

8733

20 1950

Diag'd. on Diag. Ch. No. 1233

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Topographic

Field No. Ph-5(45)C Office No. T-8733

LOCALITY

State North Carolina

General locality Long Bay

Locality Nelson Bay to Turnagain Bay

1946-'49

CHIEF OF PARTY

R.J.Sipe

LIBRARY & ARCHIVES

DATE September 15, 1949

B-1870-1 (1)

8733

<u>date</u>	<u>cht</u>	<u>cartographer</u>	<u>remarks</u>
9-29-69	419	I. Beiler	Fully applied after verification
6-9-70	1231	E. Tug	fully appd. via cht. 1233 #28

DATA RECORD

T-8733

Quadrangle (II):

Project No. (II): Ph-5(45)C

Field Office: Morehead City, N.C. Chief of Party: Lieut. Comdr. Riley J. Sipe

Compilation Office: Tampa, Fla. Chief of Party: Lieut. Comdr. R. A. Gilmore

Instructions dated (II III): Undated

Division of
Copy filed in Descriptive
Report No. T-
Photogrammetry Office Files

Completed survey received in office: 19 April 1948

~~28 Nov 1949~~

Reported to Nautical Chart Section: 26 April 1948

Reviewed: 9 June 1949 Applied to chart No.

Date:

Redrafting Completed:

Registered: 9 Sept 1949

Published:

Compilation Scale: 1:20,000

Published Scale: 1:24,000

Scale Factor (III): None

Geographic Datum (III): N.A. 1927

Datum Plane (III): M.S.L.

Reference Station (III): EXTRA 1932

Lat.: $34^{\circ} 57' 47.346''$ (1459.0m) Long.: $76^{\circ} 26' 02.636''$ (66.9m) Adjusted~~Unadjusted~~

State Plane Coordinates (VI):

X =

Y =

Military Grid Zone (VI)

PHOTOGRAPHS (III)

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
16001	5 April 1946	15:50	1:20,000	No perceptible tide in this area.
16002	"	15:51	"	
15993	"	15:12	"	
15994	"	15:13	"	

Tide from (III): No tide

Mean Range: Spring Range:

Camera: (Kind or source) U.S. C. & G.S. 9-lens, 8 $\frac{1}{4}$ " focal length

Field Inspection by: M.A. Stewart, J.R. Smith, R.A. Horn date: 7/16/47 to 8/20/47

Field Edit by: *E. T. Jenkins*

date: *Jan 1949*

Date of Mean High-Water Line Location (III): 8/18/47 to 8/20/47

All shoreline in the quadrangle is "apparent" No. mean high-water line was recovered. See item No. 7, Field Inspection Report.

Projection and Grids ruled by (III) T.L.J. Wash. O. date: 10-29-47

" " " checked by: H.D.W. " " date: 10-29-47

Control plotted by: R. Dossett date: Feb. 1948

Control checked by: B. F. Lampton date: Feb. 1948

Radial Plot by: M.M. Slavney date: 2 Mar. 1948

Detailed by: R. Dossett date: March 1948

Reviewed in compilation office by: J.A. Giles date: " "

Map Manuscript
Elevations on ~~Field Data Sheet~~
checked by: J.A. Giles

date: March 1948

STATISTICS (III)

Land Area (Sq. Statute Miles): 40

Shoreline (More than 200 meters to opposite shore): 28.8

Shoreline (Less than 200 meters to opposite shore): 6

Number of Recoverable Topographic Stations established: 3

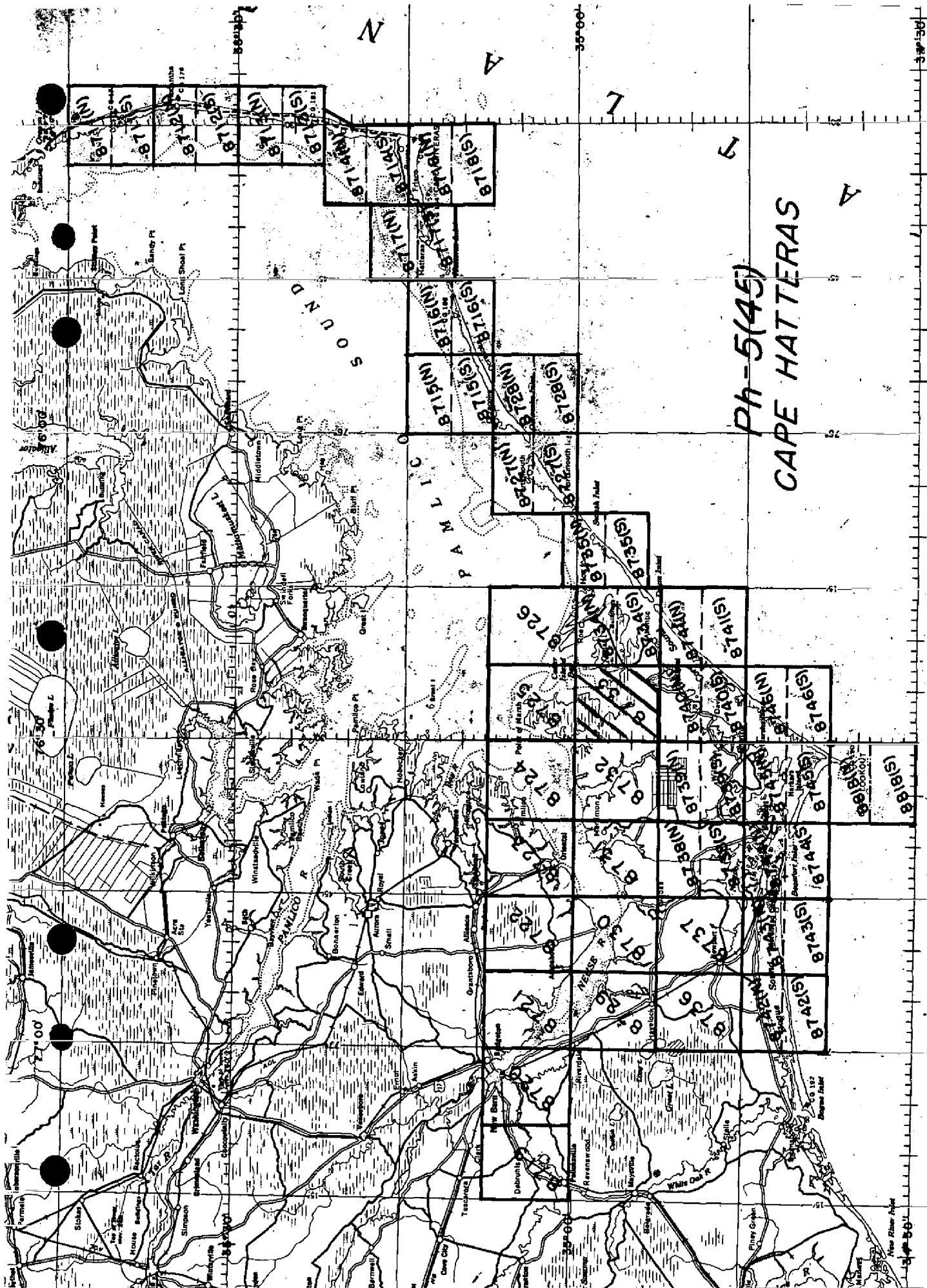
Photo-hydro
Number of ~~Temporary Hydrographic~~ Stations located by radial
plot: 0

Leveling (to control contours) - miles: 5

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

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

Remarks:



SYMBOLS
Project Ph-5(45), Subdivision A, B & C
1 March 1947

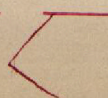
MEAN HIGH WATER LINE (fast Land).....	<u>3 mm</u> <u>minimum</u>
OFFSHORE EDGE OF MARSH (apparent shoreline).....	<u>3 mm</u> <u>minimum</u>
GRASS IN WATER.....	<u>Gr.</u>
MEAN LOW WATER LINE (approximate).....	.....
MEAN LOW WATER LINE (definite).....	.....
INSHORE EDGE OF MARSH.....	.....
INTERMITTANT DRAINAGE.....	.....
PERENNIAL DRAINAGE.....	.....
CONTOURS.....	<u>5</u> or <u>5</u>
PLANE TABLE ELEVATIONS.....	$\frac{1}{4}$ 12 or $\frac{1}{4}$ 12
FLY LEVEL ELEVATIONS.....	CE 107 12.7
BENCH MARKS.....	① E 247, 1947 Elev. 10.78
TOPO STATIONS (arbitrarily assigned name).....	— O SALE, 1946
TOPO STATIONS (natural name).....	— PIDGEON, 1946
TOPO STATIONS (additional Hydro Control, not named).....	— # 4506
LANDMARKS.....	— Land mark TANK (Elev.) - metal (5.5 high)
TRIANGULATION STATIONS.....	— Δ MINK, 1946
SUBSTITUTE STATIONS.....	— S. Sta. Δ HAPPY, 1950
BOUNDARIES (from U.S.G.S. Bulletin 788 E.....	
National, State.....	.....
County.....	.....
Civil Township, District, Precinct, etc.....	.....
Reservation.....	.....
City, Village.....	.....
Cemetery, small park, etc.....	.....

NOTE:

Shoreline should never be inked completely. At a point of detail from which a measurement to HWL is made the symbol should be used thus:

MHWL

35.0 m.



FIELD INSPECTION REPORT
T-8733 (34°52'5"/76°22.5/ 7.5
Project Ph-5(45)
Sub-project C
R.J. Sipe, Chief of Party

All phases of the field work were done in accordance with the Directors Instructions, Project Ph-5(45), Field, undated; supplement 1 to the above, dated 11 December, 1946, and Photogrammetry Instructions numbers 10 and 15, dated 14 April, 1947 and 16 June, 1947 respectively.

The field work on this quadrangle was accomplished by the following personnel:

<u>Name & Title</u>	<u>Field Work</u>	<u>Dates</u>
M.A. Stewart Engr. Aid.	Contours & interior Inspection	7 - 16 - 47 8 - 12 - 47
	Levels & vertical control Recovery	1 - 8 - 47 2 - 27 - 47
J.R. Smith Engr. Aid.	Levels	6 - 25 - 47 6 - 25 - 47
R.A. Horn Photogrammetrist	Shoreline & Recovery	8 - 18 - 47 8 - 20 - 47

1. Description of Area

A major portion of the land area of this quadrangle is referred to locally as the "Open Grounds". Actually this is a tangle mass of underbrush and briars thriving on very swampy land. Interspersed in this area are some stands of Pine; however they are of little importance commercially due to their inaccessability. Generally speaking the "Open Grounds" could be considered useless except for the Wildlife it might maintain.

U.S. Highway #70 runs through the southeastern part of this quadrangle.

2. Completeness of Field Inspection

It is felt that the field inspection is complete and adequate.

3. Interpretation of the Photographs

Since photography was of recent date no difficulty was encountered in the interpretation of the photographic detail.

4. Horizontal Control

All horizontal control stations were searched for in this quadrangle. It is felt that a sufficient number were recovered and identified for adequate compilation.

5. Vertical Control

Vertical control consisted of the recovery of existing Bench Marks, and the establishment of Bench Marks with 3rd order accuracy along U.S. Highway #70.

Five miles of Fly Levels were run along a ditch in the southern part of the quad, to facilitate contouring.

6. Contours & Drainage

Contouring was done on 1:20,000 scale photographs.

Normal Planetable procedures were employed in contouring and in the location of drainage. However, due to the nature of the "Open Grounds" as mentioned, hand level lines were used to some extent.

Drainage on the mainland is pronounced near the shoreline. The head waters, however, are very indefinite since they originate in the "Open Grounds". No definite pattern exists here because the rain fall is eliminated by seepage.

7. Mean High Water Line

The mean high water line, as such, is non-existent in this quadrangle. Since the major portion of the quadrangle is marsh, the shoreline is predominantly apparent shoreline.

8. Low Water Line

The location of low water line was not delineated in this quadrangle since that stage of tide was not encountered when the party was in the area. Tides in this section are not very perceptible and are influenced primarily by wind.

9. Wharves and Shoreline Structures

There are no wharves or shoreline structures in this quadrangle.

10. Details Offshore from High Water Line

No details offshore were noted.

11. Landmarks and Aids to Navigation

No landmarks exist within the limits of this quadrangle. Aids to navigation are reported on form #567.

12. Hydrographic Control

Topographic Stations were located in accordance with the instructions for this project.

13. Aeronautical Aids and Landing Fields

There are no Aeronautical Aids or Landing Fields within the limits of this quadrangle.

14. Roads Classification

All roads are classified in accordance with Photogrammetry Instructions No. 10, dated 14 April, 1947.

15. Bridges

There are no bridges over navigable waters within this quad.

16. Buildings and Structures

These items are adequately covered on the photographs.

17. Boundaries

~~There are no boundaries to be located in this quadrangle.~~

See Review Report.

18. Geographic Names

Geographic names will be the subject of a special report by Mr. A.J. Wraight, Topographic Engineer.

Submitted:

M. A. Stewart
M. A. Stewart ^{CEV.}
Engr. Aid.

R. A. Horn
R. A. Horn
Photogrammetrist

Approved:

Riley J. Sipe
Riley J. Sipe
Chief of Party

COMPILATION REPORT
TO ACCOMPANY
QUADRANGLE T-8733

26 AND 27. CONTROL AND RADIAL PLOT:

These are the subject of a special report to be submitted at a later date by Milton M. Slavney, Photogrammetric Engineer. *On file in Div. of Photogr. General Files*

Nine-lens photographs 16001, 16002, 15993 and 15994 were used for delineation. The following photographs in adjoining quadrangles were used in establishing detail points: 15964 and 15965 in quadrangle T-8725, 15995 in quadrangle T-8734 and 16021 in quadrangle T-8740. The photographs were of poor scale (approximately 1: 20,400) which required cutting in more detail points than usual.

The field inspection was satisfactory when consideration is given to the character of the terrain in this area. See paragraph 1 of Field Inspection Report.

The field inspector's symbolization of some areas has been questioned on the discrepancy overlay. This particularly applied to areas labeled "T.S." and which appeared photographically to be swamp.

29. SUPPLEMENTAL DATA:

None used.

30 AND 31. MEAN HIGH-WATER - LOW-WATER AND SHOAL LINES:

The entire shoreline of this quadrangle is apparent and has been so delineated by the compiler. See paragraph numbers 7 and 8 of Field Inspection Report. *See review report!*

32 AND 33. DETAILS OFFSHORE FROM THE HIGH-WATER LINE AND WHARVES AND SHORELINE STRUCTURES:

See paragraphs 9 and 10 of Field Inspection Report which cover these subjects adequately.

34. LANDMARKS AND AIDS TO NAVIGATION:

No landmarks exist within the limits of this quadrangle. Aids to navigation are reported on form No. 567.

35. HYDROGRAPHIC CONTROL:

Three recoverable topographic stations were established for the use of the hydrographer.

36. LANDING FIELDS AND AERONAUTICAL AIDS:

No landing fields or aeronautical aids appear within the limits of this quadrangle.

37. CONTOURS:

Only the southern half of this quadrangle carried sufficient elevations for contours. These have been delineated according to the field inspector's interpretation.

38. POLITICAL BOUNDARIES:

~~There are no boundaries to be located in this quadrangle.~~
See review report

39. GEOGRAPHIC NAMES:

Geographic names shown on the name sheet received from the Washington Office have been applied to the map manuscript.

44. COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES:

None available for comparison.

45. COMPARISON WITH NAUTICAL CHARTS:

A comparison was made with U.S. Coast and Geodetic Survey Chart No. 1233, (Portsmouth Island to Beaufort) scale 1: 80,000, bearing a print date of 7 September 1946. No shoreline changes were noted.

Respectfully submitted,

Rudolph Dossett
Rudolph Dossett,
Cartographer (Photo.)

Approved and Forwarded:

Ross A. Gilmore
Ross A. Gilmore,
Chief of Party. *sm*

NOTES TO COMPILER
QUADRANGLE T-8733
PROJECT Ph-5(45)
SUB-PROJECT C

R. J. Sipe, Chief of Party

Much material previously submitted in descriptive reports, while of value in compiling sheets, has little value on a permanent record; therefore, such material has been excluded from the descriptive report and is presented as "Notes to Compiler". It is recommended that these notes be retained until final office review, after which time they may be destroyed.

1. Horizontal Control

Horizontal control station #224, which is CLAM-1913, is plotted within the limits of this quadrangle on the Pamlico Sound - Cape Hatteras Horizontal Control layout sheet. Upon investigation of this station it was found that the description in no way coincides with the area. Although the geographic position does not indicate it, this station falls outside the limits of this project, according to the description. *See Review Report*

2. Stations to be Located by Radial Plot

Topographic Stations:

FRYD - 1947
GADD - 1947

Aids to Navigation to be located by Radial plot are as follows:

CEDAR ISLAND BAY LIGHT	5	(Theodolite Cuts	See form 24A)
TURNAGAIN BAY DAY BEACON	4	(Pricked Direct)	
TURNAGAIN BAY DAY BEACON	2	" "	(Quad 8724)
TURNAGAIN BAY DAY BEACON	1	" "	(Quad 8724)
THOROFARE WEST DAY BEACON		" "	
THOROFARE WEST LIGHT		" "	

Approved:

Riley J. Sipe
Chief of Party.

Submitted:

M. A. Stewart
Engr. Aid.

R. A. Horn
Photogrammetrist

NONFLOATING AIDS OR WANDMARKS FOR CHARTS

STRIKE OUT ONE

Morshhead City, N. C. 26 Aug. 1947

I recommend that the following objects which have 4446/1160 been inspected from seaward to determine their value as landmarks be charted on 4446/1160 the charts indicated.

The positions given have been checked after listing by I.I. Saperstein, Tampa Photogrammetric Office

Chief of Party.

STATE		North Carolina		CHARTING NAME		DESCRIPTION		SIGNAL NAME		POSITION				METHOD OF LOCATION AND SURVEY NO.		DATE OF LOCATION		HARBOR CHART		INSHORE CHART		OFFSHORE CHART		CHARTS AFFECTED			
LATITUDE		LONGITUDE		D.M. METERS		D.P. METERS		D.M. METERS		D.P. METERS		DATUM															
° ' "		° ' "		° ' "		° ' "		° ' "		° ' "																	
CEDAR ISLAND LIGHT		5										34 59		520'		76 24		272'		Rad Plot T8733		1947		X		1233 1231	
TURNAGAIN BAY DAY BEACON		4										34 59		430'		76 29		566'		"		"		"		"	
THOROFARE WEST DAY BEACON												34 56		377'		76 23		34'		"		"		"		"	
THOROFARE WEST LIGHT												34 56		76'		76 22		1454'		"		"		"		"	
TURNAGAIN BAY DAY BEACON		1																		Rad Plot T8724		1947		X		1233 1231	
TURNAGAIN BAY DAY BEACON		2																		"		"		"		"	

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 headings should be given.

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

STRIKE OUT ONE

Tampa Photogrammetric Office, Tampa, Fla., March 13 1969

The positions given have been checked after listing by Rudolph Dosset.

Tampa Photogrammetric Office

[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 as follows:

GEOGRAPHIC NAMES

Survey No. T-8733

1	Name on Survey	A	B	C	D	E	F	G	H	K	
	North Carolina ✓									USGB	1
	Carteret County ✓										2
	Open Grounds ✓		(large area, partly on several quadrangles)								3
											4
	Nelson Bay ✓										5
	Broad Creek ✓										6
	Broad Creek Point ✓										7
	Salters Creek ✓										8
	Mingo Creek ✓										9
	Thorofare ✓										10
	West Thorofare Bay ✓										11
	Bull Creek ✓										12
	Cedar Island ✓										13
	Cadduggen Creek ✓										14
	Goose Bay ✓										15
	Merkle Bay ✓										16
	Merkle Bay Point ✓										17
	Deep Bend ✓										18
	Tump Point ✓										19
	Tump Island ✓										20
	West Bay ✓		(pending with USBCN: charted as Cedar I. Bay) West Bay is final. USBCN decision in July, 1949. L.H.								21
	Long Bay ✓										22
	Long Bay Point ✓										23
	Owens Bay ✓										24
	Swimming Point ✓										25
	Volvee Camp ✓										26
	Golden Creek ✓										27

M 234

(pending with USBCN: charted as Cedar I. Bay)
 West Bay is final USBCN decision
 in July, 1949. L.H.

GEOGRAPHIC NAMES

Survey No. T-8733

2 Name on Survey

	A	B	C	D	E	F	G	H	K	
✓ Flag Creek ✓										1
✓ Benneys Creek ✓			(not Gut)							2
✓ Henrys Creek ✓										3
✓ Fur Creek ✓										4
✓ Stump Bay										5
✓ Piney Island ✓										6
✓ Piney Island Bay ✓										7
✓ Corn Sage Point ✓										8
✓ Jacks Bay ✓										9
✓ Jacks Bay Point ✓										10
✓ Dowdy Bay ✓										11
✓ Deep Gut ✓										12
✓ Big Gut ✓										13
✓ Hog Point ✓										14
✓ Sanborns Gut ✓										15
✓ Old Canal ✓										16
✓ Turnagain Bay ✓										17
U.S. No. 70										18
Merrimon Township.										19
Hunting Quarter "										20
Cedar Island "										21
										22
										23
										24
										25
										26
										27

Above underlined names based on chart usage and Wright's report, subject to final check by Field Edit. Only one name pending with USBGN. 4/19/49

added 7-7-41 L.H.

FIELD EDIT REPORT
QUADRANGLE T-8733
34°52.5 - 76°22.5/7.5'
Project Ph5(45)
E. R. McCarthy, Chief of Party

The field edit of this quadrangle was accomplished during January, 1949 by Elgan T. Jenkins, Cartographer. All work was performed in accordance with Field Edit Instructions, dated 24 August, 1945, and supplement 1, dated 4 February, 1946.

46 METHODS

This quadrangle was inspected by truck, traversing all existing roads. All features added to the map compilation were located by planetable, or by measurement from topographic features. All deletions and additions were made directly on the field edit sheet, with a legend showing the meaning of each color ink used.

Three theodolite cuts were taken on the Thorofare ^{two} West Daybeacon, and the Thorofare West Light. ~~Three~~ photo points were used, and are shown on photograph no. 15994. A list of directions (Form 24A) is being submitted for each photo point.

47 ADEQUACY OF THE COMPILATION

The compilation of this quadrangle was adequate, except for a few details overlooked during field inspection, and additions made since. These features are shown on the field edit sheet.

48 ACCURACY TESTS

No accuracy tests were required for this quadrangle, but it is believed to comply with the horizontal and vertical accuracy specifications.

The map compilation was reviewed by Mr. Clayton Fulcher, Jr., of Atlantic, N. C. and Mr. Robie Salter, of Sealevel, N. C. They could find no errors.

Approved:
February 1949
E. R. McCarthy
Chief of Party

Submitted:
February, 1949
E. T. Jenkins
E. T. Jenkins
Cartographer

Division of Photogrammetry
Review Report of T-8733

26 Control

Five triangulation stations fall within the limits of this quadrangle (see form M-2388-12 attached to this descriptive report). Under Notes to Compiler, the statement concerning station CLAM, 1913 may be in reference to station CLAM, 1932, which falls in Pamlico County - nearly due north of CLAM, 1913 by approximately 20 minutes of latitude. The plotted position of CLAM, 1913 falls about 25 meters from the delineated shoreline in Turnagain Bay. Station CLAM is not shown on the map manuscript.

30. Mean High Water Line

Only one short portion of fast shoreline (East shore of Nelson Bay) may be found on the Quadrangle, the balance is apparent shoreline.

43. Comparison with Previous Surveys

1074	1:20,000	1868
1277 (a and b)	1:20,000	1872
1306	1:20,000	1873
8044	1:20,000	1942-45

45 Comparison with Nautical Charts

1233	1:80,000	1942 (9/1-47)
420	1:40,000	1947 (1/13-47)

47. Adequacy of the Compilation

An examination of map manuscript T-8733 reveals it to be complete in all details as a topographic quadrangle and as a base map for common area nautical charts and hydrographic surveys.

48 Accuracy Tests

Horizontal.

No horizontal accuracy test was made. The combination of adequate nine-lens photographic coverage, nine-lens radial plot methods and adequate horizontal control insures a horizontal accuracy equal to or better than the National Map Accuracy Standards.

Vertical:

No vertical accuracy test was deemed necessary for this quadrangle.

Accuracy statement:

The published map will show the standard note regarding National Map Accuracy Requirements.

38. Political Boundaries

The boundaries of Merrimon, Hunting Quarter and Cedar Island Townships have been added to the map manuscript. BTH

Reviewed by:

J. J. Streifler

J. J. Streifler, 9 June 1949

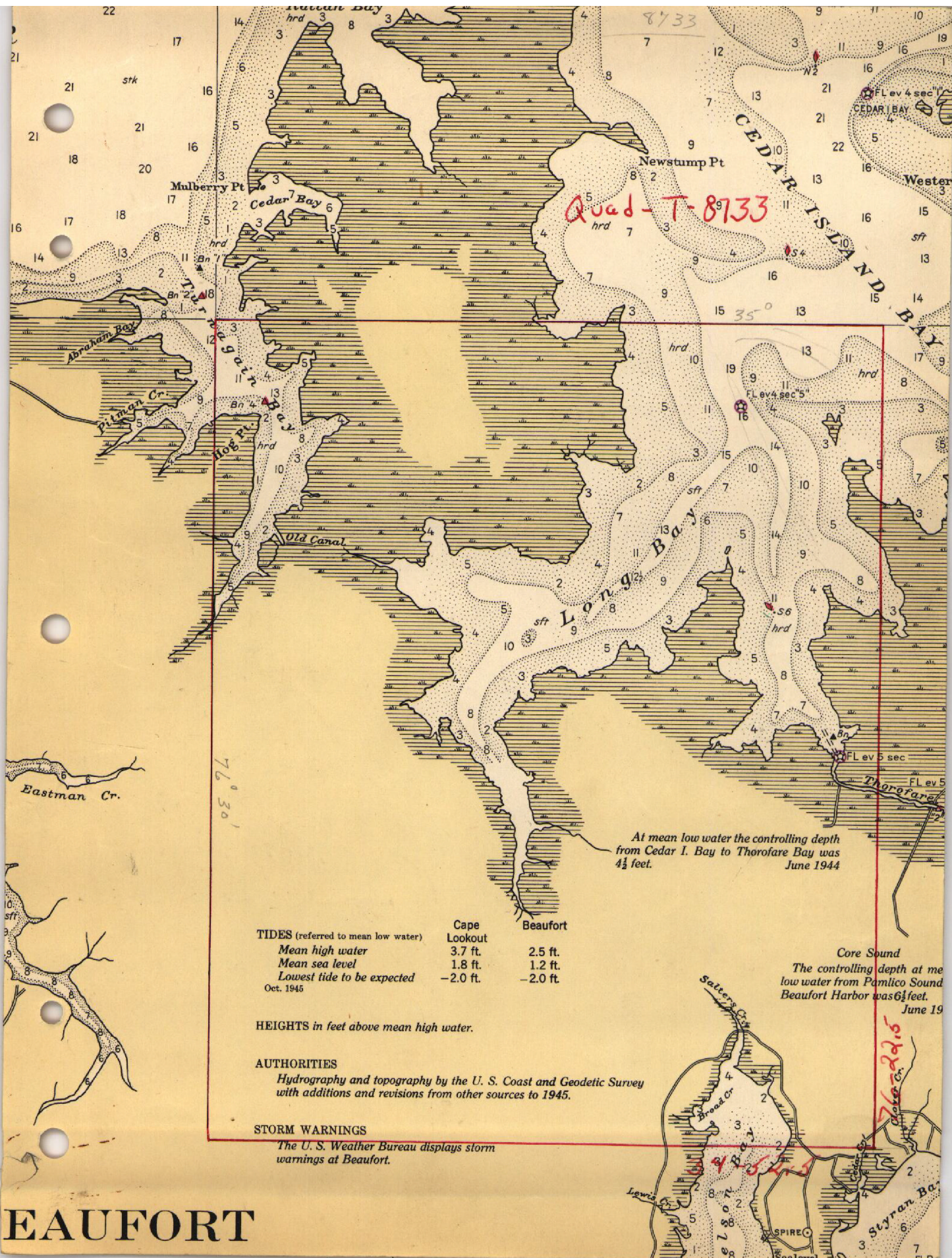
APPROVED BY:

A. V. Griffith
Chief, Review Section *K.M.*
Div. of Photogrammetry

H. Edmundson
Chief, Nautical Chart Branch

K. T. Adams
Chief, Div. of Photogrammetry

W. M. Scaife
Chief, Division of Coastal Surveys *WMS*



T-8733

Record of Work Subsequent to the Manuscript Review,
that is, Smooth Drafting, Checking, and Printing

Manuscript forwarded to the U. S. Geological
Survey for smooth drafting and publication.

Color proof furnished by the Geological Survey and
examined by _____

Name

Date

Published by the Geological Survey.