

6289a

U. S. COAST & GEODETIC SURVEY
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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. AA

State South Carolina

LOCALITY

Isle of Palms,

Charleston, S.C.

Hamlin Creek to Conch Creek

193 5

CHIEF OF PARTY

Lt. J. M. H. H. H.

U. S. GOVERNMENT PRINTING OFFICE: 1934

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET

U. S. COAST & GEODETIC SURVEY LIBRARY AND ARCHIVES	REG. NO.
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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. AVA

REGISTER NO. T6289a

State South Carolina

General locality Isle of Palms

Locality Hamlin Creek to Conch Creek
~~Isle of Palms~~

Scale 1:10,000 Date of survey March, 19 35

Vessel _____ Party No. 19

Chief of party Benjamin H. Rigg

Surveyed by Addison S. Hall

Inked by Addison S. Hall

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

Contour, Approximate contour, Form line interval _____ feet

Instructions dated October 10, 19 33

Remarks: Geographic Names had been inked on the sheets before
it was discovered that they should have been left in pencil.

OUTLINE

1. INSTRUCTIONS.
2. PURPOSE OF SURVEY.
 - A. Hydrographic Control.
 - B. Establishment and Recovery of Permanent Stations.
 - C. Location of Aids to Navigation.
 - D. Location of Topographic Detail.
3. LIMITS OF SHEET.
4. DESCRIPTION OF TERRITORY.
5. CONTROL.
6. SURVEYING METHODS USED.
7. PERMANENT STATIONS.
 - A. U.S.E.D. Reference Marks.
 - B. Other Permanent Stations.
8. AIDS TO NAVIGATION.
9. LANDMARKS AND NAMES.
10. TOPOGRAPHIC FEATURES LOCATED FOR USE IN AIR-PHOTO COMPILATION.

DESCRIPTIVE REPORT TO ACCOMPANY
ALUMINUM MOUNTED CONTROL SHEET AA

INSTRUCTIONS

The survey was carried out under instructions dated October 10, 1933, also Director's Letters 22 Mg 1990 (19), 26 - AHH 293, and circular letter No. 30.

PURPOSE OF SURVEY

The purpose of the survey was to establish control for hydrography, to establish permanent stations, and to locate Aids to Navigation.

LIMITS OF THE SHEET

The topography covered by sheet AA includes the Intracoastal Waterway from Lat. $32^{\circ} 48.0'$, Long $79^{\circ} 46.5'$, southwestward to Lat. $32^{\circ} 46.4'$, Long. $79^{\circ} 50.5'$. It includes the Ocean Beach from Lat. $32^{\circ} 47.5'$, Long. $79^{\circ} 46.0'$, southwestward past Breach Inlet, Lat. $32^{\circ} 46.6'$, Long. $79^{\circ} 48.7'$ to Lat. $32^{\circ} 46.0'$, Long. $79^{\circ} 49.0'$.

DESCRIPTION OF TERRITORY

The western part of the Isle of Palms is a small beach resort with about one hundred cottages, several stores, and a large dance pavillion. It is separated from Sullivan's Island by Breach Inlet, a narrow, shallow inlet which is closed to navigation by the pile supported wooden bridge connecting the two islands. Only the eastern end of Sullivan's Island fell on sheet AA. It includes part of the drill fields, and gunnery ranges at Ft. Moultrie, and the eastern part of the village of Moultrieville. The Intracoastal Waterway extends in a straight dredged cut across the marsh just north of Little Goat Island, and about a third of a mile north of Breach Inlet. The marsh is about two miles wide, and is cut up by winding creeks, among them being Hamlin Creek, Swinton Creek, Inlet Creek, and Conch Creek. There is a large, abandoned oyster cannery on Venning Creek, near the high ground extending across the northern part of sheet.

CONTROL

The following triangulation stations were used for control on

sheet AA.

	1857		
Venning	1924	Isle of Palms Standpipe	1932
Crescent	1924	Iron Stack Oyster Fac.	1934
Light	1924	U.S.E.D. Swinton	"
Goat Island	1857	U.S.E.D. Conch	"

SURVEYING METHODS USED

Set-ups were first made on triangulation stations VENNING, LIGHT, U.S.E.D. SWINTON, and U.S.E.D. CONCH. Cuts were taken to the hydrographic signals from these set-ups. Location of the hydrographic signals was completed from set-ups on or near signals already located from triangulation stations. The beacons along the Intracoastal Waterway were located in a few cases by taking a round of angles with a sextant. Beacons 140, 142, 144, 146, and 148, which fell off sheet AA to the eastward, were located by cuts from triangulation station U.S.E.D. CONCH, and azimuths from triangulation station MUD, which fell off sheet AA.

The method used in obtaining these azimuths was to draw an orientation line to station MUD from U.S.E.D. Conch, and then to set up on station MUD and orient back on U.S.E.D. CONCH. A position was next assumed, at a convenient place on the sheet, as the location of MUD. From this assumed position of MUD, cuts were taken to the beacons, and a check cut taken to Ft. Moultrie tank. The cuts to the beacons were transferred to the hydrographic smooth sheet, within whose limits fell all of the beacons, as well as triangulation stations MUD, U.S.E.D. CONCH, and Ft. Moultrie Tank. The intersection of the cuts from stations MUD and U.S.E.D. CONCH determined the location of the beacons. Beacon 140 had been located the year previous, on sheet A. Its position on sheet A agreed with its position obtained by the above method, giving a check on the accuracy of the work.

The detail near the Isle of Palms Pavillion was obtained by means of a three point fix taken at a point on a high sand dune about two hundred meters S.S.E. of signal LOT. From this set-up, orientation lines were drawn to two range poles, one at the foot of the Isle of Palms Dock, and the other about 50 meters N.W. of the Isle of Palms pavillion. Strong resections were taken at these poles to the Isle of Palms Standpipe. While no check on the resections was obtained in the field, the locations of the dock and the pavillion on the topographic sheet agreed within two meters with their location on the compilation.

A steel wire traverse was run from the Isle of Palms Standpipe eastward along the ocean beach to a point at the western limit of the sheet, where it was tied in with a traverse run eastward across sheet BB. This traverse was for the purpose of locating the high and low water lines. For a further discussion of this traverse see report on sheet BB.

PERMANENT STATIONS ESTABLISHED

A. U.S.E.D. Stations. -- The following pairs of reference marks for U.S.E.D. Stations were located on sheet AA, and designated with the letter "D" on the sheet.

U.S.E.D.	R.M.'s	A. & B.	
			967 + 07.19 S
"	"	"	1009 + 50.0 S
"	"	"	1064 + 00.0 S
"	"	"	1108 + 00.0 S
"	"	"	1156 + 00.0 S
"	"	"	1189 + 08.25 S

Descriptions of these stations on form 524 accompany the sheet. For a further discussion of these reference marks, see the descriptive report accompanying sheet PP.

B. Other permanent stations -- A 2" iron pipe was located on a dune about a quarter of a mile west of the Isle of Palms pavillion. A description of this station on form 524 accompanies the sheet.

AIDS TO NAVIGATION

The aids to navigation on sheet AA consist of lighted and unlighted beacons along the Intracoastal Waterway. For a discussion of the Aids to Navigation see the Descriptive Report accompanying sheet PP. 6295^b

A list of these Aids to Navigation on form 567, together with a brief description of each, with its geographic position, accompanies the sheet.

LANDMARKS AND NAMES

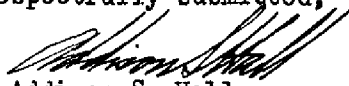
No Landmarks of importance, not already on the chart, fell within the limits of sheet AA.

All names on the present charts pertaining to the area covered by sheet AA are correct. No new names should be added.

TOPOGRAPHIC FEATURES LOCATED FOR USE IN AIR PHOTO COMPILATION

Patches of shoreline along the creeks, especially at intersections of creeks with the waterway, were rodged in for comparison with the air photo compilation, together with most of the shoreline along the ocean beach. The Breach Inlet bridge, the Isle of Palms pavillion and dock, a road intersection, and an abandoned oyster factory were also located. All rod readings on shoreline are shown by dots in breaks in the line. The shoreline along the ocean beach was transferred to the compilation from the graphic control sheet. No discrepancies of more than three meters occurred between the other features located for comparison. Ten and six tenths statute miles of shoreline were located on sheet AA.

Respectfully submitted,


Addison S. Hall
Surveyor

Forwarded by,


Lt. Benjamin H. Riggs
Chief of Party

6289b

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

DESCRIPTIVE REPORT

Topographic }
Hydrographic } Sheet No. BB

State South Carolina

LOCALITY

~~Goat Island~~, Isle of Palms

~~Charleston, S.C.~~

Dewees Inlet to Goat Island

193 5

CHIEF OF PARTY

Raymond B. Hays
Lt. Comdr. U. S. N.

U. S. GOVERNMENT PRINTING OFFICE: 1934

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET

U. S. COAST & GEODETIC SURVEY LIBRARY AND ARCHIVES MAY 21 1935 Acc. No. _____	REG. NO.
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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. BB

REGISTER NO. **T6289 b**

State South Carolina

General locality Isle of Palms

Locality Dewees Inlet to Goat Island

Scale 1:10,000 Date of survey March, 1935

Vessel Party No. 19

Chief of party Benjamin H. Rigg

Surveyed by Addison S. Hall

Inked by Addison S. Hall

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

Contour, Approximate contour, Form line interval _____ feet

Instructions dated October 10, 1933.

Remarks: Geographic Names had been inked on the sheets before
it was discovered that they should have been left in pencil.

OUTLINE

1. INSTRUCTIONS.
2. PURPOSE OF SURVEY.
 - A. HYDROGRAPHIC CONTROL
 - B. ESTABLISHMENT AND RECOVERY OF PERMANENT STATIONS.
 - C. LOCATION OF AIDS TO NAVIGATION.
 - D. LOCATION OF TOPOGRAPHIC DETAIL.
3. LIMITS OF SHEET.
4. DESCRIPTION OF TERRITORY.
5. CONTROL.
6. SURVEYING METHODS USED.
7. PERMANENT STATIONS.
 - A. U.S.E.D. Reference Marks.
 - B. Other Permanent Stations.
8. AIDS TO NAVIGATION.
9. LANDMARKS AND NAMES.
10. TOPOGRAPHIC FEATURES LOCATED FOR **USE** IN AIR-PHOTO COMPILATION.

DESCRIPTIVE REPORT TO ACCOMPANY
ALUMINUM MOUNTED CONTROL SHEET BB

INSTRUCTIONS

The survey was carried out under instructions dated October 10, 1933, also Director's Letters 22 Mg 1990 (19), 26 - AHH 293, and circular letter No. 30.

PURPOSE OF SURVEY

The purpose of the survey was to establish control for hydrography, to establish permanent stations, and to locate Aids to Navigation.

LIMITS OF SHEET

The topography covered by sheet BB includes the Intracoastal Waterway from its intersection with Dewees Creek, Lat. $32^{\circ} 49.9'$, Long. $79^{\circ} 49.6'$ southwestward to Lat. $32^{\circ} 48.2'$, Long. $79^{\circ} 46.1'$. It includes the ocean beach from the western side of Dewees Inlet, Lat. $32^{\circ} 48.9'$, Long. $79^{\circ} 43.1'$, southwestward to Lat. $32^{\circ} 47.6'$, Long. $79^{\circ} 46.1'$.

DESCRIPTION OF TERRITORY

Dewees Inlet, at the southeast corner of sheet BB is five or six hundred meters in width, and carries about four feet on the bar at mean low water. It is heavily wooded on both sides, and there is a bluff about fifteen feet high on the northern side. ^{The Isle of Palms} ~~Sullivan's Island~~, extending across sheet southeast of the waterway is heavily wooded, as is Goat Island on the northwest side. Between these islands and the high ground is a marshy area about two miles wide, cut up by winding creeks. Gray's Bay, just north of Goat Island, consists of mud flats and oyster banks baring at low water.

CONTROL

The following triangulation stations were used as control on sheet BB.

Crescent	1924	Roberts	3	1924
Shell	"	Dewee's		1934
Goat Is.	1857	U.S.E.D. Morgan		1934
		U.S.E.D. Bullyard		1934

SURVEYING METHODS USED

The hydrographic stations in the marshy interior were located by cuts from triangulation stations. A steel wire traverse was run from hydrographic station SIG at Dewees Inlet, around the end of Sullivan's Island to the western limit of the sheet where it was tied in to a steel wire traverse run eastward from the Isle of Palms Standpipe. The traverse failed to close by 11 meters, the error being almost entirely one in azimuth. This error was not considered excessive considering the length of the traverse (five miles). It was probably due to a small cumulative error in orientation on sheet BB, and was adjusted in accordance with the assumption that all of the error in the traverse occurred on this sheet.

Ref. Marks A + B

Lighted Beacon 126, and engineers' stations 902 + 84.44 were rodded in from a set-up determined by a cut from triangulation station U.S.E.D. Bullyard, resecting on station ERA and checking on a flag located eccentricly from triangulation station GOAT ISLAND, which was obscured behind the trees.

Beacon 129 and the engineers' stations opposite it were located by means of cuts from this set-up and a shore stadia traverse from triangulation station GOAT ISLAND.

PERMANENT STATIONS ESTABLISHED

A. U.S.E.D. Stations. -- The following pairs of pipes established by the U.S. Engineers' Department were located on sheet BB.

R.M.'s	A & B.	U.S.E.D.	Sta.	816 + 19.34 S
"	"	"	"	835 + 05.03 S
"	"	"	"	873 + 49.51 S
"	"	"	"	940 + 86.46 S
"	"	"	"	902 + 84.44 S

For a discussion of these engineers' stations see the Descriptive Report on sheet PP. These stations were designated by the letter "D" on the sheet. Descriptions on form 524 accompany the sheet.

B. Other Permanent Stations -- No permanent stations other than the Engineers' stations were located on sheet BB.

AIDS TO NAVIGATION

The Aids to Navigation on sheet BB consisted of lighted beacons and day markers along the Intracoastal Waterway. They were located on the graphic control sheet. A description of these Aids to Navigation, together with their geographic positions on form 567, accompanies the sheet. For a further discussion of the Aids to Navigation along the Intra-coastal Waterway, see the descriptive report accompanying sheet PP.

LANDMARKS AND NAMES

No landmarks of charting importance fell within the limits of sheet BB.

All names on the present chart pertaining to the area covered by sheet BB are correct. No new names should be added.

TOPOGRAPHIC FEATURES LOCATED FOR USE IN AIR PHOTO COMPILATION

Patches of shoreline were rodded in at bends in the Intracoastal Waterway, and occasionally along the creeks between the waterway and the high ground. This shoreline was compared with the compilation. No discrepancies of more than three meters were found. Rod readings are shown in all cases by dots in breaks in the shore line. The high water line was run in along all sandy beaches and applied to the compilation. Nine and two tenths miles of shoreline were rodded in.

Respectfully submitted,



Addison S. Hall,
Surveyor

Forwarded by,



Lt. Benjamin H. Biggs,
Chief of Party.

REVIEW OF GRAPHIC CONTROL SURVEY T- 62896, SCALE 1/10,000Date of Review *Aug 8, 1935*

1. This survey has been reviewed in connection with Air Photo Compilation Nos. T-5394, , with particular attention to the following details:

- (a) Projection has been checked in the Field. ✓
- (b) Accuracy of location of plane table control points. ✓
- (c) Discrepancies between detail on this survey and the air photo compilations listed above. ✓
- (d) Discrepancies found in descriptions submitted on Form 524 when compared with the air photo compilations listed above.

2. Refer to the reviews and descriptive reports of air photo compilations Nos. T-5394, , for a more complete discussion of any errors or discrepancies found. ✓

Any material errors found on this survey are noted in subsequent paragraphs of this review, and these have been reported to the Field Records Section and the Cartographic Section.

Notes and corrections resulting from the review are shown on this survey in green.

Lernard A. Hulsman
August 8, 1935