**SUPPLEMENT**

Form 504  
U. S. COAST AND GEODETIC SURVEY  
DEPARTMENT OF COMMERCE

**DESCRIPTIVE REPORT**

<table>
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<tr>
<th>Type of Survey</th>
<th>Topographic</th>
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<tr>
<td>Field No.</td>
<td>Office No. T-6610</td>
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**LOCALITY**

State: **Texas**  
General Locality: **Freeport**  
Locality: **Freeport Entrance**

**1947**

CHIEF OF PARTY  
Ross A. Gilmore

**LIBRARY & ARCHIVES**

DATE
Each Topographic and Graphic Control Sheet, and each Air Photographic Drawing should be accompanied by this form, completed so far as practicable, when forwarded to the Washington office.

REGISTRY No. T-6610
Field No. 
Scale 1 : 10,000

State Texas
General locality Gulf Coast

Specific locality Freeport Entrance

Dates: Survey began 3 November 1947 Completed 20 November 1947

Photography, Supplemented by ground surveys to

Project No. Ph. 14 (45) Instructions dated Undated (Suppl. 1, 7-22-47)

Versus Photogrammetric Chief of party Ross A. Gilmore

Field work by Boynton Locke Jr. Office work by Boynton Locke Jr.

Final inking by Boynton Locke Jr.

Ground elevations in feet above M. H. W.

Treetop elevations

Contours Approximate contours by Planetary Multiplex Interval

Form lines

Remarks Sheet used only to locate aids to navigation in Freeport Entrance

Channel to supplement photography


PROJECT: Ph-14(46)

DATUM: NA 1927

DATE OF INSTRUCTIONS: undated
   Supplement 1, dated 22 July 1947

DATE OF FIELD WORK: November 1947

SCALE: 1:10,000

PURPOSE: To locate aids to navigation in the Freeport Entrance Channel that could not be located by photographs due to insufficient coverage in the area of proposed chart 287 (2 of 2).

METHODS: Standard plan taber methods were used. Cuts on existing aids were taken from WELL (USE 1912), 1931 and WEST 2 (USE 1897), 1931 already plotted on the sheet, and from a resection station on the North Jetty of the entrance.

CONTROL: All stations used for control had been previously plotted except for the resection station mentioned above.

AIDS LOCATED: The following floating aids to navigation were located by three plan taber cuts each:

FREEPORT ENTRANCE LIGHTED BELL BUOY 1
FREEPORT ENTRANCE BUOY 1
   " " " 3 (can)
   " " " 5 (can)
   " " " 2 (mun)
   " " " 7 (can)
   " " " 4 (mun)
   " " " 9 (can)

FREEPORT ENTRANCE LIGHTED BUOY 2

LANDMARKS: All landmarks in the area covered by this sheet are identified on the photographs of the area and have been submitted on form 567 to accompany project data for the area "Port Arthur, Texas to Cedar Lakes, Texas!"
REMARKS: One aid to navigation falls outside the area of this sheet and a "dog-ear" is attached showing the position of FREEPORT ENTRANCE LIGHTED BELL BUOY 1. The cuts to this aid are shown where they leave the edge of the sheet and are labelled in pencil.

Submitted by:

Boynton Locke, Jr.
Photo Aid.

Approved and forwarded:

Ross A. Gilmore
Chief of Party
Each Topographic and Graphic Control Sheet, and each Air Photographic Drawing should be accompanied by this form, completed so far as practicable, when forwarded to the Washington office.

Registry No. T-6510
Field No. ____________________________
Scale 1:10,000

State Texas
General locality Gulf Coast

Specific locality Freeston Entrance

Dates: Survey began 5 November 1947 Completed 20 November 1947

Photography supplemented by ground surveys to

Project No. En 14 (44) Instructions dated Undated (Suppl. 1, 7-25-47)

Veg or Photogrammetric Chief of party Ross A. Gilmore

Field work by Boynton Locke Jr. Office work by Boynton Locke Jr.

Final inking by Boynton Locke Jr.

Ground elevations in feet above M. H. W.
Trench elevations

Contours by Planetable Multiplex Interval
Approximate contours
Form lines

Remarks Sheet used only to locate aids to navigation in Freeston Entrance
Channel to supplement photography.
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.  T6610

State  TEXAS

General locality  TEXAS COAST - BRAZORIA COUNTY

Locality  BRAZOS RIVER ENTRANCE - Freeport Entrance

Scale 1:10,000  Date of survey  June, 1937

Vessel  HYDROGRAPHER (Launch PARIS)

Chief of party  F. S. BORDEN

Surveyed by  ROSS A. GILMORE

Inked by  ROSS A. GILMORE

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

Contour, Approximate contour, Form line interval  feet

Instructions dated  February 17, 1937

Remarks:  Project No.  H.T. 214

...
DESCRIPTIVE REPORT

to accompany

TOPOGRAPHIC SHEET NO. "B" (1937) T-6610

INSTRUCTIONS

This survey was made in accordance with the Director's
Instructions dated February 17, 1937, for Project H. T. 214.

LIMITS AND GENERAL STATEMENT

This survey embodies the immediate shoreline area in the
vicinity of Baxot River Entrance. Sheet "B" was originally intended
solely as a control sheet for hydrographic work, but sufficient evi-
dence of considerable change in the topography was noted to warrant
a revision survey of the shoreline and the addition of several arti-
ficial objects erected since the previous survey.

LANDMARKS

Two new rear range as well as two new front range dredging
beacons have been erected since the previous survey. The centerline
dredging ranges were relocated and appear to be in the same position
as shown on T-6326 (1935). All ranges are shown on sheet "B" and are
included in the list of recoverable plane table positions as well as
on forms 524 and 286. A light was erected on the end of the Southwest
Jetty in 1936 and appears in the present Light List as No. 3302. This
light is also shown on the above forms.

CONTROL

Sufficient triangulation stations, close at hand, were re-
covered to give adequate control to the survey.

SURVEY METHODS AND CLOSING ERRORS

Standard plane table survey methods were used. Due to ex-
cessive heat wave action and since the topography is exceptionally flat, it was found more expeditious to use a hundred meter length of wire for measuring distances when traversing rather than to depend upon stadia distances. Stranded wire as used on the ship's wire sounding machines was found to be very satisfactory for this purpose. Detail, however, was rodded-in in the usual manner with stadia rods. No adjustments were necessary on this sheet.

COMPARISONS WITH PREVIOUS SURVEYS

A tracing (submitted with sheet "B") made of bromides of T-4866 and T-6326 for comparison readily indicates the changes that have occurred since the previous surveys. The small cut appearing on T-4866 about 1/2 mile NE of WMNL no longer exists. Considerable change has taken place SW of the Southwest Jetty. The shoreline is naturally subject to considerable change.

RECOVERABLE PLANE TABLE POSITIONS

A list of recoverable plane table positions is appended.

Objects of a more permanent nature have been described on Form 524.

MAGNETIC MERIDIANS

A magnetic meridian was obtained by declinometer at "West 2, 1931".

NEW NAMES

No new place names have been assigned to this sheet.

STATISTICS

Statute miles of shore line 14.7
Square statute miles of area 1.5

Approved and Forwarded:

Respectfully submitted,

G. C. Mattison,  Ross A. Gilmore,
Comdg. HYDROGRAPHER.  Jr. H. & G. Engineer.
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<th>D.M. Long.</th>
<th>D.M. Height</th>
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<td>&quot;USE&quot; (U.S.E. station) (d)</td>
<td>28°57'</td>
<td>1397</td>
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<td>North Rear Range Dredging Beacon (d)</td>
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<td>North Front Range Dredging Beacon (d)</td>
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<td>Rear Centerline Dredging Range (d)</td>
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<td>&quot;BAIT&quot; Small bait house</td>
<td>28 56</td>
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<td>&quot;CENT&quot;, front centerline dredging range (d)</td>
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<td>&quot;JET&quot; (Freeport Entrance &quot;2&quot; Fl. W.) (d)</td>
<td>28 55</td>
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Section of Field Records

REVIEW OF GRAPHIC CONTROL SURVEY T-6610 (1937)
FIELD LETTER B

Freeport Entrance, Gulf Coast, Texas.
Surveyed June 1937, Scale 1:10,000.
Instructions dated February 17, 1937 (HYDROGRAPHER).

Plane Table Survey. Aluminum Mounted.

Chief of Party - F. S. Borden.
Surveyed by - R. A. Gilmore.
Inked by - R. A. Gilmore.

1. **Condition of Records.**

   The records are neat and legible and conform to the requirements of the Topographic Manual except for a few small matters.

2. **Compliance with Instructions for the Project.**

   The scale, character, and extent of the survey satisfy the instructions for the project, except as noted on page one of the descriptive report.

3. **Junctions with Contemporary Surveys.**

   The junction with T-6611 (1937) on the southwest is satisfactory.

   T-6610 was carried to a satisfactory junction with T-4666 (1933-4) on the northeast.

4. **Comparison with Prior Surveys.**

   T-4666 (1933-4) 1:20,000
   T-6326 (1935) 1:10,000
   T-5362 (1933) 1:20,000

   The above recent surveys which cover the area included in T-6610 were, at the time of their review, closely compared to and found to entirely supersede all previous surveys for the area covered. Therefore, no surveys previous to these have been considered in this comparison.

(1) **Shoreline Detail.**

   Only the shoreline, of the outer coast was located in the new survey. Large natural changes have occurred.
The jetties as located on the new survey agree exactly with the prior surveys.

Only one other shoreline feature was located by the new survey, namely, a small pier within the jetties. This is not shown on the prior surveys.

(2) Signals and Prominent Objects.

a. Eight recoverable hydrographic and topographic stations were located and described on Form 524, and one recoverable H. & T. station, not described.

Two of the above objects had been located by prior surveys. The agreement was perfect. Four recoverable H. & T. stations located by prior surveys but not described, were found by the new survey to have been destroyed. This has been noted for correction on T-5362 before final printing.

b. It is believed that the signal TRIPOD located on T-4866 (1933-4) is the same point as signal USE on T-6610 (1937) which is described as having a large tripod built over it. There is, however, 15-20 meters difference in their positions. This error is probably in the location of this signal on T-4866, because it was noted in the descriptive report of T-5362 that this position on T-4866 would not check the air-photo radial plot by 15 meters. Therefore it is recommended that signal Tripod on T-4866 be used with caution in case its position has to be used for any purpose.

5. Comparison with Chart 525 (New print Feb. 16, 1937)
   Chart 1283 (New print April 11, 1936)

(1) Topography.

Chart 1283 need only be revised for the newly located shoreline.

Chart 525 has not yet been completely revised for the 1933 and later surveys.

When this is done, the shoreline and the small pier located on T-6610 (1937) should be applied.

(2) Magnetic Declination.

The magnetic declination given for the vicinity
of Freeport in 1937:

Chart 525 - - - - - - - - - - - - - - - - - 8° 31' E
Chart 1285 - - - - - - - - - - - - - - - - - 8° 40' E
T-6610 by declinatoire, Triangulation
station West 2,1931
(2 mi. S.E. of Freeport) - - - 8° 20' E

(3) **Landmarks and non-floating Aids to Navigation.**

All aids to navigation located by T-6610 have been submitted on Form 567 (Chart Letter file No. 436, 1938).

The following appear correctly charted on current charts:

Freeport Entrance Light "1"

The following have not been charted:

6 Freeport Entrance Range Beacons
(listed on P. 257, Light List, S. Atlantic Coast, 1938).

6. **Comparison with Contemporary Hydrographic Surveys.**

The comparison between this survey and contemporary hydrographic surveys has not been made. The review of the hydrographic surveys has not been made at this date and the comparison between the two surveys should be made at that time.

7. **Field Drafting.**

The inking and lettering is excellent. The receipt from the field of the phototopographic maps indicating the changes found by the new surveys was of considerable convenience in the office work of review and correction.

8. **Additional Field Work Recommended.**

No additional field work is recommended.

9. **Superseded Old Surveys.**

For the detail which it shows, the present survey supersedes all prior topographic surveys for charting purposes.
10. **Corrections applied to the existing Phototopographic Maps.**

   No changes will be made to the existing phototopographic maps from the information contained in these new surveys except where the new surveys show that an error was made in the previous surveys. The new shoreline and other new information will not be applied to the supplementals for the phototopographic surveys but will be noted on the supplementals as a matter of records.

11. **Reviewed by - T. M. Price, August 30, 1936.**

   **Inspected by - B. G. Jones**

   **Examined and approved:**
MEMORANDUM
IMMEDIATE ATTENTION

SURVEY
DESCRIPTIVE REPORT
PHOTOGRAPH

No. T-6610(Graphic Control)

received June 6, 1938
registered July 22, 1938
verified
reviewed
approved

This is forwarded in order that your attention may be directed to the matters as indicated below. Please initial in column 3 as an acknowledgement that your attention has been thus directed. The complete original records are available if desired. If you cannot give this your immediate attention, please initial, note, and forward to the next section marked, calling for the records at your convenience.

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RETURN TO

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Names underlined in red are approved. 5/5/48 L. Heck

M 234
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A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.