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5358

U. S. COAST & GEODETIC SURVEY
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Ed. June, 1923

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R. S. Patton, Director

State: Texas

DESCRIPTIVE REPORT

Photo-
Topographic } Sheet No. 5358.
~~Hydrographic~~

LOCALITY

Matagorda Bay

MATAGORDA

~~Mud Island Reef to Gulf~~

1934

CHIEF OF PARTY

T. M. Price, Jr., Ensign.

U. S. GOVERNMENT PRINTING OFFICE: 1923

applied to chart 1284 Dec. 17, 1937

J.G.H.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 5358

~~PHOTO-~~
TOPOGRAPHIC TITLE SHEET

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

Field No. 8

REGISTER NO. 5358

State Texas

General locality Matagorda Bay

Locality ~~Mud Island Reef to Gulf~~ MATAGORDA

Scale 1/20,000 Date of survey Photographs, Dec. 19 19 33
Compilation, September-October, 1934

Vessel Army Air Corps. Camera: Fairchild T-3A, 31-76

Compilation Party # 20, Corpus Christi, Texas.

Chief of party Ensign T. M. Price, Jr.

Surveyed by See data sheet in descriptive report.

Inked by J. L. Smith

Heights in feet above to ground to tops of trees

Contour, Approximate contour, Form line interval feet

Instructions dated November 7, 19 33.

Remarks: Compilation of aerial photographs L-13 to L-36.

Sheet reduced to scale and printed by photo-lithographic process.

- NOTES ON COMPILATION -

SHEET NO. 8.

PHOTOS. NO. L-13 to L-36.

DATE OF PHOTOGRAPHS: Dec. 19, 1933. TIME: 10:⁴⁷ to 11:¹⁸ A. M.

	BY	DATE
SCALE FACTOR (0.96)	(sgd) <u>C.H. Rulfs & J.L. Smith</u>	6/14/34.
PROJECTION	(sgd) <u>T. M. Price, Jr.</u>	6/21/34.
PROJECTION CHECKED	(sgd) <u>J. L. Smith</u>	6/23/34.
CONTROL PLOTTED	(sgd) <u>J.L. Smith - J.R. Reynolds</u>	6/27/34.
CONTROL CHECKED	(sgd) <u>J.R. Reynolds - J. L. Smith</u>	6/28/34.

TOPOGRAPHY TRANSFERRED

TOPOGRAPHY CHECKED

SMOOTH RADIAL LINE PLOT	(sgd) <u>J. L. Smith</u>	8/25/34.
RADIAL LINE PLOT CHECKED	(sgd) <u>T. M. Price, Jr.</u>	8/25/34.
DETAIL INKED	(sgd) <u>J. L. Smith</u>	11/1/34.

AREA OF DETAIL INKED	<u>55.3</u>	sq. statute miles.
LENGTH OF SHORE LINE OVER 200 m.	<u>35.7</u>	statute miles.
LENGTH OF SHORE LINE UNDER 200 m.	<u>79.3</u>	statute miles.
LENGTH OF SHORE LINE OF LAKES	<u>45.0</u>	statute miles.

GENERAL LOCATION: MATAGORDA BAY.

LOCATION: MATAGORDA
MUD ISLAND REEF TO GULF.

DATUM STATION: Matagorda Longitude LATITUDE: 28 - 41' - 35.434" 1090.81⁰ ✓ METERS.
Station, 1911, 1931 LONGITUDE: 95 - 58' - 07.268" 197.3²⁸¹ ✓

(position from office adjusted list)

COMPILER'S REPORT
for
PHOTO TOPOGRAPHIC SHEET FIELD NO. 8 (REG. NO. 5358)

1. GENERAL INFORMATION

This sheet was compiled from photographs taken by the U. S. Army Air Corps, using a Fairchild T-3A camera No. 31-76. The photographs used on this sheet are L-13 to L-36 inclusive. The flight for the L-strip photographs was made on December 19, 1933 from 10:47 to 11:18 A. M.

The tide in Matagorda Bay is small and the only difference in its stage which would affect the interpretation of the aerial photographs would be caused by strong continued winds. The water level at the time these photographs were taken is considered normal.

2. CONTROL

(a) Sources

Triangulation, C. & G. S., 1906, adjusted to 1927 datum.

Triangulation by F. L. Gallen, 1931.

Triangulation by E. O. Heaton, 1934. The field parties geographic positions were used for the 1934 triangulation. The difference between the unadjusted and final adjusted positions would be unplotable at the scale of this compilation.

Supplemental control points were established by the field inspection party and have been designated as "Field Inspection Stations." These stations are objects, such as road intersections, points of land etc, which showed up well on the photographs and were located in order to fill in the gaps between triangulation stations and better control certain photographs. The positions of these stations were determined by theodolite three point fixes from triangulation stations and fourth order accuracy was obtained. No recoverable marks were established for these stations. The theodolite three point fix stations included on this sheet are as follows:

Wed - Latitude	28° 37'	1677.0 meters
Longitude	95° 55'	1501.6 meters
Ding - Latitude	28° 39'	171.1 meters
Longitude	95° 52'	1329.0 meters
Mil - Latitude	28° 45'	777.7 meters
Longitude	95° 56'	1178.1 meters

Stations WED and DING are not recoverable. Station MIL is recoverable and is listed under recoverable objects and described on Form # 524.

(b) Errors

No errors in control were found by the radial line plot on this sheet.

2. CONTROL (Cont'd)

(c) Remarks

The recoverable hydrographic and topographic stations and landmarks shown by black circles and appropriate notations on the chart were located on the ground and on the photographs by the field inspection party. Their position was established by radial plot only, except in the case of station Mil which was located by theodolite three point fix. No temporary hydrographic stations were located on this sheet.

3. COMPILATION

(a) Method

The usual radial line method of plotting from five lens photographs was used in the compilation of this sheet. There was no departure from the standard method, now in practice.

(b) Adjustment of Plot

Overlapping radial points from Sheet No. 5354 were transferred to this sheet No. 5358 and with these points as a start the plot was continued and extended onto sheet No. 5360 so as to insure a perfect junction between these sheets.

No unusual adjustments were required in making the plot for this sheet and good intersections were obtained.

A large number of the photographs included on this sheet are tilted sufficiently to make tracing from certain portions of the photographs somewhat difficult. Three photographs Nos. 23, 28, and 31 showed evidence of excessive tilt and small weight was given to the cuts from these pictures in making the radial plot. In fact, these pictures were omitted from the radial plot and were not used in tracing except that the town of Matagorda was traced from the "B" print of No. 28 which was found to be well to scale and fit in with the radial plot.

(c) General Description of Topography and Interpretation

In addition to the "General Report of Matagorda and Adjoining Bays" by the field inspection party (filed with Descriptive Report Register No. 5351) the following notes are given to assist in the interpretation of this sheet.

The shore line from Mud Island Reef to vicinity of longitude 96°-03' is clearly defined by a white sand and shell beach. From this point to the Gulf the main shore line is defined by marsh grass which shows up dark on the photographs with occasional stretches of sand and shell beach. The mean high water line is not so clearly defined around the two deltas, one located at longitude 96°-01'-00" and the other at the mouth of the Colorado River. The water in these regions is so shallow that a change in tide of a few inches will change the shore line considerably. However, it is believed that the shoreline as shown on this sheet around these deltas is a close approximation to the true mean high water line, at the date the photographs were taken. However, these deltas are building out rapidly and the high water line will not be in the same position for any length of time.

3. COMPILATION (Cont'd)

(c) General Description of Topography and Interpretation. (cont'd)

The shoal areas which have been shown by dotted lines were located from their appearance on the photographs alone and cannot be taken as representing the low water line, but only as an indication of shoal area.

The general topography of this region may be described as grass lands interspersed with marsh areas, the division line between the grass land and marsh usually being a strip of sand which shows up white on the photographs. There are some cultivated fields between Matagorda and the Gulf, and abandoned rice fields just north of Matagorda.

The large wooded area just west of the Colorado River consists chiefly of oak trees. The trees just west and south of Matagorda along the Colorado River are willows approximately 20 feet in height. There are other varieties of trees scattered over this region. The "general tree and brush" symbol has been used to indicate all these growths.

Areas of sand and mud which are occasionally covered with water and which are at other times uncovered and dry have been left open and labeled "Sand and Mud". Some of these areas are covered with short grass.

The road symbols used indicate the importance rather than the type and material of the roads. A double solid line was used for through highways and well traveled public roads. A double broken line indicates roads of lesser importance and private roads. Trails are shown with a single dash line.

In some cases small irrigation canals and ditches parallel roads as is the case in the area just north east of Matagorda. No attempt has been made to show these canals and ditches but notes such as "Road--ditch on each side" have been used where necessary. The junction of a canal with a ditch along side of a road has been indicated by turning the ends of the lines delineating the canal so that they parallel the road for about 1/16 inch. Large canals and ditches have been indicated by a double solid line and smaller ditches by a single full line, where there would be no interference with the roads.

It is difficult from the photographs to tell whether the small shell islands and reefs are above or below M.H.W., even with a thorough field inspection, and since these are also subject to change, the present hydrographic survey will be the best authority on their nature. A comparison was made only to the boat sheet which is not yet complete.

(d) Bridges

The only bridge which appears on this sheet is a small fixed wooden bridge located near latitude $28^{\circ}40'25''$ and longitude $96^{\circ}01'50''$. The dimensions and clearance are of no importance for it crosses only a small stream which is not navigable.

3. COMPILATION (Cont'd)

(e) Information From Other Sources

The only source of information was that furnished by the photographs and the notes written thereon by the field inspection party, except a layout of the Texas Gulf Sulfur Plant which was used only to identify certain features of the Plant, and a map in the vicinity of the town of Matagorda from which certain names were taken, and other name sources as shown below. *The field inspection party could not determine whether Mud I. Reef and Shell I. Reef were above or below M.H.W.*

(f) Conflicting Names *The hydrographic party found these to be ~~in~~ ^{at M.H.W.} ~~on~~ ^{and they have therefore been shown by a dotted outline on this sheet.}*

There are no names on this sheet conflicting with names shown on the U. S. C. & G. S. charts of this area, except Mud Island Reef, which conflict is fully explained in the descriptive report for sheet Reg. No. 5354, although, there are new names on this sheet. There is one triangulation station on this sheet named "Shipprian's House, Peak of Roof 1906." The correct name should be "Zipprian's House". The name Zipprian was obtained from a layout map of the Texas Gulf Sulfur Co. Plant, and from records of the tax collector at Bay City, Texas. For names Shell I. and Dog I. refer to P.P. 4, (3) a, b, c.

(g) List of New Names

"Baxter Island"
"Nabb Island"

The above names were obtained from Matagorda County Conservation and Reclamation District map, survey of June 1933, H. J. Wilkins, Engineer, Bay City, Texas.

Wild Cow Island -- appears on U. S. C. & G. S. small scale chart #117 but not chart #1284. Sheet 8.

Little Boggy Bayou - from U.S.E. Intracoastal W.W. Survey 1928 Sect. 8, ^{Sheet 8.}

Culver Cut -- from U. S. E. Intracoastal Waterway maps, sheet No. 8. ^(Sheet #2)

Crab Bayou - " " " " " " " " " " " "

4. COMPARISON WITH OTHER SURVEYS

This sheet is joined by sheet Reg. No. 5359 on the south, by sheet Reg. No. 5354 on the west and by sheet Reg. No. 5360 on the east. The junction with adjoining sheets is satisfactory.

Surveys of this area were made by the U. S. Coast and Geodetic Survey about 1880 (chart #1284) and the Intracoastal Waterway Survey, U. S. Engineers 1927-28 (section 8, sheets Nos. 6, 7, 8.) No detailed comparison was made to the U. S. E. surveys.

Comparison to surveys of 1880 (chart No. 1284)

(1) The most radical changes in the shore line have occurred at the mouth of what is now called Culver Cut and at the mouth of the Colorado River.

Culver Cut furnished an outlet for the river into Matagorda Bay and a delta has been built up by the dirt dredged in making the cut and by dirt washed down by the stream. This delta extends out into the Bay approximately one mile farther than is shown by chart #1284. The delta has built up around what was called Dog Island and Dog I. channel. Therefore these names will not appear on this sheet.

(Dog I. Channel may now apply to a different channel. Reference is made to the contemporary hydrographic survey for present usage regarding channel names.

4. COMPARISON WITH OTHER SURVEYS (Cont'd)

At the mouth of the Colorado River south of Matagorda a large delta has been formed by dirt washed down by the river. This delta extends out into the bay approximately $2\frac{1}{2}$ miles farther than shown on chart # 1284 and is approximately 3 miles wide on latitude $28^{\circ}-40'$. This is shown more nearly correct on the September 1934 issue. In dredging operations to keep the river channel open a levee or spoil bank has been built up on either side of the river as is shown by hachures on this sheet. It is understood that it is proposed that a channel will be dredged across the bay, a levee being built up on either side to control the river, and the channel cut on thru Matagorda Peninsula in order to give the river an outlet into the Gulf of Mexico. At the time of the field inspection of this area a drag line was working in the river and approximately $\frac{3}{4}$ of a mile of the levees have been built up below the southern extremity of the delta proper.

This delta is chiefly marsh land with sand and mud around the shore where land is continually being formed. Numerous small streams and bayous extend from the interior of the delta to the bay shore. A dam has been built to divert the flow of the river from the channel which runs from about the center of the delta toward the eastern shore of the delta.

A delta has also been formed at the mouth of a branch of the Colorado River which branch empties into the bay near latitude $28^{\circ}-40'$ and longitude $95^{\circ}-59'$. This delta extends out into the bay approximately $\frac{3}{4}$ of a mile farther than shown on chart # 1284. There is a large bayou between this delta and the large delta at the mouth of the Colorado River. This delta, and likewise the one at Culver Cut is marsh land with sand and mud along the shore.

(2) Change in position of M. H. W. line where it crosses the following meridians:

Longitude	Latitude	Change, old to new** (meters)
$95^{\circ}-52'-30''$	$28^{\circ}-43'-00''$	+12
$95^{\circ}-55'-00''$	$28^{\circ}-42'-30''$	-81
$95^{\circ}-57'-30''$	$28^{\circ}-41'-30''$	-55
$96^{\circ}-00'-00''$	$28^{\circ}-40'-20''$	-29
$96^{\circ}-02'-30''$	$28^{\circ}-39'-30''$	-16
$96^{\circ}-05'-00''$	$28^{\circ}-38'-00''$	-24

** +Accumulation; - Recession (measured along the meridian and not necessarily normal to the shoreline)

(3) General Comparison:

(a) Beacons # 3 and # 5 which mark the channel thru Dog Island Reef are approximately 650 meters N. W. of the position as shown on chart # 1284. The channel marked by these beacons has been called Middle Channel on this sheet. Middle Channel as shown on chart #1284 is somewhat N. W. of this position.

(b) Dog Island has been made a part of the mainland, and Dog Island channel has been filled in by the formation of a delta.

(c) Shell Island is not in the position as indicated on chart No. 1284 but there are a chain of islands now in this approximate locality.

~~(d) Shell Island Reef and Mud Island Reef are shown above M.H.W. on this sheet.~~

4. COMPARISON WITH OTHER SURVEYS (Cont'd)

(e) There is no island in the west branch of the Colorado River near latitude $28^{\circ}-41'-30''$ and longitude $95^{\circ}-59'-45''$ (chart # 1284 Feb. 1934 issue) This has been corrected on the Sept. 1934 issue.

(f) Three piers shown at Matagorda near latitude $28^{\circ}-41'$ and longitude $95^{\circ}-58'$ are no longer in existence. (Chart # 1284 Feb. 1934 issue) This has been corrected on the Sept. 1934 issue.

(g) The lake shown along the shore near latitude $28^{\circ}-41'-30''$ and longitude $95^{\circ}-57'-30''$ is now marsh. (corrected on the Sept. 1934 issue)

Four

(h) ~~Two~~ islands near Latitude $28^{\circ}-43'$ and longitude $95^{\circ}-53'$ are no longer in existence.

(i) There is now a partially destroyed pier at Gulf near latitude $28^{\circ}-43'$ and longitude $95^{\circ}-53'-15''$.

(j) The center of the town of Gulf is somewhat east of the position shown on chart # 1284.

(k) Although a canal has been dredged from Matagorda Bay to the Texas Sulfur Works, it is believed that the portion of the channel that is shown on chart # 1284 as extending into the bay from the mainland is no longer maintained and is not in use. However for verification reference is made to the contemporary hydrographic surveys of Lieut. E. O. Heaton. *F.E. 99, 1934 states channel abandoned.*

(l) Road and highway layout on chart to be entirely revised, and there is now a railroad into Gulf.

(m) Numerous lakes appear in the marsh area near latitude $28^{\circ}-43'$ and longitude $95^{\circ}-55'$ which lakes are not shown on chart # 1284.

(n) Culver Cut near latitude $28^{\circ}-40'$ and longitude $96^{\circ}-01'$ is a new feature. (Shown on Sept. 1934 issue but not named)

(o) Two lakes are shown on this sheet near latitude $28^{\circ}-41'$ and longitude $96^{\circ}-01'$ where one lake is shown on chart # 1284.

(p) Raymond Landing Shoal could not be located from the photographs and therefore was not indicated on this sheet. For its existence and position reference is made to contemporary hydrographic surveys of this area.

(q) The following beacons which appear on chart # 1284 are not shown on this sheet: Beacons "2" and "33" near latitude $28^{\circ}-41'$ and longitude $95^{\circ}-54'$. Beacon (no number) near latitude $28^{\circ}-40'$ and longitude $95^{\circ}-54'$. Beacons "1" and "2" near latitude $28^{\circ}-39'$ and longitude $95^{\circ}-58'$. Beacons "1", "3", "5" and "7" near latitude $28^{\circ}-37'-30''$ and longitude $95^{\circ}-59'-30''$. (Beacons No. 3 and No. 5 are shown on this sheet but their position is not the same as the position of "3" and "5" shown on chart # 1284. Note: the above applies to Feb. 1934 issue. September 1934 issue only shows beacon (R & BK) near latitude $28^{\circ}-40'$ and longitude $95^{\circ}-54'$).

Only the beacons located by triangulation were shown on this sheet and for the existence and position of all other beacons reference is made to the contemporary hydrographic survey of Lt. E. O. Heaton, since they could not be located on the photographs, and their position as later determined by sextant will not be plotted on this compilation.

See Review Report.

5. LANDMARKS

The following determined objects are prominent, can be readily distinguished from seaward and should be charted. They have been described on Form # 567 which accompanies this sheet.

Flag Tower (U. S. Weather Bureau, Matagorda)
 Cupola, school house (Matagorda Public School)
 Stack, (ΔE. Stack, Texas Gulf Sulphur Co. 1934)
 West Stack, (W. Stack, Texas Gulf Sulphur Co.)
 Tank (Elevated), (ΔTexas Gulf Sulphur Works, Black Tank, 1931)
 *Tank (Elevated), (ΔGulf Municipal Tank, 1931)
 Day Beacon No. 3, (ΔBeacon No. 3, 1934, Dog Island Reef)
 Day Beacon No. 5, (ΔBeacon No. 5, 1934, Dog Island Reef)
 Day Beacon, (ΔBeacon "A", 1934)
 Day Beacon, (ΔBeacon "B", 1934)

Regarding other beacons, see last paragraph on page 8.

6. RECOVERABLE OBJECTS

The field inspection party has submitted descriptions on Form # 524 for the following recoverable objects. The positions of (a) and (b) were determined by the radial plot of this sheet. The position of Mil was determined by theodolite three point fix.

	latitude			longitude		
	o	'	seconds	o	'	seconds
(a) S. E. Corner Shed	28	42	1569.1	95	54	1075.4
(b) Flag Tower	28	41	797.7	95	57	1476.3
(c) Mil	28	45	777.7	95	56	1178.1

7. RECOMMENDATIONS FOR FURTHER SURVEYS

The compilation of this sheet is believed to have a probable error of 5 meters in well defined detail of importance for charting and of 8 meters for other data. The width of roads etc. may be slightly exaggerated in order to keep the detail clear and to facilitate clear photographing in the photo-lithographic process.

To the best of my knowledge this sheet is complete in all detail of importance for charting purposes, within the accuracy stated above, and no additional surveys are required.

Submitted by (sgd)

J. L. Smith
 J. L. Smith

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

Copus Christi, Tex.
Nov. 1

1934

DIRECTOR, U. S. COAST AND GEODETIC SURVEY:

The following determined objects are prominent, can be readily distinguished from seaward from the description given below, and should be charted.

Sheet Field No. 8 (Register No. 5358)

T. M. Price, Jr.,

Chief of Party.

DESCRIPTION	POSITION					METHOD OF DETERMINATION	CHARTS AFFECTED
	LATITUDE		LONGITUDE		DATUM		
	°	D. M. METERS	°	D. P. METERS			
FLAG TOWER, (U.S. Weather Bureau, Matagorda)	28-41	797.7 -1049.4	95-57	1476.3 - 152.5	N.A. 1927	Photo-camp.	No. 1284
CUPOLA, school house, (Matagorda Public School)	28-41	1063.7 - 783.4	95-58	270.7 -1358.1	N.A. 1927	Photo-camp.	No. 1284
STACK, (E. Stack, Texas Gulf Sulphur Co., 1934)	28-44	308.1 -1589.0	95-53	485.2 -1143.0	N.A. 1927	Triangulation	No. 1284
WEST STACK, (W. Stack, Texas Gulf Sulphur Co.)	28-44	310.6 -1536.5	95-53	529.2 -1099.0	N. A. 1927	Photo-camp.	No. 1284
TANK (ELEVATED), (Texas Gulf Sulphur Works, Black Tank, 1931)	28-44	921.7 - 925.4	95-53	981.4 - 646.6	N.A. 1927	Triangulation	No. 1284
* TANK (ELEVATED), (Gulf Municipal Tank, 1931)	28-43	1131.1 - 716.0	95-53	802.0 - 826.3	N.A. 1927	Triangulation	No. 1284
Inspected from Matagorda Bay							

changed limit of Chart 1284

A list of objects carefully selected because of their value as landmarks as determined from seaward together with individual descriptions, must be furnished in a special report on this form, and a copy of such report must be attached by the Chief of Party to his descriptive report.

The selection, determination, and description of these points are an important factor in the value of the chart. Landmarks selected at appropriate intervals can be clearly charted. However, when none is outstanding, a group of two or three objects may by their interrelationship provide positive identification. A group so selected should be indicated.

The description of each object should be short, but such as will clearly identify it; for example, a standpipe, elevated tank, gas tank, church spire, tall stack, red chimney, radio mast, etc. Assign numerals to landmarks to indicate: (1) offshore, (2) inshore, (3) harbor, 1, 2, 3 would be a mark useful on all charts. Generally, flagstaffs and like objects are not sufficiently permanent to chart.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

193

DIRECTOR, U. S. COAST AND GEODETIC SURVEY:

The following determined objects are prominent, can be readily distinguished from seaward from the description given below, and should be charted.

Permanent aids to navigation

Sheet Field No. 8. (Register No. 5358)

T. M. Price, Jr.,

Chief of Party.

DESCRIPTION	POSITION					METHOD OF DETERMINATION	CHARTS AFFECTED
	LATITUDE		LONGITUDE		DATUM		
	D. M. METERS	D. P. METERS	D. M. METERS	D. P. METERS			
DAY BEACON NO. 3 (Δ Beacon No. 3, 1934) (Dog Island Reef)	28- 37	1674.7 - 172.4	95- 59	1200.4 - 429.3	N.A. 1927	Triangulation	No. 1284
DAY BEACON NO. 5 (Δ Beacon No. 5, 1934) (Dog Island Reef)	28- 37	1292.3 - 554.8	95- 59	1501.2 - 128.6	N.A. 1927	Triangulation	No. 1284
DAY BEACON, (Beacon "A", 1934) ^ Δ	28- 41	00.6 - 1846.5	95- 53	287.1 - 1341.8	N.A. 1927	Triangulation	No. 1284
DAY BEACON, (Δ Beacon "B", 1934)	28- 40	1590.7 - 256.4	95- 53	180.2 - 1448.8	N.A. 1927	Triangulation	No. 1284
Located in April, 1934							

A list of objects carefully selected because of their value as landmarks as determined from seaward together with individual descriptions, must be furnished in a special report on this form, and a copy of such report must be attached by the Chief of Party to his descriptive report.

The selection, determination, and description of these points are an important factor in the value of the chart. Landmarks selected at appropriate intervals can be clearly charted. However, when none is outstanding, a group of two or three objects may by their interrelationship provide positive identification. A group so selected should be indicated.

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Survey No. T-5358

Date. May 31 1935

GEOGRAPHIC NAMES

Chart No. 1117 - 1284

TEXAS

Diagram No. _____

Approved by the Division of Geographic Names, Department of Interior. ✱

Referred to the Division of Geographic Names, Department of Interior. R

Under investigation. Q

[illegible]

REVIEW OF AIR PHOTO COMPILATION T-5358.

Scale 1:20,000.

Comparison with Contemporary Topographic Surveys.

There are no contemporary topographic surveys in this area.

Comparison with Graphic Control Surveys.

There are no graphic control surveys in this area.

Comparison with Previous Topographic Surveys.

(a) T-600 (1857) Scale 1:20,000.

There has been considerable change in this area since T-600 was executed. The shoreline near Crab Bayou and eastward for about one mile has receded from about 50 meters at the eastern part to about 250 meters at Crab Bayou. Culver Cut has built a delta about one and one-half miles into Matagorda Bay. The small stream that was the east mouth of the Colorado River in 1857 has built a delta about 1/2 mile into the bay.

The size and shape of the ponds in the marsh has changed considerably.

T-600 shows a line of hachures around the edge of the marsh. This boundary has been shown by a line of dots indicating sand and shell.

Except for the above mentioned hachures, T-5358 is adequate to supersede T-600 in all respects.

(b) T-642 (1855, 56, 57) Scale 1:20,000.

T-642 covers the eastern half of this survey.

The Colorado River has built a delta about two miles long and a mile and one-half wide into Matagorda Bay. Eastward of this delta, the shoreline of Matagorda Bay has receded from 20 to 100 meters.

T-642 shows a line of hachures at the edge of the marsh areas. On this survey, the edge of the marsh has been indicated by a line of dots representing the sand and shell that borders the upland.

Except for the above mentioned hachures, T-5358 is adequate to supersede T-642 in all respects.

• 1. The area of the photograph is

• 2. The area of the photograph is

• 3. The area of the photograph is

• 4. The area of the photograph is

• 5. The area of the photograph is

• 6. The area of the photograph is

• 7. The area of the photograph is

• 8. The area of the photograph is

The photo area (shown by dotted lines) at
28° 37' 95° 59' was transferred to this survey
from H-5865 after comparison with the photograph.
3/23/36 - 4/9/36

• 9. The area of the photograph is

• 10. The area of the photograph is

• 11. The area of the photograph is

• 12. The area of the photograph is

• 13. The area of the photograph is

• 14. The area of the photograph is

• 15. The area of the photograph is

• 16. The area of the photograph is

• 17. The area of the photograph is

Comparison with Contemporary Hydrographic Surveys.(a) H-5858, (1935) Scale 1:20,000.

H-5858 covers about two miles of the shoreline at the eastern end of this survey. There is no conflict between this survey and T-5858.

There are three cast iron pipes off the entrance to the canal into the Gulf Sulphur Works. These are not shown on this survey.

(b) The hydrographic survey covering the main portion of this survey has not yet been received. Additional information and comparisons should be obtained from this new hydrographic survey when it arrives from the field. *See opposite page*

Comparison with Chart No. 1284.

For a detailed comparison with this chart see the Descriptive Report for this survey.

There is a considerable disagreement between this survey and Chart No. 1284 in the area around the mouth of the Colorado River.

Blueprint 27375 details information in this area which also does not agree with this survey.

Comparison with the Hydrographic Survey in this area should clear up these discrepancies.

Landmarks.

Chart letters 701 (1935) and 282 (1935) list six landmarks to be added to the charts in this area. There are no landmarks on the present charts of this area.

All the above landmarks are shown on this survey.

Aids to Navigation.

The Notice to Mariners, #13, 1935, Par. 482, states that Dog Island Channel Beacons 1, 3, 5, and 7 have been discontinued. Therefore, triangulation station Dog Island Reef Beacon #5 and triangulation station Dog Island Reef, Beacon #3, which are assumed to be the same beacons, have been omitted from this survey.

Chart letter #593 (1935) states that the new lights listed on page 222, par. 722, Notice to Mariners #19, on May 8, 1935, are in

disagreement with the actual location of the lights and lists the actual present location as taken from sextant fixes plotted on the smooth Hydrographic sheet. These positions have been plotted on this survey from Chart letter 593 (1935). They are shown incorrectly on the present edition of Chart 1284.

Chart letter 701 (1935) lists additional aids to navigation in this area. (Pile, triangulation station Piling, S. E. of Gulf, 1934). Additional aids are probably shown on the Hydrographic survey of this area.

Remarks.

The projection has been checked and found correct.

The degree of accuracy stated in the paragraph under "Recommendations for Further Surveys" is believed to be too high. A better estimate of this accuracy would be 0.3 to 0.5 m.m. for intersected points and 0.3 to 0.8 m.m. for other detail.

The descriptions for recoverable topographic stations on Form 524 are filed under T-5358.

H. L. Hawkins.

August 28, 1935.

Frank G. Enkine

Comparison with H. 5865 (1935) 1:20,000

There are no conflicts with the hydrography. There are several iron pipes and day beacons on the hydrographic survey which are not shown on T-5358.

7.98.

REVIEW OF AIR PHOTO COMPILATION NO. 5358

Chief of Party: T. M. Price Jr.

Compiled by: See page 2
descriptive report

Project: Party No. 20
Corpus Christi, Texas

Instructions dated: Nov. 7, 1933

1. The charts of this area have been examined and topographic information necessary to bring the charts up to date is shown on this compilation. (Par. 16a, b,c,d,e,g and i; 26; and 64)
2. Change in position, or non-existence of wharfs, lights, and other topographic detail of particular importance to navigation which affect the chart, is discussed in the descriptive report. (Par. 26; and 66 g,n)
3. Ground surveys by ~~plane-table, sextant, or~~ theodolite have been used to supplement the photographic plot where necessary to obtain complete information, and all such surveys are discussed in the descriptive report. (Par. 65; and 66 d,e)
4. Blue-prints and maps from other sources which were transmitted by the field party contain sufficient control for their application to the charts. (Par. 28)
Maps for identification of features and names only.
5. Differences between this compilation and ^{contemporary}~~contemporary-plane~~ table and hydrographic surveys have been examined and rectified in the field before forwarding the compilations to the office and are discussed in the descriptive report.

Comparison to boat sheet only.
6. The control and adjustment of the photo plot are discussed in the descriptive report. Unusual or large adjustments are discussed in detail and limits of the area affected are stated. (Par. 12b; 44; and 66 c,h,i)

No unusual or large adjustments
7. High water line on marshy ~~and-mangrove~~ coast is clear and adequate for chart compilation. (Par. 16a, 43, and 44)

NOTE: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual. Refer also to the pamphlet "Notes on the Compilation of Planimetric Line Maps from Five Lens Air Photographs."

8. The representation of low water lines, reefs, coral-reefs and rocks, and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41)
Shoal area indicated on this sheet by dotted outline only.
No low water line obtained.
9. Recoverable objects have been located and described on Form 524 in accordance with circular 30, 1933, circular letter of March 3, 1933, and circular 31, 1934. (Par. 29, 30, and 57)
10. A list of landmarks was furnished on Form 567 and instructions in the Director's letter of July 16, 1934, Landmarks for Charts, complied with. (Par. 16d, e; and 60)
Certain day beacons were not located or listed, as described in the descriptive report.
11. All bridges shown on the compilation are accompanied by a note stating whether fixed or draw, clearance, and width of draw if a draw bridge. Additional information of importance to navigation is given in the descriptive report. (Par. 16c)
No bridges over navigable streams.
12. Geographic names are shown on the overlay tracing. The accepted local usage of new names has been determined and they are listed in the report, together with a general statement as to source of information and a specific statement when advisable. Complete discussion of place names differing from the charts ~~and from the U.-S.-S.-S.-S. Quadrangles~~ is given in the descriptive report, together with reasons for recommendations made. (Par. 64, and 66k)
13. The geographic datum of the compilation is N. A. 1927 and the reference station is correctly noted.
14. Junctions with adjoining compilations have been examined and are in agreement. (Par. 66j)
15. The drafting is satisfactory and particular attention has been given the following:
 1. Standard symbols authorized by the Board of Surveys and Maps have been used throughout except as noted in the report.
 2. The degrees and minutes of Latitude and Longitude are correctly marked.


3. All station points are exactly marked by fine black dots.
4. Closely spaced lines are drawn sharp and clear for printing.
5. Topographic symbols for similar features are of uniform weight.
6. All drawing has been retouched where partially rubbed off.
7. Buildings are drawn with clear straight lines and square corners where such is the case on the ground.

(Par. 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 48)


16. No additional surveying is recommended at this time.

17. Remarks:



18. Examined and approved;


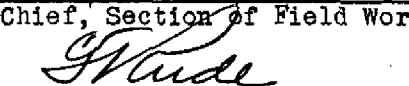

T. M. Price Jr.
Chief of Party

19. Remarks after review in office:

Reviewed in office by: 

Examained and approved:


Chief, Section of Field Records

Chief, Division of Charts


Chief, Section of Field Work

Chief, Division of Hydrography
and Topography.