

4774

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Form 504  
Ed. June, 1928

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY  
R. S. Patton, Director

State: LOUISIANA

DESCRIPTIVE REPORT

Topographic Sheet No. C 4774

LOCALITY

Lake Charles Deep Water Channel.

Lake Charles.

1933

CHIEF OF PARTY

J. C. Bose.

DESCRIPTIVE REPORT TO ACCOMPANY SHEET  
(FIELD No. C)

Instructions. The survey was made in accordance with Instructions of March 22, 1933.

Control. Control for the area surveyed consisted of first order triangulation stations established in 1931. All of the triangulation stations plotted on the sheet were used at different times except  $\Delta$  Charles. The latter is only a marked station and not a tall object and could not have been made visible over the tree tops without the building of a very tall structure.

One station, which was plotted on the aluminum mounted sheet when received from the office and the geographic position of which was furnished, is a water tank designated "Lake Charles, Small Black Tank, 1931,  $\phi$  30' 13' 53.34",  $\lambda$  93' 13' 02.49". No tank exists at this place, nor did one ever stand there, according to local information received. Two black water tanks stand in the vicinity, however, and were located by plane table cuts. One of these is the Murray-Brooks tank and the other is signal "Black." It may be that theodolite cuts on these two were confused.

*Noted in book*

It was not possible to begin the survey from a set-up on the ground at a triangulation station because none of the stations were intervisible from the ground; neither could a point be found where three stations would give a strong fix. A start was made on the roof of the Charleston Hotel by setting up on the line through  $\Delta$  Stack, Charleston Hotel" and  $\Delta$  Airways Beacon Majestic Hotel". A fix was obtained here and cuts taken to all prominent objects and several signals that had been built. These signals were then occupied and by orienting back on the initial set-up and by resection, these signals were located and finally, all prominent objects located by graphic triangulation.

Traverses In the survey of the shoreline of Lake Charles, itself, so many located points were visible that the position of the planetable could be determined without error at each set up.

To delineate the loop of the Calcasieu River in the southwest portion of the sheet, it was necessary to run a traverse, because the cypress trees obscured the control points. The traverse was closed with an error of only three meters.

On account of the tall cypress trees lining both banks of the river, it was also necessary to run a traverse without control from the Kansas City Southern bridge to the  $\Delta$  Brick Stack, Gulf States Utilities. This traverse of  $4\frac{3}{4}$  statute miles was run with an error of 18 meters (mostly in azimuth) which was adjusted in accordance with the method given on page 53 of the Topographic Manual.

The river ran off the sheet just east of  $\Delta$  "Tall Silver Tank, Rice Mill" and was surveyed for a mile northward on a sub-plan. The survey was not carried beyond the sharp bend at the north end of the sub-plan because no control was available beyond this point. In fact no fix was obtained at the northern limit of the survey, as only one triangulation station was visible part of the way. However, great care was taken in orienting and in reading the rod and the topographer believes that the survey was accurate as far as it was carried.

Description. The east and south shore of Lake Charles is firm and dry land and forms the limit of the city of Lake Charles (about 14,000 population). Along this stretch, the land has an average elevation of about 10-15 feet. A concrete highway, the Old Spanish Trail, runs along the lake-shore as far as the port area and then crosses the river over a concrete arch bridge.

Between the Silver Tank, Noble Trotter Rice Mill and the Lake Charles Boat Club, the waterfront consists mostly of business buildings, warehouses, petroleum companies and a few dwellings. A rice mill is in operation at the station mentioned above.

The municipal wharf is an earthen structure, lined with a wooden retaining wall; it is of no great importance and only a few fishing boats and barges tie up there now and then. North of the municipal pier are several old piers, landings, and clusters of piling in a state of decay. Immediately north of the pier is the remnant of an abandoned dredge and a little farther north is an abandoned tug.

South of the coulee, or stream, nearest the Boat Club the lake shore is dotted with homes. The yards of the homes contain many trees and there is a broken fringe of cypress trees along the S. lake shore. Several small private boat landings exist along the south shore of the lake. Barbe's Pavilion is a dance hall built over the water.

The west shore of the lake and the land between the lake and the loop of the river is low and appears to be all cypress swamp. Tall cypress trees line the shore of the lake and the river. At the northwestern end of the lake, however, there is dry land. Here stands the town of Westlake, once a sawmill town of some importance but now practically a deserted village. No important industry flourishes there and the main highway, which once ran through the town, now passes west of it.

The north shore of the lake is also low and mostly cypress swamp. The revetted railroad embankment of the Southern Pacific cuts across the northern extremity of the lake, leaving a small lagoon, choked with hyacinths.

Between the north end of Ryan street (the main business street of Lake Charles) and the two railroad bridges at Westlake, the river twists and turns and forms a peninsula which seems to consist all of cypress swamp.

A dry, narrow fringe of land, about 2-3 feet above mean river level, parallels the south and west river bank. It is the remnant of the old road, which was the outlet from Lake Charles before the present highway was built.

North of the railroad bridges, a high tension line crosses the Calcasieu River. The wires are carried by two steel towers 150 feet high. Clearance under the wires was stated by Mr. F. Shutts, Parish Engineer, to be 102 feet at mean low Gulf level.

The railroad bridges have very little headroom. The more southerly bridge (S. P.) has less than the K. C. S. bridge. The headroom is about five feet at mean river level but more definite information will be furnished with the hydrographic sheet.

South of the railroad bridges and east of "Web" is a narrow, and low natural levee, with cypress trees, which forms the continuation of the east river bank part way across the lake.

"Web" is the east gable of a fertilizer plant, the Kelly-Webber Co. It has a dock in good condition and occasionally, ocean going steamers dock there to discharge nitrates.

West of the highway bridge (O Draw) , the river flows in an oval loop and forms an island. The island, however, was made by a dredged cut-off, just west of the port docks, between O Cor and Ton. Tall cypress trees line the river bank opposite the island and also the east side of the island. Across the river from O Des are the hulls of three abandoned tugs.

The land between the wrecks and around the loop as far as O Gar will soon be subject to a change, as the topographer has information to the effect that an alkali plant is to be built there with docks and buildings.

On the west side of the island, near O Art, is an artesian well, which is the result of oil drilling operations.

The port area consists of four units of docks and sheds. The two northern-most sheds, extending approximately in an east and west direction are joined together but have a fire wall between them. The two southerly sheds have a space between them. The southernmost shed is of very recent construction.

Inshore from the pier sheds are a cotton compress and several cotton storage sheds. Several railroad tracks terminate at the port area; they are the Lake Charles Harbor and Terminal District Railway and connect with the Missouri Pacific. <sup>? Andine</sup>

To return to Lake Charles, the lake is badly cluttered up with old piling around its circumference. Some of this piling is the remains of old building foundations but by far the most of it was driven in long rows to retain logs, in the days when the lumber industry flourished. Many of the piles are broken at or below the water line and are obstacles for small boats. The piles number in the thousands and therefore, it was impossible to locate them all. The limits and directions of the rows, however, and the piles farthest from the shore were located.

Efforts have been made by Lake Charles citizens to clear the lake of stumps and piles but so far have been unsuccessful.

A blue print, showing a count of the piles will be sent to the office. <sup>SP 2-10-11</sup>

In the south-west portion of the lake is a spar buoy, on the east side of the deep channel. This buoy is a starboard-hand buoy and should be red. However, all buoys on the Lake Charles waterway were placed by the parish and never have been painted.

The portion of the river shown on subplan A also contains many piles but some of these still serve as log pens. There is an active saw mill at O Top but the large mill at the northern end is abandoned.

At O Small and A Silver tank is a large rice mill, the Lake Charles Rice Mill. The Noble-Trotter Rice Mill, on the lake, is also a large concern.

Magnetic Meridian. The magnetic meridian was not drawn at any of the triangulation stations because none of these were removed from disturbing influences. The meridian was drawn at a point ( center of red circle on arrow ) where a three point fix was obtained.

Marsh Those areas which are covered with the marsh symbol are always covered with water. The marsh grass or cané brake, is generally about eight to ten feet high and grows along a well defined outline. From the edge of the marsh, the river bottom falls off sharply and depths of ten to twenty feet can be found a few feet away from the marsh line.

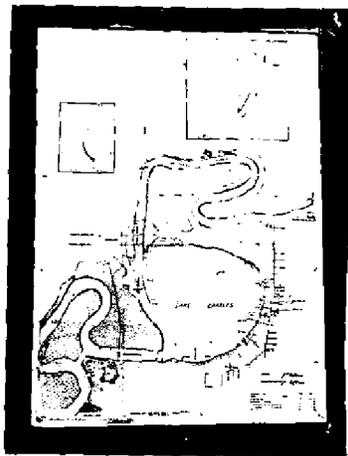
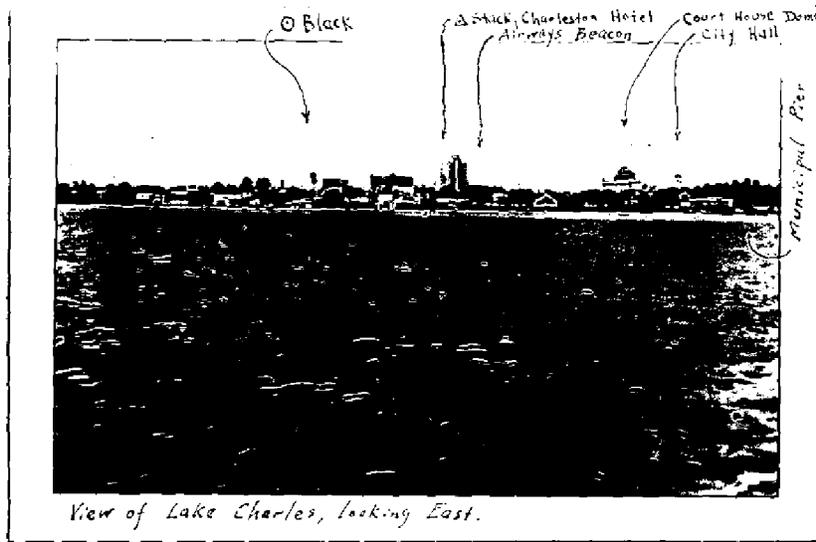
Streets. Most of the street intersections shown were accurately located by the topographer. The intersections of the east-west streets with Ryan Street from Pujo Street northward should be accurate. The intersection of S. Ryan, South Street, and Miller Avenue should also be dependable but some of the streets between Pujo Street and Miller Ave. and some of the streets crossing S. Ryan were located by rather long rod readings and are subject to some error.

Landmarks. A list of prominent objects is attached hereto. With the exception of those marked with an \*, they are visible only from the lake or on that part of Calcasieu River which flows by the city.

The landmarks marked \* are visible as far as the southwest end of Rose Bluff Cut Off, (Sheet B).

*J. C. Bose*  
J. C. Bose,  
Topographer,  
Chief of Party

*Applied to Drawing of Chart No. 592.  
Jan. 9/35. CR*



Silver Tank  
Noble-Trotter  
Rice Mill.



Charleston Hotel  
Court House  
Catholic Church  
City Hall

LAKE CHARLES, LA.

1917



LAKE CHARLES, LA.

1917

Typical Cypress Shore. South Shore of  
Lake Charles, Looking West to Barbe's Pavilion.

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

REG. NO. 4774

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. C

REGISTER NO. **4774**

State LOUISIANA

General locality Lake Charles Deep Water Channel. *large*

Locality Lake Charles.

Scale 1:10 000 Date of survey April, 1933

~~Vessel~~ Party No. 6 Project HT-138

Chief of party J. C. Rose

Surveyed by J. C. Rose

Inked by J. C. Rose

Heights in feet above \_\_\_\_\_ to ground to tops of trees

Contour, Approximate contour, Form line interval \_\_\_\_\_ feet

Instructions dated March 22, 1933

Remarks: Some revision done in port area in October 1933  
after new construction.

## REVIEW OF TOPOGRAPHIC SURVEY No. 4774

Title (Par. 56) *Lake Charles Deep Water Channel, Lake Charles, Louisiana*Chief of Party *J. C. Bose* Surveyed by *J. C. Bose* Inked by *J. C. Bose*Ship *Shore party* Instructions dated *March 22, 1933* Surveyed in *April 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-formlines- was accomplished. (Par. 18, 19, 20, 21, 22, 23.)  
*None*
5. The delineation of -contours-formlines- is satisfactory. (Par. 49, 50.) *None shown*
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.) ✓ *BP 27067, 27068 & 27069. Were not indorsed as directed by the regulations. Overlap is sufficient to adjust to and supplement the information on T4774 and T4773.*
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.) ✓
10. The span, draw and clearance of bridges are shown. (Par. 16c.) ✓  
*See Desc. Rep. for details.*
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 compilation and type of ground control.~~
15. ~~The~~ descriptions of recoverable stations and references to shore line were accomplished on Form 524. (Par. 29, 30, 57, 67 except scaling of DMs and DPs, 68.) *No marked stations established; others listed on Form 567. Landmarks. (See Circ. 30 of 1933)*
16. A list of landmarks for charts was furnished on Form 567 and plotting checked. (Par. 16d, e, 60.) *Filed as letter 766/1933*
17. The magnetic meridian was shown and declination was checked. ✓ (Par. 17, 52.)
18. The geographic datum of the sheet is *North American 1927* and the reference station is correctly noted. ✓ (Par. 34.) *seconds in meters only.*
19. Junctions with contemporary surveys are adequate. ✓
20. Geographic names are shown on the sheet and are covered by the Descriptive report. (Par. 64, 66k.) ✓
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~~

24. Remarks:

Reviewed in office by *R. J. Christman, March 16, 1934*

Examined and approved:

*L. O. Gilbert*  
Chief, Section of Field Records

*W. S. Lammiman*  
Chief, Division of Charts

*F. S. Borden*  
Chief, Section of Field Work

*G. W. Hilde*  
Chief, Division of Hyd. and Top.