# Form 504

**U. S. DEPARTMENT OF COMMERCE**  
**COAST AND GEODETIC SURVEY**

## DESCRIPTIVE REPORT

<table>
<thead>
<tr>
<th>Type of Survey</th>
<th>SHOEBLINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field No.</td>
<td>Office No. T-12280</td>
</tr>
</tbody>
</table>

## LOCALITY

<table>
<thead>
<tr>
<th>State</th>
<th>SOUTH CAROLINA</th>
</tr>
</thead>
<tbody>
<tr>
<td>General locality</td>
<td>WINYAH BAY TO CHARLESTON HARBOR</td>
</tr>
<tr>
<td>Locality</td>
<td>BULL HARBOR</td>
</tr>
</tbody>
</table>

\[1962 - 1963\]

**CHIEF OF PARTY**  
J. K. Wilson, Field Party  
J. C. Bull, Norfolk Regional Office

## LIBRARY & ARCHIVES

**DATE**
**Descriptive Report - Data Record**

**T-12280**

**Project No.** (111): (Ph 6216) 21058

**Field Office** (111): Georgetown, South Carolina

**Chief of Party**: Joseph K. Wilson

**Photogrammetric Office** (111): Tampa, Florida

**Officer-in-Charge**: V. Ralph Sobieralski

**Instructions Dated** (111) (111):
- Oct. 8, 1962 Field
- Nov. 5, 1962 Office
- Feb. 20, 1963 Amendment I
- April 26, 1963 II
- Oct. 10, 1963 Supplement I

**Method of Compilation** (111):
- Kelsh Plotter

**Manuscript Scale** (111):
- 1:20,000

**Stereoscopic Plotting Instrument Scale** (111):
- 1:6,000 pantographed to 1:20,000

**Date Received in Washington Office** (111): (111):

**Date Reported to Nautical Chart Branch** (111):

**Applied to Chart No.**

**Date Registered** (111):

**Geographic Datum** (111):
- NA 1927

**Vertical Datum** (111): Mean Higher High Water

**Reference Station** (111):
- Middle 1857

**Latitude** (111):
- 38° 55' 18.659 (574.8m)

**Longitude** (111):
- 79° 36' 17.923 (1465.7m)

**Planes Coordinates** (111):
- \( x = 398,855.39 \text{ Ft.} \)
- \( y = 2,428,064.78 \text{ Ft.} \)

**Zone**
- South

**State**
- South Carolina

**Notes**:
- Roman numerals indicate whether the item is to be entered by (111) Field Party, (111) Photogrammetric Office, or (111) Washington Office.
- When entering names of personnel on this record, give the surname and initials, not initials only.
## Descriptive Report - Data Record

### Field Inspection by (III):
- M. A. Stewart - R. S. Tibbetts
- H. G. Lucas - J. K. Wilson

### Date:
- November 1962
- February 1963

### Mean High Water Location (III) (State Date and Method of Location):
- Air photo compilation
- Date of photographs: Sept. 1, 1962
- Feb. 21, 1963

### Projection and Grids Ruled by (IV):
- A. Riley

### Date:
- Feb. 1963

### Projection and Grids Checked by (IV):
- LEB

### Date:
- Feb. 1963

### Control Plotted by (III):
- J. Honick

### Date:
- April 1963

### Control Checked by (III):
- V. P. Cackowski

### Date:
- April 1963

### Stereoscopic Control Extension by (III):
- J. L. Lisle

### Date:
- April 1963

### Stereoscopic Instrument Compilation (III):
- Planimetry
  - I. I. Saperstein
  - R. E. Smith
- Contours
  - Inapplicable

### Date:
- April 1963

### Manuscript Delineated by (III):
- I. I. Saperstein
- Reviewed by W. H. Shearouse

### Date:
- April 1963

### Scribing by (III):
- P. Leikhim
- Reviewed by: W. H. Shearouse

### Date:
- March 1964
- April 1964

### Photogrammetric Office Review by (III):
- I. I. Saperstein

### Date:
- Sept. 1964

### Remarks:
- Field Edit - 1963
## DEScriptive Report - Data Record

### Camera (Kind or Source) (iii):

Cameras "S" & W

<table>
<thead>
<tr>
<th>Number</th>
<th>Date</th>
<th>Time</th>
<th>Scale</th>
<th>Stage of Tide</th>
</tr>
</thead>
<tbody>
<tr>
<td>62S1123A</td>
<td>Sept. 1, 1962</td>
<td>8:41</td>
<td>1:30,000 (Diapositives)</td>
<td>4.9</td>
</tr>
<tr>
<td>thru 62S1125A</td>
<td></td>
<td>8:42</td>
<td></td>
<td></td>
</tr>
<tr>
<td>62S1193A</td>
<td>&quot;</td>
<td>9:47</td>
<td></td>
<td>4.8</td>
</tr>
<tr>
<td>thru 62S1195A</td>
<td></td>
<td>9:48</td>
<td></td>
<td></td>
</tr>
<tr>
<td>62S1228A</td>
<td>&quot;</td>
<td>10:12</td>
<td></td>
<td>4.6</td>
</tr>
<tr>
<td>63W3079</td>
<td>Feb. 21, 1963</td>
<td>11:18</td>
<td></td>
<td>-0.1</td>
</tr>
</tbody>
</table>

### Predicted Tide (iii)

<table>
<thead>
<tr>
<th>Reference Station</th>
<th>Ratio of Ranges</th>
<th>Mean Range</th>
<th>Spring Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charleston</td>
<td>5.1</td>
<td>6.0</td>
<td></td>
</tr>
<tr>
<td>Wharf Creek entrance</td>
<td>HW 0.0</td>
<td>LW 0.0</td>
<td>5.1 6.0</td>
</tr>
</tbody>
</table>

### WASHINGTON OFFICE REVIEW BY (IV):

M. M. Slavney, Norfolk Regional Office 6/65

### Proof Edit By (IV):

M. M. Slavney, Norfolk Regional Office 11/65

### Number of Triangulation Stations Searched For (iii):

3 # Recovered: 2 Identified: 1

### Number of BM(s) Searched For (iii):

(Tidal) 3 Recovered: 2 Identified: 1

### Number of Recoverable Photo Stations Established (iii):

none

### Number of Temporary Photo Hydro Stations Established (iii):

none

### Remarks:

In addition to Triangulation Stations above, 3 new stations (Bull 2, and Wild, and Photo Picture Point) were established by Geodetic Party 601 in January 1963. All three of which were identified on the photographs.
<table>
<thead>
<tr>
<th>Compilation Record</th>
<th>Completion Date</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compilation complete pending field edit</td>
<td>April 1963</td>
<td>Superseded</td>
</tr>
<tr>
<td>Alongshore field edit applied; compilation complete.</td>
<td>Jan. 1964</td>
<td></td>
</tr>
</tbody>
</table>
SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT T-12280

Shoreline manuscript T-12280 is one of six 1:20,000 scale maps in Project 21058 (Winyah Bay to Charleston, South Carolina), which also contains nine 1:10,000 scale manuscripts. The sketch on page 5 of this report shows the position of this manuscript in the project.

This is a stereoscopic instrument project in advance of hydrographic surveys of the area. 1:30,000 scale panchromatic photographs were taken with the W camera on September 1, 1962. The stereo bridge was run and adjusted to field identified control in the Washington Office. Compilation was done with the Kelsh Plotter. 1:20,000 scale ratio prints were processed and provided for photo hydro support.

The field operations preceding compilation included field inspection and identification of control to be used in the stereo bridge. The manuscripts were later field edited in conjunction with photo hydro support.

The compilation manuscript was a vinylite sheet 7.5 minutes in latitude and longitude. The smooth manuscript was on cronaflex for review. One cronar positive and one cronar negative are furnished for registry and record after final review.
FIELD INSPECTION REPORT

T-12280

Submitted with T-12277.
AEROTRIANGULATION REPORT

T-12280

Submitted with T-12283.
<table>
<thead>
<tr>
<th>STATION</th>
<th>SOURCE OF INFORMATION (INDEX)</th>
<th>DATUM</th>
<th>LATITUDE OR Y-COORDINATE</th>
<th>DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS</th>
<th>DATUM CORRECTION</th>
<th>N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MIDDLE, 1957</td>
<td>99</td>
<td>N.A. 1947</td>
<td>399.855.39</td>
<td>2,428.064.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BILLY, 1934</td>
<td>100</td>
<td>&quot;</td>
<td>430.641.67</td>
<td>2,422.352.39</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BULL ISLAND C.G. TOWER, 1937</td>
<td>104</td>
<td>&quot;</td>
<td>393.392.99</td>
<td>2,425.496.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WILD, 1963</td>
<td>Wash Off.</td>
<td>&quot;</td>
<td>412.019.68</td>
<td>2,438.154.84</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BULL 2, 1963</td>
<td>&quot;</td>
<td>&quot;</td>
<td>403.187.64</td>
<td>2,437.405.35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BULL BAY PHOTO</td>
<td>&quot;</td>
<td>&quot;</td>
<td>32°59' 24.849&quot;</td>
<td>765.5 (873.8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PICTURE PT 1963</td>
<td>&quot;</td>
<td>&quot;</td>
<td>79 3' 49.009&quot;</td>
<td>1027.4 (285.4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOWER, 1942</td>
<td>104</td>
<td>&quot;</td>
<td>387.915.64</td>
<td>2,422.146.80</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
- PL 115 1/8/63
- Plotted N.R.C. 4/49
- Units: ft, meters.
COMPILATION REPORT

T-12280

Items 31 thru 47 are submitted with the Descriptive Report for T-12285.

Approved and Forwarded
John C. Bull
Norfolk Regional Officer

M. M. Slavney
48. GEOGRAPHIC NAME LIST

Names, with the exceptions noted, were taken from the Final Name Sheet as prepared on the BULL ISLAND quadrangle by the Geographic Names Section, Washington Office.

ANDERSON CREEK
ATLANTIC OCEAN
BELVEDERE CREEK
BIG POND
BIRD BANKS
BLIND CREEK
BULL BAY
BULL CREEK
BULL HARBOR
BULL ISLAND
CAPE ROMAIN NATIONAL WILDLIFE REFUGE
DOAR ROAD
INTRACOASTAL WATERWAY
JACK CREEK
LIGHTHOUSE ROAD
LOWER SUMMERHOUSE POND
*MILLS ROAD
MOCASIN POND
NORTHEAST POINT
OLD FORT ROAD
SALTPOND CREEK
SEWEE CAMP
SHEEP HEAD RIDGE ROAD
SOUTH CAROLINA
SUMMERHOUSE CREEK
SUMMERHOUSE ROAD
TURKEY WALK TRAIL
UPPER SUMMERHOUSE POND
VANDERHORST CREEK
VENNING CREEK
** WHARF CREEK
WHITE ISLAND
WILSON CEMETERY

*Field editor, on field copy quadrangle BULL ISLAND.

** " " , on ozalid discrepancy print.
GEOGRAPHIC NAMES
Ph 6216 (Winyah Bay - Charleston Harbor, S.C.)

T-12280 (Shoreline)

Andersonville Creek
Atlantic Ocean
Belvedere Creek
Bird Banks
Blind Creek
Bull Bay
Bull Creek
Bull Harbor
Bull Island
Big Pond
Doar Road
Intracoastal Waterway
Lower Summerhouse Pond
Lighthouse Road
Moccasin Pond
Northeast Point
Jack Creek
Cape Romain National Wildlife Refuge
Old Fort Road
Saltpond Creek
Seewee Camp
Sheep Head Ridge Road
Summerhouse Creek
Summerhouse Road
Turkey Walk Trail
Upper Summerhouse Pond
Vanderhorst Creek
Venning Creek
Wharf Creek
White Island
Wilson Cemetery
Mills Road

A. J. Wraight
Geographic Names
I recommend that the following objects which have been inspected from seaward to determine their value as landmarks be charted on the charts indicated.

The positions given have been checked after listing by

I. I. Saperstein

V. Ralph Sobieralski

Chief of Party

<table>
<thead>
<tr>
<th>STATE</th>
<th>SOUTH CAROLINA</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHARTING</td>
<td>POSITION</td>
</tr>
<tr>
<td>NAME</td>
<td>DESCRIPTION</td>
</tr>
<tr>
<td>TOWER</td>
<td>Fire lookout, skeleton steel</td>
</tr>
</tbody>
</table>

This form shall be prepared in accordance with Hydrographic Manual, Publication 20.2, Sec. 1-55, 2-39, 6-36, 7-18 to 22 inclusive, and Fig. 79. Positions of charted landmarks and nonfloating aids to navigation, if reetermined, shall be reported on this form. Revisions shall show both the old and new positions. 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
49. **NOTES FOR THE HYDROGRAPHER**

Two landmarks have been located and form 567 submitted.

A wreck shown on chart 1238 at approx. Lat. 32° 59.7',
Long. 79° 32.2' could not be seen on the photographs and should
be investigated by the hydrographic party.
# Photogrammetric Office Review

## Title: T-12280

### 1. Projection and Grids

<table>
<thead>
<tr>
<th>5. Horizontal Control Stations of Third-Order or Higher Accuracy</th>
<th>6. Recoverable Horizontal Stations of Less Than Third-Order Accuracy (Topographic Stations)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IIS</td>
<td>IIS</td>
</tr>
</tbody>
</table>

### Control Stations

- Photo Hydro Stations: XX
- Bench Marks: IIS
- Plotting of Sextant Fixes: XX
- Photogrammetric Plot Report: Bridge (W.O.)
- Detail Points: Kelsh

### Alongshore Areas

- Shoreline: IIS
- Low-Water Line: XX
- Rocks, Shoals, etc.: XX
- Bridges: IIS
- Aids to Navigation: XX
- Landmarks: IIS
- Other Alongshore Physical Features: IIS

### Physical Features

- Water Features: IIS
- Natural Ground Cover: IIS
- Planetary Contours: XX
- Stereoscopic Instrument Contours: XX
- Contours in General: XX
- Spot Elevations: XX
- Other Physical Features: IIS

### Cultural Features

- Roads: IIS
- Buildings: XX
- Railroads: XX
- Other Cultural Features: IIS

### Boundaries

- Boundary Lines: XX
- Public Land Lines: XX

### Miscellaneous

- Geographic Names: IIS
- Discrepancy Overlay: XX
- Descriptive Report: IIS
- Field Inspection Photographs: IIS
- Forms: IIS

### Signature

- Signature of Compiler: V. P. Gaekowski
- Signature of Supervisor: M. M. Slavney
- Signature of Reviewer: M. M. Slavney

---

### Field Completion Additions and Corrections

Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted in remarks on reverse side.

---

### Use Reverse Side for Remarks
FIELD EDIT REPORT

T-12280

A field edit report was not submitted.

An ozalid discrepancy print was furnished the field editor; all questions were answered, and shoreline changes in the island "Bird Banks" were shown.

New roads and changes in road classification were shown on cronapaque ratio prints 63-W-3079 thru 3081.

W. M. Slattery
<table>
<thead>
<tr>
<th>Time</th>
<th>Height of tide</th>
<th>Height x Ratio of ranges</th>
<th>Time</th>
<th>Time difference</th>
<th>Corrected time at Subordinate station</th>
</tr>
</thead>
<tbody>
<tr>
<td>5:46</td>
<td>5.2</td>
<td>0.0 = 5.2</td>
<td>5:46</td>
<td>+ 0:05</td>
<td>11:52</td>
</tr>
<tr>
<td>11:52</td>
<td>-0.2</td>
<td>0.0 = -0.2</td>
<td>12:04</td>
<td>- 0:12</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time</th>
<th>Height</th>
<th>Tabular correction</th>
<th>Stage of tide above MLW</th>
<th>Feature above MLW</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:52</td>
<td>-0.2</td>
<td>+ 0.1</td>
<td>Feature bares</td>
<td>Stage of tide above MLW</td>
</tr>
</tbody>
</table>

Computed by: CR
Checked by: BS
61. GENERAL STATEMENT

See summary accompanying Descriptive Report (page 6).

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS

T-5390  1:10,000 scale  1934
T-5391  "   "  "
T-5392  "   "  "

(200 meters of shoreline)

An overlay comparison print of T-12280 is submitted with the differences noted:

The combined registered surveys cover all of this map excepting the island BIRD BANKS. The size and position of this island is subject to frequent change, and no registered coverage has been provided.

The Atlantic shoreline of Bull Island has had considerable change. The southern coastline has receded up to 110 meters; the 1942 description of triangulation station BOWER 1942 says "the station is about 85 meters northwest of a point where vegetation and beach meet". The station now is only about 25 meters northwest of high water line as mapped. Neither the original description nor the 1963 recovery of BOWER 1942 gave a distance to the mean high water line.

The eastern coastline of Bull Island appears to have shifted westward from about 10 meters at the south end to about 220 meters at Northeast Point. The largest change is at y coordinate - 1,000,000 feet, where the shoreline has receded about 280 meters; and at Northeast Point the entire land area appears to have shifted westward about 220 meters.

The wreck on T-5390, at latitude 32° 59.7' longitude 79° 32.2', which could not be seen during compilation, has been recommended for deletion by the hydro party according to the field editor.

The shoreline at Bull Harbor and Bull Bay has in some areas remained the same, whereas in some areas it has receded about 100 meters.

The Intracoastal Waterway has been widened to about double its 1934 width of 50 meters to about 100 meters.

The size and shape of White Island has changed considerably, the area now is about twice as large.

See Item 65 for information on the "wreck" at latitude 32° 59.7' longitude 79° 32.2'.

There is now an inlet (ferry slip) called Wharf Creek in the south bank of Summerhouse Creek.

This map supersedes the listed prior surveys for nautical chart construction.
63. **COMPARISON WITH MAPS OF OTHER AGENCIES**

**U. S. G. S. - BULL ISLAND, SOUTH CAROLINA** 1:24,000 1959

There have been obvious changes in the size and shape of White Island, Bird Banks, and at Northeast Point of Bull Island.

At the junction of this map with T-l2279, at longitude 79° 37' 30" at latitude 32° 58.7', and latitude 32° 58.9', on the north side of the Intracoastal Waterway, the field inspector indicated "Ma" and an unindented shoreline. The quadrangle shows two water indentions off the Intracoastal Waterway about 300 ft. wide and several hundred feet long.

64. **COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS**

<table>
<thead>
<tr>
<th>Boat sheets:</th>
<th>HFP-20-1-63</th>
<th>1:20,000</th>
<th>No date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>20-1-63 (overlay)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PE 20-3-63</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The portions of the boat sheets covering this survey are in agreement with a minor variance at Northeast Point on Bull Island.

65. **COMPARISON WITH NAUTICAL CHARTS**


Chart 1238, 1:80,000 scale, 4th edition, May 10, 1965. Chart 837 S.C. did not cover all the area on this map, therefore, Chart 1238 has also been used.

Both charts show the Intracoastal Waterway too narrow, by 30 to 50 meters.

Chart 837 S.C. shows no name for White Island, and shows Bird Banks as Bird Island.

The wreck at latitude 32° 59'.7 longitude 79° 32'.2 on both charts has been recommended for deletion by the Hydro party according to the field editor.

Neither the field inspector or the field editor indicated any rocks in the vicinity of White Island (lat. 32° 59'.6, long. 79° 33'.1 and lat. 32° 59'.8 long. 79° 33'.1), on both charts.

Both charts show Andersonville Creek as Anderson Creek.

66. **ADEQUACY OF RESULTS AND FUTURE SURVEYS**

This survey complies with the instructions and meets the National Standards of Map Accuracy.

Future surveys should verify the existence of the rocks referred to in Item 65.
Reviewed by

M. M. Slavney

Approved by

J. M. Bull
Norfolk Regional Officer

Approved by

Charles C. Greene
Chief, Cartographic Branch
Photogrammetric

L. G. Workcock
Chief, Photogrammetry Division

Chief, Chart Division

Chief, Operations Division
Nautical charts 8358C and 1238 show rock symbols at latitude 32° 59'.6, longitude 79° 33' and latitude 32° 59'.8, longitude 79° 33'.1. Neither the field inspector nor the field editor made any mention of rocks in this vicinity. Perhaps the sounding records may furnish some information.

The boat sheets shorelines are in agreement with this map excepting a minor variance at Northeast Point on Bull Island.