

4619

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. G 4619

LOCALITY

Houston Ship Channel

Tucker Bayou to Greens Bayou

1930-31

~~1931~~

CHIEF OF PARTY

John A. Bond, H. and C. 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 G

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 G

Houston Ship Channel, Texas

INSTRUCTIONS.

The topography on sheet G 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 Tucker Bayou to Greens Bayou. The sheet joins sheet F on the east and sheet H on the west.

CONTROL AND SURVEY METHODS.

Usual plane table survey methods were employed. Positions were obtained mainly from resections and three point fixes with a small amount of graphic triangulation in the vicinity of topographic station Sow and Tim.

The control consisted of seven triangulation stations spaced along the ship channel.

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. 17 to 23.

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 ^{0.5 ft. high} ~~3/10 foot low~~, none of them have been corrected. See explanation[✓] in Descriptive Report, Sheet A. (4613) (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 in-shore solely to delineate the 20 ft. contour.

GENERAL DESCRIPTION OF TOPOGRAPHIC FEATURES.

The shore line on the sheet consists for the most part of high banks which have been built up by dredge spoil. The areas inshore from the ship channel are covered with many sand and clay dredge dumps with a scant growth of vegetation.

A few scattered trees grow along the channel 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. Many cypress stumps which are to be found outside the high water line are shown on the sheet.

Two small ponds shown on the air photographs to the north of triangulation station Bogg were formed by dredging operations on the channel and are of a temporary nature.

The large pond to the south of topographic station Pan is privately owned and stocked with fish. A small portion of the east levee of this pond is shown on the sheet. The road to the

south of the ship channel in this vicinity is also privately owned and not opened to the public.

Large industrial developments have taken place at the Shell Petroleum Company. A blue print, not checked in the field, covering this area will be forwarded with the topographic sheet. (Blue print may be checked from air photos.)

Channel City, the site of an unsuccessful real estate development, has a population of only several families. The large buildings in the vicinity of triangulation station Channel are unoccupied and in ruins.

Greens Bayou, located at the northwest extremity of the sheet, is used extensively by sand and shell barges. A small shipyard is in operation about 1/2 mile north of the mouth of the bayou.

The U.S.E. base line extends along the north shoreline of the ship channel on this sheet. The station numbers on the base line 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.

COMPARISON WITH PREVIOUS SURVEYS.

A field comparison of the 20 ft. contour with the U.S.G.S. survey of 1915 was made with a fair agreement over the larger part of the sheet. Attention is called to a few places of large disagreement, as: a 60 meter displacement of the contour west of triangulation station Dip; an 80 meter disagreement south of

topographic station Jew; a 60 meter disagreement south of triangulation station Patrick; a 70 meter disagreement near the shore line of the ship channel east of topographic signal Dan; a 30 meter disagreement in the vicinity of Channel City; and extensive changes at Shell Petroleum Company due to industrial developments. Many of the above changes have resulted from the dumping of dredge spoil on the areas adjacent to the ship channel.

The lower portion of the road, as shown on Chart 532, on the north side of the ship channel near U.S.E. base line station 670+00 does not exist.

Two buildings, one near the north shore line of the ship channel in vicinity of triangulation station Bogg and the other at the mouth of Greens Bayou, as shown on Chart 532, do not exist.

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.

NEW NAMES.

All names shown on the sheet have been taken from Chart 532. The lower portion of what is charted as Buffalo Bayou, from the Turning Basin to Lynchburg, 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.

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

Washington, D.C.,
November 17, 1931.

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.

4619

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. G

REGISTER NO. **4619**

State Texas

General locality Houston Ship Channel

Locality Tucker Bayou to Greens Bayou

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: _____