "Carla" in September 1961. The shoreline in these areas is from T-12,231 (1962-64) and T-12,236 (1962-66), both Advance Photogrammetric Manuscripts.

The shoreline on the northwest side of Bolivar Peninsula from T-10,785 should be used for orientation purposes only as it is somewhat generalized.

3. Hydrography

- A. Depths at sounding line crossings are in good agreement.
- B. The usual depth curves were adequately delineated. The 36-ft. depth curve has been added to the survey to delineate the Galveston ship channel.
- C. The development of the bottom configuration and investigation of least depths are considered adequate.

4. Condition of the Survey

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 with H-8748 (1962) on the southwest and H-8752 (1962) on the south. [No contemporary surveys exist on the northeast and east with which to effect a junction; however, the present survey is in harmony with the charted hydrography in these areas.]

*Disregard*

*Partial butt junction made with H-9774(1978) on the northeast and north.*

6. Comparison with Prior Surveys

A.	H-247	(1850)	1:20,000
	H-265	(1851-52)	1:20,000
	H-471	(1855)	1:20,000
	H-906a,b	(1867)	1:10,000 and 1:20,000
	H-1597a,b	(1884)	1:80,000 and 1:20,000

*GKM  
8/5/80*

All of these early surveys have been superseded within the common area by the 1933-37 surveys discussed below, and therefore need not be considered in this review.

B.	H-5394	(1933-34)	1:20,000
	H-5424	(1933-34)	1:10,000
	H-5511	(1934)	1:20,000
	<u>H-6252</u>	<u>(1937)</u>	<u>1:40,000</u>

Taken together, these surveys comprise the most recent prior survey coverage of the present survey area. A comparison with the present survey indicates that shoaling of from 1-3 ft. has occurred over much of the area since the time of these prior surveys. This was caused by deposition of sediments. In addition, the main ship channel between the jetties has been dredged since the prior surveys.

The shoreline immediately to the northeast of the north jetty has built seaward substantially since the 1930's. In latitude 29°25.00', longitude 94°41.55' the shoreline has accreted about 50 meters seaward. To the northeast of this point, however, the difference decreases as the effect of the jetties becomes less.

Two wrecks were brought forward from H-5511 (1933) to supplement the present survey. Although shown as visible wrecks on that survey, they were not located on the present survey and so are now believed to be submerged. They are shown on the present survey as sunken wrecks.

With the addition of the wrecks noted above, the present survey is adequate to supersede these prior surveys within the common area.

C. Wire Drag Surveys

- F.E. No. 1, 1965 W.D.
- F.E. No. 1, 1966 W.D.

Four soundings on wrecks and one sounding on a shoal have been brought forward from these wire-drag examinations to supplement the present survey.

7. Comparison with Chart 518, 2d Ed., November 29, 1965

A. Hydrography

The charted hydrography in the area covered by the present survey originates principally with the boat sheet of the

present survey, supplemented by critical corrections from the smooth sheet before verification and review. A few soundings and other features are from U.S. Corps of Engineers surveys and other sources.

Attention is directed to the following:

(1) The visible wreck charted in latitude 29°23'05", longitude 94°43'04" is shown on the present survey as a wreck submerged 3-ft. at MLW from H-8748 (1962). The wreck should be charted as shown on the present survey.

APP 518  
OK

(2) The sunken wreck charted in latitude 29°20'43", longitude 94°40'38.5" originates with the U.S.G.S. quadrangle map "The Jetties" of 1953-54. A statement in the Descriptive Report for F.E. No. 1, 1965, asserts that the U.S. Corps of Engineers will cover this wreck as the jetty is extended. However, the wreck should be retained as charted until the jetty extension is complete.

OK

(3) The wreck cleared by 9-ft. charted in latitude 29°20'26", longitude 94°40'46.5" originates with preliminary information from F.E. No. 1, 1965 W.D. The reviewed field examination shows several pieces of wreckage in the area. The chart should be revised to reflect the final wire-drag survey findings.

APP 518  
OK

(4) The sunken wreck PA in latitude 29°19'36", longitude 94°37'53" and the sunken wreck PD in latitude 29°19'30", longitude 94°37'35" were both disproved by F.E. No. 1, 1966 W.D. and should be deleted from the chart.

OK

(5) A 35-ft. sounding brought forward to the present survey from F.E. No. 1, 1966 W.D. in latitude 29°20.19', longitude 94°36.86' should be charted.

APP 518  
OK

Except as noted above, the present survey is adequate to supersede the charted hydrography within the common area.

B. Controlling Depths

The controlling depths in the Galveston Bay Entrance Channel are charted from Corps of Engineers surveys subsequent to the date of the present survey and thus supersede the present survey information in that area.



C. Aids to Navigation

The present survey shows three floating aids to navigation. These aids formerly marked the Galveston Bay Entrance Channel, and adequately served the purpose intended. Subsequent to the date of the present survey, however, the buoys in this portion of the Galveston Bay Entrance Channel were moved and renumbered.


8. Compliance with Instructions

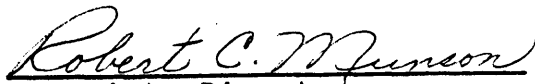
The survey adequately complies with the project instructions.

9. Additional Field Work

This is an excellent basic survey and no additional field work is recommended.

Examined and Approved:

  
Chief  
Marine Chart Division

  
Associate Director  
Office of Marine Surveys  
and Maps

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H-8791

Items for Future Pre-Survey Reviews

The deposition of sediments, the dumping of spoil, and the dredging of the Galveston Bay Entrance Channel combine to make this area one of the more changeable along the coast. Hurricanes striking this coast can also have a pronounced effect on both the nearshore depths and the shoreline.

<u>LAT</u>	<u>LONG</u>	<u>CHANGE INDEX</u>	<u>USE INDEX</u>	<u>RESURVEY CYCLE</u>
292	0944	6	9	10 yrs.
292	0945	6	9	10 yrs.
291	0944	6	9	10 yrs.
291	0945	6	9	10 yrs.

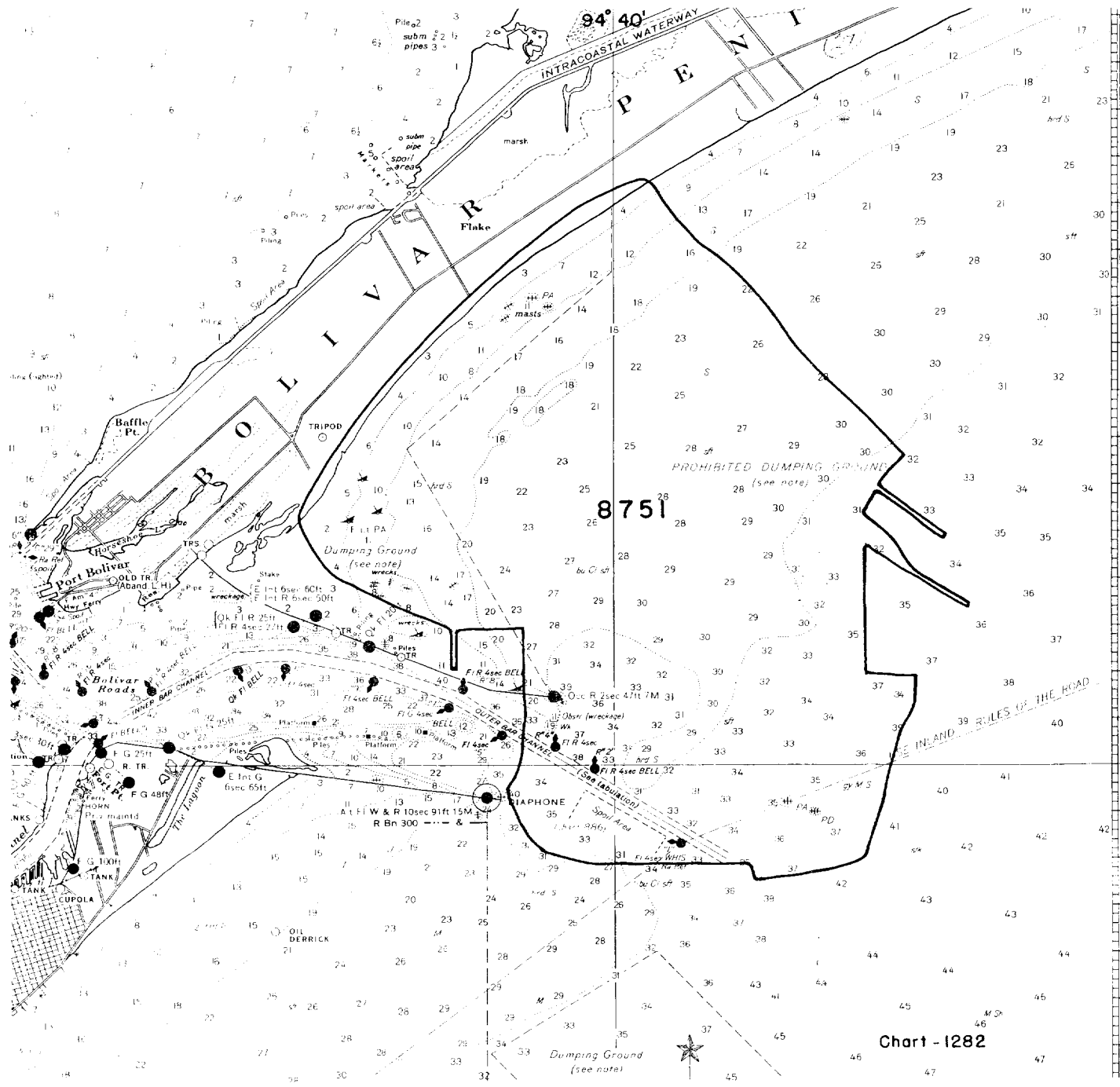


Chart - 1282

index of Roydick  
63320

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO.

H-8751

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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
518 11324	8-3-65	H. Radden	<del>Full</del> Part Before <del>After</del> Verification Review Inspection Signed Via Drawing No. 2 <i>Appld Critical Corrections only</i>
152-5C 11324	8-3-65	L. Van Zant	<del>Full</del> Part Before <del>After</del> Verification Review Inspection Signed Via Drawing No. <i>Appld thru 1282 + 518</i>
1116 11340	9/28/65	John P. Wein	<del>Full</del> Part Before <del>After</del> Verification Review Inspection Signed Via Drawing No. <i>Exam. no critical correction</i>
1282 11323	2/10/66	CR Helmer	<del>Full</del> Part Before <del>After</del> Verification Review Inspection Signed Via Drawing No. <i>Appld critical changes thru chart 518, DWG #2 Previously appld thru Spc of Boat Sheets</i>
886	5/18/66	CR Helmer	<del>Full</del> Part Before <del>After</del> Verification Review Inspection Signed Via Drawing No. <i>appld critical changes thru 518</i>
1117 11300	1/4/67	TAW/mR	<del>Full</del> Part Before <del>After</del> Verification Review <sup>before</sup> Inspection Signed Via Drawing No. <i>Examined critically before No comm - Hold further appln. until appld fully to larger scale chart.</i>
<del>752 1282</del>	<del>12/11/70</del>	<del>J. Schad</del>	<del>Full Part Before After Verification Review Inspection Signed Via Drawing No. <i>brought overlaps into agreement only</i></del>
1116 11340	8/31/71	J. Schad	<del>Full</del> Part Before <del>After</del> Verification Review <sup>before</sup> Inspection Signed Via Drawing No. <i>43. No corr - End until applied to larger scale chart</i>
<i>OP</i> 518 11324	10/3/72 8/73	D. Williams	<del>Full Part Before After</del> Verification Review Inspection Signed Via Drawing No. <i>(No corr) Appld critical corrections</i>
71330	1983		<del>Full</del> Part Before After Verification Review Inspection Signed Via Drawing No. <i>1 New Chrt</i>
11340	3/19/91	Don Black	FULL APPL'D DWG # 72 THRU 11330
11324	6/27/91	Don Black	FULL APPL'D DWG # 25 THRU 11324