

8993

ORIGINAL

Diag. Cht. No. 1231-2

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey TOPOGRAPHIC

Field No. Office No. T-8993

LOCALITY

State NORTH CAROLINA

General locality PAMLICO SOUND

Locality BLUFF POINT

1951

CHIEF OF PARTY

E. R. McCarthy, Chief of Fd. Party
Arthur L. Wardwell, Tampa Photogram-
metric Office

LIBRARY & ARCHIVES

DATE July 17, 1953

B-1870-1 (1)

8993

DATA RECORD

Page 1

T - 8993

Project No. (II): Ph-20 (47) Quadrangle Name (IV): BLUFF POINT, N.C.

Field Office (II): Washington, N. C.

Chief of Party: E. R. McCarthy

Photogrammetric Office (III): Tampa, Florida

Officer-in-Charge: Arthur L. Wardwell

Instructions dated (II) (III): 23 July 1948

Copy filed in Division of
Photogrammetry (IV)

Office Files

Method of Compilation (III): Graphic

Manuscript Scale (III): 1:20,000

Stereoscopic Plotting Instrument Scale (III): Inapplicable

Scale Factor (III): None

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):

Publication date (IV):

Geographic Datum (III): N.A. 1927

Vertical Datum (III):

Mean sea level except as follows:

Elevations shown as (25) refer to mean high water

Elevations shown as (5) refer to sounding datum

i.e., mean low water ~~or mean lower low water~~

Reference Station (III): BUFF, 1933

Lat.: 35° 19' 32".724 (1008.5M) Long.: 76° 09' 21".096 (532.8M)

Adjusted

~~Unadjusted~~

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

23 May 1949

Projection and Grids ruled by (IV): W. E. W. (Washington Office) 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 Plot or Stereoscopic Control Extension by (III): M. M. Slavney Date: 16 June, 1950

Stereoscopic Instrument compilation (III): Planimetry Date: _____
 Contours Inapplicable 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

Camera (kind or source) (III): U S C & G S Nine lens, 8 $\frac{1}{4}$ " focal length

Number	Date	Time	Scale	Stage of Tide
22247	29 March 1948	15:44	1:20,000	No periodic tide *
22248	"	15:45	"	
22250	"	15:50	"	

Tide (III)

Reference Station: No periodic tide *

Subordinate Station:

Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range

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

Date: 4 Dec 1951

Final Drafting by (IV): USGS

Date:

Drafting verified for reproduction by (IV):

Date:

Proof Edit by (IV): Everett H. Ramey

Date: 27 May 1952

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

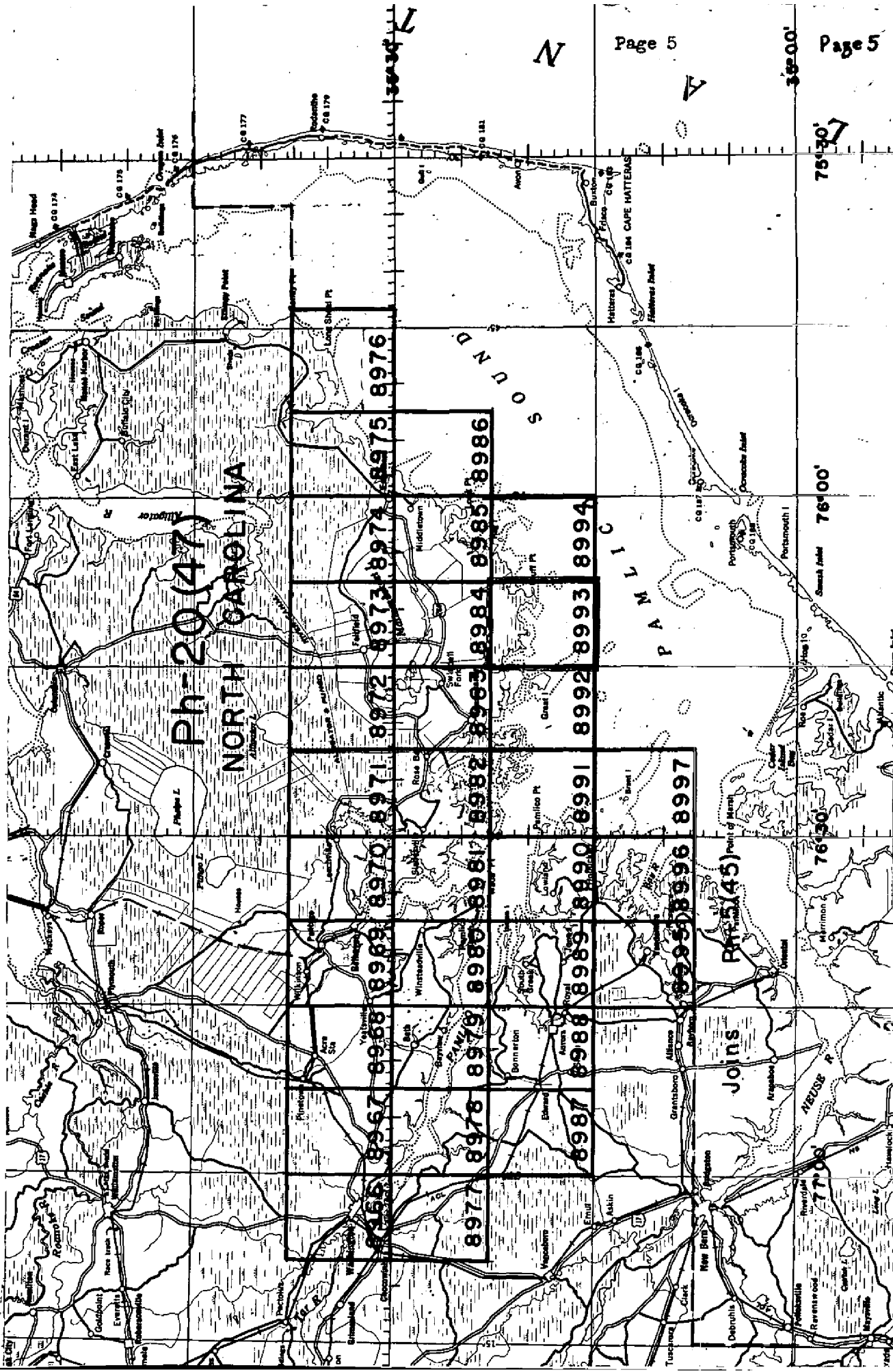
Recovered: 0

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. ^{ENR}
or less than $\frac{1}{4}$ foot -



Ph-20(47)

NORTH CAROLINA

Ph-5(45)

Joins

N

38°00'

75°30'

76°00'

76°30'

77°00'

Summary to Accompany Map T-8993

Topographic map^{T-8993} 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 $7\frac{1}{2}'$ in latitude by $7\frac{1}{2}'$ 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:

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

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^{area} 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, ^{BUFF}~~BLUFF~~ 1933, in the quadrangle was recovered and identified.

4. VERTICAL CONTROL

(a) Inapplicable

(b) No fly levels 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 planetable 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 planetable 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. *See item 68*

(d) The only fixed aid (GREAT ISLAND LIGHT) was located by Theodolite cuts. *See item 37*

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. Wraight, which will be submitted. *Both reports filed in the 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

Falls on T-8992. ^{ENR} 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. Wraight, *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. *See item 58*

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
E. L. Williams
Cartographer

Approved
25 May 1949

E. R. McCarthy
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.

MAP T. 8993

PROJECT NO. PH-20(47)

SCALE OF MAP 1:20,000

SCALE FACTOR 1.000

STATION

**SOURCE OF
INFORMATION
(INDEX)**

DATUM

LATITUDE OR y -COORDINATE
LONGITUDE OR x -COORDINATE

DISTANCE FROM GRID IN FEET.
OR PROJECTION LINE IN METERS

DATUM	CORRECTION
-------	------------

N.A. 1927 - DATUM
DISTANCE
FROM GRID OR PROJECTION L
IN METERS
FORWARD (BACK

FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FORWARD	(BACK)
1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24
25	26	27	28
29	30	31	32
33	34	35	36
37	38	39	40
41	42	43	44
45	46	47	48
49	50	51	52
53	54	55	56
57	58	59	60
61	62	63	64
65	66	67	68
69	70	71	72
73	74	75	76
77	78	79	80
81	82	83	84
85	86	87	88
89	90	91	92
93	94	95	96
97	98	99	100

BUFF, 1933

P. 363

N.A.
1927

35	19	32.724
76	09	21.096

1,008.5(840.6)
532.8(982.6)

008.5(840.6)
532.8(982.6)

1 FT. = .3048006 METER

COMPUTED BY: B. F. Lampton

DATE 22 Sept. 48

CHECKED BY: R. R. Wagner

DATE 27 Sept. 48

M. 2388.13

COMPILATION REPORT, T-8993

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 524,* 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. EHR

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.
 Pamlico 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
 Webber W. Dawsey
 Cartographic Survey Aid.

Approved and Forwarded

Arthur L. Wardwell
 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~~ ENK

T- 8993

CONTROL STATIONS

ALONGSHORE AREAS

PHYSICAL FEATURES

CULTURAL FEATURES

BOUNDARIES

MISCELLANEOUS

41. Remarks (see attached sheet)

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.

Supervisor

M-2623-12

FIELD EDIT REPORT
PROJECT PH-20(47)
QUADRANGLE T-8993

Harry F. Garber, Chief of Party

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 creek 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) Hussy 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 Gulrock Refuge boundary, but none were recovered. *See item 67*

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 24A 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, *copy attached to 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
James E. Hundley #79.
Cartographer

16 August 1951

Approved by:

Harry F. Garber
Harry F. Garber
Commander, USC&GS
Chief of Party

~~3 August~~, ~~1951~~

The positions given have been checked after listing by Webber W. Dansey

Arthur L. Wardwell

Chief of Party.

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 should be reported as follows:

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

Cunning Harbor Island

~~Gutrock Refuge~~ ²¹¹²
(not positioned)

Two words as per L.H.Eck.
See desc. report T-8983. L.H.ECK

* These names were not shown on the map manuscript because of inability to determine their positions and shapes on photographs. ²¹¹² 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.

X position after byd...

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:

Lat. 35° 14.2' / *Noted on*
Long. 76° 13.6' / *Air. Prof*

Reviewed by:

Everett H. Ramey
Everett H. Ramey.

-2-

Approved by:

L. V. Griffith
 Chief, Review Section R.M.
 Div. of Photogrammetry 7-9-53

J. H. Edmonston
 Chief, Nautical Chart Branch
 Division of Charts 5/2

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

Carl O. Heaton
 Chief, Div. of Coastal Surveys
 28d7

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.

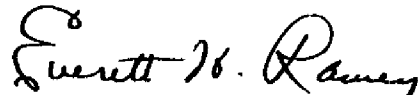
The depth curves and soundings are in feet at mean low water and originate with the following U.S.C. & G. S. hydrographic surveys:

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.



Everett H. Ramey
18 January 1952