

6813

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

DESCRIPTIVE REPORT

Topographic Sheet No. **A**
~~Hydrographic~~

State **North Carolina**

LOCALITY

Pamlico Sound

Hatteras Inlet

193 5

CHIEF OF PARTY

J.C. Bose

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

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TOPOGRAPHIC TITLE SHEET

The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. A

REGISTER NO. **6313**

State North Carolina

General locality Pamlico Sound

Locality Hatteras Inlet

Scale 1:10,000 Date of survey April 22-26, 1935

Vessel Launch WELKER

Chief of party J.C. Bose

Surveyed by J.C. Bose and Raymond H. Carstens

Inked by Raymond H. Carstens

Heights in feet above.....to ground to tops of trees

Contour, Approximate contour, Form line interval.....feet

Instructions dated....., 19.....

Remarks:.....

DESCRIPTIVE REPORT

to accompany

TOPOGRAPHIC SHEET A

Launch WELKER
Vicinity Hatteras Inlet

J.C. Bose, Chief of Party
Scale 1:10,000

Project HT-197

The descriptive report covering topographic sheet A is herewith submitted.

INSTRUCTIONS.

The topography on sheet A is part of Project HT-197, instructions for which are dated August 31, 1934, supplemented by verbal instructions to the Commanding Officer, Launch MIKAWA.

GENERAL DESCRIPTION OF THE COAST

The land area included on this sheet is a narrow sandy strip divided by Hatteras Inlet. To the east of the inlet as far as Hatteras, the land is low and flat, unmarked except for a line of telephone poles running down the middle and a small hut about a mile east of the inlet. On the western outskirts of Hatteras a large yellow club house having a cupola is very prominent. To the west of the inlet the land is spotted with small sand dunes about 15 feet high. About a mile west of the inlet the buildings of the Hatteras Inlet Coast Guard station serve as conspicuous land marks.

On the ocean side of the inlet waves constantly break on the bar.

In the sound to the north of the inlet the channel leads from Hatteras Inlet Light House to two unlighted beacons near Cross Shoal. The shoals on both sides of this channel along the one fathom curve are covered with many fish stakes.

The unlighted beacon in the vicinity of Shoal Point shown on chart no. 1232 has been destroyed and should be removed.

LANDMARKS

The landmarks included on this sheet are the cupola of the new Station house and the east gable of the old Station house of the Hatteras Inlet Coast Guard Station. ~~The new positions of these landmarks are found on the attached form 567.~~ Landmarks for charts forms are being submitted under separate cover.

CONTROL AND SURVEY METHODS

The survey was controlled by triangulation executed during 1935. Station LET is a second order triangulation station. The following are intersection stations:

- (1) East Gable Boat House.
- (2) Cupola Hatteras Inlet Coast Guard Station.
- (3) Flagpole, Coast Guard Station.
- (4) N.E. Telephone Pole, Id.
- (5) Hydro Signal.
- (6) S.W. Telephone Pole, Cape Hatteras.
- (7) Chimney, shed.

The topography was executed for the purpose of locating signals for hydrography and delineating the shore line. Standard planetable methods were used. No traverses were run. Positions were obtained by the three-point problem method, resection, and the intersection of three or more cuts.

The coast line in this area is constantly changing; minor changes being observed during the short time the survey was in progress.

The high water line on the ocean side of the land is definite and can be accurately located. In some areas the high water line on the sound side of the land was difficult to locate and the storm high water line might have been delineated in its place. These areas include the high water line from signals SOU to RECK to OUT on the east side of the inlet; and on Ocracoke Island, the high water line on the sound side of the land north of signal NOR starting at the point where the land becomes very narrow and including the separate isles and dunes. In these areas the land between the high and low water lines contained ripple marks and had the appearance of recently being covered with water but it was noted that much of this area was not covered with water unless the wind blew from over Pamlico Sound.

The low water line over the entire area was secured near the time of low water.

On comparing the topographic sheet with chart 1232, it is apparent that the shore line has been cut away on the ocean side and has been built up on the sound side. The shore line has built up on the south west end of Cape Hatteras and has been cut away on the north east end of Ocracoke Id. A portion of the

north east end of Ocracoke Id. previously surveyed as above high water now appears as a reef in the inlet, bare at low water.

About one-half mile from the north east end of Ocracoke Id. on the ocean side black earth, which apparently had previously formed the high water line, was visible at low water buried under three and four feet of sand.

AIDS TO NAVIGATION

Two unlighted beacons in the vicinity of Cross Shoal fall on this sheet. The new position of these aids to navigation are found on ~~the attached~~ form no. 567

Respectfully Submitted,

Raymond H. Carstens
Raymond H. Carstens,
Deck Officer, C&GS.

Approved and Forwarded:

J.C. Bose, Lt., C&GS.,
Chief of Party No. 6.

REVIEW OF TOPOGRAPHIC SURVEY No.

Title (Par. 56) *Hatteras Inlet, Pamlico Sound, North Carolina*Chief of Party *J. C. Bose* Surveyed by *J. C. Bose and* Inked by *Raymond H. Carstens*Ship *Launch Welker* Instructions dated *Aug 31, 1934* Surveyed in *April 1935*
and verbal instructions

1. The survey and preparation for it conform to the requirements of the Topographic Manual. (Par. 7, 8, 9, 13, 16.) ✓
2. The character and scope of the survey satisfy the instructions. ✓
3. The control and closures of traverses were adequate. (Par. 12, 29.) ✓
4. ~~The amount of vertical control that the Manual specifies for contours-formlines was accomplished.~~ (Par. 18, 19, 20, 21, 22, 23.)
No contours or form lines are shown
5. ~~The delineation of contours-formlines is satisfactory.~~ (Par. 49, 50.) ✓
6. There is sufficient control on maps from other sources that were transmitted by the field party to enable their application to the charts. (Par. 28.) *None submitted*
7. High water line on marshy and mangrove coast is clear and adequate for chart compilation. (Par. 16a, 43, 44.) ✓
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. Rocks and other important details shown on previous surveys and on the chart were verified. (Par. 25, 26, 27.)
Entire area considered in connection with review of H-5814(1935) changeable area, Extensive changes in shoreline and low water line are noted.
10. ~~The span, draw and clearance of bridges are shown.~~ (Par. 16c.) ✓
11. ~~Locations and elevations of summits are given.~~ (Par. 19, 51.) ✓
12. ~~The tree line was shown on mountains.~~ (Par. 16g.) ✓

NOTE: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual. Use reverse side for extending remarks.

13. The descriptive report covers all details listed in the Manual, in so far as they apply to this survey. (Par. 64, 65, 66, 67.) ✓
14. The descriptive report also contains ~~additional information required in aero-topography relative to type of photographs, method of compilation and type of ground control.~~
15. The descriptions of recoverable stations and references to shore line were accomplished on Form 524. (Par. 29, 30, 57, 67 except scaling of DMs and DPs, 68.) *No recoverable topo stations on the sheet.*
16. A list of landmarks for charts was furnished on Form 567 and plotting checked. (Par. 16d, e, 60.) ✓
17. The magnetic meridian was shown ^{but there is no evidence of checking the declination.} and declination was checked. (Par. 17, 52.) ✓
18. The geographic datum of the sheet is *North American 1927* and the reference station is correctly noted. (Par. 34.) ✓
19. Junctions with contemporary surveys are adequate. *No contemporary surveys join this sheet.*
20. Geographic names are shown on the sheet and are covered by the Descriptive report. (Par. 64, 66k.) ✓
21. The quality of the drafting is good. (Par. 31, 32, 33, 35, 36, 37, 38, 39, 40, 41, 42, 45, 46, 47, 48, 49, 50.) ✓
22. No additional surveying is recommended. ✓
23. The Chief of Party inspected and approved the sheet and the descriptive report after review by *There is no evidence of inspection or approval on the sheet or in the Descriptive Report.*
24. Remarks:

Reviewed in office by *R. J. Christman, Jan. 16, 1936.*

Sheet inspected by *A. L. Shalowitz*
Examined and approved:

L. K. Green
Chief, Section of Field Records

Fred. R. Peacock
Chief, Section of Field Work

L. O. Polbat
Chief, Division of Charts

Stude
Chief, Division of Hyd. and Top.