**Type of Survey** | TOPOGRAPHIC  
---|---  
**Field No.** | Office No. T-8993  
**Locality** |  
**State** | NORTH CAROLINA  
**General locality** | PAMLICO SOUND  
**Locality** | BLUFF POINT  
**Year** | 1951  
**Chief of Party** | E. R. McCarthy, Chief of Fd. Party  
| Arthur L. Hardwell, Tampa Photogrammetric Office  
**Library & Archives** |  
**Date** | July 17, 1953
DATA RECORD

Project No. (II): Ph-20 (177)  Quadrangle Name (IV): Bluff Point, N.C.
Photogrammetric Office (III): Tampa, Florida  Officer-in-Charge: Arthur L. Wardwell
Instructions dated (II) (III): 23 July 1948  Copy filed in Division of
Method of Compilation (III): Graphic  Photogrammetry (IV)
Manuscript Scale (III): 1:20,000  Office Files
Scale Factor (III): None  Inapplicable
Date received in Washington Office (IV): 1-23-51
Date reported to Nautical Chart Branch (IV):
Applied to Chart No. Date: Date registered (IV): 12 Jan 1953
Publication Scale (IV):
Geographic Datum (III): N.A. 1927
Vertical Datum (III):
Reference Station (III): Bluff, 1933
Mean sea level except as follows:
Elevations shown as (25) refer to mean high water
Elevations shown as ($) refer to sounding datum
i.e., mean low water
Lat.: 35° 19' 32"724 (1008.5M)  Long.: 76° 09' 21"096 (532.8M)
Adjusted
Plane Coordinates (IV): Lambert
State: N.C. Zone:
Y = 585, 621.37  X = 2,848, 230.21

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.
All contouring done by:

Elmer L. Williams
Cartographer

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

Field Inspection by (II): E. L. Williams  

Date: 23 May 1949

Planetable contouring by (II): E. L. Williams  

Date: 23 May 1949

Completion Surveys by (II): James E. Hundley  

Date: 3 Aug 1951

Mean High Water Location (III) (State date and method of location): Air Photo Compilation Photographs 29 Mar 1948  

Date: 23 May 1949


Date: 9 June 1948

Projection and Grids checked by (IV): W. E. W. ( )  

Date: 9 June 1948

Control plotted by (III): R. R. Wagner  

Date: 29 Sept. 1948

Control checked by (III): B. F. Lampton  

Date: 5 Oct. 1948

Radial Plotter Stereoscopic Contour Extension by (III): M. M. Slavney  

Date: 16 June, 1950

Stereoscopic Instrument compilation (III): Planimetry Inapplicable Contours  

Date:  

Date:  

Manuscript delineated by (III): W. W. Dawsey  

Date: 9 Aug. 1950

Photogrammetric Office Review by (III): J. A. Giles  

Date: 27 Sept. 1950

Elevations on Manuscript checked by (II) (III): J. A. Giles  

Date: 21 Sept. 1950
**PHOTOGRAPHS (III)**

<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>22247</td>
<td>29 March 1948</td>
<td>15:44</td>
<td>1:20,000</td>
<td>No periodic tide</td>
</tr>
<tr>
<td>22248</td>
<td></td>
<td>15:45</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22250</td>
<td></td>
<td>15:50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Tide (III)**

Reference Station: No periodic tide

Subordinate Station: No tidal stations

Washington Office Review by (IV): *Everett H. Ramey*

Final Drafting by (IV): USGS

Drafting verified for reproduction by (IV): *Everett H. Ramey*

Land Area (Sq. Statute Miles) (III): 13.0

Shoreline (More than 200 meters to opposite shore) (III): 15.3

Shoreline (Less than 200 meters to opposite shore) (III): 1

Control Leveling - Miles (II): 0

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

Number of BMs searched for (II): 0 Recovered: 0 Identified: 0

Number of Recoverable Photo Stations established (III): 4

Number of Temporary Photo Hydro Stations established (III): None

Remarks: *The periodic tide is negligible.*
Summary to Accompany Map T-8993

T-8993

Topographic map is one of 32 similar maps of Project Ph-20(47). It covers a portion of Pamlico Sound from Juniper Bay to East Bluff Bay and land area adjacent.

Project Ph-20(47) is a graphic compilation project. Operations preceding compilation included complete field inspection and the recovery and identification of horizontal control.

The map was compiled at a scale of 1:20,000 and covers 7½' in latitude by 7½' in longitude. The entire map was field edited. Hydrographic data will be added to the map by the Division of Charts. The map will then be published by the Geological Survey as a standard topographic quadrangle.

Items registered under T-8993 will include a cloth-mounted lithographic print of the map manuscript at a scale of 1:20,000, a cloth-mounted color print at a scale of 1:24,000, and the original descriptive report.
FIELD INSPECTION REPORT
Quadrangle T-8993
35-15/76-07.5/7.5
Project Ph-20(47)

E. R. McCarthy, Chief of Party

The field work for this quadrangle was done in accordance with the Director's instructions, Project Ph-20 (47), Field, dated 23 July, 1948, and other instructions as noted herein. The field work was accomplished by:

<table>
<thead>
<tr>
<th>Name and Title:</th>
<th>Phase</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>E. L. Williams</td>
<td>Contours</td>
<td>March 20</td>
</tr>
<tr>
<td>Cartographer</td>
<td>Horizontal Control to Recovery, Shoreline</td>
<td></td>
</tr>
<tr>
<td></td>
<td>and Field Inspection</td>
<td>May 23, 1949</td>
</tr>
</tbody>
</table>

This report is written in accordance with Chapter 7, Paragraph 724, of the preliminary edition of the Topographic Manual dated June, 1949.

2. AREAL FIELD INSPECTION

The quadrangle is uninhabited and is accessible only by water. The land mass consists of 15 square miles, of which about one sixth is marsh and the remainder very flat wooded land, which is usually flooded in winter. Along the northern limits of the quadrangle is a beginning of an extensive band of more open area grown up in reeds. This open area does not flood; however, numerous pot holes caused by fires are full of water during the winter or wet season.

The only cultural features are: (1) Phillips Canal, which was dredged in an unsuccessful attempt to drain and farm the land between it and the Outfall Canal, and (2) A 3 mile fire break originally cut by the C.C.C. and still cleared at irregular intervals by the U. S. Wildlife Service. The quality of the photographs was satisfactory. No difficulty was encountered in interpretation.

The field inspection is believed to be complete.

3. HORIZONTAL CONTROL

The only station, BLUFF 1933, in the quadrangle was recovered and identified.
4. VERTICAL CONTROL

(a) Inapplicable

(b) No level readings were run. The water level was used to control the contours. A check was made at the New Holland bridge over the Outfall Canal each morning and night to determine the average water level for each working day.

5. CONTOURS AND DRAINAGE

Elevations were determined by plantable supplemented by hand level lines, using the water levels of the canals as described in Paragraph 4 (b) as a datum.

Horizontal location of level points was determined by plantable traverse directly on the nine-lens photos using identifiable features for control.

All natural elevations are two feet or less. Some of the spoil banks along the Phillips Canal reach an elevation of 5'.

Drainage is not well defined. The short creeks or guts which extend into the marsh from the sound narrow rapidly and become indefinite on entering the wooded areas.

The main drainage inshore of the marsh area seems to be by seepage.

6. WOODLAND COVER

The cover was classified in accordance with Chapter 5, Paragraph 5433 of the preliminary edition of the Topographic Manual dated June, 1949.

7. SHORELINE AND ALONGSHORE FEATURES

(a) All the shoreline is apparent except where sand has built up as a beach in protected small bights. At these points M.H.W.L. has been definitely identified only where the length of the beach exceeds 30 meters.

(b) Pamlico Sound has no periodic tide, consequently, mean low-water line is the same as mean high-water line. See tide data at the beginning of this report.

8. OFFSHORE FEATURES

A wreck of a small 45' wooden fishing boat, identified on the photo, is 2' above M.H.W. It is now breaking up. The cabin is gone, although the hull will probably remain for several years. The wreck was visited and distances above the water level measured with a steel tape.
A wreck of a large steel cargo ship about 7 miles offshore was not visited. Two cuts were taken to it. It appeared to be about 300 feet long, and is estimated to be 30' above M.H.W. It now appears on chart 1231.

(d) The only fixed aid (GREAT ISLAND LIGHT) was located by Theodolite cuts.

10. **BOUNDARIES, MONUMENTS, AND LINES**

For legal descriptions of all boundaries in the project, see "Special Boundary Report", which has been submitted by Mr. Wilbur H. Nelson, and Supplemental Boundary Report by Mr. A. J. Wraght, which will be submitted. Both reports filed in Div. of Photogrammetry. See item 56.

No boundary monuments are in the quadrangle.

11. **OTHER CONTROL**

Recoverable topographic stations established are:

1. JARS 1949
2. TAIL 1949
3. TUBE 1949
4. SLOW 1949
5. TAKE 1949

(1) Falls on T-8992.\*\textsuperscript{**}H Filed under T-8992.

12. **OTHER INTERIOR FEATURES**

Inapplicable.

13. **GEOGRAPHIC NAMES**

This will be the subject of a special report, which will be submitted by Mr. A. J. Wraght, filed in Geographic Names Section, Div of Charts.

14. **SPECIAL REPORTS AND SUPPLEMENTAL DATA**

Geographic Names Report (to be submitted) See item 13
Boundary Report submitted 14 February, 1949 to Washington, D.C. See item 10
Transmitting letter with all Quadrangle Data forwarded with this report to Tampa.

15. **SWAMP**

Classification of swamp was complicated by the fact that, during field inspection, the entire area, except for marsh, was dry. However, evidence of its having been very wet were plain. In the open grassy and reed (locally called Savannah) areas, the water would probably be confined to scattered small holes made by ground fires.
Opinions of hunters, who have been in the area in the winter, and employees of the U. S. Wildlife Service, who have been in the area at all seasons, are to the effect that the woods are very wet in the fall and winter and tend to dry up in spring and summer. Differences of opinion are expressed about the savannahs.

All wooded areas have been classified as swamp. All open areas (savannahs) and the groups of trees in the open area have been classified as either "open" or "T".

25 May 1949
Submitted by:

E. L. Williams
Cartographer

Approved
25 May 1949

E. R. McCarthy
Chief of Party
Photogrammetric Plot Report

This report covers the plot for maps T-8973 to T-8976 inclusive, T-8984 to T-8986 inclusive, T-8993 and T-8994, and is filed as part of the descriptive report for T-8974.
<table>
<thead>
<tr>
<th>STATION</th>
<th>SOURCE OF INFORMATION (INDEX)</th>
<th>DATUM</th>
<th>LATITUDE OR ( y )-COORDINATE</th>
<th>LONGITUDE OR ( x )-COORDINATE</th>
<th>DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS</th>
<th>DATUM CORRECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUFF, 1933</td>
<td>G.P.s 363</td>
<td>N.A.</td>
<td>35 19</td>
<td>32.724</td>
<td></td>
<td>1,008.5(840.6)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1927</td>
<td>76 09</td>
<td>21.096</td>
<td></td>
<td>532.8(982.6)</td>
</tr>
</tbody>
</table>

1 FT. = 304.8006 METER

COMPUTED BY B. F. Lampton  DATE 22 Sept. 48

CHECKED BY R. R. Wagner  DATE 27 Sept. 48
PHOTOGRAMMETRIC PLOT REPORT
To be submitted with T-8974. Filed as part of Descriptive Report for T-8974.

31. Delineation
The manuscript was delineated by graphic methods.
The photographs and the field inspection were adequate for delineation. No difficulties were encountered.

32. Control
Sufficient control was provided and placement was good.

33. Supplemental Data
None used.

34. Contours and Drainage
No difficulty was encountered in the delineation of drainage. Carrying contours were shown along the Phillips Canal and sufficient elevations were shown to depict the character of the land.

35. Shoreline and Alongshore Details
The shoreline inspection was adequate. All shoreline was shown according to the field inspection. No piers or other alongshore details were noted on the photographs.

36. Offshore Details
One wreck was shown as discussed under Item 8.

37. Landmarks and Aids
The one aid could not be positively located from the list of directions submitted and will have to be located by the field editor. See Item 57.
38. CONTROL FOR FUTURE SURVEYS

Four cards, form 521, are submitted herewith and are listed under Item 49. Topographic station JARS, 1949 listed in Item 11 of the field inspection report falls on adjoining quadrangle T-8992.

* Filed in Div. of Photogrammetry

39. JUNCTIONS

Quadrangle T-8984 to the north in agreement.
Quadrangle T-8994 to the east in agreement.
Quadrangle T-8992 to the west in agreement.
Familco Sound to the south.

40. HORIZONTAL AND VERTICAL ACCURACY

No statement. See item 52

46. COMPARISON WITH EXISTING MAPS

None available. See item 62

47. COMPARISON WITH NAUTICAL CHARTS

Comparison was made with chart 1231, scale 1:80,000, published 1938 (8th edition), corrected to 23 December 1949. No noteworthy differences exist. See item 65

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None.

ITEMS TO BE CARRIED FORWARD

None.

Webber W. Dawsey
Cartographic Survey Aid.

Approved and Forwarded

Arthur L. Wardwell
Chief of Party
49. **NOTES FOR THE HYDROGRAPHER**

The following topographic stations are usable for hydrographic control:

TAIL, 1949  
TUBE, 1949  
SLOW, 1949  
TAKE, 1949

**NOTE:**

The following features have been omitted from the map manuscript because positions and shapes could not be determined:

BLUFF POINT LUMP  
BLUFF POINT SHOAL  
CUNNING SHOAL  
DOE CREEK  

END
PHOTOGRAMMETRIC OFFICE REVIEW

T- 8993


CONTROL STATIONS


ALONGSHORE AREAS

(Nautical Chart Data)


PHYSICAL FEATURES


CULTURAL FEATURES


BOUNDARIES


MISCELLANEOUS


40. [Signature: Jesse A. Unger]

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.

Compiler [Signature: [Blank]] Supervisor [Signature: [Blank]]
51. METHODS

The field edit of this area was accomplished by traversing the shoreline by skiff.

Corrections and additions were made by standard surveying methods in conjunction with visual inspection.

All corrections, additions and deletions have been noted on the field edit sheet.

The reviewer's questions are answered on the discrepancy print, field edit sheet, or, in this report.

A legend appears on the field edit sheet which is self-explanatory.

The actual field work was accomplished in five days in July, 1951.

52. ADEQUACY OF COMPILATION

The map compilation is adequate and will be complete after field edit data has been applied. See item 66

53. MAP ACCURACY

The horizontal accuracy of the map detail is relatively good. See item 66

54. RECOMMENDATIONS

None.

55. EXAMINATION OF PROOF COPY

It is believed that Mr. Joseph S. Mann of Fairfield, N. C. is best-qualified to examine a proof copy of this work.
Ref. to Item 48 - Compilation Report.

1. DOE CREEK

This very small creak has been obliterated by the digging of a ditch in its course. However, local inhabitants still refer to this feature as Doe Creek.

2. CUNNING HARBOR ISLAND

This feature is the marsh island southeast of Cunning Harbor Bay on which topographic station Tube is located. Authority for application of name for this feature is as follows: (a) Albin Emory, Swan Quarter, N. C.; (b) Hessey Brown, Swan Quarter, N. C.; and (c) Emmett Carawan, Swan Quarter, N. C. These three persons have resided in Swan Quarter, N. C. from thirty to fifty years and have always known this island as named above.

3. PHILLIPS CANAL

This is the correct name for this feature according to the three persons listed in the above paragraph.

56. BOUNDARY LINES AND MONUMENTS

Ref. to Item 10 - Field Inspection Report, and reviewer's question on discrepancy print.

A search was made for boundary markers on the Culrock Refuge boundary, but none were recovered. See Item 47

57. AIDS TO NAVIGATION

Ref. to Item 37 - Compilation Report.

The plotted position, on the field edit sheet, of Great Island Light was obtained by theodolite cuts. The mean of three directions was recorded for all positions observed. Forms 2LA are submitted for the stations occupied. By concluding triangles at the light, a right and left angle were computed whereby the light was checked with a three arm protractor. Form 567 is submitted with this report.

58. WOODLAND COVER

Ref. to Item 6 - Field Inspection Report.

Reclassification of vegetation has been shown on the field edit sheet.
All areas classified as "Marsh" are true or marginal marsh.

All areas classified as "Trees" are completely covered by pine trees.

All areas classified as "Swamp" consist of swamp gum, cypress, juniper and some scattered pine.

59. JUNCTIONS

Satisfactory junctions have been made with all adjacent quadrangles.

3 August 1951
Submitted by:
James E. Hundley
Cartographer

16 August 1951
Approved by:
Harry F. Garber
Commander, USCGS
Chief of Party
TO BE CHARTED

TO BE CHARTED

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 Webber W. Dawsey

Tampa Photogrammetric Office

Arthur L. Hardwell

Chief of Party

<table>
<thead>
<tr>
<th>STATE</th>
<th>NORTH CAROLINA</th>
<th>CHARTING NAME</th>
<th>DESCRIPTION</th>
<th>LATITUDE</th>
<th>LONGITUDE</th>
<th>SIGNAL NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>LIGHT</td>
<td>GREAT ISLAND, Red slatted pile structure</td>
<td>35 17</td>
<td>1106</td>
<td>76 14 88</td>
</tr>
</tbody>
</table>

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 surveys sheets. Information under each charting description.
48. **GEOGRAPHIC NAME LIST**

- BLUFF POINT
- **BLUFF POINT LUMP**
- **BLUFF POINT SHOAL**
- BUCK CREEK
- CUNNING HARBOR BAY
- **CUNNING SHOAL**
- **DOE CREEK**
- DRUM POINT
- EAST BLUFF BAY
- HARBOR CREEK
- HYDE COUNTY
- JUNIPER BAY
- JUNIPER BAY POINT
- LAKE LANDING TOWNSHIP
- LAUREL CREEK
- NORTH CAROLINA
- PAMLICO SOUND
- **PHILLIPS CANAL**
- SOUTHWEST BAY
- SWANQUARTER NATIONAL WILDLIFE REFUGE
- SWANQUARTER TOWNSHIP
- WEST BLUFF BAY

* These names were not shown on the map manuscript because of inability to determine their positions and shapes on photographs. Not on manuscript. See item 55.

**Name is shown on manuscript in pencil and on discrepancy overlay to be investigated by field editor. Reference Item 2, paragraph two, page seven.

Names approved, subj to F.E.
2-19-51
A.J.W.
REVIEW REPORT
Topographic Map T-8993
4 December 1951

62. **Comparison with Registered Topographic Surveys:**

T-1384a  1:20,000  1874-75

Map T-8993 is to supersede this survey for nautical charting purposes for common areas.

63. **Comparison with Maps of Other Agencies:** None

64. **Comparison with Contemporary Hydrographic Surveys:** None

65. **Comparison with Nautical Charts:**

1231  1:80,000  50-2/20

Chart does not show Phillips Canal, a minor ditch. No other significant differences were noted. See item 68.

66. **Adequacy of Results and Future Surveys:**

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

67. **Boundaries:**

Gulrock Refuge was not positioned by this survey. According to item 57 of Descriptive Report T-8985, this refuge has not been surveyed and is presently untended. A plat of the refuge is included as part of the Supplemental Report on Boundaries for Project Ph-20(47), which is filed in the Division of Photogrammetry.

68. **Offshore Features:**

The position of the wreck referred to in paragraph 2, item 9, was obtained during this review by plotting the control stations used by the field party and measured angles directly on Nautical Chart 1231. The instrument stations used by the field party were of fourth-order accuracy. Some reference directions were to fourth-order stations. The position thus obtained is approximately 0.2 mile eastward of that shown on Nautical Chart 1231 and the position should be accurate to 0.1 minute in latitude and longitude or better. The new position is:

\[
\begin{align*}
\text{Lat. } & 35^\circ 14'.2' \\
\text{Long. } & 76^\circ 13.6'.
\end{align*}
\]

Reviewed by:

[Signature]

Everett H. Ramey
Approved by:

L.V. Griffith
Chief, Review Section, Div. of Photogrammetry 7-1-53

H.C. Edmonton
Chief, Nautical Chart Branch Division of Charts

W.J. Jones Jr.
Chief, Div. of Photogrammetry

Carl O. Kirkman
Chief, Div. of Coastal Surveys
History of Hydrographic Information
T-8993
Vicinity of West Bluff Bay, N. C.

Hydrography was applied to the map manuscript in accordance with the general specifications of 18 May 1949.

The depth curves and soundings are in feet at mean low water and originate with the following U.S.C. & G. S. hydrographic surveys:

H-1226 (1874) 1:20,000
H-1227 (1874) 1:40,000

These surveys comprise the latest available information as of the date of this compilation. Comparison was made with Nautical Chart 1231, scale 1:80,000, latest print date of 11-12-51.

The depth curves are shown at 6 and 12 feet.

Hydrography was compiled by Everett H. Ramey on 17 January 1952 and verified by R. E. Elkins on 18 January 1952.

[Signature]

Everett H. Ramey
18 January 1952