

5835

5835

Form 504
Rev. Dec. 1933
DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
R. S. PATTON, DIRECTOR

DESCRIPTIVE REPORT

Topographic }
Hydrographic } Sheet No. 15

State ... Florida

LOCALITY

Pensacola Bay

Bayou Chico to Old Navy Cove

1935

CHIEF OF PARTY

I. E. Rittenburg

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES
REG. NO.
JUL 15 1935
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HYDROGRAPHIC TITLE SHEET

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. 15

REGISTER NO. **5835**

State Florida

General locality ~~Gulf Coast of Florida~~ Pensacola Bay

Locality ~~Pensacola Bay~~ Bayou Chico to Old Navy Cove

Scale 1:10 000 Date of survey June, 1935

Vessel Shore Party #15

Chief of Party J. E. Rittenburg

Surveyed by A. O. Dority--W. C. Huebner--W. N. Martin

Protracted by R. S. French--J. A. Kinghorn--J. R. Walsh

Soundings penciled by A. E. Inledon--J. R. Walsh--J. A. Kinghorn

Soundings in ~~Fathoms~~ feet

Plane of reference Mean Low Water

Subdivision of wire dragged areas by _____

Inked by *[Signature]*

Verified by *[Signature]*

Instructions dated November 30th, 1934

Remarks: _____

DESCRIPTIVE REPORT TO ACCOMPANY HYDROGRAPHIC FIELD SHEET #15.
JUNE, 1935. PENSACOLA BAY, WESTWARD OF PENSACOLA BAY BRIDGE TO JUNCTION
WITH HYDRO. FIELD SHEET'S #2 AND #16. H. & T. PROJECT #196.

1. AUTHORITY:

This survey was made in accordance with orders and instructions received and dated November 30th, 1934 covering H. & T. Project #196. Field work was accomplished during the month of June, 1935.

2. AREA COVERED AND JUNCTIONS:

The area covered by this survey extends Westward from Pensacola Bay bridge, a junction with Hydro. Field Sheet #12, lying in Lat. 87-11 and including Bayou Chico, to a junction with Hydro. Field Sheets #2 and #16.

but are adjacent The junction with Hydro. sheet #12 at Pensacola Bay bridge does not overlap, soundings adjacent to this junction appear adequate and satisfactory. The overlap junctions with Hydro. sheets #2 and #16 appear sufficient and satisfactory also.

3. CONTROL AND SHORE LINE:

The basic triangulation control for this survey was furnished by the party of Lieut., JG, M.H. Reese. Shore line of South shore, Bayou Chico and that portion of North shore extending Eastward from topographic signal NIG is aerial photo compiled and furnished by the party of Lieut. Reese. Shore line along North shore which extends westward from Topo. signal NIG and extending to end of sheet was mapped in the field by topographic methods on aluminum mounted sheets using plane table and alidade and stadia rod. This survey appears on Topographic Sheet "E" which has been forwarded to the office.

Additional control was established by this party and located by topographic methods on aluminum mounted sheets using plane table and alidade. The standard procedure was followed in observing and graphically plotting three or more clearly intersecting cuts to each station located, from the occupancy of triangulation stations forming the above described basic control. Further supplemental control stations were located by hydrographic sextant fixes with adequate check angles and oriented cuts. There appeared no discrepancies.

4. METHODS, SCALE AND DATUM:

This survey was made and plotted on the final adjusted N.A. datum 1927 and is of 1:10 000 scale. All sounding line positions were obtained by three point sextant fixes. Soundings were taken with ten pound hand lead and line. In depths under three feet a calibrated cane pole was used from skiff propelled by outboard motor.

5. CHANNELS:

Thirty feet may be safely carried through middle portion of bay to the Frisco R.R. wharf channel entrance, Tarragona St. L&N RR wharf channel entrance, Muscogee coaling wharf channel entrance and to the draw in the Pensacola Bay bridge. Width of five fathom channel at Fair Point is marked by lighted buoy #1 and Nun buoy #16. On entering Frisco wharf channel, Tarragona L&N wharf channel or Muscogee wharf channel, which channels are maintained to a depth of thirty feet to the normal five fathom curve and are adequately ranged, a general course should be lain through middle portion of bay until channel ranges show.

Ten feet may be carried with caution across the bar at entrance to Bayou Chico channel. Channel approach is marked by lighted range beacons. This channel is very narrow and has a ~~controlling~~ depth of ten feet to beyond Frisco RR and highway draw bridges. Above these bridges are located several saw mills and extreme caution is advised against floating debris, logs and submerged shoals.

Twenty six feet may be carried with caution through an unmarked channel to along-side Sherrill Oil Co. wharf lying in Lat. 30-24 Long. 87-13.4.

Eighteen feet may be carried with caution through staked channel to Bruce Dry Dock lying in Lat. 30-24.2, Long. 87-13.4.

Thirty seven feet may be carried with caution through an unmarked passage between Frisco RR wharf and Tarragona St. L&N RR wharf. This passage lies one hundred fifty meters South of end of Frisco wharf and one hundred meters South of end of Tarragona St. wharf, it is one hundred twenty five meters wide and shoals sharply on the edges to twenty feet.

Twelve feet may be carried with caution through narrow and unmarked channel to entrance to small bayou lying in Lat. 30-22, Long. 87-10.6. This bayou has an average depth of four feet through out one half mile its length and is used locally for harboring small craft from storms and hurricanes.

6. DANGERS:

The only real dangers in this area are to small craft of three foot draft and less that venture close ashore. Tidal current is uniform and of moderate velocity. Caution is advised for the entire area if this survey inside the one fathom curve, where lumpy shoals, submerged piling, debris and piles of rock ballast occur. Fair Point, Town Point and Bayou Chico shoals are well marked with buoys.

7. COMPARISON WITH OLD SURVEYS:

Charts 1265 and 490 were compared with this survey and in general the soundings appear to agree closely with little change from those charted. It was found that the wreck charted in Lat. 30-23.8, Long. 87-13.6 does not exist. Due to the clarity of the water in this area the bottom could be seen distinctly and a thorough search was made for remains of this wreck, none were found. It is thought that the wreck revealed by this survey lying in Lat. 30-23.6, Long. 87-14.7 was removed from this charted position.

8. GENERAL:

In general this survey appears sufficient and adequate. Crossings and check lines agree within a reasonable difference. ✓

Bayou Grande was not surveyed. It cannot be entered because of large and extremely shoal area extending across and for one quarter mile Eastward of its mouth. ✓

Clearances for fixed bridges and all geographic names in this area have been furnished the office by the photo compilation party of Lieut. Reese. ✓

Also shore line missing on smooth sheet has been forwarded to the office as part of Lieut. Reese. ✓

9. LAND MARKS FOR CHARTS, COAST PILOT NOTES:

have been All land marks for charts and coast pilot notes for this project will be furnished the office in a separate report. ✓

10. TIDES:

Tide reducers were obtained from the standard automatic gage operated at Pensacola, Fla. (~~See attached data sheet~~) Hourly heights furnished ✓

by the Office.

11. STATISTICS:

Statute miles of sounding lines-----	382.1
Number of soundings-----	11,350
Number of positions-----	2,816

The sheets and records were examined and approved;

A. O. Dority
Surveyor,
U.S.C. & G.S.

I.E. Rittenburg, Lieut.
Chief-of-party,
U.S.C. & G.S.

HYDROGRAPHIC SURVEY NO. H5835

Smooth Sheet 1

Boat Sheet 1

Sounding Records 9 Vols. _____

Descriptive Report Yes

Title Sheet Yes

List of Signals Yes in Vol. 1

Landmarks for Charts (Form 567) Yes

Statistics Yes

Approved by Chief of Party I. E. Rittenburg

Recoverable Station Cards (Form 524) Yes

Special Chart for Lighthouse Service Yes
(Circular Nov. 30, 1933)

Remarks _____

Field Records Section (Charts).

HYDROGRAPHIC SHEET NO.5835

The following statistics will be submitted with the cartographer's report on the sheet:

Number of positions on sheet	2816.
Number of positions checked	105 (mostly detected positions of piles etc.)
Number of positions revised	...5.
Number of soundings recorded	11350.
Number of soundings revised4.
Number of signals erroneously plotted or transferred0.

Date: *March 10-1936.*

Verification by *[Signature]*
Inspected by [Signature]
Review by *R. J. Christman*

Time: *89 hours*

Time: *27 1/2 hrs*

August 13, 1935.

TIDE NOTE FOR HYDROGRAPHIC SHEET

Division of Hydrography and Topography:

✓ Division of Charts: Attention: Mr. E. P. Ellis

Tide Reducers are approved in
9 volumes of sounding records for

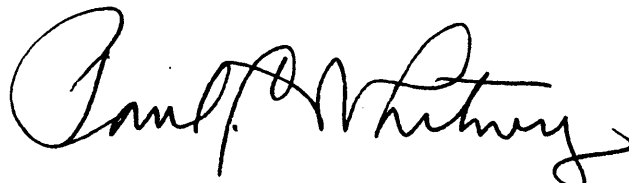
HYDROGRAPHIC SHEET 5835

Locality Bayou Chico to Old Navy Cove, Pensacola Bay, Florida.

Chief of Party: I. E. Rittenburg in 1935.
Plane of reference is mean low water reading
7.9 ft. on tide staff at Pensacola
9.1 ft. below B.M. 7

Height of mean high water above plane of reference is 1.2 feet.

Condition of records satisfactory except as noted below:



Chief, Division of Tides and Currents.

Field Records Section
Report on Hydrographic Survey H-5835 (1935) Field No. 15.
Pensacola Bay -- I. E. Rittenburg
Chief of party.

1. Condition of Records.

The records are neat legible and conform to the requirements of the Hydrographic Manual.

2. Shoreline and Control.

Shoreline and signals - T-6315 (1934-35).

Signals - T-6319a (1935).

Air Photo Compilation sheets covering shoreline on this Hydrographic survey are: T-5473, T-5488, and T-5490. ✓

3. Sounding Line Crossings.

The soundings at line crossings are in good agreement. ✓

4. Depth Curves.

The depth curves can be satisfactorily drawn throughout the limits of the survey. ✓

5. Junctions with Contemporary Surveys.

(a.) The junction with H-5668 (1935) in the vicinity of Fair Point is satisfactory.

(b.) The junction with H-5823 (1935) on the south is satisfactory. ✓

(c.) This survey, H-5835 (1935) is adjacent to H-5822 (1935) but is separated therefrom by the Pensacola Highway Bridge. ✓

6. Field Plotting.

The Field Plotting was well executed. ✓

7. Remarks.

(a.) The FLW No. 1 buoy in Lat. $30^{\circ}22.08'$ Long. $87^{\circ}13.45'$ is located on this survey, (H-5835) approximately 120 m. south of the location shown on H-5823 (1935).

(b.) Several piles are shown on T-6315 (1935) G.C. which were not located or mentioned in the sounding volumes. The most important are those on the east side of the entrance channel to Bayou Chico. ✓

(c.) When the Air Photo Compilation sheets T-5473, T-5488, and T-5490 have been reviewed, a final check of the shoreline should be made. (See par. 8 of D.R.) ✓

Verified by Leo S. Straw

Leo S. Straw
March, 10, 1936.

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5835 (1935) FIELD NO. 15

Bayou Chico to Old Navy Cove, Pensacola Bay, Florida
Surveyed in June 1935
Instructions dated Nov. 30, 1934 (I. E. RITTENBURG)

Hand Lead and Pole Soundings.

3 Point fixes on Shore Signals.

Chief of Party - I. E. Rittenburg.
Surveyed by - A. O. Dority, W. C. Huebner, W. N. Martin.
Protracted by - R. S. French, J. A. Kinghorn, J. R. Walsh.
Soundings penciled by - A. E. Incledon, J. R. Walsh, J. A. Kinghorn.
Verified and inked by - L. S. Straw.

1. Condition of Records.

The records are neat and legible and conform to the requirements of the Hydrographic Manual except as follows:

- a. No triangulation reference station was shown on the smooth sheet. It has been added in the office.
- b. Degree and minute symbols were omitted from latitudes and longitudes. They were added in the office.
- c. A special symbol was used for lighted buoys. They were changed to the standard symbols in the office.
- d. An approval note is included in the Descriptive Report but the Report was not signed either by the Hydrographer or by the Chief of Party.

The Descriptive Report satisfactorily covers all the items of importance.

2. Compliance with Instructions for the Project.

The plan, and character of development are in accordance with the instructions for the project.

3. Shoreline and Signals.

The shoreline originates with plane table survey T-6315 (1934-5) and air photo compilations T-5473 (1934), T-5488 (1934), and T-5490 (1934).

The signals are derived from plane table survey T-6315 (1934-5) graphic control survey T-6319a (1935), and hydrographic signals located by sextant cuts recorded in the sounding records. (See Vol. I, List of Hydrographic signals).

4. Sounding Line Crossings.

The sounding line crossings are in good agreement.

5. Depth Curves.

Within the limits of the survey, the usual depth curves can be satisfactorily drawn.

6. Junctions with Contemporary Surveys.

The junctions with H-5822 (1935) to the east and with H-5668 (1935) and H-5823 (1935) to the south are satisfactory.

7. Comparison with Prior Surveys.a. H-585 (1856).

This survey is on a scale of 1:20,000. The waterfront of Pensacola and the area adjacent to it have been greatly changed by improvements and the dredging of channels. Outside of this area the agreement with the present survey is good. There have been minor changes in the shoal areas off the several points and a few changes in the deeper areas (24 to 30 feet) apparently caused by changes in the directions of the currents resulting from the dredging. All important features have been adequately covered by later surveys on larger scale and it would serve no useful cartographic purpose to list the differences in detail. None of the information from the above survey is in use on the present chart and it need not be considered in future charting.

b. H-2028 (1890).

This survey on a scale of 1:10,000 was made before the establishment of the Navy Yard. The main portion of Bayou Chico has been greatly altered by dredging and depositing of spoil. The upper reaches of Bayou Chico are in good agreement with the present survey showing only a very slight shoaling. Because of the changes along the Navy Yard and because the present survey shows an equally close development of the other areas, H-5835 (1935) should supersede the above survey for charting purposes.

c. H-2186 (1894), H-2217 (1895), H-2255 (1896).

These surveys on scales of 1:10,000 are the basis for the present charting of the area under consideration outside of the improved areas along the Pensacola waterfront. The waterfront itself has undergone a number of changes. Several

of the wharves have been rebuilt and lengthened and others are in ruins and abandoned. Several channels have been dredged in the approaches to the wharves and this has resulted in a deepening of several areas adjacent to the dredged channels. In other areas covered by the present survey the agreement with the above surveys is good, although there are a few differences of 1 to 2 feet.

- (1) The channel in latitude $30^{\circ}22.4'$, longitude $87^{\circ}10.8'$ (charted) was dredged since the above surveys were made. (H-2217 of 1895).
- (2) Town Point, the point of land on the east side of Old Navy Cove (latitude $30^{\circ}22.15'$, longitude $87^{\circ}11.30'$) has receded about 250 meters. There are a number of changes in depths on the shoal extending off this point, although the 6, 12 and 18 foot curves have changed very little. A $1\frac{1}{2}$ (charted 1 foot) in latitude $30^{\circ}22.48'$, longitude $87^{\circ}11.76'$ comes from H-2186 (1894) and falls on a 10 of the present survey just outside the 6 foot curve. Other depths in the vicinity are also deeper, varying from 3 to 5 feet as against $2\frac{1}{2}$ to $3\frac{1}{2}$ feet on the older survey. This area should be classed as changeable and the present survey accepted for future charting.
- (3) Fair Point at the western side of Old Navy Cove has shifted about 60 meters to the southwest. The shoal off the point has changed greatly. A $1\frac{3}{4}$ foot sounding (charted 1 foot), latitude $30^{\circ}21.80'$, longitude $87^{\circ}12.54'$, falls on a 12 of the present survey and depths of 4 and 5 feet are shown 100 meters to the westward where H-2186 (1894) shows 8 and 10 foot soundings. General changes have taken place inside the 12 foot curve and the present survey should be accepted for future charting.
- (4) A channel has been dredged across the shoal area into Bayou Chico since the 1894 survey. The present survey also shows several deep holes to the southwest of the channel of which no indication appears on the earlier survey.
- (5) A slight deepening is indicated on the shoal extending inshore from the $2\frac{1}{2}$ foot sounding charted in latitude $30^{\circ}24.25'$, longitude $87^{\circ}12.25'$, and a general shifting of the shoal to westward has taken place as indicated by the 6 foot curve. H-2186 (1894) shows

irregular bottom over this shoal area. The 1935 survey is not conclusive in this regard and several shoal soundings have been carried to the present survey where the adjacent soundings on the two surveys are in agreement.

- (6) The ruined pier head or platform charted in latitude $30^{\circ}24.37'$, longitude $87^{\circ}12.42'$, comes from H-2186 (1894), the original source being T-1984 (1890). The present survey makes no reference to it although a line of soundings crosses the charted position. It is assumed that this feature has entirely disappeared and it should no longer be charted.

d. H-2522 (1901).

This survey on a scale of 1:10,000 is an examination of the channels leading to two of the wharves at Pensacola. These channels have been deepened by dredging since the survey was made and H-2522 (1901) should not be considered in future charting.

8. Comparison with Chart 490 (New Print dated Nov. 26, 1935).

a. Hydrography.

Within the area covered by the present survey the chart is based on the surveys discussed in the foregoing paragraphs and on the following:

- (1) Channel lines and the depths in the approach channels to the wharves at Pensacola are shown on blue print 27806 and 27807 of 1934. These areas are charted without soundings.
- (2) Bayou Chico is charted from blue print 28945 (1935). The depths are considerably less than those shown on the present survey. The latter are in closer agreement with blue print 19290 (1924) which was the authority for the charting on the 1934 edition of Chart 490. The three soundings, 16, 19 and 25 charted from blue print 19290 (1924) in the vicinity of the wreck in latitude $30^{\circ}23.8'$, longitude $87^{\circ}13.6'$, are probably misplaced as the present survey shows depths of 5 to 10 feet in this area which latter are in agreement with the earlier surveys by this Bureau.
- (3) The wreck charted in latitude $30^{\circ}23.8'$, longitude $87^{\circ}13.6'$, from T-3794 (1920) no longer exists in this place and should be expunged from the chart. (See Descriptive Report, page 2, par. 7).

b. Controlling Depths.

- (1) Controlling depths of "30 feet June 1935" are charted for the channel leading to the Muscogee Wharf and the two main wharves at Pensacola from Chart Letter 630/13 of 1935.
- (2) The controlling depth of "30 feet June 1934" in the cross channel off the wharves comes from blue print 27806 (1934).
- (3) The controlling depth of "24 feet August 1931" extending northwesterly from the above channel, comes from Chart Letter 308 of 1931.
- (4) The controlling depth of "18 feet 1920" in the channel leading to the floating dry dock comes from T-3794 (1920).
- (5) The controlling depth of "10 feet August 1935" in the channel leading into Bayou Chico comes from blue print 28945 (1935).

The present survey shows depths in excess of the controlling depths in all the above channels.

c. Aids to Navigation.

The charted aids to navigation are in agreement with the positions given on the present survey, except as follows:

- (1) The range beacons for the 18 foot channel to the floating dry dock (latitude $30^{\circ}24.3'$, longitude $87^{\circ}13.4'$) and the leading beacon for the 24 foot channel (latitude $30^{\circ}24.2'$, longitude $87^{\circ}13.7'$) were not located by the present survey.
- (2) The position of the Muscogee Channel Front Range Lighted Bn. as determined by triangulation is about 70 meters S. by W. of the position charted from the 1925 Lighthouse Service location. (Latitude $30^{\circ}24.95'$, longitude $87^{\circ}11.65'$)

The position of the Muscogee Channel Rear Range Lighted Bn. as determined by triangulation is about 30 meters S. by W. of the position charted from the 1925 Lighthouse Service location. In both cases the shift is along the axis of the range and the beacons as charted correctly mark this feature.

- (3) The position of the lighted buoy in latitude $30^{\circ}23.55'$ longitude $87^{\circ}11.80'$, as determined by a sextant fix is about 100 meters east of the charted position. The

difference between the charted position of the buoy and its actual position on the ground does not result in any menace to navigation.

- (4) The position of the black can buoy No. 21 in latitude $30^{\circ}23.20'$, longitude $87^{\circ}13.85'$, as determined by a sextant fix on the present survey is about 120 meters N. by E. of the charted position, but correctly marks the feature intended.
- (5) The position of the red nun buoy No. 18 (latitude $30^{\circ}22.62'$, longitude $87^{\circ}11.63'$) as determined by sextant fix on the present survey is about 80 meters E. by S. of its charted position. The shift is approximately parallel to the depth curve and no menace to navigation results from the discrepancy.
- (6) The position of Fair Point Lighted Buoy No. 1 (latitude $30^{\circ}22.11'$, longitude $87^{\circ}13.46'$) as determined by sextant fix on the present survey is about 40 meters west of its charted position.

The position of red nun buoy No. 16 (latitude $30^{\circ}22.18'$ longitude $87^{\circ}12.98'$) as determined by sextant fix on the present survey is about 40 meters northwest of its charted position.

These buoys correctly mark the west and east limits of the 30 foot channel off Fair Point and no menace to navigation results from the discrepancy in charting.

9. Field Plotting.

The field plotting was well done.

10. Additional Field Work Recommended.

The survey is satisfactory and no further work is required.

11. Superseding Old Surveys.

Within the area covered, the present survey, with indicated additions from previous surveys, supersedes the following surveys for charting purposes:

H-585	(1856)	in part
H-2028	(1890)	" "
H-2186	(1894)	" "
H-2217	(1895)	" "
H-2255	(1896)	" "
H-2522	(1901)	entirely

12. Reviewed by - R. J. Christman, May 2, 1936.

Inspected by - C. K. Green,

Examined and approved:

C. K. Green, *C. K. Green*
Chief, Section of Field Records.

~~*L. O. Pollett*~~
Fred. L. Peacock
Chief, Section of Field Work.

L. O. Pollett
Chief, Division of Charts.

Glude
Chief, Division of H. & T.

Applied to Ch. 490. Nov 1936. H. J. Gumble
Applied to Ch # 872 Nov. 1947 M.M.R. was 5/6/48