DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
P. S. F. F. Beyler

State: Louisiana

LOCALITY
Chandeleur Sound
Mitchell Key to Cranetown
Bay

1934

CHIEF OF PARTY
W. H. Rease, Jr., H. & G. Engr.
DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY

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. 40

REGISTER NO. T-5327

State Louisiana

General locality Chandeleur Sound

Locality Mitchell Key to Cranetown Bay

1:20,000 Photographs 11/29/32, 19

Surveyed by See data sheet in descriptive report

Inked by H.G. Caulfield

Heights in feet above to ground to tops of trees

Contour, Approximate contour, Form line interval feet

Instructions dated November 7, 1933

Remarks Compiled on scale of 1:24,000 and enlarged and printed on a scale of 1:20,000 by Photo-Lithography.
- NOTES ON COMPILATION -

SHEET NO. T-5327
FIELD NO. 30

PHOTOS, NO. DATE OF PHOTOGRAPHS TIME
1182-1192 11/29/32 10:21 to 10:26 A.M.

BY DATE
A. A. Voss 5/16/34

PROJECTION CHECKED BY E. P. Hernandez 5/16/34

CONTROL PLOTTED BY F. T. Clarke 5/16/34
H. C. Caulfield

CONTROL CHECKED BY H. C. Caulfield 5/16/34
H. C. Caulfield

RADIAL LINE PLOT BY H. C. Caulfield 5/16/34
H. C. Caulfield

RADIAL LINE PLOT CHECKED BY E. P. Hernandez 5/17/34
H. C. Caulfield

DRAFTING OF PHOTOGRAPHS BY H. C. Caulfield 5/18-30/34
H. C. Caulfield

FASTING OF NAMES BY H. C. Caulfield 6/1/34
H. C. Caulfield

REVIEW OF COMPILATION H. C. Caulfield 5/31/34

AREA OF DETAIL INKED— 3.1 sq. Statute Miles.

LENGTH OF SHORELINE— (more than 100 meters from nearest opposite shore)— 53.2 Statute Miles.
COMPILER'S REPORT
FOR
PHOTO TOPOGRAPHIC SHEET, FIELD NO. 40.

GENERAL INFORMATION:

Instructions dated November 7, 1933.
The information used in the compilation of this sheet was obtained from the notes and sketches on the field photographs, from the reports of Lieut. W. H. Bainbridge and Lieut. E. R. McCarthy, in charge of triangulation parties located in this area at the time of compilation, and from members of the field inspection party in questionable areas.
The accompanying Notes on Compilation, gives all data and statistics in connection with the compilation of this sheet.
Because of the very small tide, and the small scale of the photographs, its effect was neglected in the interpretation of the high water line from the photographs.
The area covered by this sheet consists of low marsh ground, numerous small islands and ponds and no cultivation.
This sheet was compiled from photographs taken by the U. S. Army Air Corps' five lens, T-3A Camera, No. 32-3, photograph numbers, 1182-1193. The line of flight falls approximately along Longitude 89°11'40".

CONTROL:

(A) Sources:
The following sources of control were used in the compilation of this sheet:
(b) Triangulation by Lieut. E. R. McCarthy-1934. Triangulation station Keel-1934, is one of the stations used as a tie, between the scheme of triangulation executed by Lieut. E. R. McCarthy-1934, and that executed by Lieut. W. H. Bainbridge-1934. The two geographic positions obtained are so nearly identical that the difference could not be plotted due to the small scale of this compilation.
Mitchell Key Light, located by Lieutenant W. H. Bainbridge-1934, was built since the pictures were taken, and is shown plotted on the sheet by its geographic position only.
The geographic positions are on the North American 1927 Datum and the difference between the unadjusted and the final adjusted positions, at the scale of this compilation-1:24,000 would be unplottable.
Errors:
The available control for this sheet is adequate and the radial line plot gave well defined points of intersection.

Discrepancies:
No discrepancy in position of control stations was found. No control stations established by other organizations were used in this compilation.

Compilation:

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

Adjustment of Plot:
The photographs used in the compilation of this sheet were free from excessive tilt.
There was no unusual adjustments of radial plot in the drafting of the photographs.

Interpretation:
Only the conventional symbols as approved by the Board of Surveys and Maps (1932) were used and no great difficulty was experienced in interpreting the detail from the photographs.
To indicate bayous, the double full line was used; while the smaller bayous, which were too narrow to be shown by double lines, were indicated with a single solid line.
In most cases where the field inspection party did not classify all of the features, they had to be determined by a close examination of the photographs.

Information From Other Sources:
There were no other sources of information for this sheet, other than that obtained from the photographs, from the field inspection party, and from the reports of Lieut. E. R. Mc Carthy and Lieut. W. H. Bainbridge.

Conflicting Names:
The names shown on this sheet have been taken from U.S. Coast and Geodetic Survey Chart No. 1270, from progress sketches of triangulation work performed by Lieut. E. R. Mc Carthy and Lieut. W. H. Bainbridge and from information supplied by the field inspection party. All names are in current usage by the inhabitants of this particular area and no conflict of names exist. The names shown on this compilation agree with those shown on N. S. S. No. 1268 and 1270 and any new names are shown.
COMPARISON WITH OTHER SURVEYS:

This sheet matches satisfactorily with the adjoining sheets to the North and West, T=5326, T=5322, respectively.

In comparing this sheet with the section covered by U. S. Coast and Geodetic Survey Chart No. 1270, it is noted that the main features have maintained their general similarity, however, because of the difference in scales it is impossible to make an accurate comparison.

LANDMARKS:

The list of landmarks as recommended by the field inspection party is submitted on form No. 567 for the area covered by this project.

RECOMMENDATIONS FOR FURTHER SURVEYS:

It is believed that an error of five meters may occur in the compilation of this sheet in well defined detail and an error of ten meters for other data. It is understood, however, that the widths of bayous, where necessary, have been slightly exaggerated in order that the detail may show up clearly 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: H. C. Caulfield
Draftsman.

Approved by M. H. Reese.
Chief of Party, C. & G. S.
Title (Par. 56) Forwarded with Sheet.

Chief of Party M. H. Reese Compiled by H. C. Caulfield.

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

4. 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 Des. 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. 15d, 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, 68k.)

17. The quality of the drafting is good. (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
   Chief of Party


Reviewed in office by: J. G. Jones

Examined and approved:

K. T. Adams
Chief, Section of Field Records

L. T. Dobbs
Chief, Division of Charts

F. H. Barlow
Chief, Section of Field Work

Chief, Division of Hydrography and Topography.
LANDMARKS FOR CHARTS
5327
New Orleans, La.

May 31, 1934.

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

M. H. Rees
Chief of Party.

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>POSITION</th>
<th>METHOD OF DETERMINATION</th>
<th>CHARTS AFFECTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mitchell Bay Light</td>
<td>29 54</td>
<td>270.1 89 09 1120.5 1927</td>
<td>Triangulation</td>
</tr>
<tr>
<td></td>
<td>(1677.2)</td>
<td>(469.2)</td>
<td>U.S.C. &amp; G. S.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Chart No. 1286</td>
</tr>
</tbody>
</table>

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.
The plot of the photographs on this compilation was complicated by the fact that the centers of most of the photographs fall over the water and there was a very limited amount of control. The accuracy of location given on Page 4 of the report is too high. To make a close estimate of the accuracy of the plot would require examination of the Photographs which are not yet in this office. From a careful examination of the control and the report which states that the photographs are free of large tilts the compilation is accepted as sufficiently accurate for charting and is adequate to supersed the older surveys in this area.

Comparison with the last topographic surveys T 769 (1859) and T 654 (1857) shows many changes and large sections of the islands have been washed away. Changes have been particularly large on Mitchell Key and Holmes I. The compilation does not show Barrel Key and the island shown on Chart 1268 et al as Barrel Key is accepted as no longer existing as an island. If the island still existed it would shown on the photos and is not likely to have been missed by the compiler. Chart 1270 shows only a shoal at Barrel Key. This can be checked on the Photos when they are received in the office.

B. G. Jones

B. G. Jones
<table>
<thead>
<tr>
<th>Name on Survey</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>I US Engr</th>
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<tr>
<td>Cranetown Bay</td>
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<td>✓</td>
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<td>Red Fish Bend</td>
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<td>✓</td>
<td>Change to Redfish</td>
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<td>✓</td>
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<td>✓</td>
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<td>Live Oak Bayou</td>
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<td>to secure uniformity</td>
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<td>Holmes Island</td>
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<td>Mitchell I.</td>
<td>Plural Mitchell Keys</td>
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