

5753

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES

MAY 7 1935

Acc. No. _____

Form 504
Rev. Dec. 1933

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

DESCRIPTIVE REPORT

Topographic }
Hydrographic } Sheet No. 3

State Georgia

LOCALITY

Cumberland Dividings

Cabin Bluff to Drum Point Island

1935

CHIEF OF PARTY

Hubert A. Paton

39713

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

U. S. COAST & GEODETIC SURVEY
LIBRARY & ARCHIVES.

REG. NO.

MAY 7 1935

Acc. No. _____

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. 8

REGISTER NO. 5753

State Georgia

General locality Cumberland Dividings

Locality Cabin Bluff to Drum Point Island

Scale 1:10,000 Date of survey 6/20/34- 2/28/35, 19

Vessel Party No. 26

Chief of Party Hubert A. Paton

Surveyed by George W. Lovesee

Protracted by J. D. Shearouse and G. S. Britt

Soundings penciled by M. K. Spencer

Soundings in fathoms feet

Plane of reference Mean Low Water

Subdivision of wire dragged areas by _____

Inked by P. Schorr, S. Rosen

Verified by P. Schorr, J. McQueen

Instructions dated Nov. 17 and Dec. 5, 19 33

Remarks: _____

DESCRIPTIVE REPORT
TO ACCOMPANY
SHEET NO. 8
CUMBERLAND DIVIDINGS, GEORGIA
PARTY NO. 26 - PROJECT NO. H.T. 168

April 16, 1935.

INSTRUCTIONS:

The work on this sheet was done in accordance with instructions dated November 17 and December 5, 1933.

LIMITS:

The area covered extends from Cabin Bluff on the Cumberland River, through Cumberland Dividings into Cumberland Sound as far as Drum Point Island. It includes a portion of Brickhill River, Crooked River, Point Peter Creek, North River, and all of Delaroché Creek, Mumford Creek and Old House Creek.

JUNCTIONS:

This sheet joins No. 7 on the north, No. 9 on the south and No. 11 on the west. The overlap and junctions with all three sheets were satisfactory.

DATUM:

The datum of this sheet is "North American 1927". Most of the triangulation stations had been computed on "North American Datum" and the following corrections were made before plotting:

| | |
|-----------|--------------|
| Latitude | + 1.5 meters |
| Longitude | - 5.5 meters |

These factors were obtained by a comparison of the two values furnished for some of the adjusted stations in the vicinity. The photo-topographic and graphic control sheets were all on North American 1927 Datum so the signals and shore line could be transferred without adjustment.

SIGNALS:

The topographic signals were obtained from G. C. Sheets "K", "L", and "M". No other signals were needed.

SHORELINE:

Small portions of the shoreline had been located by the topographers as a check on the photo-topographic sheets and these were all transferred to the hydrographic sheets. The major portion of the shoreline was compiled from photographs by Lieut. (j.g.) S. B. Grenell. For a discussion of the discrepancies between the two and a description of the terrain see descriptive reports accompanying the G. C. Sheets.

SURVEY METHODS:

Standard Coast Survey methods were employed in all of the large streams on this sheet. Soundings were taken with a hand lead line, positions were located by three point fixes, lines were run along the channels with a cross line every half mile. In the small creeks it was not practical to obtain fixes for all positions by the usual method, and recourse was taken to spotting their location on the boat sheet by reference to shoreline only.

CURRENTS:

The tide divides in the vicinity of Flood Island. The currents were moderate and sounding lines could be run in both directions without appreciable error.

CHANNELS:

The intra-coastal water way follows Cumberland River and Cumberland Sound. The least depth is 10 feet which is found in the vicinity of Flood Island. This route is described in the Inside Route Coast Pilot. The ranges were located by Lieut. C. M. Durgin and the following azimuths determined by inverse computations.

| Range | Azimuth |
|------------------------|---------|
| Crossover Range | 166.2 |
| Dividings Range 1 | 39.3 |
| Dividings Range 2 | 189.1 |
| Cumberland Sound Range | 176.3 |

On Dividings Range No. 2, the least depth is 10 feet but a sounding of 7 feet is found near the west side of the channel. There is a curved channel about 100 yards east of the range which has a least depth of 15 feet. Near the junction of the Dividings Ranges there is an 8 foot spot. When abeam of Beacon No. 6 change course to 204° true, passing 125 yards south-east of the front beacon on Cumberland Sound Range. When abeam of the south end of Stafford Island, the best channel will be found about 150 yards west of the above range, which will avoid several 9 foot shoals on the east side of the course. Pass 50 yards east of Beacon No. 8 and continue on the range passing 200 yards west of Beacon No. 15.

Brickhill River rejoins Cumberland River at the Dividings. It has a clear channel with a least depth of 11 feet as far as the limits of the sheet. The controlling depth is 10 feet which is found on Sheet N. 7.

Crooked River can either be considered one large stream $1\frac{1}{2}$ miles wide at its mouth with many large islands on it, or as two rivers, joined at intervals by cross over streams. The best channel is the southern stream which empties into Cumberland Sound opposite the north end of Stafford Island. with care a least depth of 10 feet can be carried across the bar which obstructs its mouth. In Longitude $81^{\circ} 31'.2$ this channel crosses over to the northern stream between two large islands. The alternate channel into Crooked River is partially obstructed by shoals but a least depth of 5 feet can be carried thru it. This controlling depth is found near the west end of the first large island.

King Bay is the term applied to the stream which empties into Cumberland Sound in Latitude $30^{\circ} 47'.5$.

Its mouth is similiar to Crooked River, having a large island which divides the stream into two parts. On the north side of this island the channel shoals to 1 foot at mean low water. On the south side a depth of about 9 feet can be carried up to the mouth of the bay proper. This bay is a large flat basin extending to the north. A shallow arm connects with Crooked river. The least depth is one foot at mean low water.

Marianna Creek is the winding stream with two arms emptying into King Bay from the west. The channel bares at low tide near the junction of these arms.

On the west side of Cumberland Sound are narrow ditches bordering the shore. They head up into shoal areas, so are of no importance. On the east side of Cumberland Sound are found several large islands and shoal areas with deeper channels between. On the east side of Stafford Island the channel is shallow, - having a least depth of one foot.

Near the mouth of Old House Creek a deeper channel begins which extends southward along the eastern side of Cumberland Sound. Here a bar separates it from the deeper water out in the middle of the sound. The channel continues on past Grayfield with a least depth of seven feet to the edge of the sheet.

A good channel is found on the east side of Drum Point Island but it shoals to a depth of eight feet at the north end of the island.

Delaroche Creek has two outlets into Cumberland River. The large one, near Beacon No. 9 has a least depth of 9 feet for $1\frac{1}{2}$ miles. The other outlet empties from the south near Signal Nix. This stream is narrow and shallow.

Mumford Creek has a channel with at least 8 feet of water, for more than a mile above its mouth. A narrow branch of this creek rejoins Brickhill River near Signal Red. The controlling depth is $\frac{1}{2}$ foot at mean low water.

The controlling depth in the portion of North River shown on this sheet is 6 feet. This depth can be carried for $\frac{1}{2}$ mile. Above this point it shoals to two feet in about one-half mile.

DISCREPANCIES:

In Crooked River there is a long narrow island (Latitude $30^{\circ} 50.5$ - Longitude $81^{\circ} 32.3$). The shoreline did not check the hydrographic lines very well. It appears as though the entire island is plotted too far west. A penciled dash line indicates the correct position.

changed slightly on westward side. P.H.S

COMPARISON WITH PREVIOUS SURVEYS:

The channel north and east of Beacon No 4 has deepened since the last survey. The channel north of Drum Point Island has changed from 22 feet to 8 feet. Several islands have disappeared and new ones built up. A few streams have filled up but others have developed. There were formerly two channels between King Bay and Crooked River but now there is only one. The southern connection between Mumford Creek and Brickhill River has closed but a new one has developed farther north.

In the north channel of Crooked River there is now only 5 feet in a place where 25 feet is shown on the charts.

GEOGRAPHIC NAMES:

All of the names shown on Chart No. 1242 are still in use and should be retained. King Bay is spelled Kings Bay on Geological Survey Maps but the singular form is preferred. The small creek near the central part of the south edge of the sheet is not Point Peter Creek as shown on the Kingsland Quadrangle, Geological Survey maps. The local name could not be ascertained. Old House Creek is a name shown on Geological Survey Maps and it is recommended that it be used on the charts.

MISCELLANEOUS:

For list of Aids to Navigation, and Land Marks see descriptive reports of G. C. Sheets.

All of the depth curves were not drawn by the field party so the soundings might not be obscured.

In several places the note "sand bar" will be found on the sheet. This generally indicates a place where the sounding launch went aground and it does not necessarily mean a place that bares at mean low water.

The two docks in King Bay are shown on an enlarged scale alongside of the insert of North River. They are drawn true to scale but are not in the correct relative position.

STATISTICS:

| | |
|---------------------------------|-------|
| Total number of positions | 4392 |
| Total number of soundings | 22225 |
| Statute miles of sounding lines | 458.9 |

Respectfully submitted,

George W. Lovesee
George W. Lovesee,
Lieut. (j.g.) C. & G. S.,
Hydrographer.

TO ACCOMPANY SHEET 8

This sheet and accompanying records have been inspected
and are approved. /

Hubert A. Paton

Hubert A. Paton,
Chief of Party.

TIDE NOTE FOR HYDROGRAPHIC SHEET

May 29, 1935.

Division of Hydrography and Topography:

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

Tide Reducers are approved in
14 volumes of sounding records for

HYDROGRAPHIC SHEET 5753

Locality Cliff Bluff to Drum Point Island, Georgia

Chief of Party: H. A. Paton in 1934-1935
Plane of reference is mean low water reading
2.3 ft. on tide staff at Crooked River
5.4 ft. below B.M. 1

4.3 ft. on tide staff at St. Marys
13.5 ft. below B. M. 1

3.0 ft. on tide staff at High Bluff (Cumberland Wharf)
35.1 ft. below B. M. 1 (+30 min. time correction)

Height of mean high water above plane of reference is 6.8 feet at
Crooked River; 6.0 feet at St. Marys; 6.8 feet at High Bluff (Cumberland Wharf)

Condition of records satisfactory except as noted below:

Chief, Division of Tides and Currents.

Date: May 9, 1935

GEOGRAPHIC NAMES
GEORGIA

Survey No. H 5753

Chart No. 1242

Diagram No. 1242-2

Approved by the Division of Geographic Names, Department of Interior. *

Referred to the Division of Geographic Names, Department of Interior. R

Under investigation. Q

| Status | Name on Survey | Name on Chart | New Names in local use | Names assigned by Field | Location |
|--------|------------------------------------|---------------|------------------------|-------------------------|----------|
| | <u>Cabin Bluff</u> ✓✓ | Same | ✓ | | 140 |
| | <u>Mumford Creek</u> ✓✓ | " | ✓ | | 140 |
| | <u>Brickhill River</u> ✓✓ | " | ✓ | | 200 |
| | <u>Cumberland River</u> ✓✓ | " | ✓ | | 240 |
| | <u>Delaroché Creek</u> ✓✓ | " | ✓ | | 140 |
| | <u>Black Point</u> | " | ✓ | | |
| | <u>Black Point Creek</u> | " | ✓ | | |
| | <u>Crooked River</u> ✓✓ | " | ✓ | | 200 |
| | <u>Cumberland Dividings</u> ✓ | " | ✓ | | 140 |
| | <u>Flood Island</u> ✓✓ | " | ✓ | | 140 |
| | <u>Stafford Island</u> ✓✓ | " | ✓ | | 200 |
| | <u>King Bay</u> ✓✓ | " | ✓ | | 200 |
| | <u>Marianna Creek</u> ✓✓ | " | ✓ | | 140 |
| | <u>Marianna</u> | " | ✓ | | |
| | <u>Cherry Point</u> ✓✓ | " | ✓ | | 120 |
| | <u>North River</u> ✓✓ | " | ✓ | | 140 |
| | <u>Cumberland Sound</u> ✓✓ | " | ✓ | | 240 |
| | <u>one word Old House Creek</u> ✓✓ | " | ✓ | Yes | 120 |
| | <u>Drum Point Island</u> ✓ | Same | ✓ | | 120 |

RED NAMES
BLANKED IN RED

Field Records Section (Charts)

HYDROGRAPHIC SHEET NO. .57.53

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

| | |
|--|-----------------|
| Number of positions on sheet | 4392 |
| Number of positions checked | 37 |
| Number of positions revised | 3 |
| Number of soundings recorded | 22,225 |
| Number of soundings revised | 13 |
| Number of signals erroneously plotted or transferred | 1 |

Date: July 30, 1935

Verification by P. Scherr, J. McQueen
Inking by P. Scherr, J. Rosen

Review by

R. J. Christman

Time: P. Scherr 73
J. McQueen 15 1/2 } 97 1/4 hrs.
J. Rosen 8 3/4

Time: { 11 hrs Rev.
1 hr. cov.

HYDROGRAPHIC SURVEY NO. H 5753

Smooth Sheet 1

Boat Sheet 1

Sounding Records 14 Vols. _____

Descriptive Report Yes

Title Sheet Yes

List of Signals ~~INDEX~~ filed in Vol. 1

Landmarks for Charts (Form 567) Letter #131 (1935)

Statistics Filed in D.R. Summary of statistics only.

Approved by Chief of Party Yes

Recoverable Station Cards (Form 524) Filed with T 6189b, T 6188b

Special Chart for Lighthouse Service # 448
(Circular Nov. 30, 1933)

Remarks _____

Section of Field Records

Verifier's Report on H. 5373

- 1.- The records conform to the requirements of the General Instructions. ✓
- 2.- The usual depth curves are drawn. ✓
- 3.- The field plotting was complete with the exception of plotting the below mentioned Shrimp net. ✓
- 4.- No part of the drafting done by the Field party was changed by us except where the shoreline was changed to agree with the aero-photo sheets. *For adjustment of discrepancies see review of air photo compilations. Ryle*
- 5.- The junctions with the adjoining finished sheets were made H- 5752 (1934-5), H-5756 (1934-5), which are satisfactory. ✓
- 6.- Remarks
 - a.- The shore line was checked with the aero-photo work and in a few places changed, to agree with that work. ✓
 - b.- A "shrimp net is located at Lat. 30 47.2, Long 81 28.8, (Page 48, Vol. 6) which was not plotted by the Field party. ~~The note for this remains in pencil.~~ *Temporary feature not plotted Ryle*
 - c.- The sounding lines on the smooth sheet are for the most part actually cut into the paper making the inking difficult and ruining the life of the sheet, ✓

Respectfully submitted,

P. Scherr

Section of Field Records

REVIEW OF HYDROGRAPHIC SURVEY NO. 5753 (1934-5) - FIELD NO. 8

Cabin Bluff to Drum Point Island, Cumberland Dividings, Georgia
Surveyed in June, 1934, to February, 1935
Instructions dated November 17 and December 5, 1933 (H. A. Paton)

Hand Lead Soundings.

3 Point Fixes on Shore Signals.

Chief of Party - H. A. Paton.
Surveyed by - G. W. Lovesee.
Protracted by - J. D. Shearouse and G. S. Britt.
Soundings penciled by - M. K. Spencer.
Verified and inked by - P. Scherr, S. Rosen and J. McQueen.

1. Condition of Records.

The records are neat and legible and conform to the requirements of the Hydrographic Manual, except that the lines joining the angle positions were deeply scored into the paper. The scored lines made it difficult to ink the soundings and in some places are so deep that the paper is cut through to the muslin backing. The sheet is certain to disintegrate, and a photolithographic reproduction has been made on mounted Whatman's paper. *After re-touching weak spots and inking curves this reproduction was filed as H. 5753 bis.*
The Descriptive Report is exceptionally complete and satisfactorily covers the items of importance.

2. Compliance with Instructions for the Project.

The plan and character of the development are in accordance with the instructions for the project. Some of the minor waterways, for example the lower part of Mumford Creek, and North River, are wide enough to warrant control signals, such as could be spotted on the air photo compilation. Since these minor waterways are comparatively unimportant, and since there is evidence that the hydrography was carefully done, the work is accepted without control.

3. Shoreline.

The shoreline originates with air photo compilations T-5230, T-5231, T-5232, T-5128 and T-5129, all of 1933.

Signals were located by the 1933 triangulation and graphic control surveys T-6188b, T-6189a and T-6189b of 1934.

4. Sounding Line Crossings.

Depths on cross lines and close parallel lines are in very good agreement.

5. Depth Curves.

Within the limits of the survey the usual depth curves may be satisfactorily drawn. A few minor waterways have single lines of soundings and no curves are shown.

6. Junction with Contemporary Surveys.

Junctions with H-5752 (1934-5) to the north and H-5756 (1934-5) to the west are satisfactory.

Junction with H-5754 (1934) to the south will be considered in the review of that sheet.

7. Comparison with Prior Surveys.

H-1063 (1870).

This survey, scale 1-20,000, is the basis for the present charting of the area under consideration. A general comparison with the present survey shows numerous changes both in the channels and in shoal areas. Several of the shoals have been built up into islands, others have changed both in size and shape and a few have entirely disappeared. Details in all the waterways have changed so much that the entire area must be classed as changeable and no useful cartographic purpose would be served by listing the changes. Because of the lapse of time since the above survey was made and because the present survey is on larger scale and shows closer development, H-5753 (1934-5) should supersede the above survey for future charting purposes.

8. Comparison with Charts 448 and 1242.

a. Hydrography.

Within the area of the present survey the charts are based on the survey discussed in the foregoing paragraph and on U. S. Engineers' blueprint 27558 (1934) showing improvements by dredging at Cumberland Dividings. Bp. 28471 (1935) also in Cumberland Dividings shows an examination survey by the U. S. Engineers in February, 1935. The Engineers' survey showed a controlling depth of $9\frac{1}{2}$ feet where H-5753 found 10 feet in June, 1934.

b. Aids to Navigation.

Ranges and beacons mark the channel through Cumberland River and Sound. Beacon 7 is charted about 300 meters northwest of the position given by the present survey, beacon 8 about 100

meters to northward and the rear range beacon of the Cumberland Sound range about 400 meters to northward of its present position. The other beacons and range beacons are in approximately the positions charted. Azimuth of ranges are given in Chart Letter 246 of 1934.

c. Controlling Depths.

The charted 5 foot depth at Cumberland Dividings (lat. 30° 50.9', long. 81° 28.8') was changed by dredging to a 9 foot depth. The present survey shows a 10 foot depth on the range but the latest Bp. (28471 of 1935) shows a slight shoaling or 9.6 feet with the deeper water to eastward of the range.

9. Field Plotting.

Protracting and penciling of soundings were satisfactory. No curves were penciled in by the field party. Attention is directed to paragraph 1 of this review relative to the scoring of lines on the smooth sheet.

10. Additional Field Work Recommended.

This is an excellent survey and no further work is required.

11. Superseding Old Surveys.

Within the area covered the present survey supersedes the following survey for charting purposes:

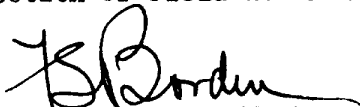
H-1063 (1870) in part.

12. Reviewed by - R. J. Christman, October 3, 1935


Inspected by - E. P. Ellis

Examined and approved:

C. K. Green 
Chief, Section of Field Records


Chief, Section of Field Work


Chief, Division of Charts


Chief, Division of H. & T.

25 Jan 7, 1936

MLC

Applied to chart 841 March 24, 1936 MLC

" " " 448 (from chart 841) July 1937 J.S.R.

Applied to chart 1242 Mar 6, 1939

G.K.S.

" " Reconstr. 448 ^{via 448} & 841 1957

G.H.E.

" " Reconstr. #453 Nov. 1958

J.M. Alinden

2716