

1-524

5363

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Form 504
Ed. June, 1928

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R. S. Patton..., Director

1 card (d) form 524

State: Texas

DESCRIPTIVE REPORT

PHOTO
Topographic
~~Hydrographic~~

Sheet No. 5363

LOCALITY

San Antonio Bay

Panther Point
First Chain of Islands to

Second Chain of Islands

1934

CHIEF OF PARTY

T. M. Price, Jr., Ensign

U. S. GOVERNMENT PRINTING OFFICE: 1929

5363

applied to chart 1284, Feb. 10, 1938

1117 May, 1940
Applied to chart 1285 May 1940 -

J. G. L.
J. H. S.
V. R. C.

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY

REG. NO. 5363

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. 13

REGISTER NO. 5363

line 1285

State Texas

General locality San Antonio Bay

Locality *Panther Point*
~~First Chain of Islands to Second Chain of Islands.~~

Scale 1:20,000 Date of survey Photographs -- Mar. 10, 1934
Jan. 8, 1934
Nov. 23, 1933

Vessel Army Air Corps Camera Five Lens, Type T-3A No. AC-31-76
Compilation-December 1934

Chief of party T. M. Price, Jr.

Surveyed by See data sheet in descriptive report

Inked by R. J. Moore

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 G Flight #21 to 41 incl.

N Flight # 16 to 22 incl, M Flight # 31 to 36 incl., E Flight

#30 to 35 incl, F Flight # 1 to 6 incl. Sheet reduced to scale

and printed by photo-lithographic process

- NOTES ON COMPILATION-

SHEET NO. 13

PHOTOS. NO. (G-41 to G-21); (N-15 to N-22); M-36 to M-31; F-1 to F-6; E-30 to E-35.

DATE OF PHOTOGRAPHS: March 10, 1934 G-Flight TIME: 9:57 to 10:29 A.M.
 March 10, 1934 N-Flight 11:55 A.M. to 12:03 P.M.
 Jan. 8, 1934 M-Flight 2:44 to 2:57 P.M.
 Nov. 23, 1933 E-Flight 3:32 to 3:45 P.M.
 Jan. 8, 1934 F-Flight 2:13 to 2:29 P.M.

	BY	DATE
SCALE FACTOR (0.97)	(sgd) N-Flight <i>C. H. Rulfs</i> G-Flight <i>C. H. Rulfs</i>	8/28/34 8/28/34
PROJECTION	(sgd) <i>T. M. Price, Jr.</i>	9/11/34
PROJECTION CHECKED	(sgd) <i>Ben Benson</i>	9/12/34
CONTROL PLOTTED	(sgd) V. L. Riehl	9/13/34
CONTROL CHECKED	(sgd) <i>W. Mack Crook</i> W. Mack Crook	9/14/34

TOPOGRAPHY TRANSFERRED

TOPOGRAPHY CHECKED

SMOOTH RADIAL LINE PLOT (sgd) *C. H. Rulfs* 11/ 2/34

* RADIAL LINE PLOT CHECKED

DETAIL INKED (sgd) *R. J. Moore Jr.* 12/28/34

AREA OF DETAIL INKED 46.3 sq. statute miles.

LENGTH OF SHORE LINE OVER 200 m. 47.1 statute miles.

LENGTH OF SHORE LINE UNDER 200 m. 20.4 statute miles.

LENGTH OF SHORE LINE OF LAKES 39.3 statute miles.

GENERAL LOCATION: San Antonio Bay

LOCATION: First Chain of Islands to Second Chain of Islands.

DATUM STATION: Cat. 1934 Latitude $28^{\circ}-12'-56.322''$ ($+1733.8m$)
 Longitude $96^{\circ}-42'-10.314''$ ($+281.2m$)
 (position from field computation)

COMPILER'S REPORT

for

PHOTO TOPOGRAPHIC SHEET FIELD NO. 13 (REG. NO. 5363)

1. GENERAL INFORMATION

This sheet was compiled from photographs taken by the U. S. Army Air Corps using Fairchild T-3A camera #31-76. The photographs used are #21 to 41 G-Flight made Mar. 10, 1934 from 9:57 to 10:29 A.M.; photos #18 to 22 N-Flight made Mar. 10, 1934 from 11:55 A.M. to 12:03 P.M.; photos #31 to 36 M-Flight made Jan. 8, 1934 from 2:44 to 2:57 P.M.; photos #30 to 35 E-Flight made Nov. 23, 1933 from 3:32 to 3:45 P.M.; photos #1 to 6 F-Flight made Jan. 8, 1934 from 2:13 to 2:29 P.M.

The predictable tide range in San Antonio Bay is too small to affect to a large extent the interpretation of aerial photographs of this scale, except in the case of the numerous shoals. Apparently the tide was nearly low when the M, E, and F flights were made and slightly below high when the G and N flights were made. The tide tables show that the tide on the Gulf Coast was $\frac{1}{2}$ high when the G-flight was made.

2. CONTROL

(a) Sources

Triangulation by Lt. E. O. Heaton 1934. Recoverable 1911 stations were incorporated in the 1934 triangulation. The control is on the N. A. 1927 datum. The field parties unadjusted positions were used but the difference between these and the final adjusted positions will not be plottable on the scale of this sheet.

(b) Errors

The radial plot showed stations Greek, 1911, and Snake, 1911, to have been mislocated on the photographs.

(c) Remarks

At Stations Greek 1911 and Snake 1911 it was necessary to make a short traverse and azimuth tie to a nearby point that showed distinctly on the photographs. This supplementary point was plotted graphical and used in lieu of the station itself for control.

3. COMPILATION

(a) Method

The usual radial line method of plotting from 5 lens photographs was used in the compilation of this sheet. There was no departure from standard practice.

(b) Adjustment of Plot

In general the photographs covered by this sheet appear to be free from excessive tilt and scale fluctuation and the radial plot required no unusual adjustments. The control for the G-flight was relatively scarce.. However by coordi-

nating this flight by means of common points with more strongly controlled partly overlapping flights, and by carrying the plot through on the joining sheets until a good fix was obtained together with the fixes obtainable on this sheet, a sufficiently strong plot was finally effected. The plots of all flights on this sheet were carried through joining sheets and brought into agreement with overlapping flights without unusual or large adjustments being necessary. Since the G-flight, which extends the length of the sheet, and the N-flight, had scale factors of 0.97, this scale was used for the sheet, in spite of the fact that the E and F-flights had a scale factor of 1.01. This difference necessitated considerable adjustment in tracing for the area in the N. E. portion of the sheet, which however is a small percentage of the total sheet area.

(c) General Description of Topography and Interpretation

The following notes are submitted as a supplement to the general report of the field inspection party filed at the end of this report.

Matagorda Island- The position of the sand dunes along the Gulf of Mexico shore, as shown by the standard symbol, has been generalized, no attempt having been made to spot the individual dunes from the photographs. Between Long. $96^{\circ}-38'$ and $96^{\circ}-42'$ the sand dunes have been leveled by storms, leaving extensive sand flats (shown by widely spaced sanding dots) with scattered mounds of higher sand (shown by more closely spaced sanding) and all of this area is bare of vegetation. When this sand area approaches the grassy prairie toward the bay side of the island there are low scattered dunes which were not considered of sufficient importance to indicate.

In the vicinity of Lat. $28^{\circ}-11'$, Long. $96^{\circ}-47'$ and Lat. $28^{\circ}-10'$, Long. $96^{\circ}-46'$ there are extensive low bare sand and mud flats (shown with widely spaced sanding dots) which are probably barely covered during storms. Scattered around these flats is higher ground in the form of hummocks which are covered with brush, grass and weed growths. The boundaries between the low and high ground has been indicated by the use of rows of closely spaced sanding dots and various vegetation symbols. The mean high water line of the gulf coast and the bay shore proper was not difficult to follow with the notes on the field photographs. However in the maze of lakes, marsh and sand and mud flats between the prairie land and the bay, the M. H. W. line of these inland lands and sloughs was often difficult of delineation due to its great seasonal variation and the flatness of the land. However, consistent shadings were followed and it is believed the accuracy of representation is more than commensurate with its importance. At Lat. $28^{\circ}-14.2'$, Long. $96^{\circ}-36.4'$ is the remains of a vessel which went aground and has been broken up, and is marked by concrete and metal wreckage above water. Only a small portion of the trail that runs the length of the island is shown because elsewhere on this sheet it is too indistinct and its location is subject to considerable variation. It is shown on Sheet Reg. No. 5364 at the junction with this sheet but was not carried through on this sheet for the above reasons.

3. COMPILATION (cont'd)

Islands and Shoals

In the area covered by this sheet there are numerous off-shore islands and shoals. Those that are small and low are difficult to distinguish from printing spots and blemishes on the photographs, and it is also difficult to tell exactly which are above or below M. H. W. The storm of July 1934, which is after the photographs were taken, is thought to have caused changes in the height, position and shape of these shoals which are naturally unstable. They have been depicted however as indicated by the photographs. Those which were apparently just below M. H. W. are shown with a dotted outline. This does not represent the low water line necessarily, and the hydrographic survey which follows this compilation will be a much better authority on the present condition of these shoals. However, because it is recognized that any representation of these reefs and shoals will be Mainland correct for a short time only, no changes will be made to make them conform on this sheet with the hydro. survey. The mainland N. W. of False Live-oak Point is largely covered with dense growth of mesquite, scrub oak, huisache and all that type of growth included in the general term chaparral. It seldom exceeds 25 or 30 feet in height and has scattered grassy clearings. Toward the west it becomes lower and less dense. The general tree and brush symbol was used to denote all of this type of growth.

(d) Bridges

There are no bridges in the area covered by this sheet.

(e) Information from other Sources.

No information except as furnished by the photographs and field inspection notes there-on. ~~Information will later be obtained from the hydrographic survey regarding the islands and shoals which are subject to question as explained in paragraph (c) above.~~

(f) Conflicting Names

False Live-oak Point. Spelled False Liveoak Point on Chart #1285. The spelling of Live-oak was given in the Standard Desk Dictionary (Funk and Wagnalls) and shown there^{us} on this sheet.

(g) List of New Names

Fourmile Point for the large rounded point at Lat. 28°-11.3', Long. 96°-47.5. This name has general local usage.

(First Chain of Islands Cut for the dredged cut through the First Chain of Islands. Taken from Inside Route Pilot Page 132 (1925 edition). This name not used as there is disagreement among local people as to whether this cut should be called by this name or "South Pass". Some give the name South Pass to a small pass about 1/2 mi. south of this cut. The hydrographic party will obtain further information on this and submit it with the hydrographic sheet.

(h) Junction with adjoining sheets

This sheet is joined by the following Photo-topographic sheets:

On the west by sheet #5397
 On the North west by sheet #5396
 On the North west by sheet #5398
 On the Northeast by sheet #5399
 On the east by sheet #5364

Junctions with these adjoining sheets have been compared and are satisfactory.

4. COMPARISON WITH OTHER SURVEYS

Surveys of this area were made by the Coast and Geodetic Survey about 1891 (chart 1285) and by the Intracoastal Waterway Survey, U. S. Engineers 1927-28. No comparison was made to the U. S. E. surveys.

(a) Detail Comparison to chart #1285

- (1) Change in position of the M. H. W. line of the following shorelines where they cross the following meridians or parallels .

Latitude	Longitude	Change old to new (meters)*	Remarks
Near 28-09	On 96 -45	+ 183	
Near 28-10	On 96 -43	+ 140	Gulf of
Near 28-12	On 96 -40	+ 115	Mexico
Near 28-14	On 96 -37	+ 67	
Near 28-15	On 96 -35	+ 219	
On 28-15	Near 96 -47	- 91	San Antonio
On 28-14	Near 96 -47	- 142	Bay
On 28-20	Near 96 -42	- 123	
Near 28-19	On 96 -40	- 161	S. Shore of Grass I
Near 28-19	On 96 -39	- 107	S. Shore of Grass I.

* + = Accumulation; - = recession

The above differences were measured along the line of the meridian or parallel (marked on) and not necessarily normal to the shoreline.

(b) General Comparison to Chart #1285

- (1) Matagorda Island -- The Gulf shoreline has moved seaward on an average of over 100 meters. The San Antonio Bay shoreline has remained generally the same, and the larger bodies of water on Matagorda Island have remained practically the same as before.
- (2) Grass Island -- This Island has begun to disintegrate probably on account of the current through "Steamboat Pass". The small island on which station "Roost" is located was at one time the western tip of Grass Island.
- (3) Mustang Lake -- This Lake has broadened out at its southern extremity and an opening has formed at the northern end, connecting this Lake with San Antonio

Bay. The opening at the southern end, shown on Chart #1285, has now closed up.

- (4) There are numerous changes in the islands and shoals both at the First and the Second Chain of Islands. This compilation has showed all those that appear definitely on the photos above M. H. W., and by dots those that are nearly above and probably bare at L. W. However these sand and shell reefs are subject to much change.
- (5) Numerous changes in coves and Lakes at Lat. $28^{\circ}-20'$ and Long. $96^{\circ}-40'$.
- (6) Photographs do not indicate reefs above M. H. W. in vicinity of Lat. $28^{\circ}-13'$ and Long. $96^{\circ}-47'$ (2 shown on chart 1285) or at Lat. $28^{\circ}-13.5'$ and Long. $96^{\circ}-47.5'$. There is indication of shoal water however and the hydrographic survey may possibly disclose something above.
- (7) Cove entrance just S. of Panther Pt. has opened.
- (8) No island now at Lat. $28^{\circ}-13.2'$, Long. $96^{\circ}-42.3'$.
- (9) No island now at Lat. $28^{\circ}-15.9'$, Long. $96^{\circ}-37.9'$
There are numerous shoreline changes in this vicinity.
- (10) There is now no road at Lat. $28^{\circ}-12'$, Long. $96^{\circ}-41.5'$.

5. LANDMARKS

There are no landmarks in the area covered by this sheet, except aids to navigation in the form of day beacons. They will be located by the hydrographic party by sextant and plotted on the hydrographic sheets but not on this compilation

6. RECOVERABLE OBJECTS

Chimney in the center of Brundarett's house near Lat. $28^{\circ}-08.8'$ and Long. $96^{\circ}-45.4'$. Described on Form 524.

7. RECOMMENDATION FOR FURTHER SURVEYS

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 running 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)

R. J. Moore Jr.
R. J. Moore

FIELD INSPECTION REPORT

for

ESPIRITU SANTO, SAN ANTONIO, AND MESQUITE BAYS

This report covers the territory adjoining Espiritu Santo, San Antonio, and Mesquite Bays. The following notes are submitted to act as a guide in the compilation of the sheets for this area, including Matagorda Island and that land that falls in the middle half of the wing prints, about four miles inland from the coast line. These are compiled by notes and sketches made by the field inspection party and through a knowledge of this locality obtained by the field inspector in locating control on the aerial photographs.

GENERAL DESCRIPTION OF TOPOGRAPHY

It is thought best to divide the field inspection report into several parts, each relating to that specific territory covered by a Photo-Topographic sheet. This is done in order that each draftsman may more easily obtain that which has reference to his particular compilation. In most instances the draftsman assisted in the field inspection of the area covered by their compilation.

During the storm of July 25, 1934, various changes took place in the areas covered by this report. The most marked changes occurred at the shore line where the mean high water line was changed in certain localities. Due to the impracticability of determining the high water line after the storm, it is recommended that the draftsman limit his delineation of the mean high water line to that status as shown on the photographs. In certain cases where reefs changed considerably, it is thought best to interpret the photographs as they are rather than try to show the changes in said reefs, due to the storm. In most instances the reefs are unstable and show only about six inches above the mean high water line.

In general, those reefs which show a bright white on the photographs may be interpreted as being above mean high water. Those reefs which show slightly dark or diffused may be interpreted as being below mean high water and shown as such on the individual sheets.

1. MATAGORDA ISLAND

This stretch of land separating Espiritu Santo and San Antonio Bays from the Gulf of Mexico, extends northeast, latitude, $28^{\circ}-05'$ longitude $96^{\circ}-50'$ to latitude $28^{\circ}-21'$ longitude $96^{\circ}-24'$. On the Gulf side the high water line is apparent on the photographs by a very slight difference in coloring of the sand beach. This mean high water line is just outside the last strip of white sand. There is a small strip of

sand about 5 to 10 meters wide that is intermittently wet between the mean high water line and said strip of white sand. The mean high water line on the Gulf side is the last uniform line of the beach showing a difference in coloring of the sand.

The high water line on the bay side is determined by the white shell beach or marsh grass line. This line is readily determined from the photographs and with the aid of the notes shown on the field photographs. There should be little difficulty in interpretation. Shoal waters are abundant on the bay side and can be interpreted from the photographs in contrast to the bay proper. Sand beach on the Gulf side varies in width, but is about 180 meters wide. Sand dunes varying in height, but averaging about 15 feet in height, extend on the Gulf side of the island throughout. However, in the center fifth of this island, ^{there are only a few low dunes} the sand dunes are interspersed about half way between the Gulf and the Bay. The area between the sand dunes in this locality and the Gulf side consists of vast expanse of sand. The sand dunes are usually covered with light growths and can be easily recognized on the photographs. The center and Bay side of the island are covered with marsh, grass, and sand flats, and bodies of intermittent water. Of special significance are the strips of water which extend between the sand dunes and the Bay shore throughout the entire length of the island. Each type of culture is evident on the photographs.

~~There is no vegetation on the island and practically the major portion of the grass contains intermittent water.~~

~~Cedar Bayou, the break at the northeast end of the Island, and separating St. Joseph and Matagorda Islands, has filled up on the Gulf side and Vincen Slough has opened into the Gulf with no connection to Cedar Bayou.~~

2. MESQUITE BAY-NORTH SHORE

The mean high water line of this locality is apparent on the photographs. In practically all cases, the mean high water line is characterized by dark marsh grass. The entire shore area adjacent to Mesquite Bay is marsh extending inland for over a mile. In the interior is found sand flats and grass.

3. SAN ANTONIO BAY-WEST SIDE

The mean high water line of this locality has been marked on the photographs at sufficient intervals to enable the draftsman to properly interpret the location of said line. It is characterized by the outside grass line outside of the white shell beach in various instances.

Adjacent to the Bay on the points is found narrow strips of marsh, while between these points is found a bluff averaging about 15 feet in height between Webb Pt. and Austwell. Starting with a slope around Webb Pt. and reaching an abrupt bluff just below Austwell. The interior in the southern part is covered with a heavy growth of trees and brush which gradually gives way to pasture land and cultivated land as it progresses northward. The land in the vicinity of Austwell is ~~heavily~~ extensively cultivated.

4. SAN ANTONIO BAY-EAST SIDE

In the vicinity of station SWAN and MOSQUITO POINT, a low bluff, about 3 feet in height, marks the high water line. This line has been noted on the photographs and there should be no difficulty in the office interpretation of this line. South of MOSQUITO POINT marsh areas are found consisting of sand spots, grass, and bodies of intermittent water. North of Swan Pt. the bluff continues around to a short ways north of Seadrift, where it drops back from the shore line to let strips of marsh form the land bounding the Bay.

In the southern part of this ^{area} strip there is no cultivation in the interior and the land is used for grazing but further north around Seadrift, ~~is~~ found areas of cultivation which get thicker as they proceed northward.

5. ESPIRITU SANTO BAY-NORTH SIDE

With the exception of the bluffs, ^{the} shore line and culture of this vicinity is similar to that of the east side of San Antonio Bay, and the same remarks apply.

6. GUADALUPE RIVER DELTA

This area is composed almost altogether of marsh, ponds, and intermittent water. The shore being all marsh with the exception of a narrow strip nearest Austwell which is an abrupt bluff about 12 to 18 ^{feet} in height. The interior is low and flat covered chiefly with switch cane about 10 feet in height or grass about 3 feet in height. A heavy growth of trees about 25 feet in height will be found adjacent to the river and some smaller streams. There is no cultivation on this, though some of the northwestern part is used for grazing.

CONTROL

Triangulation executed by the party of Lieut. E. O. Heaton in 1934 and the first order 1931 triangulation by Lieut. F. L. Gallen form the principal control for the area covered in this report. In the areas including the intracoastal canal survey by the U. S. Engineer Department, their stations were used as supplemental ^{control}. All previously established control that could be used, and which was not connected to the 1934 triangulation, was used by applying an adjustment for change to the 1927 datum.

The field inspection party located on the ground and on the photographs, points that could be used as recoverable topographic stations. The positions of these points are to be determined by the photographic radial line plot.

CHANGES IN MAPS AND PUBLICATIONS

No changes are recommended in either the "Gulf Coast Pilot" or the "Inside Route Pilot." Notations regarding bridges and transmission lines have been furnished by the U. S. Engineers and will be listed in the descriptive report of the sheet in which they occur. There are

CHANGES IN MAPS AND PUBLICATIONS (cont'd)

Occasional piers extending out into the bay, especially, near stations NET, MOSQUITO POINT, and about 2 miles east of FAR, which should be shown on future maps. Reference is here made to the ~~aero-Photo-topographic~~ ^{field prints} map of the vicinity, for the correct determination and extent of these piers.

Shoal water Bay shown on sheet # 1285, is known locally as Steamboat Bay. Mullet Bay is known locally as Sundown Bay, Pringle Lake is known locally as Pringle Lake and this latter spelling is used by the U. S. E. D.

✓ The landmark, TANK, at Seadrift, should be taken from the charts as the tank has been taken down. ✓ A landmark, ^{house} ~~HO-EE~~, at Seadrift has been located by radial plot and ^{should be} added to the chart. ~~just compiled.~~

COAST PILOT NOTES AND LIGHT LIST CORRECTIONS

No changes are recommended in either the "Gulf Coast Pilot" or the "Inside Route Pilot." (*Certain changes are given in special Coast Pilot notes report*)

INFORMATION FROM OTHER SOURCES

Notations regarding bridges and transmission lines have been furnished by the U. S. Engineers and will be listed in the descriptive report of the sheet in which they occur.

GEOGRAPHIC NAMES

Survey No. 1-5362

Chart No. 1284 1285

Diagram No.,

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

Not Approved by the Division of Geographic Names, Department of Interior.

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

Status	Name on Survey	Name on Chart	New Names in local use	Names assigned by Field	Location
✓	<u>Grass Island</u>	SAME	x	✓	
	<u>Signal Island</u> see Hydro Sheet 11			✓	
✓	<u>First Chain of Islands</u>	SAME	x	✓	
	<u>Shell Island</u> see Hydro Sheet 11	"		✓	
✓	<u>San Antonio Bay</u>	SAME	x	✓	
✓	<u>Mustang Lake</u>	"		✓	
✓	<u>False Liveoak Point</u>	"		✓	
✓	<u>Mustang Slough</u>	"		✓	
✓	<u>Panther Point</u>	"		✓	
	<u>Fourmile Point</u>				
✓	<u>Second Chain of Islands</u>	SAME	x	✓	
✓	<u>Matagorda Island</u>	SAME	x	✓	
	<u>Gulf of Mexico</u>	"	x	✓	
✓	<u>SWAY LAKE</u>			✓	

Names app. Nov 30 1935
C. E. Egan

REVIEW OF AIR PHOTO COMPILATION T 5363

Scale 1:20,000

Comparison with Graphic Control Surveys

There are no graphic control surveys in this area.

Comparison with Previous Topographic Surveys

T 828 (1860), 1:20,000

T 828 covers the vicinity of False Liveoak Point. The shoreline from the north edge of the sheet to False Liveoak Point has receded + 50 meters. From False Liveoak Point to the west edge of the sheet, the shore line is in agreement within 10 meters.

The bluff, shown on T 828 and added to T 5398, was not considered to be of sufficient height in this area to warrant its being shown on the compilation.

The compilation is adequate to supersede T 828 in all points of detail except for hachures within the area common to the two surveys.

T 787 (1860), 1:20,000

T 787 covers the area from Second Chain of Islands to Fourmile Point.

On the north shore of San Antonio Bay the shoreline is in agreement within 20 meters. On the south shore, it has receded about 30 meters.

Second Chain of Islands is shown 50 meters westward of the position given on the compilation.

The compilation is adequate to supersede T 787 in all points of detail within the area common to the two surveys.

T 767 (1859), 1:20,000

T 767 covers a small area on the compilation just north of Grass Island.

The shoreline is in agreement within 20 meters.

The compilation is adequate to supersede T 767 in all points of detail within the area common to the two surveys.

T 766 (1859), 1:20,000

T 766 covers San Antonio and Espiritu Santo Bays.

Extensive changes have taken place in the region around Grass Island, which is shown extending in one piece to the island on which is situated triangulation station ROOST.

The positions and shapes of First Chain of Islands have changed.

The shoreline at San Antonio Bay on Matagorda Island agrees within 30 meters.

The shoreline of the Gulf of Mexico has moved outward about 100 meters.

The compilation is adequate to supersede T 766 in all points of detail within the area common to the two surveys.

T 1030 (1859), 1:20,000

T 1030 covers Matagorda Island from Fourmile Point to Butler Point.

The shoreline of San Antonio Bay is in agreement within 30 meters.

The shoreline of the Gulf of Mexico has moved out about 100 meters.

The compilation is adequate to supersede T 1030 in toto.

Comparison with Recent Hydrographic Surveys

Hydrographic surveys in this area are under way but have not as yet been received in this office.

Comparison with Chart 1285

A very complete and detailed comparison with chart 1285 is given on pages 6 and 7 of the descriptive report for the compilation.

Landmarks and Aids to Navigation

There are no landmarks charted in this area and none are submitted with the compilation.

The contemporary hydrographic surveys (not yet received in this office) are referred to for positions of day beacons in this area.

General - Diagonals fail to check by 0.9 mm. across 8 minute squares. This is probably due to differential changes in the celluloid.

Aug. 30, 1935.

RALPH M. BERRY

Frank G. Eskine

REVIEW OF AIR PHOTO COMPILATION NO. 5363

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

See page 2 of
Compiled by: descriptive
report

Party #20

Project: 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)
Only such methods as is usual in substituting a nearby point for the control station on the photographs.
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 ~~plans~~ ~~charts~~ 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.
Differences in the ever-changing shell reefs and shoals will not be rectified as discussed in the report. *Comparison made to unfinished 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) Dotted lines indicate shoals not bare at mean high water, probably bare or awash at low water as indicated by appearance on photographs only.
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) No landmarks. Day beacons not shown as described in 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
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~~ ~~topographic 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 hurricane of July 1934, ^{and various minor storms} may have caused changes in the nature of reefs and islands from that shown on the photographs. These changes will ^{not} be made as far as indicated by the hydrographic Survey, if available before this sheet is submitted. It has been observed that these changes are continuous, and it is thought impracticable to change to a representation which itself is only temporarily true.

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*

Examined and approved:

C. H. Green
Chief, Section of Field Records
L. O. Solbert
Chief, Division of Charts

J. B. Borden
Chief, Section of Field Work
G. H. Hude
Chief, Division of Hydrography
and Topography.