

7138

Diag. Cht. No. 1234-2.

Form 504

U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey Planetable

Field No. GI-a-60 Office No. T-7138

LOCALITY

State North Carolina

General locality Beaufort Inlet

Locality Vicinity of Fort Macon

1960

CHIEF OF PARTY

K.A. MacDonlad, Chief of Field Party
W.E. Randall, Balto. District Officer

LIBRARY & ARCHIVES

DATE February 15, 1961

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FORM 537a
(9-24-47)

DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

REGISTER NO. T - 7138

TOPOGRAPHIC TITLE SHEET

FIELD NO. GI-a-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

Vicinity of Fort Macon

SCALE

1:5,000

DATE OF SURVEY

6-13 October, 19 60

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 C&GS 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 (165° 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. How 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, 1933) 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 telemeter 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, 1943". 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 islands 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 dredging 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; FORT MACON 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, USN
Baltimore District Officer

2005.1

DATE _____

U.S. DEPARTMENT OF COMMERCE
DESCRIPTIVE REPORT
COAST AND GEODETIC SURVEY
CONTROL RECORD

PROJECT NO. 10072-820 SCALE OF MAP 1:5000 SCALE FACTOR 1.5000

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ψ -COORDINATE LONGITUDE OR χ -COORDINATE	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS		N.A. 1927-DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS	FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS	
				FORWARD	(BACK)	FORWARD	(BACK)	(BACK)
GAR 1927	G-5132 P-471	NA 1927	41 45.051	1388.2		1.6	3.2	(921.2)
MOREHEAD CITY PORT GUARD CO. WATER TANK, 1952	P-652	"	40 52.697	1341.2		195.9	391.9	(371.7)
MOREHEAD CITY FRY ROUSE CO. BLACK STAKE, 1952	P-652	"	43 07.635	235.3		235.3	470.6	(453.8)
MOREHEAD CITY WMBL RADIO TOWER, 1948	G-5297 G-7695 P-633	"	42 06.325	160.9		160.9	321.8	(441.6)
FORT MACON, 1950	G-5297 P-498	"	43 08.067	248.6		248.6	497.2	(427.2)
NEW MACON, 1986	G-5650 P-454	"	42 08.388	213.4		213.4	426.8	(336.6)
MOREHEAD CITY WATER TANK, 1952	G-5650 P-454	"	41 11.464	216.7		198.9	397.8	(526.6)
FORT MACON PORT GUARD CHUPOLA	G-5650 P-454	"	41 45.107	1201.8		291.7	583.4	(184.0)
FORT MACON PORT GUARD STATION	G-5650 P-454	"	40 44.189	1389.9		694.9	1389.9	(459.0)
NO. 191 CUPOLA, 1952	G-5650 P-454	"	41 44.727	1124.7		562.4	1124.7	(402.4)
HOP, 1943	G-5650 P-454	"	40 45.187	1150.1		53.2	106.4	(818.0)
CRF BATTERY 7 1943	G-5650 P-454	"	43 16.370	504.4		4.8	9.5	(754.0)
MOREHEAD CITY PORT GUARD STATION	G-5650 P-454	"	42 32.263	820.9		42.2	84.4	(844.0)
MOREHEAD CITY PORT GUARD STATION	G-5650 P-454	"	41 48.222	1362.7		57.6	115.1	(648.2)
NO. 191 CUPOLA, 1952	G-5650 P-454	"	40 51.392	1308.1		438.2	876.5	(486.0)
HOP, 1943	G-5650 P-454	"	41 45.400	1399.0		162.7	325.4	(438.0)
CRF BATTERY 7 1943	G-5650 P-454	"	40 51.717	1316.3		12.3	24.6	(900.4)
MOREHEAD CITY PORT GUARD STATION	G-5650 P-454	"	41 45.370	1398.0		171.0	342.0	(421.6)
NO. 191 CUPOLA, 1952	G-5650 P-454	"	40 44.489	1132.3		11.4	22.8	(901.2)
HOP, 1943	G-5650 P-454	"	41 39.769	1225.4		318.8	727.5	(26.0)
CRF BATTERY 7 1943	G-5650 P-454	"	40 56.676	1442.6		301.0	602.0	(322.4)
MOREHEAD CITY PORT GUARD STATION	G-5650 P-454	"	43 07.034	216.7		297.2	594.3	(169.2)
NO. 191 CUPOLA, 1952	G-5650 P-454	"	41 47.235	1201.8		216.8	433.5	(490.4)
HOP, 1943	G-5650 P-454	"	40 47.235	1201.8		56.9	112.7	(649.6)