FORM 594
Rev. April 1935
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Topographic Sheet No. B and C

State

Albemarle Sound

U.S. Marine Coros Air Station

XXXX 1942

CHIEF OF PARTY

Joseph E. Waugh

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.

Remarks: The inking of this sheet was completed at the Norfolk

Processing Office.

DESCRIPTIVE REPORT

TO ACCOMPANY

TOPOGRAPHIC SHEETS NO. B & C (field letter)

U. S. MARINE CORPS AIR STATION

ALBEMARLE SOUND

PROJECT CS 292

LAUNCH ELSIE III

INSTRUCTIONS:

The topography on these sheets was executed in accordance with the Director's Instructions for Project CS 292, dated July 27, 1942, amended by telegram on August 6, 1942.

LIMITS AND SCALE:

The scale for sheet B is 1:5000 and the scale for sheet C is 1:2400. The Navy officer in charge of construction at the Air Station requested the larger scale for the area covered by sheet C.

The sheets cover the shore line on the north side of Albemarle Sound between signal Jake (near triangulation station CENTER) and a point approximately 100 meters west of the railroad bridge in Latitude 36° 00'.7, Longitude 76° 34'.9. The whole area (except the 100 meters west of the bridge) is on the U. S. Marine Corps Air Station and will be changed as the work on the Station progresses. Sheet C covers the area where the seaplane ramps will be installed. The Norfolk Southern Railway is the western boundary of the Air Station.

SURVEY METHODS AND CONTROL:

FOR SHEET B.

There are five triangulation stations on this sheet. The line from all the stations, except SKINNER 2, are clear to CENTER. In addition the WEST-TRUCK (but not the TRUCK-WEST) line is clear. To check the orientation for the planetable, as the stations are close to being on line, positions

on range with the triangulation stations across the sound were computed and plotted on the sheets. All the topography along and near the beach was rodded in from traverse setups. Standard topographic practices being followed. Signals Lite, But, Mis and Al were cut in from triangulation stations. The north end of the fish trap north of signal Al was also cut in.

There are three traverses on the sheet. The first from HOLLAND to CENTER was 1208 meters long. It failed to close by one meter. A field adjustment was made. The second traverse was from WEST to SKINNER 2, and was 680 meters long. This traverse closed exactly. The third was from SKINNER 2 to a point on the dock west of the railroad and return. It was 191 meters long. There was no error of closure.

The railroad bridge was located from the three signals on the bridge and by measuring the width of the bridge. The opening at signal Lite was located by measurements taken from this signal. The bridge and openings were then drawn on the sheet. A complete description of this bridge is given in the descriptive report for hydrographic sheet no. one.

FOR SHEET C. 7-68396

There are three triangulation stations on this sheet. None of the lines were intervisible, except the WEST-TRUCK line. Orientation of the plane table was obtained by computing and plotting points that are on range with the triangulation stations across the sound. Orientation of the table at other points was obtained from the topographic signals which were intervisible.

The topographic signals had been previously located ahead of the topography by taping between triangulation stations TRUCK and HOLLAND. One set of 3 D&R was measured at each signal between the two signals adjacent (one on each side) and the horizon closed. Starting at TRUCK the position of each signal was computed using the observed angle and taped distance. The traverse position of HOLLAND differed from the triangulation position of HOLLAND by 0.3 meter. This error was distributed throughout the traverse in proportion to the signal's distance from triangulation station TRUCK. The distance from TRUCK to WEST was measured also when the stakes were set for the hydrography. It differed from the computed distance by 0.286 meters. The computed distance depends on a 1° angle. All the computations relative to this traverse will be found in the descriptive report for hydrographic sheet no. 2.

There are no traverses on the sheet. The shore line was rodded in by standard topographic methods from setups at at the triangulation stations and the topographic signals. All off lying features were cut in from at least three setups. All signals fall inside the mean water level line and, except for triangulation stations WEST and HOLLAND (which are marked), are of a temporary nature.

DESCREPANCISE:

No descrepancies were noted in the field.

LANDMARKS AND AIDS TO NAVIGATION:

There are no landmarks to charts or aids to navigation on either sheet.

MAGNETICS:

Magnetic observations were obtained with the declinatoire furnished with alidade no. 244 at triangulation stations HOLLAND, WEST, and SKINNER 2. The error of the declinatoire is not known and no favorable opportunity presented itself for the determination of this error.

Station	Time	Date	Observed Value	Charted Value
SKINNER 2 HOLLAND WEST	1455 (EWT) 1600 (EWT) 750 (EWT)	8/28/42 8/27/42 8/28/42	50 37' W 50 24' W 50 48' W	5° 45' W 5° 45' W

SIGNALS OUTSIDE WATER LINE:

Name	Character
Al	fish stake
Ask	piling of railroad bridge
But	ditto
Cal	cypress tree
Jake	dead pine tree
Lite	light on fender pile on south
	side of opening in bridge
Mis	fish stake

STATISTICS:

Sheet B. Length of shore line Length of railroads Area	1.2 statute miles 1.1 statute miles 0.2 square statute mile
Sheet C. Length of shore line Area	0.6 statute mile o.2 square statute mile

GENERAL CHARACTER OF AREA:

There is a small vertical bluff varying in height from 10' to 17' which runs back of a sand beach along the entire area. In places, as shown, the bluff is partly hidden by trees and brush growing on the beach. There is a fringe of trees and brush along the bluff in some areas. Back of this fringe of trees are cultivated fields. There are several small drains making out of the fields and down onto the beach as indicated.

The cypress swamp between signals Bill and Girl (sheet B) is not wet except during the rainy season or on extreme high tides. A narrow sand beach is between it and the sound. The north side of this swamp was not located and the detail on the sheet is not intended to show this limit. There are numerous trees, stumps, stakes, etc., along the ahore as indicated. Only those showing above the water level have been located on the topographic sheet. All submerged obstructions found were located by hydrographic methods. The symbol for narrow-leaved trees shown in the water invariably indicates growing cypress trees.

The small cypress swamp at signal Dog (sheet C) is covered with water at all times. The outer limit is that line which appears from off shore to be the edge of land.

COMPARISON WITH PREVIOUS SURVEYS:

A detail comparison with topographic sheets no. 72944 and no. T 3527 could not be made in the field due to the differences in scales. From evidence along the bluff line (such as large uprooted pine trees laying with their tops across the beach along the side of the bluff) and from information obtained from local residents this shore line has receeded since the previous survey.

The railroad bridge on no. 2944 checks reasonably well with the new survey. The detail shown along the bank is in a different shape than shown (on old survey) and was undoubtly sketched on the previous survey.

JUNCTIONS:

Sheet no. B joins sheet no. A at signal Jake on the east end. A satisfactory junction was obtained. No junction with a modern survey was made on the west end.

Sheets no. B & C join at triangulation station HOLLAND on the east end of sheet no. C and at triangulation station WEST on the west end of sheet no. C. A satisfactory junction was obtained in each case.

Respectfully submitted,

Joseph E. Waugh Joseph E. Waugh Lieutenant, C&GS

Oct. 16, 1942 Norfolk Processing Office

Approved and Forwarded.

Paul C. Whitney

Supervisor, Southeastern District

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MEMORANDUM IMMEDIATE ATTENTION

SURVEY DESCRIPTIVE REPORT PHOTOSTATION	**Nox*** No. T T6839a.*b	
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This is forwarded in order that your attention may be directed to the matters as indicated below. Please initial in column 3 as an acknowledgement that your attention has been thus directed. The complete original records are available if desired. If you cannot give this your immediate attention, please initial, note, and forward to the next section marked, calling for the records at your convenience.

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DIVISION OF CHARTS

SURVEYS SECTION

REVIEW OF TOPOGRAPHIC SURVEY

REGISTRY NO. 6839a&b

Field No. B & C

North Carolina; Albemarle Sound U. S. Marine Corps Air Station Surveyed August 1942; Scale 1:5,000 1:2,400

Instructions dated July 27, 1942

Plane Table Survey

Aluminum Mounted

Chief of Party - J. E. Waugh Surveyed by - J. E. Waugh Inked by - J. E. Waugh and Norfolk Processing Office Reviewed by -R. H. Carstens Inspected by - H. R. Edmonston, December 7, 1942

1. Adjoining Surveys

The present survey joins T-6838 (1942) on the east. There are no contemporary surveys on the west.

2. Comparison with Prior Surveys

T- 247 (1848) 1:20,000 T-2944 (1909) 1:10,000 T-3527 (1915) 1:40,000

Agreement with the shoreline of these earlier surveys is fairly good. In some places there are differences of as much as 50 meters, probably caused by sketching and interpretation. Natural changes may have taken place in Lat. 36°00.6'; Long. 76°34.65' where the shoreline appears to have receded about 35 meters. The present survey contains much more detail than the earlier surveys and should supersede them within the common area.

3. Comparison with Chart 1228 (latest print date 8-18-42)

The charted topography originates with the previously discussed surveys and needs no further consideration.

4. Condition of Survey

Satisfactory.

- 5. Compliance with Instructions for the Project Satisfactory.
- 6. Superseded Surveys

T- 247 (1848) in part T-2944 (1909) " " T-3527 (1915) " "

Examined and approved:

Chief, Surveys Section

Chief, Division of Charts

LPRaynor Chief, Section of Hydrography

Chief, Division of Coastal Surveys