

U S COAST & GEODETIC SURVEY
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Form 504

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R.S. PATTON Director

State: Texas

DESCRIPTIVE REPORT

Topographic
Hydrographic

Sheet No. H 4620

LOCALITY

Houston Ship Channel

Greens Bayou to Clinton

1930-31

~~1930~~

CHIEF OF PARTY

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

GOVERNMENT PRINTING OFFICE

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

Project No. 68
1930-31

Descriptive Report
to
Accompany

TOPOGRAPHIC SHEET H

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 H

Houston Ship Channel, Texas

INSTRUCTIONS.

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

LIMIT AND SCALE.

Surveyed on a scale of 1/5000, the sheet covers the shore line of the Houston Ship Channel from Greens Bayou to about one-half mile west of Vince Bayou. The sheet joins sheet G on the east and sheet J on the west.

CONTROL AND SURVEY METHODS.

Usual plane table survey methods were employed. Positions were obtained mainly from three point fixes and resections, with a small amount of graphic triangulation in the vicinity of topographic station Nic. There were no stadia traverses on the sheet.

The control consisted of 8 triangulation stations, 5 of which were spaced along the shore line with the remaining 3 about 3/4 mile inshore.

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. 10 to 19.

All elevations on this sheet are known to be ^{0.5 ft. high} ~~3/10 foot low~~, none of them have been corrected. See explanation ^Vin 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.

A steep bluff bank extends down to the water's edge over the greater part of the shore line on this sheet. Large areas on either side of the channel are used as dumping grounds for the nearly continuous dredging operations on the ship channel.

A few scattered trees grow along the channel banks with an occasional heavy stand of pine, oak and elm. The wooded areas on the inside of the several curves of this section of the channel have been cut away to facilitate navigation, with the exception of the heavily timbered area across from Norsworthy. Negotiations are under way to purchase and clear away the timber on the inside of this curve. Many cypress stumps which are to be found outside of the high water line are shown on this sheet.

The largest of the several industrial developments on this sheet is at the Texas Company at Galena. Large shipments of oil refined at this plant are made from their loading slip on the channel in the vicinity of topographic signal Tim. Smaller

quantities of oil are shipped from the oil refining plants of the Crown Oil Company with docks near the Galena-Pasadena ferry, and at the American Oil Company's docks at Noraworthy. The Houston Light and Power Company operates a plant in the vicinity of topographic signal Dar. Blue prints for the area covered by the Texas Pasadena Company, American Oil Company, and the Houston Light and Power Company will be forwarded with the topographic sheet. A field inspection of these prints was not considered necessary due to the existence of recent air photographs covering the areas.

A cable and pipe line crossing and a power line crossing the channel are shown near the west limits of this sheet. A tunnel for pipe lines and cables is now being constructed under the ship channel at the site of the present cable crossing. The power line between topographic signals Dar and Pow has a clearance of about 209 feet.

The ferry near triangulation station Gad is owned and operated by Harris County with no charge to the public. The present ferry slips as shown on the sheet were constructed after the air photographs were taken.

There are three wrecks in the water area on this sheet. The wrecked barge in the mouth of Hunting Bayou is hard aground. A wooden ship, burned to the water's edge, is at the mouth of the east entrance to what was formerly known as Irish Bend. Several tanks and boilers extending 12 ft. above the water line are to be found amidships. The tug "MAE" wrecked and sunk

about 170 meters to the south has only a small part of the engine and stern railing showing above mean high tide.

The U. S. Engineers' base line extends along the north shore line of the ship channel except for a section of about 1/2 mile in the vicinity of Norsworthy where the base line crosses to the south shore. The station numbers are distances measured on the center line of the channel from the zero at Morgan Point. Markers are set along the shore line normal to their corresponding points on the center line. The markers are bronze discs set in concrete every 500 feet, with iron pipes at intermediate 100 ft. Stations.

There are no spar buoys in this section of the ship channel.

COMPARISON WITH PREVIOUS SURVEYS.

The land areas adjacent to the ship channel have undergone many changes due to extensive dredging operations on the channel. A fair agreement exists between the 20 ft. contour and the U.S.G.S. survey of 1915 in areas unaffected by dredging operations. A few of the large discrepancies in the comparison of the 20 ft. contour not apparently accounted for by dredging are: a disagreement of about 120 meters in the vicinity of topographic signal Fine; a disagreement of 50 meters north of topographic signal Pig; and a disagreement by about 30 meters south of topographic signal Sir. Industrial developments account for large changes east of topographic signal Flag and in the vicinity of topographic signal Dar.

What was formerly Irish Bend Island, located at the east edge of this sheet, is now connected to the mainland on the south by dredge spoil.

The small buildings in the vicinity of topographic signal Fine and shown on chart 532 do not exist.

The mouth of Cottonpatch Bayou has been dredged to provide an unloading place for sand and shell barges.

A docking place shown between topographic signals Tat and Tee was only partially completed at the time of suspension of construction.

An oil loading dock near topographic signal Cor is not shown on chart 532.

A small dock shown on chart 532 on the south side of the ship channel in the vicinity of topographic signal Tan does not exist.

The word Pasadena as it appears on chart 532 is 1/2 mile from the center of the small town by that name.

NEW NAMES.

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

The portion of the ship channel that is charted as Buffalo Bayou is known locally as Houston Ship Channel.

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 18, 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.

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REG. NO. 4620

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. H

REGISTER NO. 4620

State Texas

General locality Houston Ship Channel

Locality Greens Bayou to Clinton

Scale 1/5000 Date of survey April, 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: _____