

# 7139

original

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Form 504	
U. S. DEPARTMENT OF COMMERCE	
COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT	
Type of Survey Planetable Hydro Support	
Field No. 10,000-820	Office No. T-7139
(GI-b-60)	
LOCALITY	
State	North Carolina
General locality	Beaufort Inlet
Locality	Fort Macon and Shackleford Point
1960	
CHIEF OF PARTY	
K.A. MacDonald, Chief of Field Party	
W. E. Randall, Baltimore District Officer	
LIBRARY & ARCHIVES	
DATE	FEB 15 1961

USCOM-DC 5087

7139

FORM 537a  
(9-24-47)

DEPARTMENT OF COMMERCE  
COAST AND GEODETIC SURVEY

REGISTER NO. T-7139

TOPOGRAPHIC TITLE SHEET

FIELD NO. GI-b-60

Each Planetable and Graphic Control Sheet should be accompanied by this form, completed so far as practicable, when forwarded to the Washington Office.

STATE

North Carolina

GENERAL LOCALITY

Beaufort Inlet

LOCALITY

Fort Macon to Shackleford Point

SCALE

1:5,000

DATE OF SURVEY

6-13 October, 1960

VESSEL

GILBERT

Photography--None

CHIEF OF PARTY

K. A. MacDonald

SURVEYED BY

E. L. Williams, D. D. Harper & J. Collins

INKED BY

HEIGHTS IN FEET ABOVE MHW OR \_\_\_\_\_

☐ TO GROUND

☐ TO TOPS OF TREES

CONTOUR

APPROXIMATE CONTOUR

FORM LINE INTERVAL \_\_\_\_\_ FEET

PROJECT NUMBER

10,000-820

Instruction date Sept. 6, 1960

REMARKS

Planetable survey of high-water line and signals.

DESCRIPTIVE REPORT  
to accompany  
Planetable Sheets  
GI-a-60 and GI-b-60  
Project 10,000-820

AREAL FIELD INSPECTION

This report is submitted for the eastern end of Bogue Banks and the western end of Shackleford Bank adjacent to Beaufort Inlet, North Carolina.

Only the mean high water line and the positions of hydrographic signals selected by officers of the CGCS Ship GILBERT are shown on the planetable sheets.

HORIZONTAL CONTROL

From September 26 until the arrival of the Ship GILBERT on September 29, horizontal control recovery over the project, and reconnaissance for the establishment of a control station at the western end of planetable sheet GI-a-60 was accomplished.

As a result of the reconnaissance, a third-order station PLAN, 1960; was established by the three-point method. This adequately controlled a planetable traverse - FORT MACON, 1850 to PLAN, 1960 - over the working area of planetable sheet GI-a-60. However, at the midway point of this traverse a U.S. Engineers' station called DUNES could not be held. The station is marked with a brass disk of the U. S. Engineers and the position was supplied by the Wilmington, North Carolina District Engineers' office. The planetable position of DUNES fell 37.7 meters north (16° in azimuth) of the plotted position. The traverse was rerun from PLAN, 1960 to FORT MACON, 1850 and GAR, 1927. In addition, traverse station CRF BATTERY 7, 1943, was tied into the traverse. Apparently, the position of DUNES is incorrect. The position of a landmark chimney west about 20 meters from DUNES was obtained from the Washington office on Friday, 21 October 1960. Now this topographic station position fits the planetable position will be discussed in an addendum to this report furnished by the Ship GILBERT.

On planetable sheet GI-b-60, adequate control existed for short loop-traverses and for cuts to the many dredging ranges in the area which will be used as hydro signals.

In the traverse from JETTY (USE SHACKLEFORD, 1913) to BACK RANGE LIGHT: whose position also was supplied by the U. S. Engineers District Office in Wilmington, North Carolina; a discrepancy of about 0.3 millimeters in the distance was noted. A planetable set up beneath the light indicates the position of the light to be correct by resection. The traverse along the high water line was based upon the BACK RANGE LIGHT, because azimuth cuts from JETTY to FORT MACON and TOWN MARSH 2, though reasonably close, were not as good as from the R. Range Light.

## MEAN HIGH WATER LINE AND ALONGSHORE FEATURES

### Planetable Sheet G1-a-60:

The mean high water line along the ocean side of Bogue Banks was about 5 meters beyond the seaward edge of a sand ridge. Along the Beaufort Channel and Bogue Sound shore, the mean high water line was outlined by rock interspersed between rock groins.

The long fishing pier (Triple Ess Pier) could not be shown in its full length but a teleneter distance was measured to the southern gable of a shed near, but not at the end, of the pier.

Two gun mounts, large circular concrete foundations, were seen in the ocean on each side of the plotted position of the traverse station "DP Battery 7, 1913". High water and surf made it impossible to get a planetable position at this time.

### Planetable Sheet G1-b-60:

The high water line on the ocean side was similar to that described on sheet G1-a-60. On the sound side, the mean high water line is much more difficult to determine. The state fisheries inspector, whose territory includes this area, said that before hurricane Donna, a large part of the island and very flat sand areas shown on the planetable sheets as being above MHW, were awash at high water. However, since hurricane Donna, the area has been above high water. A debris line left by the high tide was followed over this area.

## HYDROGRAPHIC SIGNALS

Signals, on sheet G1-a-60, were selected before the planetable traverse. All the signals were gables and chimneys except about seven which were constructed before the traverse. Planetable turning points were marked in several cases in the event that more signals were desired.

On sheet G1-b-60, enough ranging ranges and other features existed so that only five additional signals need be built. These were marked temporarily with flags or are at the ends of rock groins or jetties. On this sheet it was possible to get cuts from triangulation station TOWN MARSH 2; PORT MAON and JETTY to many hydro-signals.

Respectfully submitted  
8 November 1960

*Elmer L. Williams*  
Elmer L. Williams  
Carto. (Photo.)

Approved and forwarded

*William E. Randall*  
William E. Randall  
LCDR, USCG  
Baltimore District Officer

SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR Y-COORDINATE LONGITUDE OR X-COORDINATE	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS		MAGNETIC 1911-1920 DATUM CORRECTION 1911-1920	N.A. 1927-DATUM		FROM GRID OR PROJECTION LINE IN METERS	FROM GRID OR PROJECTION LINE IN METERS
				FORWARD	(BACK)		FORWARD	(BACK)		
1927 (USE SHACK- HILL)	G 5132	NA	34 41 08 144	250.9		00	250.9	(211.3)	501	1
1933	P 476	1927	76 39 07 017	178.6		00	178.6	(203.7)	35	1
1944 MARSH	G 5650	"	34 42 46 253	1425.3		45	1425.3	(423.6)	77.3	(912.2)
2, 1927	P 454	"	76 40 06 038	153.6		00	153.6	(225.0)	301.7	(155.1)
1927 PAGE	Wilmington District U.S.E		34 41 18 753			15	25.3	(693.1)	25.3	(693.1)
1927			76 39 30 987			30	51.2	(718.2)	105.7	(155.1)

DATE \_\_\_\_\_