

5574

1234

Form 504
Rev. Dec. 1933
DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
R. S. PATTON, DIRECTOR

DESCRIPTIVE REPORT

Airphoto
Topographic

Sheet No. 5574

~~Hydrographic~~

State North Carolina

LOCALITY

~~Adam Creek - Corn Creek Canal~~

NEWPORT RIVER

BEAUFORT and Vicinity

1936

CHIEF OF PARTY

S. B. Grenell
S. B. Grenell

5574

Applied to CHN 421 - May 1938. J. S. S.

Applied to Cht. 1233, Mar. 23, 1939. K. P.

" " 420, Nov. 13, 1939. K. P.

Applied to chart dwg. (buff) August 14, 1941. L. Am.

NOTES ON COMPILATION

One copy of this form must accompany each chart from beginning to completion. The last draftsman, whose name appears on this form, is responsible for it and all personnel will endeavor to keep these forms up to date and correctly posted. This form is very important inasmuch as the final Descriptive Report of the Chart compiled is based upon the information contained herein.

Acc. 261 Photos 15-32
 " 262 37-48
 " 263 49-59
 " 265 72-86

SHEET NO. T-5574

PHOTO NO. _____ TO PHOTO NO. _____

BY _____ START _____ FINISH _____

ROUGH RADIAL PLOT J.B. Schell
 SCALE FACTOR(100) J.B. Schell
 SCALE FACTOR CHECKED J.A. Giles
 PROJECTION Washington, D.C.
 PROJECTION CHECKED J.B. Schell
 CONTROL PLOTTED J.B. Schell
 CONTROL CHECKED J.A. Giles
 TOPOGRAPHY TRANSFERRED J.B. Schell
 TOPOGRAPHY CHECKED _____
 SMOOTH RADIAL LINE PLOT J.B. Schell
 RADIAL LINE PLOT CHECKED _____
 DETAIL INKED J.B. Schell

AREA DETAIL INKED 84.7 sq. Statute Miles

LENGTH OF SHORELINE OVER 200 m. 74.7 Statute Miles

LENGTH OF SHORELINE UNDER 200 m. 89.6 Statute Miles

GENERAL LOCATION Beaufort, N.C.

LOCATION Adams Creek Canal to Beaufort Entrance

DATUM STATION ADAM-1931 Latitude 34-49-40.168 (~~1237.8~~)

Datum: N.A.-1927 Longitude 76-41-27.372 (~~1695.6~~) (adjusted)

Report of Compilation

no
T - 5574

GENERAL INFORMATION:

The photographs covering this compilation were flown ~~in~~ ^{on} Jan. 24, 1933. ~~1933~~ In January, 1933, the field prints were forwarded to the writer who was attached to the GILBERT basing at Morehead City, N. C. The area of this compilation was covered by field control sheet T-6000 on which points visible in the photographs were located for photo control. General field inspection of the photographs was also made at that time.

In February, 1936, the photographs were forwarded to the field for compilation and additional field inspection was made.

All of the fast land areas in this section are relatively low. Most of the heavily wooded sections are classed locally as "swamp" but are actually flooded for only a short portion of the year during the wet season. The areas more frequently flooded are wooded with a mixed growth of gum and cypress and the dryer ridges support pine, oak, maple, gum, with pine predominating in the dry, sandy sections. Most of the good timber has been logged off leaving a dense second growth of mixed deciduous and scrub pine.

The cleared and cultivated areas are scattered along the higher ridges where drainage is possible. There is probably no area on the whole compilation more than ten feet above mean high water.

The shoreline in general is not sharply defined because the low areas are subject to flood at extreme high water and almost all shoreline is fringed with a marshy growth which makes it difficult to delineate a definite H. W. L.

All photographs on the compilation are very poor. Most of them are badly tilted and were evidently flown on a hazy day because all detail has a grey, hazy appearance. This makes it exceptionally difficult to identify small objects such as houses even with the aid of the magnifying stereoscope. Fortunately the compiler was intimately acquainted with the country and was able to interpret the detail.

RADIAL LINE PLOT:

The intensive triangulation with the planetable control made it possible to rigidly hold the plot and secure excellent intersections between overlapping flights. The control was weakest along the north border of the compilation but a perfect junction was made with 1:10,000 compilation T - 5566. The radial plot also checked satisfactorily with aluminum control sheet T - 6000.

COMPARISON WITH CHART No. 420

The general comparison with the charted detail is very good considering the changeable nature of the country and the time elapsed since the last topographic surveys. There has been considerable shifting of the outer beaches and along the dredged channels where the spoil banks have been built up. The most prominent of these changes is the wooded island near the mouth of Core Creek which is charted as a sand shoal but which now supports a permanent growth of brush and small trees.

A bridge has been constructed from the Morehead City - Beaufort highway to the Marine Biological Station on the island. The bridge was built after the photographs were taken and it was necessary to tie in the structure on the field prints. The bridge is now correctly shown on the compilation.

CONSTRUCTION CHANGES:

A new port terminal is being constructed at Morehead City which includes extensive dredging for an anchorage basin and deepening of the entrance channel. New spoil banks are being thrown up and these, together with the deepening of the channel, will probably cause considerable topographic change. Local report is that the operations so far have caused a considerable increase in the tide range at Morehead City and vicinity. This will have an added effect on delineation of the H. W. L. of low areas.

ACCURACY AND COMPLETENESS:

The compilation is complete in every detail as far as can be determined from a close inspection of the photographs which are all of poor quality.

It is believed that no point of definite detail is in error from the true position by more than 2 m.m. Due to the excellent distribution of control over most of the compilation the general maximum error probably does not exceed 1 m.m.

LANDMARKS FOR CHARTS:

Form 567 is submitted in duplicate with this report.


NAMES ON OVERLAY SHEET:

All names were taken from the current issue of Chart 420. A list of these names is attached to this report.

BRIDGE DATA:

Location	Type	Clear Width			Vertical Clear.	
		L	C	R	M.L.W.	H.W.
Canal, Adams Ck.- Core Ck.	Hwy. Sw.	80	18.9		18.9	15.0
Newport R. - Morehead City	R.R. Sw.		50		5.4	2.7
" "	Hwy. B.		79		10.0	7.3
Gallant Chan.- Beaufort	R.R. B.		60		11.0	8.0
" "	Hwy. B.		60		10.0	7.3

Respectfully submitted,


S. B. Grenell,
Chief of Party.

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

Airphoto Compilation T-5574

Norfolk, Va.

October 15, 1936

DIRECTOR, U.S. COAST AND GEODETIC SURVEY:

The following determined objects are prominent, can be readily distinguished from seaward from the description given below, and should be charted:

S. B. Grenell

Chief of Party.

DESCRIPTION	POSITION						METHOD OF DETERMINATION	CHARTS AFFECTED	
	LATITUDE			LONGITUDE					DATUM
	°	'	D.M. METERS	°	'	D.P. METERS			
							N. A.		
Tank ✓	34	43	317.8	76	40	518.4	1927	Triang.	420 421 ✓
Bridge Tower (east) ✓	34	43	476.1	76	40	309.6	"	"	" 421 ✓
Bridge Tower (west) ✓	34	43	492.9	76	40	334.7	"	"	" 421 ✓
Tallest of 3 stacks (N) ✓	34	43	1521.9	76	40	185.1	"	"	" 421 1233 ✓
Tallest of 3 stacks (S) ✓	34	43	1333.5	76	40	96.8	"	"	" 421 1233 ✓
Tallest 3 stks. (island) ✓	34	43	1691.8	76	41	355.7	"	"	" 421 1233 ✓
Bridge Tower (east)	34	43	399.5	76	41	944.0	"	"	" 421 ✓
Bridge Tower (west)	34	43	395.9	76	41	979.9	"	"	" 421 ✓
* Tank (very tall-Beaufort)	34	43	247.8	76	39	1270.0	"	"	" 421 1233 ✓
Cupola Coast Guard	34	41	1362.8	76	40	1307.8	"	"	" 421 ✓
Stack on Fish Factory, Lenoxville Pt.								T-6000	421
* This tank is very prominent and should appear on all charts of this area.									

A list of objects carefully selected because of their value as landmarks as determined from seaward, together with individual descriptions, must be furnished in a special report on this form, and a copy of such report must be attached by the Chief of Party to his descriptive report.

The selection, determination, and description of these points are an important factor in the value of the chart. Landmarks selected at appropriate intervals can be clearly charted. However, when none is outstanding, a group of two or three objects may by their interrelationship provide positive identification. A group so selected should be indicated.

The description of each object should be short, but such as will clearly identify it; for example, a standpipe, elevated tank, gas tank, church spire, tall stack, red chimney, radio mast, etc. Assign numerals to landmarks to indicate: (1) Offshore, (2) Inshore, (3) harbor, 1, 2, 3 would be a mark useful on all charts. Generally, flagstaves and like objects are not sufficiently permanent to chart.

U.S. GOVERNMENT PRINTING OFFICE: 1954 25379

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

LANDMARKS FOR CHARTS

Airphoto Compilation T-5574

Norfolk, Va.

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S. B. Grenoll

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DESCRIPTION	POSITION						METHOD OF DETERMINATION	CHARTS AFFECTED	
	LATITUDE			LONGITUDE					DATUM
	°	'	D. M. METERS	°	'	D. P. METERS			
							N. A.		
Tank	34	43	317.8	76	40	518.4	1927	Triang.	420
Bridge Tower (east)	34	43	476.1	76	40	309.6	"	"	"
Bridge Tower (west)	34	43	492.9	76	40	334.7	"	"	"
Tallest of 3 stacks (E)	34	43	1521.9	76	40	185.1	"	"	"
Tallest of 3 stacks (S)	34	43	1333.5	76	40	96.8	"	"	"
Tallest 3 stks. (island)	34	43	1691.8	76	41	355.7	"	"	"
Bridge Tower (east)	34	43	399.5	76	41	944.0	"	"	"
Bridge Tower (west)	34	43	395.9	76	41	979.9	"	"	"
* Tank (very tall-Beaufort)	34	43	247.8	76	39	1270.0	"	"	"
Gupola Coast Guard	34	41	1362.8	76	40	1307.8	"	"	"
Stack on Fish Factory, Lenoxville Pt.									
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PLACE NAMES
Compilation T-5574

The following names all appear on Chart # 420 and were checked and found in local usage in 1933.

CLUBFOOT CANAL
HARLOWE CREEK
NEWPORT RIVER
OYSTER CREEK
CORE CREEK
BELL CREEK
WARE CREEK
RUSSELL CREEK
NEWPORT MARSHES
GALLANT POINT
TOWN MARSH
TOWN CREEK
BEAUFORT
CARROT ISLAND
NORTH RIVER
NORTH RIVER THOROUGHFARE
BOGUE BANKS
SHACKLEFORD BANKS
SHACKLEFORD POINT
CHENEY BAY
TURNER CREEK
MIDDLE MARSHES
LENOXVILLE POINT
TAYLOR CREEK

PLACE NAMES
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The following names all appear on Chart # 420 and were checked
and found in local usage in 1933.

CLUBFOOT CANAL
HARLOWE CREEK
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TOWN CREEK
BEAUFORT
CARROT ISLAND
NORTH RIVER
NORTH RIVER THOROUGHFARE
BOGUE BANKS
SHACKLEFORD BANKS
SHACKLEFORD POINT
CHENEY BAY
TURNER CREEK
MIDDLE MARSHES
LENOXVILLE POINT
TAYLOR CREEK

Remarks

Decisions

1		
2	Er. name from No. Harlowe on P.O.M.	
3		
4		
5		
6	'Bell Creek' on wrong Creek on Field Survey	
7		
8		
9		
10		
11		
12	not shown on sheet	
13		
14		
15		
16		
17		
18		USGB decision
19		
20		
21		
22		
23		
24		
25		
26	closed by R.R. Fill	
27		
M 234		

GEOGRAPHIC NAMES

Survey No. T-5574

Name on Survey	<div>On Chart No. 420</div> <div>On previous survey No. T-315, T-1328</div> <div>On U. S. quadrangle Maps</div> <div>From local information see D.R.</div> <div>On local Maps</div> <div>P. O. Guide or Map</div> <div>Rand McNally Atlas</div> <div>U. S. Light List</div> <div>USCP</div>									
	A,	B,	C,	D	E	F	G	H	K	
<u>Clubfoot Canal</u>	✓			✓					←	1
<u>Harlowe Creek</u>	✓	Harlow Cr.		✓						2
<u>Newport River</u>	✓	✓		✓						3
<u>Oyster Creek</u>	✓	✓		✓						4
<u>Core Creek</u>	✓	✓		✓						5
<u>Eastman Creek</u>	✓	✓		✓						6
<u>Bell Creek</u>	✓	Eastman Cr.	Eastman's Cr.	✓						7
<u>Ware Creek</u>	✓	✓		✓						8
<u>Russell Creek</u>	✓	Russell's Cr.		✓						9
<u>Newport Marshes</u>	✓	✓		✓						10
<u>Gallant Point</u>	✓	Gallants Point		✓						11
<u>Town Marsh</u>	✓	✓		✓						12
<u>Town Creek</u>	✓	✓		✓						13
<u>Beaufort</u>	✓	✓		✓		✓				14
<u>Carrot Island</u>	✓	✓		✓						15
<u>North River</u>	✓	✓		✓						16
<u>North River Thorofare</u>	✓	✓		✓						17
<u>Bogue Banks</u>	✓	✓		✓						18
<u>Shackleford Banks</u>	✓	✓		✓					✓	19
<u>Shackleford Point</u>	✓			✓				✓	✓	20
<u>Cheney Bay</u>	✓	Cheney's Bay		✓						21
<u>Turner Creek</u>	✓	Turner's Cr.		✓						22
<u>Middle Marshes</u>	✓	✓		✓						23
<u>Lenoxville Point</u>	✓	✓		✓						24
<u>Taylor Creek</u>	✓	Taylor's Cr.		✓						25
<u>Bell Creek</u>	✓	Bell's Cr.		✓						26
Adix Adix Adix	✓	✓								27
<u>Fort Macon</u>	✓	✓							✓	28

M 234

Remarks

Decisions

1		
2		
3		
4	<i>About Filled in</i>	
5		
6		
7		
8		
9		
10		
11		<i>See T-6468</i>
12		
13		
14		
15		
16		
17		
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24		
25		
26		
27		

GEOGRAPHIC NAMES

Survey No. T-5574

Name on Survey

A,

B,

C,

D

E

F

G

H

K

USCP

On Chart
No. 420

On previous survey
No. T-315

On U. S. quadrangle
Maps

From local
information

On local maps
B.P.

P. O. Guide or Map

Rand McNally Atlas

U. S. Light List

off
sheet

Tar Landing Bay

Drum Creek

Fishing Creek

~~Spiper~~
~~Saw Pea Creek~~

Mullet Pond

~~Horse Island~~
~~Horse Island~~

steep Point Chan

~~Gable Creek~~

Bulkhead Chan.

Gallant Chan.

Clubfoot Creek

Piver Island

Beaufort Inlet

Atlantic Ocean

Crab Point Thorofare

off sheet

ch
421
✓

B.P.
29351

Gallant
chan.

Pivers

29813

Names underlined in red approved

by JTE on 2/21/38

REVIEW OF AIR PHOTOGRAPHIC SURVEY T-5574

Scale 1:20,000

Data Record

Triangulation to 1933.
Photographs in January 1933.
Plane table surveys in February 1933.
Hydrography (no recent surveys).
Field Inspection in 1933 and 1936.

The field inspection was largely for the spotting of control and interpretation of the photographs. Except for a bridge at latitude $34^{\circ} 43.2'$, long. $76^{\circ} 40.3'$, which was built since the time of the photos and located by field inspection, this survey is of the date of the photographs.

Comparison with recent Graphic Control Surveys.

T-6000 (1933) 1:20,000.

T-6000 shows only a small amount of detail rodged in at the triangulation stations.

There are a few differences from 0.0 to 0.5 mm. between T-6000 and this Air Photographic survey. In each case the photographs have been examined and T-5574 has been corrected where necessary. The air photographic survey is accepted as correct. The remaining differences with T-6000 are minor.

Comparison with recent Hydrographic Surveys.

There are no recent hydrographic surveys within the area covered by the air photographic survey.

Comparison with former topographic surveys.

T-315 (1851) 1:10,000; T-874 (1862) 1:10,000; T-1328 (1873)
1:20,000; T-3395 (1913) 1:10,000; T-4267 (1927)
1:10,000.

The above surveys show some erosion at Beaufort entrance from the air photographic survey. Channels have been changed and canals dug that are not shown on the above surveys. The air photographic survey is more complete in detail and shows the recent cultured changes such as bridges and roads.

The air photographic survey is complete and adequate to supersede the portions of the above surveys which it covers.

Comparison with Charts 420, 833 and 1233.

T-5574 was applied to Chart 1233 prior to this review. None of the changes made on T-5574 during this review affect Chart 1233.

T-5574 has not been applied to charts 420 and 1234 at this date.

The construction of the new boat basin at lat. $34^{\circ} 43'$, long. $76^{\circ} 41.5'$ has been completed since the date of the field inspection and the basin and spoil dumps resulting from dredging of the basin are not shown on T-5574.

T-5574 shows numerous changes in shoreline and cultural details on the present charts 420 and 1233.

The stack and dock shown on charts 420 and 1233, lat. $34^{\circ} 42.6'$ long. $76^{\circ} 37.0'$, no longer exists and should be removed from the chart. This information is from examination of the photographs.

The stack shown on the charts at lat. $34^{\circ} 42.4'$, long. $76^{\circ} 37.2'$ is not shown on T-5574 but is not disproved and should be continued on the charts. An ambiguous field inspection note indicates that the stack is in existence but it cannot be definitely identified on the photos.

The lights and beacons shown on T-5574 were located by triangulation in 1933 and the year of location is shown on T-5574.

Triangulation Station North, Range Beacon 1933, at lat. $34^{\circ} 42.8'$, long. $76^{\circ} 35.1'$, has been changed since 1933 and the station has been removed from T-5574.

The following were not located by the triangulation and are not visible on the photos and are not shown on T-5574:

Beacon at lat. $34^{\circ} 42.8'$, long. $76^{\circ} 39.5'$
 Light at lat. $34^{\circ} 42.8'$, long. $76^{\circ} 39.7'$
 Range light, lat. $34^{\circ} 42.8'$, long. $76^{\circ} 35.1'$

General

Practically no field inspection notes were made on the marsh shoreline and because of the poor quality of the photographs the marsh shoreline is subject to some misinterpretation. The delineation of the marsh on the old survey T-1328 has been used as an aid in interpreting the photos. The marsh line shown by the field party had to be corrected in the office.

L. C. Landy

REVIEW OF AIR PHOTO COMPILATION NO.

Chief of Party: *J.B. Grenell*

Compiled by: *J.B. Grenell*

Project: *Party #18*

Instructions dated: *Mar. 18, 1936*

1. ✓ The charts of this area have been examined and topographic information necessary to bring the charts up to date is shown ✓ on this compilation. (Par. 16a, b,c,d,e,g and i; 26; and 64)
2. ✓ Change in position, or non-existence of wharfs, lights, and other topographic detail of particular importance to navigation which affect the chart, is discussed in the descriptive report. (Par. 26; and 66 g,n)
3. ✓ Ground surveys by plane table, sextant, or theodolite have been used to supplement the photographic plot where necessary to obtain complete information, and all such surveys are discussed in the descriptive report. (Par. 65; and 66 d,e)
Topo control sheet T-6000
4. ✓ Blue-prints and maps from other sources which were transmitted by the field party contain sufficient control for their application to the charts. (Par. 28) *None*
5. ✓ Differences between this compilation and contemporary plane table and hydrographic surveys have been examined and rectified in the field before forwarding the compilations to the office and are discussed in the descriptive report. ✓
6. ✓ The control and adjustment of the photo plot are discussed in the descriptive report. Unusual or large adjustments are discussed in detail and limits of the area affected are stated. (Par. 12b; 44; and 66 c,h,i)
7. ✓ High water line on marshy and mangrove coast is clear and adequate for chart compilation. (Par. 16a, 43, and 44)

NOTE: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual. Refer also to the pamphlet "Notes on the Compilation of Planimetric Line Maps from Five Lens Air Photographs." 11-47

8. The representation of low water lines, ~~reefs, coral reefs and rocks,~~ and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41) ✓
9. Recoverable objects have been located and described on Form 524 in accordance with circular 30, 1933, circular letter of March 3, 1933, and circular 31, 1934, (Par. 29, 30, and 57) ✓
Sufficient Δ - No recoverable points located
10. A list of landmarks was furnished on Form 567 and instructions in the Director's letter of July 16, 1934, Landmarks for Charts, complied with. (Par. 16d, e; and 60) ✓
11. All bridges shown on the compilation are accompanied by a note stating whether fixed or draw, clearance, and width of draw if a draw bridge. Additional information of importance to navigation is given in the descriptive report. (Par. 16c) ✓
12. Geographic names are shown on the overlay tracing. The accepted local usage of new names has been determined and they are listed in the report, together with a general statement as to source of information and a specific statement when advisable. Complete discussion of place names differing from the charts and from the U. S. G. S. Quadrangles is given in the descriptive report, together with reasons for recommendations made. (Par. 64, and 66k) ✓
13. The geographic datum of the compilation is *N.A. 1927 (adjusted)* and the reference station is correctly noted. ✓
14. Junctions with adjoining compilations have been examined and are in agreement. (Par. 66j) ✓
15. The drafting is satisfactory and particular attention has been given the following: ✓
 1. Standard symbols authorized by the Board of Surveys and Maps have been used throughout except as noted in the report. ✓
 2. The degrees and minutes of Latitude and Longitude are correctly marked. ✓

3. All station points are exactly marked by fine black dots. ✓
4. Closely spaced lines are drawn sharp and clear for printing. ✓
5. Topographic symbols for similar features are of uniform weight. ✓
6. All drawing has been retouched where partially rubbed off. ✓
7. Buildings are drawn with clear straight lines and square corners where such is the case on the ground. ✓

(Par. 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 48)

16. ~~No additional surveying is recommended at this time.~~

Recommend that a survey of the Morehead City Port Terminal be made when that project is completed.

17. Remarks:

See descriptive report for discussion.

(Signature)

18. Examined and approved;

(Signature)

Chief of Party

19. Remarks after review in office:

Reviewed in office by: *L.C. Rande* *B.G. Jones*

Examined and approved:

(Signature)
Chief, Section of Field Records

(Signature)
Chief, Division of Charts

(Signature)
Chief, Section of Field Work

(Signature)
Chief, Division of Hydrography and Topography.