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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

Topographic
~~Hydrographic~~

Sheet No. B 4779

LOCALITY

Gulf Coast of Louisiana

Calcasieu River and Pass

to Calcasieu Lake

1933

CHIEF OF PARTY

W. E. Parker.

U. S. GOVERNMENT PRINTING OFFICE: 1929

4779

DESCRIPTIVE REPORT
TO ACCOMPANY
TOPOGRAPHIC SHEET B
CALCASIEU RIVER AND PASS

LOCALITY AND LIMITS.

The topography on this sheet extends from the coast line to the Calcasieu Pass Jetties inshore along the Calcasieu River to the junction of the river and Calcasieu Lake at the northeast corner of St. John Island. The work was performed at a 1:10,000 scale. The limits of the sheet are Latitude $29^{\circ} 44'$ to $29^{\circ} 51'$ and Longitude $93^{\circ} 18'$ to $93^{\circ} 22'$. However no attempt was made to make a detailed survey of the entire area covered by the sheet. It is believed that all topographic features that could be of any use or interest to boats running along the river are shown.

CONTROL AND METHODS.

Five triangulation stations located or relocated in 1933 are on the sheet. From these control points it was possible to start a system of graphic triangulation that could be extended as the work progressed to insure a rigid control system for the area surveyed.

All shoreline was located from rod readings made at setups on a traverse line along the river. The position of each traverse station was checked by resecting on previously established points; either triangulation stations or stations located by graphic triangulation. By using a combined system of traverse and triangu-

lation it was possible to check every instrument setup. Due to the fact that the land on both sides of the river is open it was not necessary to depend on traverse alone for a single setup.

The shoreline was rodged in with considerable detail; the average distance between rod readings being between twenty five and fifty meters.

LANDMARKS AND GENERAL DESCRIPTION OF THE AREA.

When viewed from offshore the area surveyed has only three outstanding landmarks. Of these three the one visible at the greatest distance is the oil rig located west of the west jetty and between the high and low water lines (Oil). This rig was erected during the time the topography was being executed. It is a steel structure built on a pier and is about 120 feet in height. A description of it has been furnished on the standard form for topographic station but it has not been listed as an aid to navigation or a landmark for charts because no information regarding its permanency could be obtained and rumors were heard to the effect that similar rigs would soon be erected in the vicinity.

The second outstanding landmark is the Calcasieu Light-house, shown on all the charts.

The other landmark is the cupola of the Biological Station also shown on the charts. This building has been abandoned for a number of years and is very much weathered but it will probably stand for several years yet.

The town of Cameron has no outstanding buildings, no flagpoles or church spires. With its background of trees it is

quite inconspicuous. Only a part of the houses in the village were located by rod readings. The majority of them were sketched in to furnish some idea of the size of the village. Cameron has a post office, general store, garage, restaurant and hotel. It is recommended that only the buildings used for hydrographic signals be used for reducing air photographs.

The highway through Cameron is a good shell road. The ferry at Cameron operates on a 30-minute schedule during the day and an hourly schedule at night. It carries persons and vehicles free of charge. The ferry is a barge operated by a small tug alongside. The only structures at the ferry landings are the single lines of fender piling as shown. The canal along the highway on the south side of the river was dug to get the filling material for the highway. It is not navigable.

Above Cameron the country is very featureless with no trees or structures other than those shown. The canal at station FIT is evidently a drainage canal that has never been cut through into the river. Station ROD is a 2-inch galvanized pipe stuck up in the river and used by fishermen to secure their nets. Stations SHED, PIP, CAP, FAR and RAT are structures of fishermen but of such temporary nature that they were not described.

MARSH AND HIGHWATER LINE.

The two most difficult problems for the topographer on this survey were the location of the highwater line on the east side of the jetties and the definition of the marsh in the area. The highwater line finally selected seemed to be about a mean for

the high waters at different periods of the month. The mud area to the eastward from the jetties is so flat that one or two inches difference in the height of tide would shift the water line by a great many meters. Weeds and driftwood that are usually helpful in defining the highwater line are scattered over a strip about 100 meters wide in this area. It is noted that the highwater line of this survey is further offshore as compared to chart 518 but it is impossible to tell whether this is due to a filling in near the jetty or due to the estimate of two different topographers of the position of the highwater line.

While working in the vicinity of the jetties it was noted that some of the rocks in the submerged part of the west jetty were from two to eight inches above the water surface at low tide.

The location of the limits of marsh was even more troublesome than the highwater line. The majority of the work to the north of the lighthouse was performed during a time of heavy rains and prevailing fresh southerly winds. As a result practically the entire area covered by the survey was under water at the time the work was accomplished. Under such adverse conditions it was not possible to tell what areas would be under water at a normal high tide in the dry season. All the area shown as marsh is not submerged at a normal high tide but it is flooded so much of the time that it is covered with a dense growth of the marsh grass which is prevalent all along the coast.

INKING.

In inking the sheet the highwater line was so drawn that the offshore or water edge of the line was the exact high water line.

LIST OF PLANE TABLE POSITIONS.

Descriptions of Topographic Stations have been written for all prominent objects, located by plane table, that might be recovered and utilized for hydrographic work. The 16 topographic stations so described on the standard form 524 are: Oil, Boy, Cot, Car, Lin, Gal, Fun, Yel, Pet, Old, Lone Tree, Bum, Can, Met, Chim, and Top. In addition to the permanent hydrographic stations 35 stations of a temporary nature such as flags, piling, trees and beached house boats were located. The temporary stations, that will probably be lost within a short time are: Gay, End, Mil, Cry, Red, Min, Spot, Ter, Pile, Tree, Cow, Big, Flag, Cat, Pot, Dog, Fit, Pan, Cor, Nut, Tub, Lit, Rod, Mar, Rat, Far, Cup, Pip, Shed, Bar, Bob, Pig, Pole, Aid and Fin.

Respectfully submitted

Charles A. Schanck

Charles A. Schanck,
Jr. H. & G. Engineer,
Coast & Geodetic Survey,
Topographer.

Approved:

W. E. Parker

W. E. Parker, Captain,
Coast and Geodetic Survey,
Chief of Party.

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REG. NO. 4779

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. B

REGISTER NO. 4779

State Louisiana

General locality Gulf Coast

Locality Calcasieu River and Calcasieu Pass to Calcasieu Lake

Scale 1:10,000 Date of survey Feb. 21 - March 8, 1933

Vessel U.S.C. & G.S.S. "HYDROGRAPHER"

Chief of party W. E. Parker

Surveyed by Charles A. Schanck

Inked by Charles A. Schanck

Heights in feet above _____ to ground to tops of trees

Contour, Approximate contour, Form line interval _____ feet

Instructions dated December 17, 1932:

Remarks: _____

070

Applied to Chart 591 - 4/8/35 - Lutz
Applied to Chart 1279
12/27-35 g.H.S.

REVIEW OF TOPOGRAPHIC SURVEY No. 4779

Title (Par. 56) *Calcasieu R. and Calcasieu Pass to Calcasieu L., La.*

Chief of Party *W.E. Parker* Surveyed by *C.A. Schanck* Inked by *C.A.S.*

Ship *Hydrographer* Instructions dated *Dec. 17* Surveyed in *1933*

1. The survey and preparation for it conform to the requirements of the Topographic Manual. (Par. 7, 8, 9, 13, 16.) ✓
2. The character and scope of the survey satisfy the instructions. ✓
3. The control and closures of traverses were adequate. (Par. 12, 29.) ✓
4. ~~The amount of vertical control that the Manual specifies for contours and lines was accomplished. (Par. 18, 19, 20, 21, 22, 23.)~~
5. ~~The delineation of contours and lines is satisfactory. (Par. 49, 50.)~~
6. There is sufficient control on maps from other sources that were transmitted by the field party to enable their application to the charts. (Par. 28.) *None submitted*
7. High water line on marshy and mangrove coast is clear and adequate for chart compilation. (Par. 16a, 43, 44.) ✓
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.)
9. ~~Rocks and~~ other important details shown on previous surveys and on the chart were verified. (Par. 25, 26, 27.) *except landmark Windmill noted in par. 16.*
10. The span, draw and clearance of bridges are shown. (Par. 16c.) *None*
11. ~~Locations and elevations of summits are given. (Par. 19, 51.)~~
12. ~~The tree line was shown on mountains. (Par. 16g.)~~

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.

13. The descriptive report covers all details listed in the Manual, in ✓
so far as they apply to this survey. (Par. 64, 65, 66, 67.)
14. The descriptive report also contains additional information required
in aero-topography relative to type of photographs, method of compi-
lation and type of ground control. *With the exception of the details on the
village of Cameron this subject is not discussed in the descriptive report.*
15. The descriptions of recoverable stations and references to shore line
were accomplished on Form 524. (Par. 29, 30, 57, 67 except scaling
of IMs and DPs, 68.) *16 cards submitted*
16. A list of landmarks for charts was furnished on Form 567 and plotting
checked. (Par. 16d, e, 60.) *None furnished but this subject is discussed in descriptive report.
Landmark Windmill (29° 49.9', 93° 20.9') shown on charts 591 and 1279 was not shown on the sheet nor discussed
in the descriptive report.*
17. The magnetic meridian was shown and declination was checked. (Par. ✓
17, 52.)
18. The geographic datum of the sheet is *N.A.(1927) Adjusted* and the
reference station is correctly noted. (Par. 34.)
19. Junctions with contemporary surveys are adequate. *There is no contemporary
survey. Junctions with previous surveys are adequate.*
20. Geographic names are shown on the sheet and are covered by the Des-
criptive report. (Par. 64, 66k.) *They are shown on the sheet but not
discussed in the descriptive report. except the H.W. line is somewhat too heavy.*
21. The quality of the drafting is good. (Par. 31, 32, 33, 35, 36, 37, 38, ✓
39, 40, 41, 42, 45, 46, 47, 48, 49, 50.)
22. No additional surveying is recommended. ✓
23. The Chief of Party inspected and approved the sheet and the descriptive
report ~~after review by~~ *There is no record that the chief of party
inspected the sheet.*
24. Remarks:

Reviewed in office by *E. P. Eakin, March 13, 1936*

Examined and approved:

E. H. Green
Chief, Section of Field Records

Fred. L. Peacock
Chief, Section of Field Work

L. O. Robert
Chief, Division of Charts

G. F. Hude
Chief, Division of Hyd. and Top.