

5291

U. S. COAST & GEODETIC SURVEY
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DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R. S. Patton, Director

State: Louisiana

DESCRIPTIVE REPORT

Photo
Topographic
~~Hydrographic~~

} Sheet No. T-5291

LOCALITY

Caillou Bay

Raccoon Point to Whiskey Bay

ISLES DERNIERES

1934

CHIEF OF PARTY

M. H. Reese, Jr. H. & G. Eng.

5291

Applied to Chart 1274 - March 1937 - O.S.S.
" " " 1275 May " O.S.S.
Applied to Chart 1050 May 1937 Chas. R. Bush Jr.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 5291

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. 4

REGISTER NO. T-5291 5291

State LOUISIANA

General locality CAILLOU BAY

Locality ~~NACCOON POINT TO WHISKEY BAY~~ Isles Dernieres

Scale 1:24,000 ²⁰ Photographs 11/30
Date of ~~SURVEY~~ 11/30, 19.32.

~~Vessel~~ AIR PHOTO COMPILATION PARTY NO. 24, NEW ORLEANS, LA.

Chief of party M. H. Reese

Surveyed by See data sheet in the descriptive report.

Inked by S. S. Gill

Heights in feet above ----- to ground to tops of trees

Contour, Approximate contour, Form line interval -----feet

Instructions dated November 7, 19.33.

Remarks: Compiled on scale of 1:24,000 and enlarged and printed on scale of 1: 20,000 by Photo Lithography.

- NOTES ON COMPILATION -

SHEET NO. T-5291

FIELD NO. 4

PHOTOS, NO.	DATE OF PHOTOGRAPHS.	TIME.
1626-1632	11/30/32	9:43 to 9:46 A. M.
1708-1717	11/30/32	10:21 to 10:25 A. M.

	BY	DATE
PROJECTION BY	<u>E. P. Hernandez <i>E.P. Hernandez</i></u>	<u>2/27/34</u>
PROJECTION CHECKED BY	<u><i>M.H. Reese</i> M. H. Reese</u>	<u>2/27/34</u>
CONTROL PLOTTED BY	<u><i>E.P. Hernandez</i> E. P. Hernandez</u>	<u>2/28/34</u>
CONTROL CHECKED BY	<u><i>H. C. Cauiffield</i> H. C. Cauiffield</u>	<u>3/1/34</u>
RADIAL LINE PLOT BY	<u><i>E.P. Hernandez</i> E. P. Hernandez</u>	<u>3/4-6/34</u>
RADIAL LINE PLOT CHECKED BY	<u><i>E.L. Fitch</i> E. L. Fitch</u>	<u>3/11/34</u>
DRAFTING OF PHOTOGRAPHS BY	<u><i>S.S. Gill</i> S. S. Gill</u>	<u>3/12-24/34</u>
PASTING OF NAMES BY	<u><i>S.S. Gill</i></u>	<u>5/21/34</u>
REVIEW OF COMPILATION BY	<u><i>E.L. Fitch</i> E. L. Fitch</u>	<u>4/16/34</u>

AREA OF DETAIL INKED- 16.2 sq. Statute Miles (Approx.)

LENGTH OF SHORELINE (more than 100 meters from nearest opposite shore)--
122.4 Statute Miles.

COMPILER'S REPORT

for

PHOTO TOPOGRAPHIC SHEET, FIELD NO. 4.

GENERAL INFORMATION.

Instructions dated November 7, 1933.

The information used in the compilation of this sheet has been obtained from the notes and sketches on the field photographs, and from members of the field inspection party in questionable areas.

The accompanying "Notes on Compilation" details all data and statistics in connection with the compilation of this sheet. The statistics, as to shoreline and area, of this sheet are approximate because of the irregularity of the coast line and the many bayous and small islands.

The high water line, as shown along the Gulf Coast, was taken from the field photographs on which the field inspection party had sketched in the high water line of this section as well as other questionable areas. Ordinarily there is very little tide in this locality (approximately 1 foot) and its affect was neglected because of the small scale of the photographs. The high winds that are common to this section in the winter are the cause of the changeability of these islands by backing up the waters of the Gulf or forcing it out from the bays and lakes to the north. Inland from the coast the land area is composed of low marshy ground and no difficulty was experienced in interpreting the correct delineation of the shore line. The shoal areas, which in this locality are subject to constant change, are indicated by broken lines. The area covered by this sheet is devoid of cultivation of any nature.

This sheet was compiled from photographs taken by the U. S. Army Air Corp's five lens T-3 A Camera, No. 32-3, photograph numbers 1626-1632 (West Flight) approximately parallel with Longitude $90^{\circ}56'45''$; and 1708-1717 (East Flight) approximately parallel with Longitude $90^{\circ}48'15''$.

CONTROL.

(A) Sources.

The following sources of control were used in the compilation of this sheet.

- (a) Triangulation by W. Mussetter in 1928, recomputed to N. A. 1927 datum.

The geographic positions used were those obtained by W. Mussetter in 1928 on the North American datum. These geographic positions were recomputed to the North American - 1927 datum (by a member of E. R. Mc Carthy's party), eastward from the triangle "Amos", "Beach", "Hammock", which had been adjusted to the North American 1927 datum. Recent ties with 1st order work indicate that any existing error in this area would be unplotable at the small scale of the photographs, 1:24,000.

(B) Errors.

The control is adequate for this sheet and the radial plot gave good intersections.

(C) Discrepancies.

No discrepancies in position of control stations was found.

No control stations established by other organizations were used in this compilation.

COMPILATION.

(A) Method.

The usual five lens radial line method of plotting was used throughout in the compilation of this sheet.

(B) Adjustment of Plot.

The photographs in the two strips covering the area shown by this sheet appear to be free of excessive tilt and scale fluctuation and the radial plot required no unusual adjustments.

(C) Interpretation.

To denote mangrove brush three or four feet high the symbol used was (§), otherwise only the conventional graphic symbols were used as approved by the Board of Surveys and Maps (1932) and no great difficulty was experienced in interpreting the photographic detail.

There are no roads or canals in this area. The larger bayous were shown by one solid line depending in weight upon the importance of the feature. In most cases (unless labeled on the field inspection prints) the classification of these features had to be determined by a close examination of the photographs.

All boundaries of shoal water areas (shown by single broken line) on this sheet were so indicated because of appearance on the photographs, and sketches by the field inspection party, and they may be expected to have some departure from actual conditions.

(D) Information from other sources.

There was no information derived from sources other than the photographs and reports of the field inspection party. The photographs were clear and it is believed the compilation is exact in all particulars.

(E) Conflicting names.

The names shown on this sheet were taken from U. S. Coast and Geodetic Survey chart No. 198 entirely as no other survey of this area has been made in recent years. There is practically no development of any nature in this area and no names exist except those of bays, islands, bayous, etc., which have been used for years; therefore, as far as can be ascertained there are no conflicting names except the island shown on the chart as "Isle Derniere" which has now broken up into a number of small islands. The fishermen in this locality refer to these small islands as "Last Island". The naming of these islands is left to the discretion of the Hydrographic Party which will be engaged in this area in the near future.

COMPARISON WITH OTHER SURVEYS.

The junctions with adjoining sheets to the North and East, T-5290 and T-5295 respectively, are satisfactory.

In comparing this sheet with U. S. Coast and Geodetic Survey Chart No. 198 it is to be noted that "Isle Derniere" as shown on Chart 198 had broken up into a number of smaller islands leaving quite large shoal areas between. The general characteristics of the remaining islands, however, are very similar to those shown on the chart. The marsh areas inland from the coast have also undergone change but to a less marked degree.

LANDMARKS.

There are no landmarks in this area suitable for navigation.

RECOMMENDATIONS FOR FURTHER SURVEYS.

The compilation of this sheet is believed to have a probable error of five (5) meters in well defined detail of importance for charting and of ten (10) meters for other data. There was no need to exaggerate any detail of importance in order to keep it distinct in the photo-lithographic process. *See below*

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.

Approved by: M. H. Reese
Chief of Party.

Submitted by:

E. L. Fitch
E. L. Fitch
Chief Draftsman.

The value of 5 to 10 meters given above is high for work on this scale. A better estimate is an accuracy of location of 5 to 8 meters for intersected points and 5 to 20 meters for other detail.

The following pages 4 5 to 6 discuss the revision of this compilation to obtain coordination with the planimetric and Hydrographic surveys T 6108 and # 5537
B.G. Jones

5

MEMORANDUM TO ACCOMPANY SHEET NO. 5291

In the investigation of the apparent discrepancies existing between the air photo compilation sheet and the plane table survey by Lieutenant ~~F. B. Reed~~ covering the area contained within the limits of this sheet, the geographic positions of the topographic stations were used in coordination with the geographic positions of the triangulation stations as control in a new radial line plot. This new plot was deemed necessary in order to determine the cause of the discrepancies between the compilation and the survey, and the intersections thus established are considered the proper and correct locations of the stations appearing on this sheet. In the development of this plot it was found that the geographic positions of some of the topographic stations did not coincide with the positions of these stations as established by the radial line plot intersections. Concluding these geographic positions to be in error, the geographic positions of the radial line plot intersections were scaled from the sheet and submitted as the correct locations of the topographic stations in question.

The following individual reports of all topographic stations for which corrections were considered necessary describe in detail the corrections made and the conclusions drawn concerning the causes of the discrepancies between the compilation and the survey.

Topographic station JAP is located at approximately Latitude $29^{\circ}06'40''$ and Longitude $90^{\circ}52'50''$. The geographic position as established by the radial line plot coincides with the geographic position as established by the survey of Lieutenant Reed. The western shore line of the island was incorrectly traced due to dimness of the photographs and to improper orientation. With a proper orientation of the photographs the detail was correctly shown on the celluloid sheet, and indicated on the overlay sheet. ✓

Topographic station OWL is located at approximately Latitude $29^{\circ}05'18''$ and Longitude $90^{\circ}50'25''$. The geographic position as established by the radial line plot coincided with the geographic position as established by the survey of Lieutenant Reed. The point on which this station is located was incorrectly traced due to the insufficient number of radial points in this vicinity. The point had been located by an orientation of the photographs between points too far distant to warrant correct location. The proper correction was made on the celluloid tracing and indicated on the overlay sheet. ✓

Topographic station LOU is located at approximately Latitude $29^{\circ}04'30''$ and Longitude $90^{\circ}51'15''$. The geographic position as established by the radial line plot coincided with the geographic position as established by the survey of Lieutenant Reed. The western shore of this point that the station was located on was traced incorrectly. This was evidently due to the dimness of the photographs in this area and to improper orientation. With a proper orientation of photographs the detail was correctly traced on the celluloid sheet and indicated on the overlay sheet. ✓

The geographic positions, as established by Lieutenant Reed, of the following topographic stations coincided with the geographic positions as established by the radial line plot intersections, and as far as could be ascertained no corrections were found necessary:

TUT
BAT
AMP
HOUSE

The island that topographic station TUT is located on was shown as a solid line but was changed to dotted line on celluloid and indicated on overlay sheet.

The following topographic stations are located along the outer coast line. Since the shore line was traced from the ground survey by Lieutenant Reed and the shore line here is so variable, no attempt was made to tie in the stations on the photographs. The stations are shown on the celluloid with a black circle and indicated on the overlay sheet:

FAG
CUT
TIM

Triangulation stations RYE 1934 and CHA 1934, located by Lieutenant T. B. Reed, were plotted on the celluloid tracing and indicated on the overlay sheet.

S. S. Gill
S. S. Gill,
Draftsman.

Examined and approved:

M. H. Reese
M. H. Reese,
Chief of Party.

MEMORANDUM TO ACCOMPANY DESCRIPTIVE REPORT SHEET NO. 5291

The southern shoreline of the Isles Derniere was changed due to the storm after the pictures were taken. The shoreline has washed away in most places approximately 100 meters. In many instances shoal areas have been formed and in other cases small islands have been formed. At Latitude 29°02'-29°03' and Longitude 90°54'-90°55' the east point of the island has washed away and formed two small islands. Also a shoal area has formed just south of this. At Latitude 29°02' to 29°03' and Longitude 90°52' to 90°53', the islands have increased in area. At Latitude 29°02' to 29°03' and Longitude 90°47' to 90°48', an island has been formed. At Latitude 29°02' to 29°03' and Longitude 90°46' to 90°47' the western end of the island has washed away and formed three islands. This information was traced on the celluloid compilation from a survey made by Lieut. T. B. Reed immediately after the hurricane. T6108.

T. B. Reed

REVIEW OF PHOTO TOPOGRAPHIC SURVEY NO. T-5291

Title (Par. 56) Forwarded with sheet.

Chief of Party M. H. Reese

Compiled by S. S. Gill.

Project Louisiana Air Photo Compilation Instructions dated Nov. 7, 1933.
Party No. 24.

1. The survey and preparation for it conform to the requirements of the Topographic Manual. (Par. 8; and 16, a, b, c, d, e, g and i.) (Note) Par. 8 not applicable to this party.
2. The character and scope of the compilation satisfy the instructions and the "Notes on the Compilation of Planimetric Line Maps from Five Lens Aerial Photographs".
3. The control and adjustment of the radial plot were adequate. (Par. 12, 29.)
4. There is sufficient control on maps from other sources that were transmitted by the field party for their application to the charts. (Par. 28.) None submitted.
5. High water line on marshy and mangrove coast is clear and adequate for chart compilation. (Par. 16a, 43, 44.)
6. 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.) See Par. C, Page 3 of Desc. Report.
7. Important details shown on previous surveys and on the chart have been compared with this sheet and a statement has been entered in the report regarding the removal from the chart or change in position of important detail such as rocks, lights, beacons, prominent objects, bridges, docks, and structures along the water front. No changes in such details have been noted on this sheet.
8. The span, draw and clearance of bridges are shown. (Par. 16c.)
9. The data furnished by the Field Inspection is adequate.

NOTE: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual. Use reverse side for extending remarks.

- 10. The descriptive report covers all details listed in the Manual, so far as they apply to this survey. (Par. 64, 65 and 66.)
- 11. The descriptive report also contains all additional information required in photo topography as prescribed in the instructions and in the "Notes on the Compilation of Planimetric Line Maps from Five Lens Aerial Photographs".
- 12. The descriptions of recoverable stations and references to shore line were accomplished on Form 524, and scaling of positions checked. (Par. 29, 30 and 57.)
- 13. A list of landmarks for charts was furnished on Form 567 and scaling of positions checked. (Par. 16d, e, 60.)
- 14. The geographic datum of the sheet is North American 1927 and the reference station is correctly noted. (Par. 34.)
- 15. Junctions with contemporary surveys are adequate.
- 16. Geographic names are shown on the sheet and are covered by the Descriptive Report. (Par. 64, 66k.)
- 17. The quality of the drafting is ^{good} *post - too heavy for printing*. (Par. 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 45, 46.)

18. No additional surveying is recommended.

19. Remarks:

20. Examined and approved: *M. H. Reese*
 (Sgd.) M. H. Reese.
 Chief of Party

21. Remarks after review in office:

Reviewed in office by: *B. G. Jones*

Examined and approved:
E. K. Green
 Chief, Section of Field Records
L. O. Polbut
 Chief, Division of Charts

J. P. Borden
 Chief, Section of Field Work
G. W. Wade
 Chief, Division of
 Hydrography and Topography.

REVIEW OF AIR PHOTO COMPILATION T-5219

Comparison with other surveys

1. T-6108- This planetable survey shows the outer coast line as surveyed just after the hurricane of June 16, 1934. There were large changes and the compilation has been changed to agree with T-6108.

2. H-5537- Two small islands shown on the compilation (1932 photographs) at lat. $29^{\circ}05.5'$ long. $90^{\circ}50.2'$ have disappeared and have been removed in accordance with the descriptive report T-5537. Described hydrographic stations from H-5537 have been plotted and are shown on this compilation as discussed on pages 5 and 6 of this report.

Names

See page 3. The name Isle Derniere has been changed to Isles Dernieres pending Mr. Bacon's decision. Names on this compilation agree with those on T-6108 and H-5537.

B. G. Jones

Survey No. T 5291
 (H5537)
 Chart No. 198 and 1116
 Diagram No. III6

Date. Feb 8, 1935

GEOGRAPHIC NAMES

La.
 Names underlined in red approved Mar 13, 1935
 Harlow Bacon

- * 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.

Compared with USGS Surveys of 1935

Status	Name on Survey	Name on Chart	New Names in local use	Names assigned by Field	Location
	<u>Caillou Bay</u> ✓	Same			
	<u>Raccoon Pt</u> ✓	" "			
	<u>Isles Dernieres</u> (DGN) ✓	Isle-Derniere			
	<u>Gulf of Mexico</u> ✓				
	<u>Pass des Ilettes</u> ✓	Same	<u>Grand Pass des Ilettes</u> (USGS 1935) Recommended to USBGN Adopted by agreement with USGS, June 1936 H.B.		
	<u>Flat Bayou</u> ✓	" "			
	<u>Pelican Lake</u> ✓	" "			
	<u>Pass Wilson</u> ✓	" "			
	<u>Bay Round</u> ✓	" "			
	<u>Lake Pelto</u> ✓	" "			
	<u>Caillou Boca</u> ✓	" "			
	<u>Whiskey Pass</u> (DGN) ✓				29° 02' 90.47"
	<u>Bayou-Go-to-Hell</u> ✓	<u>Pelican Bayou</u> (USGS 1935) Recommended to USBGN. Name of USGS adopted June 2, 1936 H.B.			
	<u>Bay Wilson</u>				