

5366

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Form 504
Ed. June, 1928

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R. S. Patton, Director

State: Texas

DESCRIPTIVE REPORT

PHOTO
Topographic } Sheet No. 5366
HYDROGRAPHIC

LOCALITY

Corpus Christi Bay

Nueces Bay

1934

CHIEF OF PARTY

T. M. Price, Jr., Ensign

U. S. GOVERNMENT PRINTING OFFICE: 1933

Applied to drawing of chart № 5366, Jan 1936 S.B. Maize
" " " 1117 May 1940 g. H. S.
applied to chart 523 Mar 1945 K. R. D.

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY

REG. NO. 5366

^{PHOTO}
TOPOGRAPHIC TITLE SHEET

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

Field No. 16

Slide 1286-2

REGISTER NO. 5366

State. Texas

General locality. Corpus Christi Bay

Locality. Nueces Bay

Photos taken March 10, 1934-- U & I Flight

Scale 1/20000 Date of survey March 19, 1934-- T Flight

Compilation, December 1934--February 1935

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

Compilation Party #20, Corpus Christi, Texas

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

Surveyed by. See data sheet in descriptive report

Inked by. Dan Allen & V. L. Riehl

Heights in feet above to ground to tops of trees

Contour. Approximate contour, Form line interval feet

Instructions dated November 7, 1933.

Remarks: Compilation of aerial photographs. Nos. U-1 to U-17 incl.
T-22 to T-56 incl., I-29 & I-30

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

* NOTES ON COMPILATION *

- SHEET NO FIELD 16 (REG. NO. 5366) -

PHOTOS: No. U-1 to U-17 incl.; T-22 to T-56 incl.; I-29 & I-30

DATE OF PHOTOS: U & I March 10, 1934 TIME: U Flight 11:19-11:30 A.M.
T March 19, 1934 T Flight 3:19-3:37 P.M.
I Flight 10:55 - 11:10 A.M.

	BY	DATE
SCALE FACTOR (0.970)	(sgd) Dan Allen	8/ 6/34
PROJECTION	(sgd) J. L. Smith	8/ 9/34
PROJECTION CHECKED	(sgd) Ben Benson	8/10/34
CONTROL PLOTTED	(sgd) R. J. Moore	8/14/34
CONTROL CHECKED	(sgd) Dan Allen	8/17/34
TOPOGRAPHY TRANSFERED	(sgd) Dan Allen	10/ 3/34
	(sgd) V. L. Riehl	2/26/35
TOPOGRAPHY CHECKED	(sgd) R. J. Moore	10/17/34
	(sgd) Ben Benson	2/26/35
SMOOTH RADIAL PLOT	(sgd) Dan Allen	9/21/35
DETAIL INKED	(sgd) Dan Allen	1/15/35
	(sgd) V. L. Riehl	2/15/35

AREA DETAIL INKED 75 sq. statute miles

LENGTH OF SHORE LINE OVER 200 m. 29.5 statute miles

LENGTH OF SHORE LINE UNDER 200 m. 35.4 statute miles

GENERAL LOCATION: Corpus Christi Bay

LOCATION: Nueces Bay

DATUM STATION: ACES 1933 Latitude 27°-51'-05.226" (+160.9)
Longitude 97°-30'-13.056" (+357.2)
(Position from field computations)

COMPILER'S REPORT

for

PHOTO TOPOGRAPHIC SHEET NO. 16 (Reg. No. 5366)

1. GENERAL INFORMATION

This sheet was compiled from photographs taken by the U. S. Army Air Corps, using Fairchild five lens T-3A camera No. 31-76. The photographs used were the part of three flights, as follows: U-1 to U-17 incl., covering an area extending from a point about ten miles west of Corpus Christi to the west limits of the city of Corpus Christi along the Calallen-Corpus Christi highway and covering the south shore of Nueces bay and the Nueces River. T-flight, T-25 to T-56 incl., covers the north shore of Nueces bay from a point about two miles West of the town of Portland, to approximately two miles west of the Missouri Pacific railway. This flight also covers the marsh area around the mouth of the Nueces River. The I-flight on this sheet covers only a small area around Clarkwood Texas, only two photos I-29 and I-30 were used.

The time of the photographs are as follows: U-flight March 10, 1934 from 11:19 to 11:30 A.M.; I-flight March 10, 1934 from 10:55 to 11:10 P.M.; T-flight March 19, 1934 from 3:19 to 3:37 P.M.

The tide at the time of the U-flight was about mean high. During the T-flight the tide was low.

2. CONTROL

(a) Sources

Triangulation by Lieut. F. L. Gallen 1931*

Triangulation by Lieut. E. O. Heaton 1934

Plane table graphic location of several points from the 1:20,000 (T-4904) plane table sheet field letter "Q" by Lieut. E. O. Heaton 1934.

The following three point fixes were made by the field inspection party with fourth order accuracy:

	Latitude	Longitude
(1) Cross	27° 49' 12.972"	97° 34' 19.307"
(2) Calallen	27° 51' 20.380"	97° 36' 08.054"
(3) Dem	27° 56' 32.990"	97° 36' 29.449"

Station Cross is the only one of the above that comes within the photographing limits of this sheet and is the only one for which a description has been submitted on Form No. 524. Cross and Dem were located by theodolite and Calallen by sextant.

This control is adjusted to N. A. 1927 Datum. The field parties geographic positions were used for 1934 triangulation. The difference between the unadjusted and final adjusted positions would be unplotable on this scale of this compilation.

(b) Errors (For additional errors see attached report on file)

The radial plot showed two points taken from plane table sheet field letter Q to be in error. A resurvey by the plane table substantiated the radial plot location and the points were corrected on that sheet.

*Note: Rosita Ranch House, S. Chimney 1905, was included in the office adjusted list for 1931 although not observed in 1931

2. CONTROL

(c) Remarks

Several points located on above listed plane table sheet that were spaced between triangulation control and that could be located on the photographs were selected to act as supplementary control. These points were located on the photos in the field and checked against the plotted position by radial plot. All that could be definitely located on the photographs checked except the two mentioned above. Station Aces 1933 was not located as it was very difficult to reach and was not needed for the plot. In several cases short traverse and azimuth ties were made to definite points near control stations where the station itself was doubtfully located on the photographs. These points were plotted graphically on the 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 practice.

(b) Adjustment of Plot

The photographs were free from excessive tilt or scale fluctuations. There was no unusual adjustment required in the radial plot. The control was strong and good intersections were obtained.

Beyond half way out on C-wing, T flight the detail lacked as good definition as on most flights which made it difficult to select radial points in this section. The sun reflection from Nueces Bay was bad on several photographs of the T flight and there were many blemishes in the water area from the chemicals of the fixation process of the photographs.

(c) General Description of Topography and Interpretation.

In addition to the general report for Corpus Christi and adjoining bays, filed with descriptive report for sheet Reg. No. 5365, the following notes are submitted for the interpretation of this sheet.

The north shore line of the portion of Nueces Bay on this sheet is characterized by bluffs approximately 40 feet high and in most cases

3. COMPILATION (CONTINUED)

(c) General Description of Topography and Interpretation (continued)

The south shoreline of Nueces bay is determined by marsh grass. The area near the water line is marshy for a short distance then rises to higher levels by gradual slope and in a few instances by bluffs as shown.

The territory north of Nueces Bay is covered by brush and large cultivated tracts. There are few scattered trees ranging in height from 15 feet to 25 feet but most of the uncleared sections are covered with dense mesquite brush and scrub oak. Large wooded or brush covered areas were outlined and labeled. This was also done with large cultivated tracts. These cultivated tracts are mostly separated by farm roads and small ditches. Where important ditches occur these are shown by a solid line, and if spoil banks are along the ditches these were shown by the usual legend and labeled. The usual legend was used for trails, poor motor and good motor roads. Only the more important trails, field roads and ditches were shown, as it was not thought practicable to show all on this scale considering the time which would have been required both in the office and field for proper identification and representation. Roads not labeled paved are dirt, only passable in dry weather.

There are several gas craters in the area caused by drilling for oil or gas, and these are labeled on the cover sheet. The crater shown at Long. $97^{\circ} 32.1'$ and Lat. $27^{\circ} 48.2'$ is approximately 35 feet high above the surrounding territory. The one at Long. $97^{\circ} 31.6'$ and Lat. $27^{\circ} 48.7'$ is only about 3 feet higher than the ground, having practically filled. The levees shown surrounding this crater were fire walls built to prevent the flow of mud and oil.

This detail transferred to T 5365. ~~see~~

The spoil banks near the Southern Alkali plant were caused by the dredging of a channel from the Corpus Christi Turning Basin to the plant. This work was not done at the time photographs were taken and the work was transferred from plane table sheet Q of Lieut. E. O. Heaton 1934.

There are several small reefs in the north portion of Nueces bay that are shown from their appearance on the photographs alone. The ones that appear to be above high water are shown by solid lines and those that are below are shown by dotted lines. ^{which} ~~these do not necessarily represent~~ low water. These shell reefs and islands change, and are difficult to interpret from the photographs and the hydrographic survey will be a better authority on the present conditions of these features.

There are several "mosquito control ditches" that show up on the photos on the south shore of Nueces Bay, but in as much as these were temporary they were not considered of enough importance to show on this sheet.

With the exception of schools, only those buildings were shown which could be seen from the water. Small breaks in the cultivation symbol mark the location of farm yards and buildings or gas well developments. The gas well developments however have usually been indicated by small tanks, or by squares showing fire dikes.

Some of the areas shown with grass symbol are occasionally cultivated. Some of the areas of the Nueces River delta particularly in the vicinity of station Aces and Viola, although best described and shown as marsh, consists of low grass covered mud flats which during the dry season becomes hard enough to drive a car over, and is used for grazing. The sidings at the Clarkwood Gin in Clarkwood Texas have not been shown. They were located by the field inspection party and are not sufficiently distinct on the photographs to show without identification on the ground. Several other small sidings, as at Viola, have not been shown for same reason.

3. COMPILATION (CONTINUED)

(d) Bridges

There is one bridge over a navigable stream. This is the Missouri Pacific Railroad fixed timber trestle bridge across the Nueces River. It has a vertical clearance of 11 feet at M.L.W. and 5 feet at H. W. and a horizontal clearance of 12 feet. This information furnished by the U. S. E. D. There are several small open trestles on the same railroad line over non-navigable streams.

(e) Information from Other Sources

San Patricio County Map was used for name comparison only. Blue print of the Southern Alkali Plant for identification of certain features only. Plane table Field Sheet Letter Q 1:20,000 scale, by Lieut. E. O. Heaton for (1) all of the low water line shown on this sheet (the dotted outline of reefs does not represent low water) (2) piers, and docks (3) Tracks of the Missouri Pacific Railroad to the extent shown on the plane table sheet. (4) Buildings, spoil banks, shoreline of turning basin and channels in the vicinity of the Southern Alkali Corporation plant (note: the beacons and piling shown on the plane table sheet here were not transferred to this sheet. (5) The highwater line to the extent shown on the plane table sheet.

see T5365

The highwater line as transferred from the plane table sheet was checked against the photographs. Where there was an apparent discrepancy it was investigated. If the plane table sheet proved correct this sheet was made to conform. If the photographs proved correct, tracings were made and given to the topographer of the plane table sheet in order that that sheet might be corrected.

The railroad as transferred agreed within the accuracy of plotting on this scale.

T5365

No check could be obtained on the features in the vicinity of the chemical plant and turning basin as their construction and dredging had taken place since the photographs were made.

At Lat. $27^{\circ} 51.9'$ and Long. $97^{\circ} 27.4'$ also Lat. $27^{\circ} 51.8'$ and Long. $97^{\circ} 29.1'$ the low water line as transferred from the plane table sheet passes well inside the marsh line. The topographer of the plane table sheet said that this was the actual condition on the ground. There was no line on the photos that could be followed for the high water line, so the high water line was shown just inside the low water line as transferred. These two places constitute only short stretches of shore.

For this area see report on review of this survey

At Lat. $27^{\circ} 52.7'$ and Long. $97^{\circ} 27.4'$ there was no high water line on the photos to agree with the high water line as originally transferred from the plane table sheet. The topographer stated that the high water line at this place was impossible to determine accurately because of the flatness of the shore here, so it was decided better to show the M. H. W. line here dashed.

(f) Conflicting Names

(1)

Nueces, Viola, and Nuecestown are not in conflict on any maps or charts but it should be understood that these are names of railroad sidings ~~or~~ ^{or} localities and not of towns.

3. COMPILATION (CONTINUED)

(f) Conflicting Names (continued)

(2) White or Whites Point.

This name occurs on chart # 1286, chart # 1117, U.S.G. Survey as Whites Point. On San Patricio County Map it is called White Point, having the following names near it; White Point Field (oil development); White Point Development Company, and does not appear as Whites anywhere on the county map.

The present usage of White Point is on account of its appearance, while Whites Point is known to the oldest inhabitants because of the name of the person formerly living there.

White Point is recommended because it now has more general usage.

(3) Rosita

This name occurs on chart # 1286 as a locality but no town which is correct. On chart # 1117 the town symbol should be removed.

(4) Juan Saenz

On chart # 1117 this appears as a town which is incorrect. Investigation reveals that there was at one time a Post Office and community located there but at this time it is only a locality and not very well known. This locality is at the junction of a road running North from Clarkwood with the Calallen-Corpus Christi highway, and the name still has some local usage.

(5) Tule Lake

Tule Lake is the correct name and is spelled thus on all charts and maps. However a few local people call this Tula Lake.

(g) New Names

Indian Point.--This also appears on sheet No. 5367. The origin of this name may be found in the descriptive report of the above sheet.

Gum Hollow, West Portland School, Tulosa School, Fairview School, are names taken from the U.S. G. S. Quadrangle Sheet "Corpus Christi"

Avery Point.--This name is locally accepted for the area on the south shore of Nueces Bay in the vicinity of the Southern Alkali Corporation Plant.

4. COMPARISON WITH OTHER SURVEYS

(a) This sheet is joined on the N.E. by sheet Reg. #T5367 (field No. 17); on the S. E. by sheet Reg. #T5365 (field No. 15); on the S.E. by 1:10,000 plane table sheet Field letter "R". In order to keep the printing clear the width of the Nueces Bay Highway Causeway was exaggerated to the westward, so that the east side of the causeway shown on this sheet is the true position of the centerline.

The junctions with the above sheets are satisfactory.

This causeway transferred to T5365 & T5367

4. COMPARISON WITH OTHER SURVEYS (CONTINUED)

(b) Detail comparison to surveys of 1889 (chart # 1286)

Changes in position of M. H. W. where it crosses the following meridians or parallels.

		o	'		o	'	Change old to new (meters)*	
On	Long.	97	23	Near	Lat.	27	53	- 30
"	"	97	26	"	"	27	52	+ 20
"	"	97	27	"	"	27	52	-10
"	"	97	28	"	"	27	52	+60
Near	"	97	29	On	"	27	52	+115
On	"	97	29	Near	"	27	51.5	- 80
On	"	97	27	Near	"	27	49	+120
"	"	97	29	"	"	27	49	- 10
Near	"	97	29	On	"	27	50	No change

The south shore near Latitude $27^{\circ} 49'$ and Longitude $97^{\circ} 26'$ has changed a great deal due to the dredging of a channel to the Southern Alkali Corp. as explained in paragraph 3, section (c) and there is a large dock here and many large buildings now in this locality and range beacons (not shown on this compilation as explained elsewhere)

Transferred to T5365.

The west limits of Nueces Bay above the mouth of Nueces River has filled in a great deal as compared with chart # 1286 as follows:

	o	'		o	'	Change old to new (meters)*		
On	Long.	97	30	Near	Lat.	27	53	+ 500 (approx)
Near	"	97	31	On	"	27	52	+1450 "
On	"	97	31	Near	"	27	51	+ 230 "
On	"	97	30	Near	"	27	51	+195 "

* + Accumulation; - Recessions (measurements made along the meridians or parallels marked on and not necessarily normal to shoreline.)

General Comparison to Chart # 1286 and #1117

Kalita shown on chart No. 1117 as a settlement is no longer in existence and is not shown on this chart.

West of the Nueces Bay causeway there are many small islands that are not shown on chart # 1286

Transferred to T5365 & T5367

There are several small islands at the mouth of the Nueces River on Chart # 1286 that do not appear on this chart. There is now one large island in the position of the small islands on chart # 1286

There is a small pier on the north shore at White Point; also one on the south shore of Nueces Bay 130 m. east of recoverable H & T station "End". The above piers are not shown on chart # 1286.

The island at Lat. $27^{\circ} 51.9'$ and Long. $97^{\circ} 28.15'$ is now a part of the mainland.

Two islands formerly shown at Lat. $27^{\circ} 52.2'$ and Long. $97^{\circ} 29.5'$ are not shown on this chart, but the water here is so shoal it is difficult to tell exactly from the photographs.

The island formerly shown at Lat. $27^{\circ} 50'$ and Long. $97^{\circ} 25.6'$ does not appear on the photographs.

5. LANDMARKS *For additional information see Report on Review*

There are three landmarks within the limits of this sheet. They are as follows:

Description	Latitude meters	Long. meters
Stack, Southern Alkali Corp.	27° 48' +1476.1	97° 25' +1465.5
Two range beacons in the new channel of the Southern Alkali Corp.		
at approximately Lat. 27° 49' and Long. 97° 26'.		

Stack, Southern Alkali Corp. is a 1934 triangulation station. This is a very tall stack that can be seen from any part of Nueces Bay and many parts of Corpus Christi Bay. This landmark is submitted on Form No. 567.

The two range beacons are aids to Navigation, they were located on the plane table sheet Field letter Q and Not transferred to this sheet.

6. RECOVERABLE OBJECTS

1. "Buoy" (d) old buoy
2. "Tow" (d) windmill tower
3. "Nell" (d) S. gable of house
4. "Gate" (d) W. gate post
5. "Pipe" (d) $2\frac{1}{2}$ inch iron pipe
6. "End" (d) W. end of bridge
7. "Nueces" (d) Station sign
8. "Red" (d) chimney

The above recoverable objects were located by the plane table sheet Field letter Q and transferred to this sheet by plotting. Nos. 5, 6, 8 were located on the photographs by the field inspection party and used in the radial plot (see paragraph "Control"). Descriptions for the above will be furnished by Lieut. E. O. Heaton on Form 524 with plane table sheet Field Letter Q.

The following object is a theodolite three point fix by the field inspection party.

	Latitude meters	Long. meters
Cross (d) road Intersection	27° 49' +399.3	97° 34' +528.4'

A description for the above three point fix is submitted on Form 524.

7. RECOMMENDATION FOR OTHER SURVEYS *(See Report on Review)*

The compilation of this sheet is believed to have the probable error of 5 meters in well defined detail of importance for charting and of 8 meters for other data. It is understood that the width of roads, etc. may be slightly expanded in order that the detail may be kept clear and the bunching together of lines avoided. The size of buildings may also be slightly exaggerated.

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)

Dan Allen by J. L. P.

Dan Allen
J. L. Riehl
V. L. Riehl

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

Corpus Christi, Texas

February 28, 1935

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:

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

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.

Survey No. T-5366

GEOGRAPHIC NAMES

Date. May 24, 1935

Chart No. 1117, 1286

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

Status	Name on Survey	Name on Chart	New Names in local use	Names assigned by Field	Location
	<u>Nuecestown</u>	Same			
	<u>Clarkwood</u>	"			
	<u>San Antonio, Uvalde, & Mexico R.R. Co. (MPL)</u>	Gulf			
	<u>Rincon Bayou</u>	Same			
	<u>Nueces River</u>	"			
	<u>viola</u>	"			
	<u>Juan Saenz</u>	"			
	<u>Tulosa School</u>	USGS			
	<u>Tule Lake</u>	Same			
	<u>Rosita</u>	"			
	<u>White Point</u>	Whites Point			
	<u>Gum Hollow</u>	USGS			
	<u>West Portland School</u>	"			
	<u>Nueces Bay</u>	Same			
	<u>Nueces</u>	"			
	<u>Avery Point</u>	Not on this survey		Avery Point	
	<u>Texas Mexican Ry.</u>	(By Guide)			
	<u>Fairview School</u>	USGS			
	<u>Corpus Christi College</u>				
		APPROVED NAMES UNDER CONTRACT			
		<i>W. H. Woods</i>			

REVIEW OF AIR PHOTO COMPILATION T 5366
Scale 1:20,000

Comparison with Graphic Control Surveys

(a) T 4904 (1934-5), scale 1:20,000

T 4904 covers the eastern part of T 5366.

This survey agrees with T 4904 in regard to the high and low water lines except in Lat. $27^{\circ} 52.7'$, Long. $97^{\circ} 27.5'$ where the high water line has been moved inland some 100 meters to agree with the photographs. The descriptive report for this survey states that the topographer on T 4904 was uncertain of the location of this line. This high water line was partially marked on the field photographs and inspection under the stereoscope indicated that the high water line should be moved to the position shown on this survey. The high water line in this area is subject to frequent change. The interpretation on T 5366 is accepted as correct at the date of the photographs, (3/19/34).

All recoverable control stations with the exception of topographic signal West Gable of Barn, Lat. $27^{\circ} 52.6'$, Long. $97^{\circ} 23.2'$ have been plotted on this survey and, if discernable on the photographs, checked by the radial plot.

No structure was visible in the vicinity of topographic station West Gable of Barn.

The following recoverable topographic stations were found in error. ~~_____~~ They are shown on T 5366 in the accepted positions which were determined by the radial plot and are listed below:

	Lat.	d.m.meters	Long	d.p.meters
S. E. Cor. of House		(211.8)		(846.2)
15 m. Az. $\pm 65^{\circ}$ from N.	$27^{\circ} 52'$	1635.1	$97^{\circ} 27'$	795.2
Windmill		(978.5)		(933.8)
11 m. Az. $\pm 45^{\circ}$ from N.	27 52	868.4	97 26	707.6
N. W. Cor. of House		(949.6)		(952.2)
12 m. Az. $\pm 45^{\circ}$ from N.	27 52	897.3	97 26	689.2

All topographic stations listed on T 4904 and described on Form 524 have been plotted on this sheet. The descriptions of these stations are filed under T 4904, with the exception of topographic station Cross which is filed under T 5366.

Topographic station Red Chimney, S. End of 2 Story House, shown on T 4904, by triangulation in 1905. It has been shown on this survey as triangulation station Rosita Round House, South Chimney 1905.

The azimuth of the dock shown on this survey at Lat. $27^{\circ} 49.1'$, Long. $97^{\circ} 28.8'$ does not agree with the azimuth as shown on T 4904. On examination of the photographs, the azimuth as shown on this survey is accepted as correct.

All detail on T 4904 is shown on T 5366 except magnetic meridian, temporary stations and as mentioned above.

Comparison with Previous Topographic Surveys

(a) T 1513 (1882), scale 1:20,000

T 1513 covers the area about one mile inland around Nueces Bay. There have been many changes in the shoreline since T 1513 was made. The western end of Nueces Bay has filled in approximately two miles. The mouth of the Nueces River has built out about one-half mile on the northerly side and the island shown at Lat. $27^{\circ} 51.8'$, Long. $97^{\circ} 27.7'$ has become attached to the mainland.

The course of the Nueces River through the marsh has changed considerably. The small islands shown to the west of White Point appear in a different position on the photographs. These islands are correctly shown on this survey.

T 5366 is adequate to supersede T 1513 in all respects except the contour lines.

Comparison with contemporary Hydrographic Surveys

There are no contemporary hydrographic sheets in this area.

Comparison with charts

(a and b) Charts Nos. 1286 and 1117

For detailed comparison with these charts see page 8 of this descriptive report.

The small islands and shell reefs in Nueces Bay shown on Chart 1286 and on T 1513 appear in different locations on the photographs.

The positions of these islands and shell reefs on this survey are accepted as correct.

Landmarks

The present charts, Nos. 1286 and 1117, show no landmarks in the area covered by this survey.

Chart letter No. 267 (1935) lists the following landmarks to be added to chart No. 1286:

CHIMNEY, Triangulation station Rosita Ranch house, S. Chimney, 1905.

STACK, Triangulation station Southern Alkali Stack, 1934.

These landmarks have been shown on this survey.

Remarks

The accuracy stated under "Recommendation for other surveys" in this report is too great. A better estimate would be 10 m. for intersected points and 15 m. for other detail.

July 29, 1935.

H. L. HAWKINS

Frank G. Eustace

REVIEW OF AIR PHOTO COMPILATION NO. 5366

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)

None Transmitted

5. Differences between this compilation and 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.

Hydrographic surveys not made at the date of this review.

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)
Dotted outline of reefs does not represent low water line necessarily. *Reefs shown dashed where elevation is questionable*
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)
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)
Bridges over non-navigable streams are not all labelled and have no information on clearances.
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. G. 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: The lines on this sheet are not all as clear cut as would be desirable. As many much of the drafting has been retouched as could be improved without the expenditure of an excess amount of time.
18. Examined and approved;

T. M. Price Jr.
T. M. Price Jr.
Chief of Party

19. Remarks after review in office:

Reviewed in office by:

Frank G. Estline

Examained and approved:

G. K. Green
Chief, Section of Field Records

L. O. Olbert
Chief, Division of Charts

J. S. Borden
Chief, Section of Field Work

G. M. Glazde
Chief, Division of Hydrography
and Topography.