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U. S. COAST AND GEODETIC SURVEY
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Ed. June, 1928

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R. S. PATTON, Director

State: Texas

DESCRIPTIVE REPORT

Topographic
Hydrographic

Sheet No. D 4616

LOCALITY

Houston Ship Channel

Alexander I. and vicinity

1930-31

CHIEF OF PARTY

John A. Bond, H. and G. E.

U. S. GOVERNMENT PRINTING OFFICE: 1928

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R. S. PATTON, DIRECTOR

Project No. 68
1930-31

Descriptive Report
to
Accompany

TOPOGRAPHIC SHEET D

of

HOUSTON SHIP CHANNEL AND VICINITY

TEXAS

John A. Bond, H. and G. E., U. S. C. and G. S.
Chief of Party

Descriptive Report to Accompany Topographic Sheet D

Houston Ship Channel, Texas

INSTRUCTIONS.

The topography on sheet D is a part of Project No. 68, the instructions for which were dated July 24th, 1930.

LIMIT AND SCALE.

Surveyed on a scale of 1:5,000, the sheet covers the shore line of the Houston Ship Channel and adjacent areas in the vicinity of Baytown, Alexander Island and Jennings Island and the south portion of upper San Jacinto Bay. The sheet joins sheet C on the southeast and sheet E on the northwest.

CONTROL AND SURVEY METHODS.

Usual plane table survey methods were employed. Positions were obtained entirely from resections and three point fixes.

The control consisted of 16 triangulation stations adequately spaced upon the sheet.

A series of air photos of the Houston Ship Channel will be forwarded under separate cover, and should prove useful in supplying interior detail which could not be economically covered by plane table methods. The area included on this sheet is covered by photos Nos. 31 to 34.

In most cases the low water line shown on the sheet has been drawn from information obtained during the hydrographic survey.

All elevations on this sheet are known to be ~~3/10 foot low;~~
0.5 ft. high.

none of them has been corrected. See explanation^V in Descriptive Report, Sheet A. (T4613) *(and memo of Feb. 28, 1934 from Dir. of T. & C.)*

At a few places where there was a good agreement with the U.S.G.S. survey of 1915 small sections of the 20 ft. contour were drawn on the sheet without the usual survey methods.

At no place was an extra plane table station established inshore solely to delineate the 20 ft. contour.

GENERAL DESCRIPTION OF TOPOGRAPHIC FEATURES.

There are many low sand and clay dredge dumps of a temporary nature in the areas immediately adjacent to the ship channel.

A large salt marsh with tall grass comprises the entire southern half of Alexander Island. The northern part of the island is used for cattle grazing. A power line extends along the northern edge of the island and crosses the ship channel in the vicinity of Mitchell Bay. The power line, which has a clearance of 203 feet at the crossing, is supported by two tall steel towers, which have been located as topographic signals Nor and Sow. Two other similar but smaller towers are located as topographic signals We and Low. A pipe line extends in a southwesterly direction across the central portion of the island.

A second pipe line crosses the Ship Channel and San Jacinto Bay in the vicinity of Jennings Island.

A steep tree covered bank, 20 to 30 feet in height, closely parallels the south shore line of upper San Jacinto Bay. Numerous small gullies lead inshore from the bank.

Extensive building has taken place at Baytown. There are many houses to the north of Black Duck Bay, near Missouri Ave., which are not shown on the sheet.

The U.S.E. base line extends up the narrow arm of land between Black Duck Bay and the Ship Channel to near Range A Front where it crosses to Alexander Island. From here it extends westerly on Alexander Island to the edge of the sheet. The base line is marked by bronze discs set in concrete every 500 feet with intermediate 100 foot stations marked by wooden stakes.

Blue prints of Baytown and the Humble Oil property will be forwarded with the topographic sheet. (Bp. 24581)

COMPARISON WITH PREVIOUS SURVEYS.

The narrow bayou between Alexander Island and Barnes Island has been filled with dredge spoil for a distance of 175 meters inshore from the Ship Chammel.

The 20 ft. contour on the north edge of the sheet was in fair agreement with the U.S.G.S. survey of 1915, with the exception of a knoll near the north shore line of Mitchell Bay.

A poor agreement of the 20 ft. contour was noted between triangulation station Brinson and triangulation station Small. The U.S.G.S. 20 ft. contour was displaced about 30 meters to the south. A poor agreement in the vicinity of topographic signal Gab was also noted.

The marshy shore line on the western edge of the sheet has undergone many small changes since the previous U.S.G.S. survey of 1915.

All buoys shown on this sheet have been accurately located and there are no buoys in place in the area surveyed which are not shown.

The lower portion of what is charted as San Jacinto River, from Lynchburg to Morgan Point, is known locally as Houston Ship Channel.

NEW NAMES.

All names shown on the sheet have been taken from chart 532.

LANDMARKS.

A list of landmarks for charts which contains the positions of prominent objects and all beacons and ranges will be forwarded under separate cover.

Respectfully submitted.

Washington, D.C.,
November 12, 1931.

Edmund L. Jones
Edmund L. Jones
Aid, U.S.C. and G.S.

Approved:

John A. Bond
John A. Bond, H. and G.E.
Chief of Party, U.S.C. and G.S.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO. 4616

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. D

REGISTER NO. **4616**

State Texas

General locality Houston Ship Channel

Locality Alexander ~~Island~~ Island and Vicinity

Scale 1/5000 Date of survey January, 1931, 19

Vessel

Chief of Party John A. Bond

Surveyed by Edmund L. Jones

Inked by E. L. Jones, H. W. Murray

Heights in feet above M. H. W. to ground ~~to tops of trees~~

Contour, Approximate contour, Form line interval 20 feet

Instructions dated July 24, 1930, 19

Remarks: