

# 8750

Diag. Cht. No. 1282-2.

FORM C&GS-504

U.S. DEPARTMENT OF COMMERCE  
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION  
COAST AND GEODETIC SURVEY

## DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. 742-10-3-63 Office No. H-8750

### LOCALITY

State Texas

General locality Galveston Bay

Locality Jones Lake to Pelican I.

19 63-66

CHIEF OF PARTY

P. A. Stark & R. E. Alderman

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DATE 8-1-67

USCOMM-DC 37022-P66

# 8750

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

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

REGISTER No. H-8750

Field No. 742-10-3-63

State TEXAS

General locality GALVESTON BAY

Locality JONES LAKE TO PELICAN I.  
VICINITY OF CAUSEWAY

Scale 1:10,000 Date of survey 4/3/6<sup>3</sup> to 4/12/66

Instructions dated April 25, 1962 & June 4, 1964

Vessel HYDROGRAPHIC FIELD PARTY 742

Chief of party P.A. STARK & R.E. ALDERMAN

Surveyed by G.F. TREFETHEN

Soundings taken by ~~XXXXXXXX~~, graphic recorder, hand lead, ~~with~~ POLE

Fathograms scaled by PARTY PERSONNEL

Fathograms checked by PARTY PERSONNEL

Protracted by G.F. TREFETHEN

Soundings penciled by G.F. TREFETHEN

Soundings in ~~XXXXXX~~ feet at MLW ~~XXXXX~~

REMARKS:

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.....  
.....  
.....  
.....

*G.F. Trefethen*

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DESCRIPTIVE REPORT  
TO ACCOMPANY HYDROGRAPHIC SURVEY H-8750  
(Field No. East Coast Field Party 10-3-63)

Scale 1:10,000  
Project OPR 428

Chief of Party  
LCDR P. A. STARK  
LCDR RICHARD E. ALDERMAN

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 and amended instructions 211, S-2 HFP 242, dated 2 February 1965.

B. AREA SURVEYED

The area covered by this survey is ~~northeast~~ <sup>southwest</sup> of the Galveston causeway to the west end of Pelican Island. The eastern end of West Bay, Offatts Bayou and Jones Lake.

The boat sheet projections are from Lat.  $29^{\circ} 16.00'$  to Lat.  $29^{\circ} 20' 30''$  and from Long.  $94^{\circ} 49' 30''$  to Long.  $94^{\circ} 58' 30''$ .

This survey makes junction with C&GS contemporary survey H-8747 (1963-65) ECFP 10-2-63 on the north and contemporary survey H-8749, ECFP 05-1-63 on the east, and contemporary H-8873, HFP 20-2-65 on the southwest. (1965-66)

This survey is covered by prior survey H-5522, scale 1:20,000 dated 1933 and prior survey H-5462 scale 1:10,000 dated 1934.

Field work on this survey commenced on 3 April 1963 and was completed on 12 April 1966. Work on this project was interrupted from 20 May 1963 to 25 October 1964 because of a special project at Lake Mead, ~~Virginia~~ <sup>NEVADA</sup>.

C. SOUNDING VESSEL

Vessel used to obtain soundings for this survey were Launch C.S. 1177 identified by blue day letters, Skiff 758 identified by red day letters and Skiff 520 identified by violet day letters.

D. SOUNDING EQUIPMENT

A Raytheon Fathometer, model DE-723 Serial No. 544, 20KC was used to obtain soundings on Skiff 758 for "a" thru "l" days. A Raytheon Fathometer serial No. 263, 20KC was used for "m" thru "da" day.

A Raytheon Fathometer, Model DE-723 Serial No. 549, 200KC was used to obtain soundings on Skiff 520 for "a" day, "c" thru "e" day, "g" thru "k" day, "p" thru "r" day, "v" thru "ba" day, "da" thru "ka". A sounding pole was used all day on "b", "f", "l" thru "n" days, "s" thru "u" days and "ca" day.

#### D. SOUNDING EQUIPMENT (Cont.)

A leadline was used to obtain soundings on Launch C.S. 1177 on "a" and "b" days.

A sounding pole was used to obtain soundings in depths less than 3 feet on Skiff 758 and Skiff 520.

The transducer~~s~~ on Skiff 758 is mounted in the bilge.

The transducer on Skiff 520 is mounted in the hull.

Corrections to be applied to echo soundings were determined from daily bar checks and simultaneous comparisons.

An abstract of these corrections is tabulated in Appendix B of this report.

An armed lead was used to obtain bottom samples.

#### E. SMOOTH SHEET

The smooth sheet project<sup>ion</sup> was made in the Washington Office with a projection ruling machine. The smooth sheet will be accomplished by the Norfolk processing office.

#### F. CONTROL

Horizontal control was obtained by standard visual three-point sextant fix methods. Appendix A of this report contains a complete list of control~~y~~ used and the quality and source of control. The control and shoreline for this survey was furnished by Photo Party 756.

#### G. SHORELINE

Shoreline detail for the boat sheet was taken from blue line prints of manuscripts T-12232, T-12233, T-12234, T-12237, T-12238, T-12239. See Review Par. 2  
(1962-63) (1962-65) (1962-65) (1961-65) (1962-65) (1962-65)

There are numerous man made changes in the shoreline. It has been noted that in October or November of 1965 new photographs were flown of this area. The smooth plotter should delay inking the shoreline until he has the most advanced manuscripts, which should be available in mid 1966.

#### H. CROSSLINES

Crosslines were run at approximately 6% of the regular system of sounding lines. Crosslines were generally in good agreement except where the 1966 Hydro crosses over 1963 Hydro in the area where dredging has taken place and new spoil areas have been made after the 1963 Hydro was run.

I. JUNCTIONS

Depths at the junctions with the survey listed in section B of this report are in good agreement and depth curves can be adequately drawn at all junctions.

J. COMPARISON WITH PRIOR SURVEY

The following is a list of pre-survey review items that were investigated on this survey.

Old causeway footing charted at Lat. 29° 17.38' Long. 94° 52.68' <sup>Concur</sup> and lies parallel to the south side of the causeway bridge, to Lat. 29° 17.94' Long. 94° 53.90' were verified by D.Ps by the Hydrographer. It is recommended that the item remain as charted.

Sunken wreck, at Lat. 29° 18.12' Long. 94° 50.04' was chain dragged <sup>g</sup> for 30 min. on "1" day Skiff 758: Results were negative. It is recommended that the item be deleted from the chart. Wrecked barge at Lat. 29° 19.12' Long. 94° 49.52 was located on 1 "b" day Skiff 758. It is recommended that the item remain ~~as~~ charted <sup>(deleted from chart)</sup> but show one H.W. barge <sup>Rev. item 7A8</sup>

Old dike at Lat. 29° 18.80' Long 94° 49.80' <sup>5</sup> was <sup>indicated on 140 "b"</sup> located on ~~141 "b" day by Skiff 758~~ <sup>near 140 "b" day by Skiff 520</sup>. The submerged end of the dike was ~~not~~ found. It is recommended that the item remain as charted. There is no indication in Vol I that this dike was located on 140b and 141b day by skiff 758.

Piles along the Offatts Bayou channel. These piles were investigated at extreme low tide when the channel bank was exposed or covered by only 1 foot of water, by a man walking along the channel bank. The results were negative. It is recommended that the piles be deleted from the chart. <sup>See Review Per 6B</sup>

Pile at Lat. 29° 16.15' Long. 94° 55.62 this pile was located on 1 "ca" day Skiff 520 as a 12" iron pipe bareing <sup>4</sup> 5' M.L.W. It is recommended that the item remain as charted.

Remains of old steel bridge. This item was located on 63 "ka" and 64 "ka" as an iron obstr. bares <sup>22</sup> 1 1/2 feet M.L.W. at Lat. 29° 17.47' Long. 94° 56.45'. It is recommended that this item remain as charted.

The area has so completely changed that an adequate comparison can not be made. A more adequate comparison can be made with the chart.

K. COMPARISON WITH THE CHART

This survey was compared with C&GS chart No. 518, 1st edition dated May 17, 1965 scale 1:25,000 and with C&GS small craft chart 152-SC Galveston Bay to Freeport, Texas second edition Oct. 1965 scale 1:40,000 page D.

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K. COMPARISON WITH THE CHART (Cont.)

The chart shows a wreck at Lat.  $29^{\circ} 19.80'$  Long.  $94^{\circ} 49.57'$ . This wreck was located on 2 "b" day Skiff 758 on the 1963 Hydro. This area was visually inspected when Hydro in 1966 was run in the area and no evidence of the wreck was seen. <sup>at 1966 Hydro</sup> This wreck was charted inside the zero curve. It is recommended that the wreck be deleted from the chart. ✓ Concer

At Lat.  $29^{\circ} 19.25'$  Long.  $94^{\circ} 49.80'$  the chart shows this area to have 13 feet of water. The 1966 Hydro was found to be 2 to 3 feet shoaler. This area was resurveyed in 1966. All the 1963 Hydro in this area will be superseded by Hydro done in 1966. ✓

The chart shows a sign at Lat.  $29^{\circ} 18.73'$  Long.  $94^{\circ} 49.86'$ . No visual evidence of the sign was seen when working in the area. This feature was not investigated for the possibility of submerged piles. ✓ See Review  
Par 6C  
item 15

The chart shows a sign at Lat.  $29^{\circ} 18.73'$  Long.  $94^{\circ} 49.77'$ . No visual evidence of the sign was seen when working in the area. ✓ See Review  
Par 6C  
item 14

The chart shows a discontinued spoil area at Lat.  $29^{\circ} 18.50'$  Long.  $94^{\circ} 51.80'$  to Lat.  $29^{\circ} 18.55'$  Long.  $94^{\circ} 52.48'$ . This spoil area was reactivated in 1966. The Hydro that was run in this area in 1963 will be superseded by 1966 Hydro. ✓

The chart shows a pile at Lat.  $29^{\circ} 19.92'$  Long.  $94^{\circ} 50.70'$ . This area was visually investigated during the 1966 Hydro and no evidence of the pile was seen. This pile was located on 14 "a" day Skiff 758 in 1963. It was also Hydro-signal POL. The chart shows a pile at Lat.  $29^{\circ} 19.81'$  Long.  $94^{\circ} 50.85'$  located 13 "e" day Skiff 758 in 1963. The area was visually investigated in 1966 and no evidence of the pile was seen. *A platform is presently charted from a subsequent Corps of Engineers survey (Bp 72922) of 1967.*

The chart shows a pile at Lat.  $29^{\circ} 19.70'$  Long.  $94^{\circ} 51.00'$ . This pile was located on 14 "e" day Skiff 758 in 1963. The area was visually investigated in 1966 and no evidence of the pile was seen. *A pile in the above location is presently charted from a subsequent Corps of Engineers survey (Bp 72922) of 1967.* ✓

The chart shows piles at Lat.  $29^{\circ} 19.60'$  Long.  $94^{\circ} 51.15'$  and at Lat.  $29^{\circ} 19.50'$  Long.  $94^{\circ} 51.30'$  and at Lat.  $29^{\circ} 19.40'$  Long.  $94^{\circ} 51.44'$  and at Lat.  $29^{\circ} 19.30'$  Long.  $94^{\circ} 51.58'$  and at Lat.  $29^{\circ} 19.20'$  Long.  $94^{\circ} 51.87'$ . These piles were visually investigated for in 1963 and in 1966 no evidence of the piles were seen. *The piles listed above are presently charted from a subsequent Corps of Engineers survey (Bp 72922) of 1967.* ✓

The chart shows a pile at Lat.  $29^{\circ} 18.99'$  Long.  $94^{\circ} 52.03'$ . This pile was located on 27 "e" day Skiff 758 in 1963. This area was visually investigated in 1966 and no evidence of the pile was seen. *The pile indicated above is presently charted from a subsequent Corps of Engineers Survey (Bp 72922) of 1967.* ✓

The chart shows Daybeacon No. "4" (Pelican Island west channel) at Lat.  $29^{\circ} 20.07'$  Long.  $94^{\circ} 50.70'$ . This is not daybeacon No. "4". Daybeacon No. "4" is located at Lat.  $29^{\circ} 20.03'$  Long.  $94^{\circ} 50.56'$ . The chart shows a pile at this position. Daybeacon No. "4" is also signal OLE. ✓

*Corrected on later charts*

K. COMPARISON WITH THE CHART (Cont.)

The chart shows bare areas at Lat. 29° 17.92' Long. 94° 52.90' and at Lat. 29° 17.97 Long. 94° 52.80', and at Lat. 29° 17.95' Long 94° 52.67' and at Lat. 29° 18.14' Long. 94° 52.93'. The new survey shows 2 to 3 feet of water in these areas. *from earlier sources charts revised*

The chart shows a submerged wreck at Lat. 29° 18.12' Long 94° 50.04'. This wreck was chain dragged for on "1" day Skiff 758 from 35 "1" to 53 "1" with negative results. It is recommended the feature be deleted from the chart. *Disproved 44-45 & red day letter deleted on later charts*

A new channel and turning basin has been dredged at Lat. 29° 18.43' Long. 94° 51.58 running southeast to Lat. 29° 17.85' Long. 94° 51.20'. This new channel is for the Kelso Concrete Co. there are shoreline changes in this area also. *This channel and turning basin was charted from L-1351 (1969) NODD.*

The chart shows a wreck at Lat. 29° 16.82' Long. 94° 52.04' no visual evidence of the wreck was seen and a sounding line over that area shows 13 feet of water. See Review

The chart shows the old intracoastal waterway at Lat. 29° 17.87' Long. 94° 55.88' to have 11 and 12 feet of water. The new survey shows only 5' and 6' feet of water *about a mile to the eastward*

L. ADEQUACY OF SURVEY

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

M. AID TO NAVIGATION

The U. S. Coast Guard maintains 35 fixed aids and 107 floating aids to navigation within the limits of this survey.

A comparison with the light list and chart indicates these aids adequately serve the purpose for which they were established.

The only unofficial aid to navigation is one daymarker and 3 buoys marking the private channel at Lat. 29° 18.30' Long. 94° 51.47' leading in to the Kelso Concrete Co. and 3 Daymarkers leading in to a small Marina at Lat. 29° 17.46 Long. 94° 52.78' and 9 Daymarkers leading in Jones Lake from the intracoastal waterway at Lat. 29° 17.30' Long. 94° 56.35'.

N. STATISTICS

Vessel	Number of Position	Nautical Miles SDG
Skiff 758	2880	240.6
Skiff 520	2210	203.6
Launch C.S. 1177	27	0.0
Total	5117	444.2

STATISTICS (Cont.)

Total area surveyed 32.4 sq. nautical miles.

Total number of bottom samples 159.

Tide gages at pier 21, Bolivar Point, and Offatts Bayou **Furnished**

Tide control for this survey. See appendix C Tidal Note for additional information on these stations.

MISCELLANEOUS

This survey was interrupted in 1963 for a special project at Lake Mead, Nevada. Afer the Lake Mead project was completed, this survey was then completed in 1966. The 1963 Hydro was all northeast of the causeway. After returning to this survey, it was found that numerous areas had been formed. A complete tie up between the 1963 and 1966 work was made. All the floating aids to navigation that were located in 1963 were relocated in 1966.

The following is a recommended list of positions from the 1963 Hydro that has been superseded by Hydro done in 1966.

The smooth plotter should follow this list when smooth plotting this survey. The smooth plotter may add to this list if he finds any area that will not tie in with the 1966 Hydro. The 1966 Hydro will hold preference over the 1963 Hydro.

<u>Day Letter</u>	<u>Vol. No.</u>	<u>Skiff</u>	<u>Position To Be Deleted</u>
a	1	578	10, 15, 25, 26, 27
b	1	758	2, 54 thru 57, 93 thru 99, 141 thru 145
c	1&2	758	1, 23 thru 26, 32 thru 41, 57 thru 64, 68 thru 75
d	2&3	758	42 thru 46, 130
e	3	758	6, 13, 14, 27
f	3&4	758	1-11, 52, 63-69, 78, 79, 90-98, 102-104
g	4	758	11-14, 33-35, 47, 52, 67-75, 113-122
h	4&5	758	1-6, 9-22, 96-111, 128-145, 149-151
k	5&6	758	156 thru 169
l	6	758	1-21, 28-37, 44-46, 48-53

See final tabulation in addendum

Respectfully submitted,

*Guy F. Trefethen*  
Guy F. Trefethen  
Cartographic Technician

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Appendix A ✓  
List of Signals

Hydrographic Survey H-8750 (ECFP 10-3-63)

Triangulation

EGG Galveston - Freeport Range F. Front Light, 1963  
FIT Galveston - Freeport Range E. Front Light, 1963  
HUG Galveston - Freeport Range B Front Light, 1963  
IRK Galveston - Freeport Range C. Rear Light, 1963  
LIT Galveston - Freeport Cutoff Channel Light 11, 1963  
MOO Galveston, Moody's Press, Water Tank, 1933  
NUX Galveston - Freeport Range B Rear Light 1963.  
OFF Offatts, 1933-1960  
ONE Jones, 1933-1960  
RAN FRANCE, 1933-1947  
SKI Galveston - Freeport Range D Rear Light 1963  
SUB Galveston - Freeport Range E Rear Light 1963  
VES Galveston, Cotton concentration Co, Water Tank, 1933-1947  
WAS Galveston - Freeport Range F Rear Light 1963

Photo-Hydro Signals on copies of field sheets subsequently destroyed

ABE	T-12238	JUT	T-12238
ADD	T-12239	KIM	T-12234
AGO	T-12234	LET	T-12239
AHA	T-12239	LOW	T-12239
AMP	T-12238	MAL	T-12238
ANT	T-12233	NAT	T-12239
ASK	T-12237	NIC	T-12234
AZO	T-12239	NIL	T-12239
BAG	T-12238	NIX	T-12239
BAN	T-12233	NOW	T-12237
BAT	T-12233	ODD	T-12239
BOA	T-12238	OLE	T-12234
BOX	T-12238	PAR	T-12238
CAB	T-12238	POD	T-12233
COP	T-12239	QUO	T-12239
COD	T-12239	RAD	T-12239
DAW	T-12238	RAT	T-12239
DAY	T-12238	RIM	T-12237
DOL	T-12239	RAM	T-12239
DON	T-12239	SEA	T-12239
DOT	T-12239	SIR	T-12238
END	T-12234	SOW	T-12239
EVA	T-12237	TAN	T-12239
FEW	T-12239	TER	T-12238
FLY	T-12237	TRI	T-12233
FOX	T-12238	VET	T-12239
FUN	T-12238	YES	T-12234
HAG	T-12238	WIN	T-12237
ITS	T-12239	ZAG	T-12239
JAP	T-12239		
JOY	T-12232		

Appendix A (Cont.)

Hydrographic signal

JOE Vol 24, page 43  
POL Vol 1, page 8

Appendix B  
 Corrections to Echo Soundings ✓  
 Hydrographic Survey H-8750

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SKIFF 758

<u>Day Letters</u>	<u>Echo Recorder No.</u>	<u>Depth (Ft.)</u>	<u>Corr. (Ft.)</u>
"a" thru "b"	544	3.0 to 4.0	0.0
		4.1 to 8.0	+0.2
		8.1 to 18.0	+0.4
		18.1 to 21.0	+0.6
		21.1 to 24.0	+0.8
		24.1 to 27.0	+1.0
		27.1 to Deeper	+1.2
"c" thru "l"	544	3.0 to 4.0	0.0
		4.1 to 5.0	+0.2
		5.1 to 12.0	+0.4
		12.1 to 18.0	+0.6
		18.1 to 22.0	+0.8
		22.0 to 26.0	+1.0
		26.1 to Deeper	+1.2
"m" thru "da"	263	3.0 to 4.0	0.0
		4.1 to 6.8	+0.2
		6.9 to 18.0	+0.4
		18.1 to 22.0	+0.6
		22.1 to 30.0	+0.8
		30.1 to Deeper	+1.0
"a"	549	<u>SKIFF 5X20</u>	
		3.0 to 4.1	-0.6
		4.2 to 13.8	-0.4
		13.9 to 21.8	-0.2
		21.9 to 25.2	0.0
		25.3 to Deeper	+0.2
"b"		Sounding pole all day	
"f"		Sounding pole all day	
"l" thru "n"		Sounding pole all day	
"s" thru "u"		Sounding pole all day	
"ca"		Sounding pole all day	
"c" thru "k" "p" thru "r" "v" thru "ba" "da" thru "ea"	549	3.0 to 5.1	-0.2
		5.2 to 11.1	0.0
		11.2 to 16.9	+0.2
		17.0 to 20.1	+0.4
		20.2 to 23.4	+0.6
		23.5 to 27.8	+0.8
		27.9 to 30.4	+1.0
		30.5 to 33.0	+1.2
		33.1 to 38.0	+1.4
		38.1 to 40.0	+1.6

## Appendix B (Cont.)

SKIFF 520 ✓

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<u>Day Letters</u>	<u>Echo Recorder No.</u>	<u>Depth (Ft.)</u>	<u>Corr. (Ft.)</u>
"fa" thru "ka"	549	3.0 to 4.8	-0.2
		4.9 to 8.8	0.0
		8.9 to 11.0	+0.2
		11.1 to 13.4	+0.4
		13.5 to 16.2	+0.6
		16.3 to 19.2	+0.8
		19.3 to Deeper	+1.0

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Appendix C ✓  
Tidal Notes  
Hydrographic Survey H-8750

Tide control for the 1963 survey was furnished by a Tide Gage at Bolivar Point and the Standard Gage at pier 21 Galveston, Texas.

Gage Location: Bolivar Point, Galveston Bay, Texas *Not on survey sheet*  
Lat.  $29^{\circ} 21.75'$  Long.  $94^{\circ} 46.53'$

Gage Type: Portable Automatic

Staff: Vitrified scale MLW corresponds to 2.2 feet on the staff

Corrections: +1 hr. in time and 0.9 height ratio

Time Meridian: 90th

Gage Location: Pier 21, Galveston, Texas *Not on survey sheet*  
Lat.  $29^{\circ} 18.70'$  Long.  $94^{\circ} 47.36'$

Gage Type: Standard

Staff: Fixed

Corrections: +1 hr. in time and 0.9 height ratio

Time Meridian: 90th

Tide control for the 1966 Survey was furnished by two gages. One at pier 21 and the other at Offatts Bayou. Pier 21 controlled all Hydro N.E. of the Galveston causeway and Offatts Bayou controlled all Hydro S.W. of the Galveston causeway.

Gage Location: Pier 21, Galveston, Texas *Not on survey sheet*  
Lat.  $29^{\circ} 18.70'$  Long.  $94^{\circ} 47.36'$

Gage Type: Standard

Staff: Fixed

Correction: +30 min. in time

Time Meridian: 90th

Appendix C (Cont.)

Gage Location: Offatts Bayou Galveston, Texas  
Lat.  $29^{\circ} 16.93$ ; Long  $94^{\circ} 51.66$ '

Gage Type: Portable automatic

Staff: Vitrified scale MLW corresponds to 33 on the staff

Correction: Offatts Bayou direct

Time Meridian: 90th

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The Corps of Engineers maintained one Tide Gage within the limits of this survey, although not used by the C&GS the gage is located at Lat.  $29^{\circ} 17.82$ ' Long.  $94^{\circ} 53.10$ ' on the Galveston causeway.

Data from this gage may be obtained from the U. S. Corps of Engineers Galveston, Texas. It should be noted that a datum difference of 0.86 ft. exists between the Corps of Engineers datum and the C&GS datum.

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NORFOLK PROCESSING BRANCH  
ADDENDUM  
To Accompany

HYDROGRAPHIC SURVEY H-8750 (742 10-3-63)

GENERAL ✓

Hydrography was started on this survey in 1963 and was not resumed until the 1966 field season. During the interim period, natural and man-made changes occurred which caused numerous conflicts between soundings observed in the two field seasons. Most of this disagreement was found in the vicinity of channels, spoils banks, and particularly in the dredged area near Lat. 29-19' and Long. 94-50'. Soundings recorded during the 1966 season were plotted first and 1963 work was plotted when it was in agreement.

The following is a list of 1963 positions which were rejected:

10 thru 13, 15, 25 thru 37, a day, Skiff 758  
2, 54 thru 57, 93 thru 99, 141 thru 145, b day, Skiff 758  
1, 23 thru 26, 32 thru 41, 57 thru 64, 68 thru 75, 83 thru 84 and 94 thru 104, c day, Skiff 758  
1 thru 23, 42 thru 46, 130, d day, Skiff 758  
4 thru 23, 25 thru 27, 30 thru 44, e day, Skiff 758  
1 thru 11, 52, 63 thru 69, 78, 79, 90 thru 98, 102 thru 104 and 131 thru 133, f day, Skiff 758  
11 thru 14, 33 thru 35, 47 thru 52, 67 thru 75, 113 thru 132, g day  
1 thru 6, 9 thru 22, 33 thru 37, 96 thru 111, 124, 128 thru 145, and 149 thru 151, h day, Skiff 758  
156 thru 169, 102, k day, Skiff 758  
1 thru 21, 28 thru 37, 44 thru 46, 48 thru 53, l day, Skiff 758

SHORELINE ✓


The bridge located on position 25v (red), at Lat. 29-16.15' and Long. 94-50.80', was not smooth plotted as its azimuth was not furnished.

OVERLAYS ✓

Positions 47 thru 70g (purple) are being submitted on a smooth overlay to avoid congestion on the smooth sheet.

Norfolk, Va.,  
July 20, 1967

Respectfully submitted,

  
Hugh L. Proffitt  
Chief, Hydrographic Branch



TIDE NOTE FOR HYDROGRAPHIC SHEET

November 22, 1966

~~Atlantic Marine Center~~ Atlantic Marine Center

Plane of reference approved in  
26 volumes of sounding records for

HYDROGRAPHIC SHEET 8750

Locality: Galveston Bay, Texas

Chief of Party: P. A. Stark, 1963  
R. E. Alderman, 1966

Plane of reference is mean low water

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

Bolivar Point  
Offatts Bayou  
Galveston, Pier 21

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

Bolivar Point	1.4 feet
Offatts Bayou	1.1 "
Galveston, Pier 21	1.4 "

Remarks Tide reducers for the following positions have been revised in red and verified.

<u>Vol.</u>	<u>Position</u>
19	1-1 to 1-18
22	y-1 to y-57

*J. M. Simmons*  
Chief, Tides and Currents Branch

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO *H-8750*

Records accompanying survey: Smooth sheets *1*...;  
*1(2 parts)* boat sheets *3*...; sounding vols. *26*...; wire drag vols. ...;  
~~1-boat sheet~~ *Overlay* Descriptive Reports *1*...; graphic recorder envelopes *2*... *2 cahiers*  
 special reports, etc. *Velocity corrections filed in cahier*.....  
 .....

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

Number of positions on sheet	.511.7
Number of positions checked	.607.
Number of positions revised	.47.
Number of positions revised (refers to depth only)	.9.
Number of soundings/erroneously spaced	.62
Number of signals erroneously plotted or transferred	.0.
Topographic details	Time .16 hrs
Junctions	Time .3 hrs
Verification of soundings from graphic record	Time .50...
Special adjustments	Time .24..

Verification by *W.L. Spence*..... Total time *4.37*. Date *26 May 1967*

Reviewed by *Fannie B. Powers*..... Time *11.5 hrs* Date *July 1, 1974*

*Insp. Carstens*..... Time *74 hrs* Date *6/17/74*  
*Shaw*

OFFICE OF MARINE SURVEYS AND MAPS  
MARINE CHART DIVISION  
HYDROGRAPHIC SURVEY REVIEW

REGISTRY NO. H-8750

FIELD NO. 742-10-3-63

Texas, Galveston Bay, Jones Lake to Pelican I.

SURVEYED: April 3, 1963 - April 12, 1966

SCALE: 1:10,000

PROJECT NO.: OPR-428

SOUNDINGS: DE 723 Depth Recorders,  
Sounding Pole

CONTROL: Sextant fixes  
on Shore Signals

Chief of Party .....P. A. Stark  
.....R. E. Alderman  
Surveyed by .....G.F. Trefethen  
Protracted by .....G. F. Trefethen (AMC)  
Soundings Plotted by .....G. F. Trefethen  
Verified and inked by .....W. L. Jones (AMC)  
Reviewed by .....F. B. Powers  
Date: 5-10-74  
Inspected by .....R. H. Carstens

1. Description of the Area

This survey covers a portion of Galveston Bay and the eastern end of West Bay, from Jones Lake to Pelican Island.

Federal channel projects extend the length of the survey. Except in the channels, the bottom is generally flat or slopes gently and is broken up by islets, shell bars, shoals, and spoil areas. Rocks, stakes, pipes, piles, signs, obstructions and dolphins are found throughout much of the area.

The predominant bottom characteristics are sand, mud and shells.

2. Shoreline and Control

The origin of control is adequately covered in part F of the Descriptive Report.

The shoreline originates with reviewed photogrammetric manuscripts T-12232 (1962-63), T-12233 (1963-65) and T-12234 (1962-65) and with advanced photogrammetric manuscripts T-12237 (1961-65), T-12238 (1962-65) and T-12239 (1962-65). Several islets on T-12238 are shown as shell bars from information furnished by the hydrographer. Revisions appearing in red are by the hydrographer.

3. Hydrography

- A. Depths at crossings are in good agreement.
- B. The usual depth curves are adequately delineated.
- C. The development of the bottom configuration and the investigation of least depths are considered adequate.

Numerous submerged piles charted from earlier surveys and charted piles and pipes not visible at the time of hydrography should have been investigated by trawl-board chain drag for field disposition of these features.

4. Condition of the Survey

The sounding records, smooth plotting and Descriptive Report are adequate and conform to the requirements of the Hydrographic Manual except that different names were assigned for the same control stations on contemporary junctional surveys and the center prick points of signals were not accentuated with a sharpened pencil.

5. Junctions

An adequate junction was effected with H-8873 (1965-66) on the southwest. The junctions with H-8747 (1963-65) on the north and with H-8749 (1963-65) on the east are discussed in the reviews of those surveys.

6. Comparison with Prior Surveys

- A. H-247 (1850), 1:20,000
- H-264 (1861), 1:20,000
- H-323 (1852), 1:20,000
- H-918a(1867), 1:20,000

These early surveys have been compared with and were superseded by the surveys discussed in the following paragraph. Further consideration is not necessary in the present review.

- B. H-5462 (1933-34), 1:10,000
- H-5522 (1933-34), 1:20,000

A comparison between the present and prior surveys reveals minor deepening of  $\frac{1}{2}$  to 1 foot since 1933, except in Offatts Bayou and areas affected by borrowing, dredging and deposition of spoil, where the changes are greater. The eastern part of Offatts Bayou has shoaled 2-5 feet since the prior surveys were made.

Numerous rocks awash symbolizing fragments of concrete shown along the railroad causeway on H-5522 have been carried forward to supplement present survey annotations.

Numerous piles, stakes, pipes and wrecks shown on these surveys were not specifically investigated or disproved in the field and have been carried forward to the present survey as submerged.

Based on a general statement in the Descriptive Report that visual observations were made at a minus tide for traces of charted piles along Offatts Bayou Channel falling in very shallow areas or areas uncovering at MLW and none were found, some prior piles and pipes along this channel were not carried forward.

The following items on H-5522 were not adequately verified or disproved by the hydrographer and are carried forward to supplement the present survey information:

<u>Item</u>	<u>Location</u>
(1) Submerged pipe	lat. 29°17.03', long. 94°50.52'
(2) Submerged post	lat. 29°16.92', long. 94°51.57'
(3) Submerged pipe	lat. 29°16.84', long. 94°51.78'
(4) Submerged pile	lat. 29°16.75', long. 94°52.09'
(5) Submerged pile	lat. 29°16.74', long. 94°52.73'
(6) Submerged pile	lat. 29°17.45', long. 94°53.31'
(7) Submerged pile	lat. 29°16.78', long. 94°52.99'
(8) Submerged pile	lat. 29°16.78', long. 94°53.04'
(9) Submerged pile	lat. 29°16.99', long. 94°53.15'
(10) Submerged pile	lat. 29°17.08', long. 94°53.19'
(11) Submerged pile	lat. 29°17.24', long. 94°53.27'
(12) Two notes "Fragments of concrete"	in the vicinity of lat. 29°17.8', long. 94°53.15'
(13) Submerged stake	lat. 29°17.58', long. 94°53.83'
(14) Submerged wreck	lat. 29°17.54', long. 94°52.42'
(15) Note "Submerged wreckage"	lat. 29°18.07', long. 94°53.54'
(16) Wreckage	lat. 29°18.24', long. 94°53.73'
(17) 3-ft. shoal sounding	lat. 29°18.28', long. 94°52.53'
(18) low water curve	lat. 29°17.05', long. 94°55.08'
(19) Submerged iron frame	lat. 29°16.55', long. 94°56.14'

With the additions noted, the present survey is adequate to supersede the prior surveys within the common area.

- C. T-8943 (1946-47), 1:10,000
- T-8945 (1946-47), 1:10,000
- T-10787 (1957-60), 1:20,000
- T-10788 (1957-60), 1:20,000

These topographic surveys supersede the shoreline on the above prior surveys and therefore a comparison will be made. The following items were not verified or disproved and have been carried forward to supplement the present survey:

<u>Item</u>	<u>Location</u>	<u>Source</u>
(1) Submerged pipe	lat. 29°17.40 <sup>24</sup> ' long. 94°53.30 <sup>16</sup> '	T-8945
(2) Submerged piling	lat. 29°16.80 <sup>48</sup> ' long. 94°53.90 <sup>15</sup> '	T-8945
(3) Submerged pipe	lat. 29°17.60 <sup>36</sup> ' long. 94°53.60 <sup>34</sup> '	T-8945
(4) Submerged pipe	lat. 29°17.50 <sup>30</sup> ' long. 94°54.10 <sup>10</sup> '	T-8945
(5) Submerged pipes	lat. 29°17.80 <sup>48</sup> ' long. 94°54.20 <sup>12</sup> '	T-8945
(6) Submerged piling & six submerged dolphins in the vicinity of (Virginia Point)	lat. 29°18.00 <sup>00</sup> ' long. 94°54.25 <sup>15</sup> '	T-8945
(7) Three submerged piles (Signs) in the vic. of	lat. 29°17.95 <sup>57</sup> ' long. 94°53.14 <sup>84</sup> '	T-8945
(8) Submerged pile (Sign)	lat. 29°17.87 <sup>42</sup> ' long. 94°53.02 <sup>12</sup> '	T-8945
(9) Submerged pile	lat. 29°17.38 <sup>42</sup> ' long. 94°52.56 <sup>33</sup> '	T-10787
(10) Submerged pile	lat. 29°17.48 <sup>28</sup> ' long. 94°52.85 <sup>21</sup> '	T-10787
(11) Three submerged piles (Signs) in the vicinity of	lat. 29°17.90 <sup>54</sup> ' long. 94°52.98 <sup>58</sup> '	T-10787
(12) Submerged pile (Sign)	lat. 29°18.02 <sup>12</sup> ' long. 94°53.13 <sup>18</sup> '	T-10787
(13) Submerged piling	lat. 29°18.79 <sup>17</sup> ' long. 94°53.50 <sup>30</sup> '	T-8945
(14) Submerged pile (Sign)	lat. 29°18.45 <sup>27</sup> ' long. 94°49.77 <sup>46</sup> '	T-8943
(15) Submerged pile (Sign)	lat. 29°18.73 <sup>43</sup> ' long. 94°49.85 <sup>21</sup> '	T-8943
(16) Submerged piling in vicinity of	lat. 29°18.81 <sup>46</sup> ' long. 94°49.35 <sup>21</sup> '	T-8943
(17) Submerged wreck	lat. 29°16.83 <sup>48</sup> ' long. 94°52.04 <sup>11</sup> '	T-10788
(18) Submerged pile	lat. 29°18.60 <sup>36</sup> ' long. 94°52.30 <sup>14</sup> '	T-8945
(19) Submerged pile (Sign)	lat. 29°18.63 <sup>37</sup> ' long. 94°49.54 <sup>21</sup> '	T-10788
(20) Submerged pile (Sign)	lat. 29°17.93 <sup>55</sup> ' long. 94°53.15 <sup>17</sup> '	T-8945
(21) Submerged pile (Sign)	lat. 29°17.85 <sup>31</sup> ' long. 94°53.03 <sup>18</sup> '	T-8945

With the additions noted, the present survey is adequate to supersede the prior topographic information within the common area.

- 7. Comparison with Chart 518 (latest print date Oct. 13, 1973)  
887 (latest print date Nov. 10, 1973)

A. Hydrography

The charted hydrography originates with the previously discussed prior surveys which require no further consideration and with prior and subsequent Corps of Engineers surveys, supplemented by the partial application

of depths from the boat sheet and verified smooth sheet of the present survey. Only minor differences are noted between the present survey and charted depths. Several dolphins, pipes and obstructions located by the hydrographer are not presently charted.

Attention is directed to the following:

- (1) Items indicated on Bp 88595, by the reviewer, charted subsequent to the date of the present survey, supersede the survey information and should be retained on the chart.
- (2) The following items charted from sources indicated are considered disproved and should be deleted from the chart:

<u>Item</u>	<u>Location</u>	<u>Source</u>
(a) Submerged piling	lat. 29°16.75 <sup>45</sup> long. 94°52.38 <sup>22.8</sup>	H-5522
(b) Submerged piling	lat. 29°16.74 <sup>44</sup> long. 94°52.52 <sup>31.2</sup>	H-5522
(c) Submerged piling	lat. 29°16.75 <sup>45</sup> long. 94°52.42 <sup>25.5</sup>	H-5522
(d) Submerged piling	lat. 29°16.70 <sup>41</sup> long. 94°52.64 <sup>38.4</sup>	H-5522 ✓
(e) Submerged pile	lat. 29°16.70 <sup>41</sup> long. 94°52.95 <sup>57</sup>	H-5522 ✓
(f) Submerged pile	lat. 29°16.91 <sup>54.6</sup> long. 94°53.11 <sup>6.6</sup>	H-5522 ✓
(g) Low water spot	lat. 29°18.32 <sup>19.2</sup> long. 94°50.88 <sup>52.8</sup>	H-5522
(h) Iron stake symbol	lat. 29°18.33 <sup>19.8</sup> long. 94°53.75 <sup>45</sup> (Discredited in 1966 field work)	Boat sheet
(i) Submerged wreck	lat. 29°19.80 <sup>13.6</sup> long. 94°49.57 <sup>11.2</sup> (Discredited in 1966 field work)	Boat sheet ✓
(j) Six piling	In the vicinity of lat. 29°17.75 <sup>43</sup> long. 94°51.50 <sup>30</sup> (discredited in 1966 field work)	Boat sheet ✓ (bp 64308)

(3) The following items charted from the boat sheet information should be revised as indicated:

- ✓(a) A post in lat. 29°16.12<sup>7.2</sup>, long. 94°53.63<sup>37.8</sup> should be relabeled pipe.
- ✓(b) A pile in lat. 29°17.87<sup>52.2</sup>, long. 94°52.97<sup>58.2</sup> should be deleted from the chart. (This pile was erroneously charted).
- (c) A platform on chart 887-SC in lat. 29°17.60<sup>36</sup>, long. 94°55.55<sup>33</sup> should be relabeled platform ruins.
- ✓(d) An iron stake in lat. 29°17.81<sup>48.6</sup>, long. 94°51.47<sup>28.2</sup> should be relabeled pipe.
- (e) A sign in lat. 29°17.84<sup>4</sup>, long. 94°53.03<sup>1.8</sup> should be revised to agree with the present survey.

(4) The following items charted from T-8945 should be revised to agree with the final smooth sheet data:

6.

- (a) The pipe in lat.  $29^{\circ}17.50'$ <sup>30</sup>, long.  $94^{\circ}54.10'$ <sup>06</sup> should be charted as submerged. LNM 74
- (b) The piling in lat.  $29^{\circ}17.60'$ <sup>36</sup>, long.  $94^{\circ}54.12'$ <sup>12</sup> should be charted as submerged. LNM 74
- (5) The submerged piles (signs) in the vicinity of lat.  $29^{\circ}17.87'$ <sup>52.2</sup>, long.  $94^{\circ}53.00'$  from T-8945 and T-10787 should be revised to agree with the final smooth sheet data. (Two of these signs from T-8945, though not specifically disproved by the hydrographer are considered adequately represented on the present survey.)
- (6) A pipe charted in lat.  $29^{\circ}18.89'$ <sup>53.4</sup>, long.  $94^{\circ}53.39'$ <sup>23.4</sup> prior to the date of the present survey from a source not readily ascertainable was not verified or disproved by the hydrographer and should be revised to a submerged pipe. LNM 74
- (7) The following items charted from H-5522 should be revised as indicated:
  - ✓(a) A submerged rail in lat.  $29^{\circ}16.93'$ <sup>55.4</sup>, long,  $94^{\circ}53.94'$ <sup>56.4</sup>, falls within the low water line and should be deleted from the chart.
  - (b) A pile in lat.  $29^{\circ}16.78'$ <sup>46</sup>, long.  $94^{\circ}52.99'$ <sup>59.4</sup> should be relabeled submerged pile. LNM 74
  - (8) Two wrecked barges charted in the vicinity of lat.  $29^{\circ}19.11'$ <sup>6.6</sup>, long.  $94^{\circ}49.53'$  from T-10788 should be revised to show one high-water barge in accordance with the final smooth sheet data.
  - ✓(9) A pile charted in lat.  $29^{\circ}17.54'$ <sup>17.4</sup>, long.  $94^{\circ}52.97'$ <sup>52.2</sup> from T-10787 should be deleted from the chart. (The present survey located a pile 35 meters north which is adequate to represent the area.)
  - (10) Three pilings located on the present survey in lat.  $29^{\circ}17.95'$ <sup>57</sup>, long.  $94^{\circ}51.11'$  are superseded by New Orleans Field Office information chart letter No. 1351 of 1967 and should not be charted.

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

B. Controlling Depths

The charted controlling depths are based on subsequent New Orleans Field Office and Corps of Engineers information that supersede the present survey information.

C. Aids to Navigation

Several aids to navigation have been established or relocated subsequent to the date of the present survey.

The aids presently charted adequately mark the features intended except that Bn 20 charted in lat. 29°16.77', long. 94°52.40' from the present survey boat sheet is in error and should be revised to agree with the smooth sheet.


8. Compliance with Instructions


This survey adequately complies with the Project Instructions, except that the hydrographer failed to prove or disprove most of the presurvey review items or dispose of them in the Descriptive Report.

9. Additional Field Work

This is a good basic survey and no additional hydrography is recommended. However, in order to clear the chart of many of the submerged piles and pipes carried forward from prior surveys, it is recommended that these be investigated by chain drag methods in order to verify their existence.

Examined and Approved:

  
Chief  
Marine Chart Division

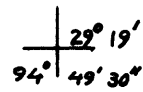
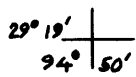
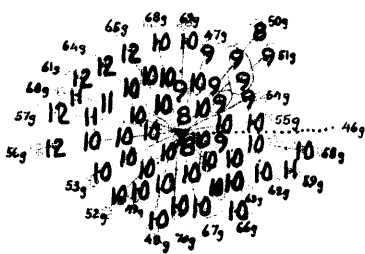
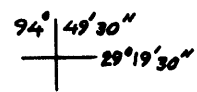
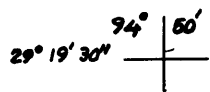
  
Associate Director  
Office of Marine Surveys  
and Maps

H-8750 (1963-66)

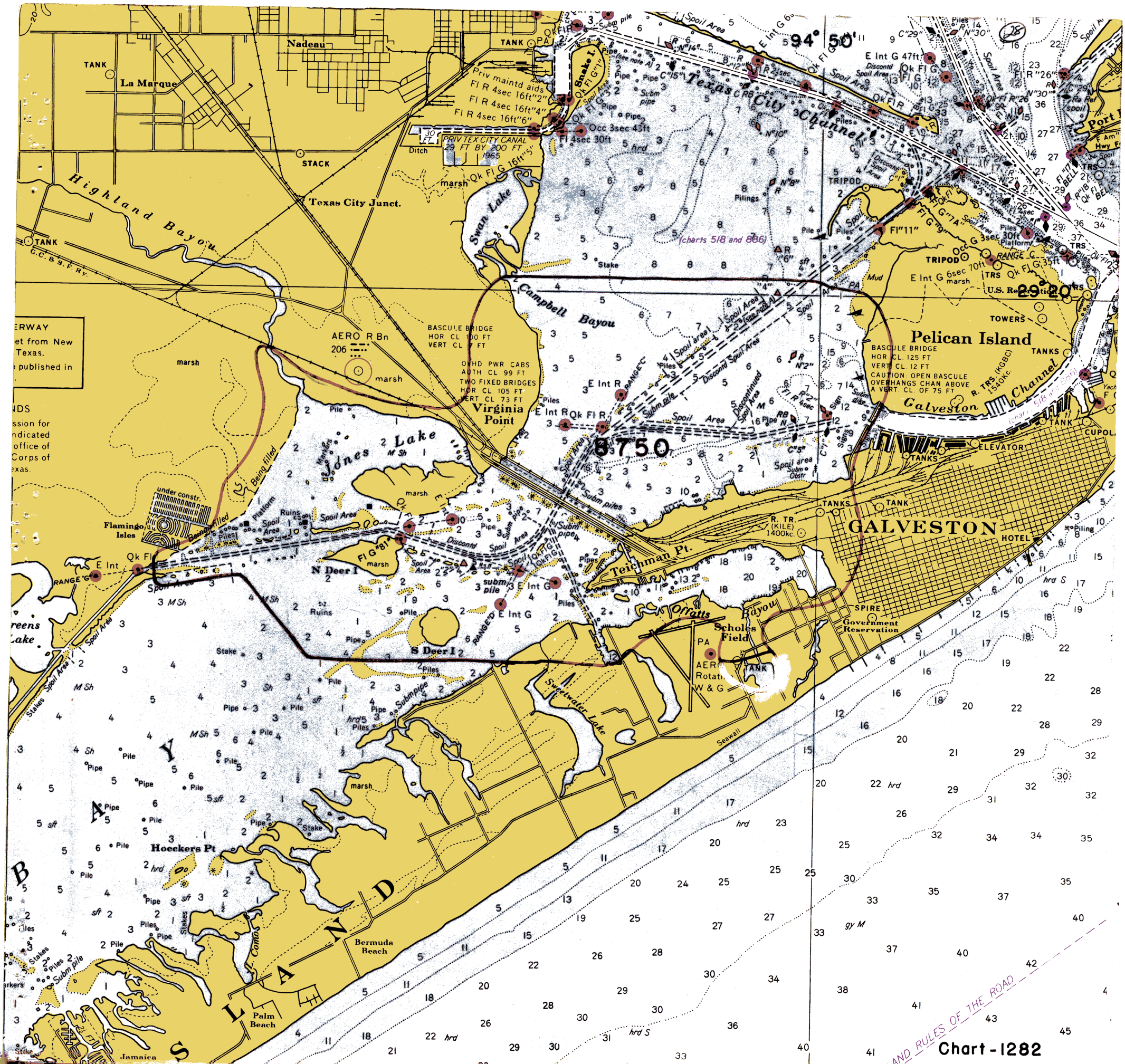
Information for Future Pre-Survey Reviews

Bottom changes have resulted from channel dredging, spoil disposal and natural changes. Chain dragging for submerged piles is recommended.

<u>Position Index</u> <u>lat.</u> <u>long.</u>	<u>Bottom Change</u> <u>Index</u>	<u>Use</u> <u>Index</u>	<u>Resurvey</u> <u>Cycle</u>
291      0945	3	9	25 Years
291      0950	5	2	25 Years



OVERLAY TO ACCOMPANY ECFP 10-3-63 H-8750  
 27 JAN. 1966 from pos. 47g to pos 70g Vol. 17 AND 18 SKIFF 520



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Chart-1282

RECORD OF APPLICATION TO CHARTS

(27)

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. H-8750

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
1282	1/9/68	H. Quimby	<del>Full Part Before</del> After Verification <del>Review</del> Inspection Signed Via Drawing No. 43. Forward, apply after review except items noted in report.
Area cleared of Hydro			
518	1/9/68	H. Quimby	<del>Full Part Before</del> After Verification <del>Review</del> Inspection Signed Via Drawing No. 6. Forward, apply after review except items noted in report.
887 sc	1/9/68	H. Quimby	<del>Full Part Before</del> After Verification <del>Review</del> Inspection Signed Via Drawing No. 1X. Forward, apply after review except items noted in report (then 518)
<del>518</del>	<del>1/9/68</del>	<del>H. Quimby</del>	<del>Full Part Before</del> After Verification, Review, Inspection, Signed Via Drawing No. applied to x drawing.
<del>887</del>	<del>1/9/68</del>	<del>H. Quimby</del>	<del>Full Part Before</del> After Verification, Review, Inspection, Signed Via Drawing No. <del>1X</del>
<del>152</del>	<del>1/25/73</del>	<del>C. Williams</del>	<del>Full Part Before</del> After Verification Review Inspection Signed Via Drawing No. <del>152</del>
11324	1-31-91	K.R. Foster	Full <del>Part Before</del> After Verification Review Inspection Signed Via Drawing No. 26 Applied in Full.
11322	2-6-91	K.R. Foster	Full <del>Part Before</del> After Verification Review Inspection Signed Via Drawing No. 21 Applied in Full.
			Full Part Before After Verification Review Inspection Signed Via Drawing No.
			Full Part Before After Verification Review Inspection Signed Via Drawing No.