8741

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. ECFP-10-1-63 Office No. H-8741

LOCALITY

State Texas

General locality Houston Ship Channel

Locality Morgans Point to St. Mary Point

19 63-67 5

CHIEF OF PARTY

P. A. Stark & R. E. Alderman

LIBRARY & ARCHIVES

DATE January 20, 1966

USCOMM-DC 37022-P66

8741

FORM C&GS-537
(8-15-59)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

REGISTER NO.

H-8741

HYDROGRAPHIC TITLE SHEET

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-10-1-63

State TEXAS

General locality ~~GALVESTON BAY, TEXAS~~ Houston Ship Channel

Locality ~~Houston Ship Channel from~~ Morgan Point to St. Mary Point ~~GALVESTON BAY NORTH REACHES~~

Scale 1:10,000 Date of survey 6 Feb. 1963 to 30 Aug. 1965

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

Vessel SKIFF 758 SKIFF 520

Chief of party CDR. P.A.STARK ICDR. R.E.ALDERMAN

Surveyed by GUY F. TREFETHEN

Soundings taken by echo sounder, hand lead, pole

Graphic record scaled by PARTY PERSONNEL

Graphic record checked by PARTY PERSONNEL

Protracted by

Soundings penciled by

Soundings in ~~fathoms~~ feet at MLW ~~MLLW~~

REMARKS:

USCOMM-DC 8272-P62

DESCRIPTIVE REPORT
HYDROGRAPHIC SURVEY H-8741

(Sheet 10-1-63)
Galveston Bay, Texas

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 the Houston Ship Channel North of Morgan Point also Tabbs Bay and San Jacinto Bay. The adjacent shoreline is from Atkinson Island on the South to Alexander Island on the North.

The boat sheet projection is from Lat. 29°39'30" to Lat. 29°44'30" and from Long. 94°54'30" to 95°03'30".

This survey makes junction with contemporary survey H-8742 (ECFP 10-8-62) on the South.

This survey ~~makes junction with~~ overlaps a portion of prior survey H-5510 scale 1:20,000 dated 1933 on the South. The majority of this survey is covered by prior surveys H-5521 and H-5522 scales 1:5,000 dated 1931.

Field work on this survey commenced on 6 February 1963 and was completed on 30 August 1965. Work on this survey was interrupted from 20 May, 1963 to 25 October, 1964 because of a special project at Lake Mead, Nevada.

C. SOUNDING VESSEL

Vessels used to obtain soundings for this survey were Skiff 758 identifyed by red day letters and Skiff 520 identifyed by green day letters.

C.SOUNDING VESSEL(cont)

Skiff 520 is a new Skiff that was sent to this party for testing as a Hydrographic Skiff. This Skiff is made out of fiberglas, it is about 20 feet long and 6 feet wide. It is powered by two 18 hp outboard motors. The Skiff was built by the Ski Barge Co. of Arkansas. It has a light transom and the standard outboard motor will not work. A long shank motor had to be used to power this Skiff. The long shank motor is about 8 inches longer than the standard motor. This limits the depth of water this boat can run in. This Skiff has no keel and the wind had a great effect on controlling it. It has been noted that this Skiffs bottom is of such a design, that in shoal water the speed will vary from slow to fast. This Skiff was not equipped with a fathometer on this survey, and a sounding pole was used exclusively.

D.SOUNDING EQUIPMENT

A Raytheon Fathometer, model DE-723 Serial No. 544, 20 KC was used to obtain soundings on Skiff 758 for "b" day thru "p" day "a" day was pole sounding. All soundings were obtained with a sounding pole on Skiff 520.

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.

E.SMOOTH SHEET

The smooth sheet projection was made in the Washington Office with a projection ruling machine. It is planned to accomplish the smooth sheet on Hydrographic Field Party 242.

F.CONTROL

Horizontal control was obtained by standard, visual, three-point sextant fixes. Appendix A of this report containes a complete list of control used and the quality and source of control. The control and shoreline for this survey was furnished by photo-party 721.

Of the 28 fixed, non-private aids to navigation within the limits of this survey, 20 were used as Hydro signals. Aids used as Hydro signals are either 1955 or 1965 Triangulation. The 8 aids used as Hydro signals that were destroyed after 1955 were re triangulated in 1965, except for signal "CAB" which was rebuilt in 1965 after Hydrography and the 1955 position was used.

G.SHORELINE

Shoreline detail was taken from blueline prints of shoreline Manuscripts RS-803, RS-804, and RS-805. The shoreline on the boat sheet in the Eastern area of Tabbs Bay, Barbour Cut, Morgan Point, Atkinson Island, and Hog Island is approximate. Photogrammetric compilation of these areas are to be provided to this party upon completion.

It has been noted that in October or November of 1965 new photographs will be flown of this area. The smooth plotter should delay inking the shoreline until he has the most Advanced Manuscripts, which should be available in early 1966.
Additonal shoreline on the smooth sheet in green from the Hydroqraphic signal plot control Sheet (See Review Part. 2)

H.CROSSLINES

Crosslines were run at approximately 8% of the regular system of sounding lines. Crossings were generally in good agreement. However smooth tides and predicted tides were used thru-out the survey and a better comparison can be made after smooth plotting.

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 the junction.

J.COMPARISON WITH PRIOR SURVEY

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

Item No. "4a"—Piles This item was located at Lat. 29°41.90'$^{54}_{06}$ Long. 94°57.51'$^{30}_{06}$ on 18 "c" day Skiff 520. It is recommended that the piles remain on the chart.

Item No, "4b"—Snag This item was located at Lat. 29°41.44'^{269} Long. 94°58.04'^{14} on 12 "j" day Skiff 520. This snag is about 40 meters Northwest of charted position. The charted position of snag was chain dragged with negative results. It is recommended that the new snag be charted and the old position be deleted f rom the chart.

J.COMPARISON WITH PRIOR SURVEY (cont)

Item No. "4c"—snag This item at Lat. 29°41.32' Long. 94°57.78' was chain dragged on "j" day Skiff 520 for 30 minutes with nagative results. It is recommended that this item be deleted from the chart. (Also see description of chain drag under (0) Miscellaneous)

Item No. "4d"—pile This item at Lat. 29°41.18' Long. 94°57.66' was chain dragged on "j" day Skiff 520 with negative results. It is recommended that the item be deleted from the chart.

Item No. "4e"—Pile This item at Lat. 29°41.07' Long. 94°57.33' was chain dragged on "j" day Skiff 520 with negative results. It is recommended that the item be deleted from the chart.

Item No. 9—piling This item no longer exists. On 1"d" day Skiff 520 a spoil area that bares 1 foot MLW was located at Lat. 29°41.74' Long. 94°58.32' this is the same area of item No. 9. A visual inspection of the area was made and no piling were found. It is recommended that the item be deleted from the chart and the new information be charted.

Item No. 17—Wreck Wreck of motor boat Wonda Lou II. from Hon to M 39, 1961 at Lat. 29°40.52' Long. 94°58.88'. This item was investigated on 3 and 4"k" day Skiff 758. A visual inspection of the area was made and no evidence of the wreck above water was found. The wreck could be submerged. This aspect was not investigated do to the fact that the wrecks position lay inside a foul area in shoal water. It is recommended that the wreck be shown on the chart as a submerged wreck.

Item No. 34—Dolphins Charted at Lat. 29°42.18' Long. 95°01.17' originate with a source not readily ascertainable. A visual inspection of the area was made and on 27 "e" day Skiff 520. A concrete pile with a 9'X 9' base was located. This location is 150 meters Southeast of charted dolphins on"k" day Skiff 520, the area was chain dragged. On 39 "k" day Skiff 520 a concrete pile (submerged) was found that protrudes 2 foot off the bottom. This pile was located 90 meters Southeast of charted position. The charted area at Lat. 29°42..18' Long. 95°01.17' was chain dragged for on "k" day Skiff 520. This bottom was foul with rocks and other items and impossible to drag a chain on the bottom. Since the source is not readily ascertainable the position of the item may not be reliable. Until a reliable position can be determined it is recommended that the item be shown on the chart as submerged dolphins. It is also recommended that the pile at Lat. 29°42.13' Long. 95°01.08' (27 "e" day Skiff 520) be charted and that the submerged pile located at Lat. 29°42.15' Long. 95°01.11' (39 "k" day Skiff 520) be charted. It is also recommended that this area is not suitable for small boats to drop anchor.

J.COMPARISON WITH PRIOR SURVEY(cont)

Item No. 40--Wreck Sunken Barge at Lat. 29°40.82' Long. 95°00.45' Originates with U.S. Corps of Engineers survey of 1957. This wreck was located on 18"1" day Skiff 758 at Lat. 29°41.83' Long. 95°00.44' as a wreck with portion of hull above sounding datum.

Item No. 41--Dolphins Dolphins at Lat. 29°41.35' Long. 94° 57.87'. This item was chain dragged for 30 minutes on "j" day Skiff 520 with negative results. It is recommended that the item be deleted from the chart.

The following is a list of prior survey features investigated on this survey.

Prior survey feature N--Pile at Lat. 29°40.20' Long. 94°58.55'. This feature originated from prior survey H-5121. This feature was chain dragged on "j" day Skiff 758. On position 10 "j" drag caught on snag. Pole indicated snag just inches off bottom. It is recommended that this feature be ~~deleted from~~ the chart. (Shown as a ~~snag~~ on smooth sheet) ← another subm. snag on smooth sheet at Pos. 15 j. nearby.

Prior survey feature N--Rock pile at Lat. 29°40.29' Long. 94° 58.56'. This feature originated from prior survey H-5121. This feature was chain dragged for on "k" day Skiff 758 on position 10 "k" the chain hung on a submerged object. This object seemed to be concrete or rock from sounding pole indications. Apparently the object is partly covered by sand. It is recommended that ~~this feature be charted as submerged rocks~~. the 6ft sounding be charted as indicated on the survey.

Prior survey feature N--Piling at Lat, 29°41.42' Long. 94°57.92' This feature originated from prior survey H-5121. This feature was chain dragged for 30 minutes on "j" day with negative results. It is recommended that this feature be deleted from the chart.

Prior survey feature O--Submerged piles at Lat. 29°41.35' Long. 94°59.27'. This feature originated from prior survey H-5122. This feature was chain dragged for 30 minutes on "k" day with negative results. It is recommended that the feature be deleted from the chart.

Prior survey feature O--Piles at Lat. 29°41.54' Long. 94°59.24' This feature originated from prior survey H-5122. This feature was chain dragged on "k". On position 23 "k" Skiff 520 the drag hung on a submerged pile. This submerged pile was located on 24 "k" day. The pile protrudes 2 feet off the bottom. It is recommended that this feature be charted as submerged piles.

J.COMPARISON WITH PRIOR SURVEY(cont)

Prior survey feature O--Piles at Lat. 29°41.63' Long. 94°59.43'. This feature was chain dragged for 30 minutes on "k" day Skiff 520 with negative results. It is recommended that the feature be deleted from the chart.

Prior survey feature P--Piles at Lat. 29°43.86' Long. 95°01.53'. This feature originated from prior survey H-5123. This feature was located on 66 "f" day Skiff 758 as a submerged pile. It is recommended that this feature be charted as submerged piles.

Prior survey feature P--Piles at Lat. 29°43.90' Long. 95°01.57'. This feature originated from prior survey H-5123. This feature was chain dragged for 45 minutes on "k" day Skiff 520 with negative results. It is recommended that this feature be deleted fromthe chart.

The following is a list of prior Topographic features investigated on this survey.

Prior Topographic feature X--Wreck at Lat. 29°41.85' Long. 95° 00.04'. This feature originated from prior topographic survey T-9918. This feature was located on 59 "l" day Skiff 758 as a wrecked barge. It is recommended that this feature remain as charted.

Prior Topographic feature X--Dolphins at Lat. 29°42.19' Long. 95°01.85' and dolphins at Lat. 29°42.07' Long. 95°01.74'. These dolphins originated from Topographic survey T-9918. These dolphins were located on 34, 35, 38, and 39 "d" day Skiff 758. It is recommended that these dolphins remain as charted.

Prior Topographic feature X--Dolphins at Lat. 29°43.56' Long. 95°01.22'. This feature was located on 119 and 120 "f" day Skiff 758. These dolphins have been rebuilt of steel with a cat walk from the pier to the dolphins. The dolphin on the South end of this pier are the same. The new dolphins look to be in the same position as the old dolphins. It is recommended that the feature be shown as charted.

Prior Topographic feature Z--Pier ruins at Lat. 29°40.94' Long. 94°59.02'. This feature originated from topographic survey T-9920. This feature was located on 21 "g" day Skiff 758 as a new pier. It is recommended that this pier be charted.

J.COMPARISON WITH PRIOR SURVEY(cont)

Prior Topographic feature Z--Dolphin at Lat. 29°40.78' Long. 94°58.96'. This feature was located on 23 "g" day Skiff 758 as steel dolphins with cat walk. These dolphins also have a light on top and are listed in the Light List as County Wharf Light 1 and 3. It is recommended that these dolphins remain as charted.

Prior Topographic feature Z--Dolphins at Lat. 29°40.95' Long. 94°59.00'. This dolphin was located on 22 "g" day Skiff 758 as an old ferry landing. It is recommended that this feature remain as charted. See review

Prior Topographic feature Z--Dolphins at Lat. 29°40.94' Long. 94°59.56'. This feature was located on 39 "1" day Skiff 758. It is recommended that this feature remain as charted.

A comparison was made with prior surveys H-5122 and H-5121, scale 1:5,000 dated 1931.

The area has so completely changed that a 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. 588, 4th edition dated May 18,1964, scale 1:10,000.

A ½ foot sounding on the chart at Lat. 29°41.27' Long. 94° 59.18' is no longer in existence. The boat sheet shows 3 to 5 foot of water in that area.

A 1 foot sounding on the chart at Lat 29°41.35' Long. 94° 59.22' is no longer in existence. The boat sheet shows 5 to 6 feet of water in that area.

The boat sheet shows a 3 to 6 foot channel beginning at Lat. 29°41.35' Long. 94°57.90' and running to the North for about 600 meters and then turning to the Northwest into Tabbs Bay. This channel is marked with temporary small wooden stakes. This channel was not developed past Lat. 29°41.75' Long. 94° 58.20' because of the unsafe navigation in Tabbs Bay.

K.COMPARISON WITH THE CHART(cont)

A pier in ruins shown on the chart at Lat. 29°41.93' Long. 94°58.07' is no longer in existence. A sounding line was run thru this area on 23 and 24 "c" day Skiff 520 and no visual evidence of this pier was seen. No investigation made. Sounding line is not sufficient to disprove existence of pier in ruins.

The area of Black Duck Bay at Lat. 29°43.00' Long. 95°00.50' was not surveyed. This area was outside the project limits.

The small bay on the chart at Lat. 29°41.50' Long. 95°01.50' has been dredged to 4 to 5 feet for a new marina at Lat. 29°41.15' Long. 95°01.55'. This marina (Port Haven) was located on 1 thru 11 "g" day Skiff 520. It also has a dredged channel from the North end of the Bay to the Dupont Channel at Lat. 29°42.07' Long. 95°01.64'. This channel is dredged to 3 foot MLW. This channel is marked with piles and is maintained by the Port Haven Marina. A form 429 (small craft chart facility index) was filled out on the Port Haven Marina and will be sent in with the Coast Pilot report.

The small bay at Lat 29°41.25' Long. 95°01.00' was not surveyed. This bay is landlocked and unnavigable.

A new dredged channel that begins on the North side of the Dupont Channel at Lat. 29°42.18' Long. 95°01.63 and runs into San Jacinto Bay was dredged after the area was surveyed in 1963. This channel is shown on the boat sheet on a overlay. The chart shows 2 foot of water in the area, the new dredged channel has 4 to 5 feet of water. [New channel (Barge Canal) & controlling depth presently charted from L-1417/70 & Bp 79405-07] 4 00

The area at Lat. 29°43.29' Long. 95°01.90' is shown on the chart as Green (bares at MLW). This area on the boat sheet has 4 foot of water at MLW. This area is the entrance to Scott Bay. This bay is shown on the chart as 3 foot deepest depth. While surveying in this area this party was asked to check for a 5 foot reported channel from Lat. 29°43.90' Long. 95°02.05'. North into Scott Bay and West into Crystal Bay and North again into Burnett Bay. This area was checked, but no indications of a channel was found. The 3 bays were found to be several feet deeper than the chart shows.

A submerged pipeline crossing at Lat. 29°41.43' Long. 94° 59.65' on the West side of the Houston Ship Channel and Lat. 29°41.37' Long. 94°59.20' on the East side of the ship channel. This pipeline is not shown on the chart.

L. ADEQUACY OF SURVEY

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

M. AIDS TO NAVIGATION

The U.S. Coast Guard maintains 28 fixed aids and 29 floating aids to navigation within the limits of this survey. All fixed aids were checked by strong sextant fix methods. Most of the fixed aids were used as control points on the boat sheet. The latest triangulation of these aids was in 1955. A check with the light list shows that some of these aids were rebuilt after 1955. All aids that were rebuilt after 1955 will be located by triangulation by Photo Party 756 and reported on form 567, Landmarks for charts. The smooth plotter should wait for the triangulation position before plotting the aids as signals.

There are 4 privately , maintained, lighted aids on this survey. Two are at Morgan Point and two at the Humble Oil docks. The positions of these aids were checked by sextant, and, the aids are listed in the light list.

All floating aids are adequate to serve the purpose for which they were established, except for buoys No. 102 and 104 at Lat. 29°42.22' Long. 95°00.94', and buoy no. 104 at Lat. 29°42.36' Long. 95°01.07' have been discontinued by the U.S. Coast Guard. It is recommended that these buoys No. 102 and 104 be deleted from the chart. (Buoys No. 102 and 104 are not charted)

N. STATISTICS

Vessel	Number of Pos.	Nautical Miles of Sounding Lines
Skiff 758	1277	119.1
Skiff 520	619	48.7
Total---	1896	167.8

Total area surveyed 11.3 square nautical miles
Total number of bottom samples 73

Tide gages at Morgan Point and Tabbs Bay, furnished tide control for this survey. See Appendix C TIDAL NOTES, for additional information on these stations.

O.MISCELLANEOUS

On Skiff 758 a modified chain sweep was utilized to search for submerged objects. This sweep consisted of two trawl boards, identical to those used by shrimp trawlers. With a one hundred foot length of small chain(rod size 3/16") between them. The trawl boards were bridled and towed in such a manner as to drag along the bottom approximately 150 feet behind the Skiff. Upon snagging an object the two lines to the trawl boards, which were generally 60 % apart, would come together slowly allowing sufficient time for the coxswain to stop the Skiff. The sweep was then pulled aboard until the snagged object was close aboard the stern. A leadline or sounding pole could then be eased down the taughtly drawn chain to obtain a depth on the object.

On Skiff 520 the chain sweep consisted of a chain towed between two Skiffs. One end of the chain was attached to Skiff 520 and the other to a small Skiff. The small Skiff would stay abeam of Skiff 520. This chain drag did not utilize the trawl boards and in turn there was no positive proof that the chain stayed on the bottom at all times.

Respectfully submitted,

Guy F. Trefethen

Guy F. Trefethen, Surveying Tech.

APPENDIX D

Approval Sheet to Accompany
Hydrographic Sheet H-8741 (ECFP 10-1-63)

Approximately 90% of the field and office work was accomplished under the supervision of LCDR. P.A.Stark in 1963.

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

The descriptive report was written and the 1965 Hydrography performed by Guy F.Trefethen, Surveying Tech.

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

APPENDIX B

Corrections to Echo Soundings
Hydrographic Survey H-8741

Skiff 758

Date	Day Letter	Echo Recorder No. Sounding Pole	Depth(ft)	Corr(ft)
2-6-63	a	544	0.0 All Depths	
3-1-63	b	544		
3-4-63	c	544		
3-5-63	d	544		
3-6-63	e	544		
3-7-63	f	544		
3-8-63	g	544		
3-12-63	h	544		
3-18-63	j	544	3.0 to 4.0	-0.2
3-19-63	k	544	4.1 to 5.0	0.0
			5.1 to 14.0	+0.2
			14.1 to Deeper	+0.4
3-20-63	l	544	3.0 to 4.0	0.0
3-21-63	m	544	4.1 to 12.0	+0.2
3-22-63	n	544	12.1 to 21.0	+0.4
3-25-63	p	544	21.1 to 26.0	+0.6
			26.1 to Deeper	+0.8

APPENDIX A

List of Signals

Hydrographic Survey H-8741 (ECFP 10-1-63)

TRIANGULATION

ABE	HOUSTON SHIP CHANNEL RANGE K REAR LT., 1955
AGE	HOUSTON SHIP CHANNEL RANGE A FRONT LT., 1955
AMP	HOUSTON SHIP CHANNEL RANGE D REAR LT., 1955
ARM	HOUSTON SHIP CHANNEL RANGE E FRONT LT., 1955
BED	HOUSTON SHIP CHANNEL RANGE F FRONT LT., 1955
CAB	HOUSTON SHIP CHANNEL RANGE K & P FRONT LT., 1955
EGG	HOUSTON SHIP CHANNEL RANGE P REAR LT., 1965 (Not used)
FLY	BAYTOWN N.E. TRANSMISSION TOWER, 1931
FRO	HOUSTON SHIP CHANNEL RANGE B REAR LIGHT, 1955
~~GUY~~ JET	CEDAR BAYOU CHANNEL LT. #31, 1965
JAR	CEDAR BAYOU CHANNEL LT. #14, 1965
LING	STERLING'S WATER TANK, 1933
MAL	HOUSTON SHIP CHANNEL RANGE G FRONT LT., 1955
NIG	HOUSTON SHIP CHANNEL RANGE B FRONT LT., 1965
NUT	BAYTOWN S.W. TRANSMISSION TOWER, 1931
ORB	HOUSTON SHIP CHANNEL RANGE G REAR LT., 1955
PORT	LAPORTE, DUPONT CHEMICAL CO., W.T., 1952
QUIT	MESQUITE KNOLL #2, 1930
QUO	HOUSTON SHIP CHANNEL RANGE E FRONT LT., 1955
REV	HOUSTON SHIP CHANNEL RANGE D FRONT LT., 1965
RIP	HOUSTON SHIP CHANNEL RANGE J REAR LT., 1965
TUB	HOUSTON SHIP CHANNEL RANGE J FRONT LT., 1965
YAK	HOUSTON SHIP CHANNEL RANGE E REAR LT., 1955
ZOO	HOUSTON SHIP CHANNEL RANGE C REAR LT., 1955

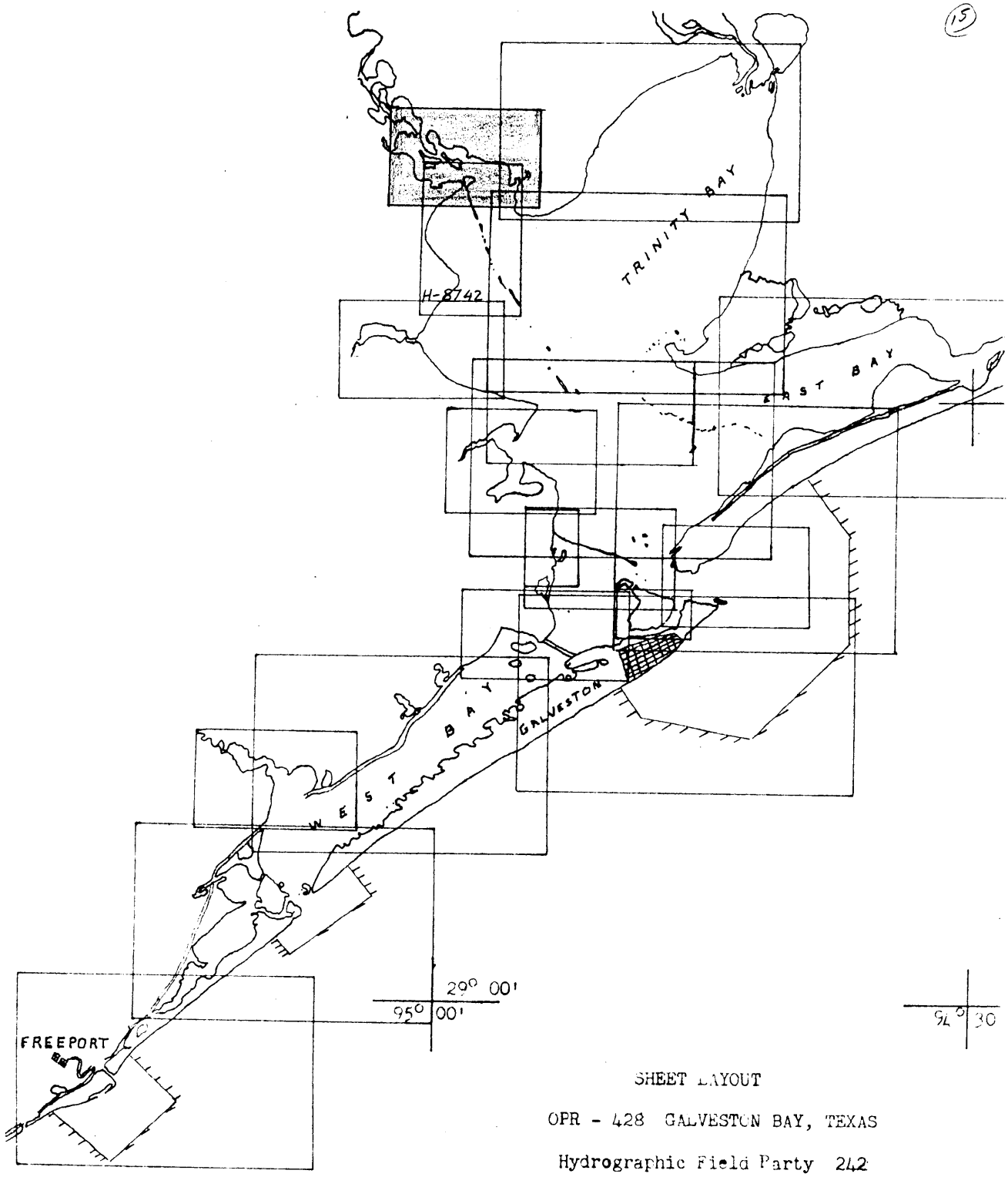
PHOTO-HYDRO SIGNALS:

ACE	RS-803	HON	RS-803	OAK	RS-804
AHA	804	HOW	804	ODD	804
AXE	803	HUT	804	OFF	804
BAB	803	ICE	804	OWL	804
BOA	803	ITS	804	PAW	804
BOX	803	Same as JAM	803	PEP	804
BUS	804	A station → JET	805	PRO	804
DAW	804	JIB	804	PUG	804
DUD	803	JUT	803	RAG	803
EAR	803	KED	804	RIC	804
EBB	804	KEN	804	RIG	804
ERG	804	LAX	803	ROO	805
FEZ	804	LOG	804	SAL	804
FUN	804	MOP	804	SOP	803
GAS	804	MUM	804	THE	805
GUS	805	NOD	803	TOM	805
HID	804	NOR	804	TOY	804
HIS	804	NUX	804	VET	803

cedar Bayou Light 14 (1963)

HYDROGRAPHIC SIG.

DOE Vol 9 pg 14
FAT Vol 9 pg 14
EGG Vol 9 pg. 59



SHEET LAYOUT

OPR - 428 GALVESTON BAY, TEXAS

Hydrographic Field Party 242

(ECFP 10-1-63) H-8741

ADDENDUM TO DESCRIPTIVE REPORT
BY
SMOOTH PLOTTER

The following is a list of positions that were not plotted.

Positions	Skiff	Remarks
1j to 11j	Skiff 520	Wire drag investigation, no sounding taken
13j to 57j	Skiff 520	
1k to 14k	Skiff 520	
16k to 23k	Skiff 520	
25k to 38k	Skiff 520	
40k to 51k	Skiff 520	
53k to 56k	Skiff 520	
92a	Skiff 758	This position was the location of buoy #91 which was replaced by buoy #89A located 11 Skiff 520.
106b	Skiff 758	These positions located buoys #104 and #102 which have been discontinved.
108b	Skiff 758	
15e	Skiff 758	This was the position of aPrivt. maintd. which has been discontinved.
23g	Skiff 758	Same as County Wharf Lt. #3 which was plotted by triangulation.
3h to 9h	Skiff 758	Superseded by 1965 work
58h to 80h	Skiff 758	
86h & 87h	Skiff 758	
100h to 111h	Skiff 758	
1jto 9j	Skiff 758	Wire drag investigation
11j to 14j	Skiff 758	
6k to 9k	Skiff 758	Wire drag investigation
47k	Skiff 758	Same as County Wharf Lt. #1 which was plotted by triangulation.
69n	Skiff 758	Superseded by 2"1" Skiff 520

The shoreline on the Smooth Sheet was left in pencil due to the changes from that shown on the manuscripts available at this time. See section G. SHORELINE of this report for more information.

Respectfully submitted,

Bernie T. Davis

Bernie T. Davis
Surveying Technician

FORM 197
(3-16-55)

GEOGRAPHIC NAMES

Survey No. H-8741

(17)

Name on Survey	A On Chart No.	B On previous survey No.	C On U. S. quadrangle Maps	D From local information	E On local Maps	F P. O. Guide or Map	G Rand McNally Atlas	H U. S. Light List	K	
Alexander Is.										1
Atkinson Is.										2
Baytown										3
Black Duck Bay										4
Brinson Point										5
~~Cedar Point~~										6
Evergreen Pt.										7
Hog Island										8
Morgans Point										9
Spilmans Is.										10
Tabbs Bay										11
Ash Point										12
Shell Point			Names approved							13
Galveston Bay			June 24, 1966							14
Barbours Cut			Frank M. Parker							15
Lower San Jacinto Bay										16
Upper San Jacinto Bay										17
Goose Creek										18
Blackwell Peninsula										19
Mitchell Bay										20
St. Mary Pt.			Approved 1-17-72							21
Cedar Bayou			A. J. Wright							22
Mesquite Knoll										23
Ilfrey Island										24
										25
										26
										27

FORM C&GS-712
(3-9-64)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

(18)

TIDE NOTE FOR HYDROGRAPHIC SHEET

June 28, 1966

Nautical Chart Division:

Plane of reference approved in
9 volumes of sounding records for

HYDROGRAPHIC SHEET 8741

Locality: Galveston Bay, Texas

Chief of Party: P. A. Stark, R. E. Alderman - 1963-65

Plane of reference is mean low water

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

Tabbs Bay
Morgan Point

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

1.0 ft.

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

Vol.	Position
2	1e - 135e

J. M. Symons
Chief, Tides and Currents Branch

USCOMM-DC 6680-P64

APPENDIX C

Tidal Notes

Hydrographic Survey H-8741

Tide control for the 1963 survey was furnished by two tide gages, one at Morgan Point and the other at Tabbs Bay.

GAGE LOCATION:	Morgan Point, Texas Lat. 29°40.58' Long. 94°58.85'
GAGE TYPE:	Portable Automatic
STAFF:	Vitrified scale MLW corresponds to 2.9 feet on the staff(1963) MLW corresponds to 2.8 feet on the staff(1965)
CORRECTIONS:	No time or height corrections were applied
TIME MERIDIAN:	90th

The limits of Morgan Point tide gage on this survey are the Houston Ship Channel and West

GAGE LOCATION:	Tabbs Ba y Lat. 29°42.5' Long. 94°59.0'
GAGE TYPE:	Portable Automatic
STAFF:	Vitrified scale MLW corresponds to 1.9 feet on the staff . This gage was not used in the 1965 survey.
CORRECTION:	No time or height corrections were applied
TIME MERIDIAN:	90th

The limits of Tabbs Bay Gage on this survey was the area of Tabbs Bay and East.

Note: The Corps of Engineers maintains a tide gage within the limits of this survey at Lat. 29°40.60' Long. 94°58.83'.

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

(20)

FORM C&GS-946
(REV. 11-65)
(PRESC. BY HYDROGRAPHIC MANUAL 20-2, 6-94, 7-13)

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

HYDROGRAPHIC SURVEY STATISTICS

HYDROGRAPHIC SURVEY NO. 8741

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 *(List)*

SPECIAL REPORTS *(List)*

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				1896
POSITIONS CHECKED		265		
POSITIONS REVISED		0		
DEPTH SOUNDINGS REVISED		302		
DEPTH SOUNDINGS ERRONEOUSLY SPACED		25		
SIGNALS ERRONEOUSLY PLOTTED OR TRANSFERRED				
	TIME (MANHOURS)			
TOPOGRAPHIC DETAILS		16	85 hrs	
JUNCTIONS		8		
VERIFICATION OF SOUNDINGS FROM GRAPHIC RECORDS		12		
SPECIAL ADJUSTMENTS		40		
ALL OTHER WORK		255		
TOTALS		331	281	

PRE-VERIFICATION BY	BEGINNING DATE	ENDING DATE
VERIFICATION BY Dennis J. Romesburg	BEGINNING DATE 11/21/66	ENDING DATE 1/24/67
REVIEW BY Jaxine B. Powers	BEGINNING DATE Dec. 16, 1971	ENDING DATE March 3, 1972

Inspected by: Dale E. Westbrook 48 hrs. 11/14/72

USCOMM-DC 36271-P65

(21)

OFFICE OF MARINE SURVEYS AND MAPS

MARINE CHART DIVISION

HYDROGRAPHIC SURVEY REVIEW

REGISTRY NO. H-8741 FIELD NO. ECFP-10-1-63

Texas - Houston Ship Channel, Morgans Point to St. Mary Point

SURVEYED: February 6, 1963 through August 30, 1965

SCALE: 1:10,000 PROJECT NO.: OPR-428

SOUNDINGS: Raytheon DE-723 Depth Recorder, Sounding Pole CONTROL: Sextant fixes on shore signals

Chief of Party	P. A. Stark
	R. E. Alderman
Surveyed by	G. F. Trefethen
Protracted by	B. T. Davis
Soundings Plotted by	B. T. Davis
Verified and Inked by	D. J. Romesburg
Reviewed by	F. B. Powers
	Date: March 3, 1972
Inspected by	D. E. Westbrook

1. Description of the Area

This survey covers Galveston Bay north of lat. 29°40.2', and Houston Ship Channel from Morgan Point to St. Mary Point. Federally maintained channels extend along the Houston Ship Channel and across Galveston Bay from Cedar Bayou to Barbour Cut. The bottom configuration is generally flat in the bays. Numerous piers, stakes, piles, oil well structures, dolphins, duck blinds, and foul areas exist throughout the survey area.

The predominate bottom characteristic is soft mud.

2. Control and Shoreline

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

The shoreline originates with photogrammetric manuscripts RS-803 (1951-62), RS-804 (1951-62), and RS-805 of 1962. Additions and corrections from the hydrographic signal plot and the boat sheet of the present survey are shown in green and red, respectively.

3. Hydrography

A. Depths at crossings are in good agreement.

B. The usual depth curves were adequately delineated, except the low-water line which, in most areas, fell in very shallow and foul water.

C. The development of the bottom configuration and the investigation of least depths are considered adequate.

4. Condition of the Survey

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

5. Junction

An adequate junction was effected with H-8742 (1962) on the south. No contemporary survey junctions with the present survey on the north. However, present survey depths are in harmony with charted depths in that area.

6. Comparison with Prior Surveys

H-414 (1853) 1:20,000
H-5121 (1931) 1:5,000
H-5122 (1931) 1:5,000
H-5123 (1931) 1:5,000
H-5124 (1931) 1:5,000

Survey H-414 was compared with and was superseded in the review of the 1931 surveys. Further consideration is not deemed necessary in the present review.

These prior surveys taken together cover the common area of the present survey. A comparison between the present and prior surveys reveals the present survey depths to be 1-3 feet deeper than the prior depths, except for the portion of the survey area in the north end of Galveston Bay which shows little change.

So much change in the shoreline has occurred since the prior surveys in this area that little would be gained by a detailed comparison.

Attention is directed to the following:

A. Two submerged jetties charted in the vicinity of lat. 29°40.65', long. 94°56.30', from T-4613 (1930) were not investigated by the field party and have been carried forward to supplement the present survey.

B. The platforms charted in lat. 29°42.48', long. 94°59.90' from H-5122 (1931) was not investigated by the field party and has been carried forward to the present survey as submerged platform ruins.

C. Two derricks charted in the vicinity of lat. 29°42.32', long. 94°59.65' from H-5122 (1931) were not investigated by the field party and have been carried forward to the present survey as submerged derrick ruins.

D. Two oil wells, one in lat. 29°43.12', long. 94°59.37', and the other in lat. 29°42.94, long. 94°59.34 are charted from T-9919 (1951). They were not verified or disproved by the field party and have been carried forward to the present survey.

E. The pier ruins charted in lat. 29°40.91', long. 94°59.05' from T-9920 (1951) were not verified or disproved by the field party and have been carried forward to the present survey.

F. A row of piling on H-5124 (1931) in lat. 29°43.82', long. 95° 01.53' was investigated by the field party and one pile was found. The row of piles has been brought forward as submerged piles to supplement the present survey.

G. A row of piles on H-5124 (1931) in lat. 29°44.16, long. 95° 01.69' was not investigated by the field party and has been brought forward as submerged piles to supplement the present survey.

H. The area of broken piling on H-5121 (1931) in lat. 29°40.4', long. 94°58.6' was not specifically investigated by the field party although it was designated as a Pre-Survey Review Item. Several regular sounding lines were run across the area, however, with no indications of piling. Therefore, because of a lack of specific information on the location of such piling and the changes that have taken place in the area it is believed that the piling no longer exist, and are superseded by the present survey information.

With the addition of the items noted above, this survey is adequate to supersede the prior surveys within the common area.

7. Comparison with Charts 588 latest print date May 9, 1970, 7th Ed.
589 latest print date November 28, 1970, 11th Ed.

A. Hydrography

The charted hydrography originates with the previously discussed prior surveys which require no further consideration, supplemented by the partial application of depths from the boat sheet and verified smooth sheet of the present survey and from prior and subsequent information furnished by the Corps of Engineers and Port of Houston Authority. Only minor differences are noted between the present survey and charted depths.

Several features such as snags, piles, wrecks, platforms, etc., were located by the field party and have not as yet been added to the charts. These should be added at the next opportunity.

Attention is directed to the following:

1. The following items were charted subsequent to the date of the present survey from sources indicated and should be retained on the chart:

a. Six stakes charted on chart 588 in the vicinity of lat. 29°40.62', long. 94°58.65' from Corps of Engineers Bp 69322 of 1966.

b. A visible wreck PA charted on chart 588 in lat. 29°40.92', long. 95°00.02' and a sunken wreck in lat. 29°40.89', long. 94°59.89' from L-1244 of 1969.

c. The dolphins charted on charts 588 and 589 in the vicinity of lat. 29°43.80', long. 95°01.2' (piers 4 and 6) from L-1266 and L-1763 of 1965, L-311 of 1966, L-38 of 1970, and 1967 air photography (Bp 98464).

d. Two groups of dolphins charted on charts 588 and 589 in the vicinity of lat. 29°43.69', long. 95°01.70' (around two towers) from L-1704 of 1964.

e. Two dolphins charted on chart 589 in the vicinity of lat. 29°42.77', long. 95°03.37' from the Port of Houston Authority Bp 79405-07 of 1969.

f. The San Jacinto Bay barge dock in lat. 29°42.78', long. 95°03.37', and soundings along the channel charted on chart 589 in the vicinity of lat. 29°42.7', long. 95°03.2' are from Port of Houston Authority surveys Bp 79405-07 of 1969.

g. The soundings along the Houston Ship Channel charted on charts 588 and 589 were charted from Corps of Engineers Bp 68210-11 of 1965, Bp 78319-21 of 1970, and Bp 78325-31 of 1970.

h. The cooling system intake canal charted on chart 588 in the vicinity of lat. 29°41.5', long. 94°56.86' from United States Power Squadrons Chart Letter No. 1844 of 1968.

i. The spoil areas charted on chart 588 within the limits of the present survey originate with Corps of Engineers surveys Bp 68405 and Bp 74380 of 1965 and 1968 respectively. These spoil areas should be retained on the chart.

j. The sunken wreck on chart 588 in lat. 29°40.84', long. 95°00.04' is shown as a visible wreck on the present survey but was changed to a sunken wreck on the chart from Chart Letter No. 1244 of 1969 and should be retained as charted.

k. The five sunken wrecks on chart 588 at the west end of Barbours Cut in about lat. 29°40.8', long. 95°00.4' were described as submerged from information in Chart Letter No. 1244 of 1969. Although some of these wrecks are shown to be visible on the present survey, these wrecks should be retained as charted.

2. The rock pile charted on chart 588 in lat. 29°40.29', long. 94°58.57' was originally a high water feature on H-5121 (1931). The least depth was found on the present survey. The chart should be revised to show a 6-ft. sounding Rk in that area in accordance with the present survey.

3. Two dolphins charted on chart 588 in the vicinity of lat. 29°42.19', long. 95°01.15' from a source not readily ascertainable, were not adequately investigated on the present survey and should be retained on the chart, but revised to submerged dolphins.

4. The visible wreck in lat. 29°40.97', long. 94°59.64' from T-9920 of 1951 is believed to have shifted position and should be deleted from the chart in favor of the visible wreck shown nearby on the present survey.

5. Two submerged piles in the vicinity of lat. 29°41.54', long. 94°59.27' from H-5122 of 1931 were adequately investigated and should be deleted from the chart in favor of the submerged piles shown on the present survey.

6. A snag on chart 588 in lat. 29°41.41' (24.6), long. 94°58.02' (01.2) from a source not readily ascertainable was investigated adequately and should be deleted from the chart in favor of the snags and stakes shown on the present survey. Applied

7. The pile on chart 588 in lat. 29°41.29' (17.4), long. 94°59.03' (01.8) was described on the Pre-Survey Review as a discontinued light strucuture. It was not investigated on the present survey. This pile should be retained on the chart but revised to a submerged pile. No Corr

8. The two submerged piles on chart 588 in lat. 29°40.22' (13.2), long. 94°58.56' (33.6) are shown as submerged snags on the present survey and the chart should be revised accordingly. No corr

9. The tree on chart 588 in lat. 29°40.53' (31.8), long. 94°57.93' (55.8) is shown as a snag on the present survey and the chart should be revised accordingly. Applied To Base

10. The stake on chart 588 in lat. 29°40.62' (37.2), long. 94°56.52' (31.2) is shown as platform ruins on the present survey and the chart should be revised accordingly. AP

11. The pier ruins and dolphins on chart 588 in lat. 29°40.94' (56.4), long. 94°59.00' originate with T-9920 (1951) and 1962 air photos (Bp 98155). The features in this area should be charted as shown on the present survey. AP

12. The ruins on chart 588 in lat. 29°41.51' (30.6), long. 94°56.39' (23.4) are from the present survey. The feature is nothing more than duck blind ruins and should be deleted from the chart. AP

13. The snag on charts 588 and 589 in lat. 29°43.88' (52.8), long. 95° 01.56' should be revised on the charts to a 1-ft. sounding obstruction as shown on the present survey. No Corr

14. The 1-ft. charted in lat. 29°40.95' (57.0), long. 94°59.05' (03.0) from H-5121 has apparently been removed by dredging in this area and should be deleted from the chart. No Corr

15. The submerged wreck PA charted in lat. 29°40.52' (31.2), long. 94° 58.87' (52.2) from N. to M. 39 (1961) was not visible to the hydrographer and no search was made for submerged remains. The wreck should be retained as charted. No Corr

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

B. Topography

The charted topography should be revised to agree with the topography on the present survey except as noted below:

1. The following items were charted subsequent to the date of the present survey from sources indicated and should remain as charted:

a. A pier and two dolphins on chart 589 in lat. 29°42.78', long. 95°03.39' from Port of Houston Authority Bp 79405-07 of 1969.

b. The numerous shoreline revisions charted on charts 588 and 589 from Bp 98464 and Bp 98462 respectively (1967 air photography).

c. The topographic change and channel charted on chart 588 in lat. 29°40.5', long. 94°58.55' from Corps of Engineers Bp 69322 of 1966.

d. A pier and two piles charted on chart 588 in lat. 29° 41.45', long. 95°01.56' from L-44 of 1970.

e. The topographic change charted on chart 588 in lat. 29° 42.0', long. 94°56.7' from L-1844 of 1968.

f. The numerous shoreline revisions on chart 588 in Galveston Bay from 1968 air photography (Bp 77451).

g. A pier charted on chart 588 in lat. 29°41.91', long. 94°57.25' from a source not readily ascertainable.

2. The numerous shoreline revisions charted on charts 588 and 589 from 1962 photography (Bp 98155 and Bp 98272) respectively were not verified or disproved by the present survey and should be retained on the chart.

3. The ruins charted on chart 588 in lat. 29°40.91', long. 94° 59.18' prior to the date of the present survey from a source not readily ascertainable was retained on the chart when a major revision to the shoreline was made. It is believed the ruins are no longer in existence and should be deleted from the chart.

C. Controlling Depths

The tables of controlling depths and controlling depth note of Houston Ship Channel and Barbours Cut Channel on charts 588 and 589 are based on Corps of Engineers data subsequent to the present survey L-392 of 1970 and 614 of 1969 respectively. The charted 16½ ft. Rep 1969 and 16½ ft. Rep 1966 on charts 588 and 589 in the vicinity of lat. 29°43.8', long. 95°01.25' (Piers 2 and 4) are based on Port of Houston Authority L-38 of 1970 and L-311 of 1966 respectively. The controlling depth noteof San Ja cinto Bay Barge Channel and turning basin on chart 589 are based on Port of Houston Authority survey Bp 79405-07 (1969). The 4 ft. charted along the access channel on chart 588 in lat. 29°40.59', long. 94°58.85' is based on Corps of Engineers information in L-64 of 1965.

The charted controlling depth tables and notes supersede the present survey information and should be retained as charted.

D. Aids to Navigation

The present survey positions of buoys N"4", N"8", N"16", N"18", N"20", N"22", N"24", N"26", N"28", and N"30" marking Cedar Bayou Channel are in substantial disagreement with their charted positions, but adequately mark the feature intended.

Cedar Bayou Channel buoys N"10", N"12", N"34", and N"38" were moved subsequent to the date of the present survey from information published in N. to M. 94 of 1970.

Houston Ship Channel buoy C"109" located on the present survey in lat. 29°42.91, long. 95°01.29' is charted 320 meters northward of this position. The reason for this discrepancy is not known.

Houston Ship Channel lighted buoy "98" was changed to a lighted buoy subsequent to the date of the present survey from information published in N. to M. 2 of 1968.

The privately maintained aids charted in San Jacinto Bay marking the barge channel and dock were charted subsequent to the date of the present survey from information published in Local Notice to Mariners No. 94 of 1970.

Although several of the aids located on the present survey are in substantial disagreement with their charted position, the features intended are adequately marked.

8. Compliance with Project Instructions

This survey adequately complies with the Project Instructions.

9. Additional Field Work

This survey is considered to be a good basic survey and no additional field work is recommended.

Examined and Approved:

John C. Boyer
Chief
Marine Chart Division

for Donald R. Tilbert
Associate Director
Office of Marine Surveys and Maps

H-8741

Items for Future Pre-Survey Reviews

The bottom is considered adequately developed on the present survey. Minor changes in general depths were noted since the prior surveys. These changes can be attributed to natural causes. Extensive changes are continually being made for harbor improvements and channel maintenance.

Position index - lat. 294, long. 0950
Bottom change - 2
Use index - 9
Resurvey cycle - 25 yrs.

Position index - lat. 294, long. 0951
Bottom change - 2
Use index - 9
Resurvey cycle - 25 yrs.

FORM C&GS-8352
(3-25-63)

NAUTICAL CHART DIVISION

(31)

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. H-8741

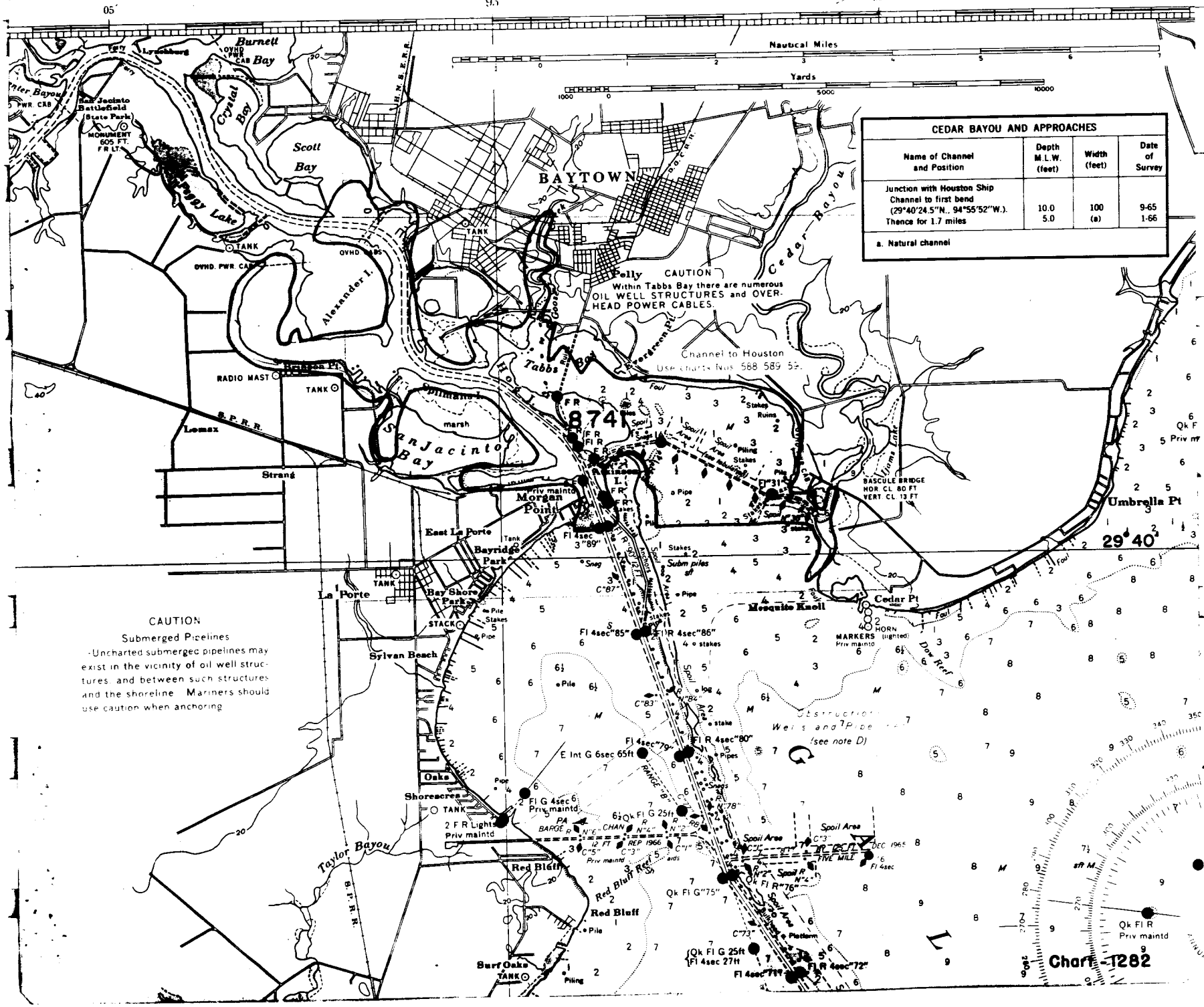
INSTRUCTIONS

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	2/4/66	Helmer	~~Full~~ Part Before ~~After~~ Verification Review Inspection Signed Via
11323			Drawing No. Appd critical changes within area of charted hydrography.
589	10/26/66	Helmer	~~Full~~ Part Before ~~After~~ Verification Review Inspection Signed Via
			Drawing No. Revised fcw sdgs and other information. Was previously appd as Bp. 68440
588	6/30/69	Lundberg A.E	~~Full~~ Part ~~Before~~ After Verification Review Inspection Signed Via
			Drawing No. Appd hydro before review only in area where this sheet overlaps area of H-8742
519	4/19/73	D. Williams	Full ~~Part~~ ~~Before~~ After Verification Review Inspection Signed Via
			Drawing No. DWG#10M-x
588	6/6/73	D. Williams	Full ~~Part Before~~ After Verification Review Inspection Signed Via
11329			Drawing No. DWG#22
589	6/29/73	D. Williams	Full ~~Part Before~~ After Verification Review Inspection Signed Via
11329			Drawing No. 32
152-SC	5/8/74	W. Wanlass	~~Full~~ Part ~~Before~~ After Verification Review Inspection Signed Via
			Drawing No. 11 Descriptive Report fully applied thru cht 588 Dwg #22
152 SC	2/25/77	J. OWYANG	Full ~~Part Before~~ After Verification Review Inspection Signed Via
11326			Drawing No. 14 fully applied thru cht 588 and 589.
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.

FORM C&GS-8352 SUPERSEDES ALL EDITIONS OF FORM C&GS-975

USCOMM-DC 8558-P63


Nautical Miles
Yards
CEDAR BAYOU AND APPROACHES
Name of Channel and Position | Depth M.L.W. (feet) | Width (feet) | Date of Survey
Junction with Houston Ship Channel to first bend (29°40'24.5"N., 94°55'52"W.). Thence for 1.7 miles | 10.0 5.0 | 100 (a) | 9-65 1-66
a. Natural channel
CAUTION
Within Tabbs Bay there are numerous OIL WELL STRUCTURES and OVERHEAD POWER CABLES.
CAUTION
Submerged Pipelines
-Uncharted submerged pipelines may exist in the vicinity of oil well structures, and between such structures and the shoreline. Mariners should use caution when anchoring.
Channel to Houston
Use charts Nos. 588 589 52
BAYTOWN
Burnett Bay
Crystal Bay
Scott Bay
Pelly
Tabbs Bay
Alexander I.
Goose Pt.
Goldsmith Pt.
Cedar Bayou
Lynchburg
San Jacinto Battleground State Park
MONUMENT 605 FT. FR LT.
Peggy Lake
Lomax
Strang
Morgan Point
East La Porte
Bayridge Park
La Porte
Bay Shore Park
Sylvan Beach
Oaks
Shoreacres
Taylor Bayou
Red Bluff
Burf Oaks
Umbrella Pt
Mesquite Knoll
Cedar Pt
Dow Reef
Five Mile
Chart 1282
29°40'