

10303

Diag. Cht. Nos. 1239-2 & 1240-2.

Form 504

U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey Topographic

Field No. Ph-154 Office No. T-10303

LOCALITY

State South Carolina

General locality St. Helena Island

Locality Otter Islands

52
1955-1960

CHIEF OF PARTY

J. E. Waugh, Photogrammetric Party No. 1
William F. Deane, Balto. District Officer

LIBRARY & ARCHIVES

DATE Sept. 1963

COMM-DC 61300

10303

DESCRIPTIVE REPORT - DATA RECORD

T-10303

①

Project No. (II): Ph-154

Quadrangle Name (IV):

Field Office (II): Burton, S. C.

Chief of Party: J. E. Waugh

Photogrammetric Office (III): Baltimore, Md.

Officer-in-Charge: W. F. Deane

Instructions dated (II) (III): 16 August 1955 (Field and Office)
19 October 1953 (Project Ph-81) Par. 4

Copy filed in Division of
Photogrammetry (IV)

Method of Compilation (III): Graphic

Manuscript Scale (III): 1:10,000

Stereoscopic Plotting Instrument Scale (III):

Scale Factor (III): 1.000

Date received in Washington Office (IV):

Date reported to Nautical Chart Branch (IV):

Applied to Chart No.

Date:

Date registered (IV):

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): N.A. 1927

Vertical Datum (III): MSL

Mean sea level except as follows:
Elevations shown as (25) refer to mean high water
Elevations shown as (2) refer to sounding datum
i.e., mean low water or mean lower low water

Reference Station (III): ASH, 1914

Lat.: 32° 29' 19.511" (601.0m) Long.: 80° 25' 00.170" (4.4m)

Adjusted
~~Unclassified~~

Plane Coordinates (IV):

State: S. C.

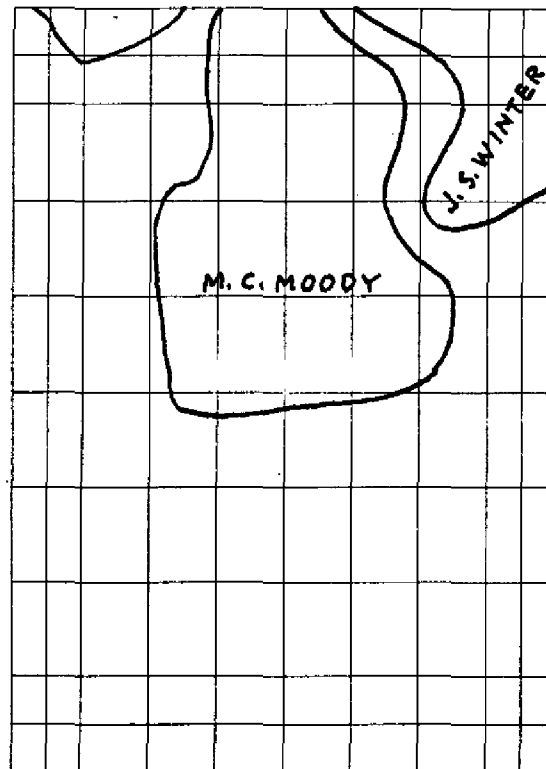
Zone: South

Y=

X=

Roman numerals indicate whether the item is to be entered by (II) Field Party, (III) Photogrammetric Office,
or (IV) Washington Office.

When entering names of personnel on this record give the surname and initials, not initials only.



Areas contoured by various personnel
(Show name within area)
(II) (III)

DESCRIPTIVE REPORT - DATA RECORD

(3)

Field Inspection by (II):	W. M. Reynolds B. F. Lampton, Jr. I. Y. Fitzgerald M. C. Moody	Date: Jan.-Feb. 1954 Feb. 1954 July 1955 Aug. 1955
Planetable contouring by (II):	M. C. Moody J. S. Winter	Date: Aug. 1955 July 1955
Completion Surveys by (II):	G.E. VARNADOE	Date: 1960
Mean High Water Location (III) (State date and method of location): 1955 photographs - Field inspection and office interpretation.		
Projection and Grids ruled by (IV):	A. Riley	Date: 8/19/55
Projection and Grids checked by (IV):	A. Riley	Date: 8/19/55
Control plotted by (III):	B. F. Lampton	Date: 10/31/55
Control checked by (III):	E. L. Williams	Date: 10/31/55
Radial Plot Microphotographic		Date: 12/15/55
Control checked by (III):	B. Frank Lampton	
Stereoscopic Instrument compilation (III):	Planimetry Contours	Date: Date:
Manuscript delineated by (III):	J. Council	Date: 6/17/58
Photogrammetric Office Review by (III):	R. Glaser	Date: 6/20/58
Elevations on Manuscript checked by (II) (III):	R. Glaser	Date: 6/20/58

DESCRIPTIVE REPORT - DATA RECORD

Camera (kind or source) (III): 9 lens (C&GS)

(4)

Number	Date	PHOTOGRAPHS (III) Time	Scale	Stage of Tide
35988 and 35989	3/17/52	0952	1:10,000	4.2 above MLW
49266 and 49267	3/23/55	1355	"	-0.7 below MLW
49313	3/23/55	1430	"	-0.5 below MLW
52229 and 52230	11/21/55	1022	"	4.8 above MLW

Refer to Field Edit Report for nos. of Field Edit photosTide (III)
From predicted Tide TablesReference Station: Savannah River Entrance
Subordinate Station: Combahee Bank
Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range
	6.8	8.1
	6.2	7.3

Washington Office Review by (IV): S.G. BLANKENBACH

Date: JUNE 1963

Final Drafting by (IV):

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV):

Date:

Land Area (Sq. Statute Miles) (III): 4

Shoreline (More than 200 meters to opposite shore) (III): 8 mi.

Shoreline (Less than 200 meters to opposite shore) (III): 10 mi.

Control Leveling - Miles (II):

Number of Triangulation Stations searched for (II): 5 Recovered: 1

Identified: 1

Number of BMs searched for (II): 0

Recovered:

Identified:

Number of Recoverable Photo Stations established (III):

Number of Temporary Photo Hydro Stations established (III):

Remarks:

Number of Third-Order Stations established: 2

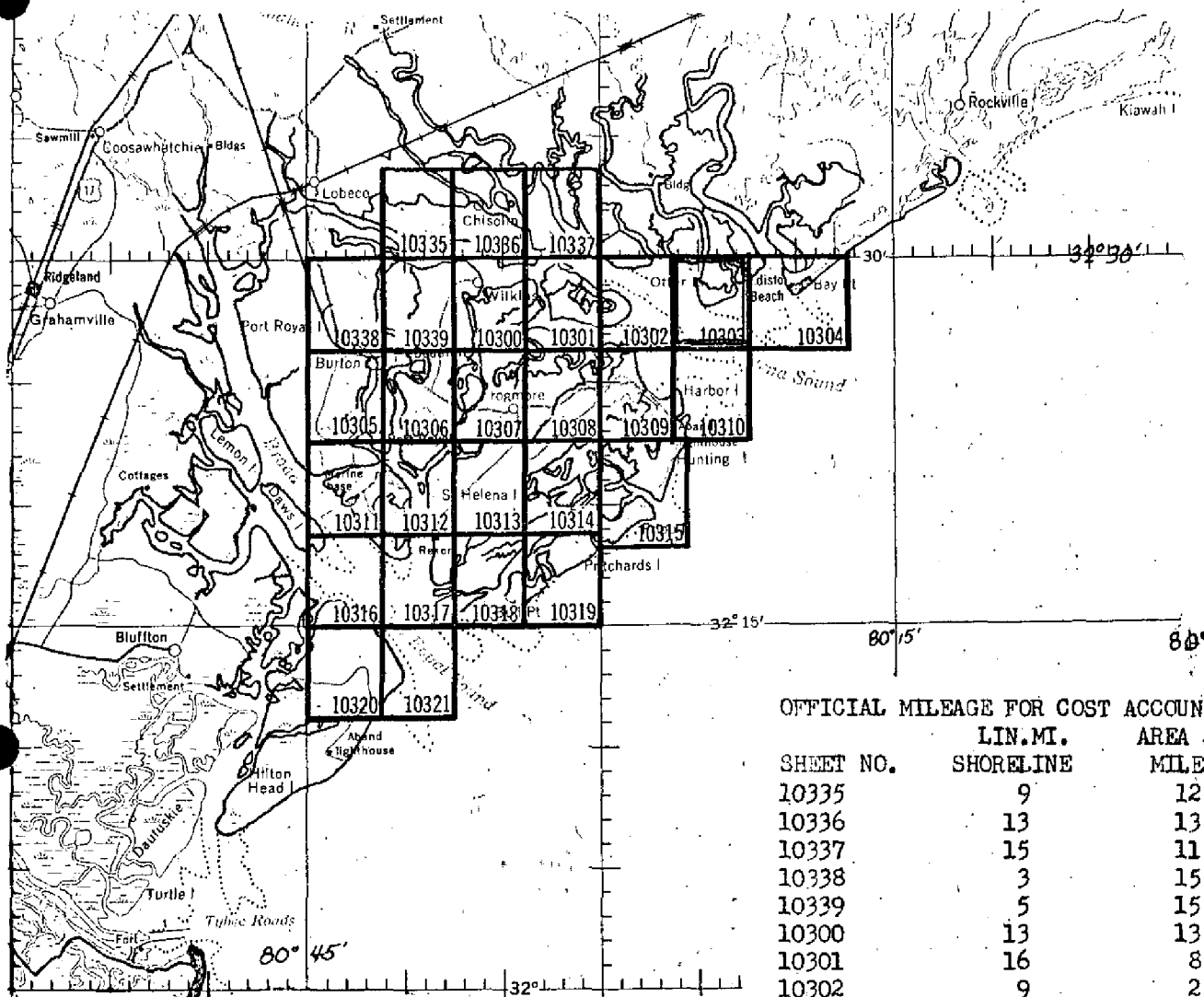
Identified: 1

Number of Recoverable Topographic Stations
established: 4

SHORELINE MAPPING PROJECT 6154

ST. HELENA SOUND TO PORT ROYAL SOUND; S. CAROLINA

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OFFICIAL MILEAGE FOR COST ACCOUNTS

SHEET NO.	LIN. MI. SHORELINE	AREA SQ. MILES
10335	9	12
10336	13	13
10337	15	11
10338	3	15
10339	5	15
10300	13	13
10301	16	8
10302	9	2
10303	9	3
10304	7	3
10305	6	15
10306	13	13
10307	8	14
10308	3	15
10309	13	11
10310	3	1
10311	9	12
10312	16	12
10313	6	15
10314	13	13
10315	13	8
10316	9	2
10317	8	4
10318	13	9
10319	9	4
10320	4	15
10321	5	1

TOTALS 250

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Summary to Accompany Descriptive Reports
T-10303 and T-10304

These topographic maps are a part of Project 154. The remainder of the project is comprised of 25 planimetric maps. T-10303 and T-10304 were completed - field edited in 1960 in conjunction with the completion of FH-81 maps (topographic) to the north. The FH-81 maps will be reduced, edited, and published by the Geological Survey as standard topographic maps.

The subject maps (T-10303 and T-10304) will not be published - recent Geological Survey Quadrangles cover the area.

Items to be registered under T-10303 and T-10304 will include Descriptive Reports and Cronar positives of the manuscripts.

FIELD INSPECTION REPORT
Project 6154
Map T-10303

Please refer to the Field Inspection Report for Map T-10315
for all data pertaining to this map.

10 OCT 1955

Joseph K. Wilson
Joseph K. Wilson
Cartographer

Approved & Forwarded: 10 OCT 1955

J. E. Waugh
J. E. Waugh
CDR, C & GS
Chief of Party

SCALE FACTOR

[illegible]

10/18/55

COMPILATION REPORT
Survey T-10303

The Photogrammetric Plot Report is a part of Descriptive Report, T-11125.

31. DELINEATION

This manuscript was delineated by graphic methods.

The Nov. 1955 photographs were office interpreted and used to correct the earlier field inspection where such changes were deemed necessary.

32. CONTROL

Identification, density and placement of horizontal control is considered to be adequate.

33. SUPPLEMENTAL DATA

For names, an annotated USGS Quadrangle, Edisto Island, S. C., was used.

34. CONTOURS AND DRAINAGE

Contours: The field contours were adequate except along the beach where the 5-foot contour had to be moved to agree with the changes in the MHWL - as shown on 1955 photographs.

35. SHORELINE AND ALONGSHORE DETAILS

The south shoreline of Otter Islands changed with each succeeding group of photographs. The high and low water lines now on the manuscript were delineated from the latest photographs available (Nov. 1955).

36. OFFSHORE DETAILS

The extensive offshore shallows were determined from the most recent available low-water pictures (March 1955).

37. LANDMARKS AND AIDS

There are no landmarks.

There is herewith submitted Form 567 for two aids to navigation.

38. CONTROL FOR FUTURE SURVEYS

Form 524 for four recoverable topographic stations have been previously submitted. They are: TRAY, 1954; ACHE, 1954; LITE, 1954; and ISLE, 1954.

Item 49 was not used because these forms have already been furnished to the hydrographic party.

39. JUNCTIONS

T-10303 joins T-11123 (Ph-81) to the north.
T-10304 to the east, all water junction with
T-10310 to the south and T-10302 to the west.

40. HORIZONTAL AND VERTICAL ACCURACY

No comment.

41 through 45

Not applicable.

46. COMPARISON WITH EXISTING MAPS

Quadrangle (USGS) Edisto Island, S. C., scale 1:62,500, edition of 1919 reprinted 1944.

C&GS T-5169, South Edisto River, scale 1:10,000; from photographs of 1933.

47. COMPARISON WITH NAUTICAL CHART

This manuscript has been compared with chart No. 793, scale 1:40,000, published September 1937, corrected to June 16, 1956.

Items to be applied to nautical chart immediately: None.
Items to be carried forward: None.

Respectfully submitted
June 17, 1958

Judson Council

Judson Y. Council
Carto. Photo. Aid

Approved and forwarded

William F. Deane

William F. Deane
CDR C&GS
Baltimore District Officer

50- PHOTOGRAMMETRIC OFFICE REVIEW

T-10303

6-20-58

1. Projection and grids ☒ 2. Title ☒ 3. Manuscript numbers ☒ 4. Manuscript size ☒

CONTROL STATIONS

4a. Classification label ☒5. Horizontal control stations of third-order or higher accuracy ☒ 6. Recoverable horizontal stations of less than third-order accuracy (topographic stations) ☒ 7. Photo hydro stations ☒ 8. Bench marks ☒ 9. Plotting of sextant fixes ☒ 10. Photogrammetric plot report ☒ 11. Detail points ☒

ALONGSHORE AREAS

(Nautical Chart Data)

12. Shoreline ☒ 13. Low-water line ☒ 14. Rocks, shoals, etc. ☒ 15. Bridges ☒ 16. Aids to navigation ☒ 17. Landmarks ☒ 18. Other alongshore physical features ☒ 19. Other along-shore cultural features ☒

PHYSICAL FEATURES

20. Water features ☒ 21. Natural ground cover ☒ 22. Planetable contours ☒ 23. Stereoscopic instrument contours ☒ 24. Contours in general ☒ 25. Spot elevations ☒ 26. Other physical features ☒

CULTURAL FEATURES

27. Roads ☒ 28. Buildings ☒ 29. Railroads ☒ 30. Other cultural features ☒

BOUNDARIES

31. Boundary lines ☒ 32. Public land lines ☒

MISCELLANEOUS

33. Geographic names ☒ 34. Junctions ☒ 35. Legibility of the manuscript ☒ 36. Discrepancy overlay ☒ 37. Descriptive Report ☒ 38. Field inspection photographs ☒ 39. Forms ☒40. P. J. Glaser
ReviewerJoseph H. Humberg
Supervisor, Review Section of Unit

41. Remarks (see attached sheet)

FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT

42. Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted under item 43.

Judson C. Council
CompilerFrank J. Borega
Supervisor

43. Remarks:

FIELD EDIT REPORT
PROJECT PH-81
QUADS. T-11123 & T-10303

F.E. REPORT
FOR

T-11124
T-10304

FILED WITH
11124

(12)

51. Methods. All roads were ridden out to check their classification and to visually inspect the planimetry and contours, except on that part of Fenwick Island south of Fenwick Cut, where the roads were walked out. Some road 7's that have been abandoned and have become impassable through disuse were deleted. Roads that have been constructed since the field inspection have been classified on the 1959 photographs and cross referenced on the field edit sheets.

Additional acreage has been added to the Bear Island Game Management Area south of Crooked Creek. The section of the new boundary line appearing on photograph 59S-9084 was taken from an aerial photograph (approx. 1:4800 scale) which is on file at the Game Management Headquarters on Bear Island. A small scale map, as furnished to hunters, showing this area is a part of the data for T-11123 and is labeled Field Edit Sheet No. 5.

Features that are new since the field inspection, principally dikes and ditches, appear on the 1959 photography. These have been classified and cross referenced on the field edit sheets. New buildings and others that were not mapped have been circled on the 1959 photographs where they are discernible. Those that have been built since photography or are obscured by trees have been blocked in and circled. All buildings are class 1 unless otherwise classified.

The Intracoastal Waterway and other inland waters, where questions arose, were inspected by boat and changes noted on the photographs, in many areas. Note old boat wreckage on shoal approximately one mile Northwest of Fenwick Cut, on photograph 59S-9061.

Aids to navigation that are known to have been moved or rebuilt since the field inspection were located by direct identification on the photographs where clearly discernible and by sextant fixes for others. Azimuths of the ranges were determined by occupying the front range and measuring the angle from a triangulation station to the rear range with a sextant held directly over the front range.

All aids are charted except Daybeacon 5 at Lat. 32 32.0 Long. 80 23.6 (approx.) and a Marker (large single pile) at Lat. 32 31.5 Long 80 22.5 (approx.).

Forms 567 are being submitted for all aids located since 1 June 1960 when forms 567 for aids prior to this date were submitted with Quad. T-11122. These forms are being submitted to the Photogrammetric Office only and are to be forwarded to their proper designations when accurate positions are determined.

The M H W L along the Sound side of Otter Island in T-10303 was inspected and located by walking the shoreline. Inspection by boat was impractical because of the vast area offshore which was bare or very shallow when the area was inspected.

Field edit information is shown on the following: Five field edit sheets for T-11123 and one field edit sheet for T-10303. One ratio print each of photographs Nos. 59S-9048, 9050, 9052, 9054, 9059, 9061, 9063, 9082, 9084 and 9086.

Violet ink was used for all additions and corrections and green ink was used for all deletions on all photographs and sheets.

52. Adequacy of The Compilation. Due to the long lapse of time since the field inspection many changes have occurred and new features built. The M H W L along the sound side of Otter Island should be corrected from the inspection of 5 Aug. 1960, on photograph 59S-9054 and the 5 foot contour should be corrected as discussed in letter to Chief, Photogrammetry Division dated 11 June 1960 and reply No. 762/AKH dated 21 June 1960. When these and other corrections and additions are applied from the field edit data the compilation will be adequate and complete.

53. Map Accuracy. No horizontal accuracy tests were made. Contours were tested in two separate areas in T-11123. A total of 33 points on the contours were tested all of which were in error less than one half contour interval. See form 187 (Summary and abstract of vertical accuracy test) attached. Contours along the Sound side of Otter Island in T-10303 were visually inspected while walking the area. Except for the 5 foot contour, which has shifted with the M H W L in places, the contours are good as to shape and size.

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54. Recommendations. None offered.

55. Examination of the proof copy. No one was requested to examine a proof copy of the map as no one contacted was believed to be qualified.

Respectfully submitted,
18 August 1960

George E. Varnadoe
Supervisory Cartographer.

Review Report
Topographic Map T-10303
June 1963

61. General Statement

Differences exist between T-10303 and a 1956 Geological Survey Quadrangle (St. Helena Sound, S. C., scale 1:24,000). The differences are discussed under item 63 of this report.

T-10303 will not be published by the Geological Survey (refer to the "Summary" for this report).

62. Comparison with Registered Topographic Surveys

5169 1:10,000 1933

T-10303 supersedes the prior survey for nautical charting purposes.

63. Comparison with Maps of Other Agencies

St. Helena Sound, S. C. 1956 1:24,000

Differences exist. They are, for the most part, differences to be expected due to the elapsed time between the surveys and scale difference.

Scale

There are differences in apparent shoreline resulting from a difference in selection of details to represent this feature. In addition, there are some differences in contours.

64. Comparison with Hydrographic Surveys

Inapplicable.

65. Comparison with Nautical Charts

793 revised 12/4/61 1:40,000 scale

Differences exist. However, there are no items to be applied immediately.

66. Adequacy of Results and Future Surveys

This map complies with the National Map Accuracy Standards and meets Bureau requirements.

2 16

Reviewed by:

S. G. Blankenbaker
S. G. Blankenbaker

Approved by:

Charles Thurner Samuel A. Taylor
Chief, Cartographic Branch Chief, Nautical Chart Division
Photogrammetry Division

J. E. Vaughn 8/13/63 W. S. Connerly
Chief, Photogrammetry Division Chief, Operations Division

T-10303.

Geographic Names.

Ashepoo River

Beaufort County

Colleton County
Combahee Bank

Fish Creek

Hutchinson Island

Jefford Creek

Otter Creek
Otter Islands

Pelican Bank
Pine Island
Pine Island Creek

St. Helena Sound
South Carolina

Names approved 9-10-58
L. Heck

NONFLOATING AIDS OR LACED MARKS FOR CHAIRS

TO BE CHARTED

STRIKE OUT ONE

Burton, South Carolina 19 Sept. 1955

I recommend that the following objects which have ~~(been)~~ been inspected from seaward to determine their value as landmarks be charted on ~~(charts)~~ the charts indicated.

The positions given have been checked after listing by Joseph K. Wilson

J. E. Waugh

Chief of Party.

[illegible]

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

* TABULATE SECONDS AND METERS

COMM-DC 28356

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. T-10303

INSTRUCTIONS

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.

1. Letter all information.
2. In "Remarks" column cross out words that do not apply.
3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

[illegible]