

6627



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Form 504  
Rev. April 1935  
DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

*Topographic* }  
*Hydrographic* } Sheet No. 3 (Field)

U. S. COAST & GEODETIC SURVEY  
LIBRARY AND ARCHIVES

APR 17 1941

Acc. No. ....

State BAHAMAS

LOCALITY

MAYAGUANA ISLAND

VICINITY ABRAHAM BAY

of  
WESTWARD START POINT

193 41

CHIEF OF PARTY

G. C. MATTISON

U. S. GOVERNMENT PRINTING OFFICE



DUPLICATE

6627


DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

REG. NO.

HYDROGRAPHIC TITLE SHEET

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

Field No. 3

REGISTER NO. H6627 

State BAHAMAS

General locality VICINITY ABRAHAM BAY

Locality WESTWARD OF START POINT

Scale 1:4,800 Date of survey January 22 & 27, 1941

Vessel HYDROGRAPHER

Chief of Party G. C. MATTISON

Surveyed by E. R. McCARTHY

Protracted by M. J. Timmerman & L. S. Roberson

Soundings penciled by C. W. Clark & W. B. Page

Soundings in ~~1000~~ feet

Plane of reference M. L. W.

Subdivision of wire dragged areas by

Inked by H. W. Murray

Verified by "

Instructions dated November 9, 1940

Remarks: Project H. T. 258

DESCRIPTIVE REPORT

To Accompany

HYDROGRAPHIC SHEET NO. 3 (FIELD)

WESTWARD OF START POINT

VICINITY ABRAHAM BAY

MAYAGUANA ISLAND

BAHAMAS

SCALE 1:4,800 SEASON 1941

SURVEYED BY: E. R. MCCARTHY, JR. H. & G. E.

U.S.C. & G.S.S. "HYDROGRAPHER" G. C. MATTISON, COMMANDING

INSTRUCTIONS

Hydrography was executed in accordance with instructions dated November 9, 1940, Project H. T. 258.

GENERAL LOCATION

The area of this survey lies to westward of Start Point. It consists of a narrow strip 0.4 mile in width adjacent to and parallel to rocky shoreline between Start Point and a point 1.7 miles to westward.

GENERAL

The entire shoreline contiguous to this survey is low and rugged and footed by extremely foul rocky areas close inshore.

APPROVAL NOTE


In reference to the statement in the descriptive report "The bottom is sandy and spotted with numerous coral heads", most of these coral heads in the strip suitable for anchorage rise but a slight height above the surrounding bottom. Least depths were obtained on critical coral heads.

The purpose of this survey, which was outside of the area covered by the instructions, was to obtain information on anchorage possibilities. An anchorage in 8 to 9 fathoms off triangulation station NEW was used to a considerable extent by the HYDROGRAPHER during northeasterly and easterly weather.

Large frame signals were built over traingulation stations RAM, MAC, NEW and OLD. All of these signals, with the exception of station MAC, were boarded up and painted white on the seaward side. They are conspicuous and make good beacons.

A large white painted slat signal was also built over topographic station END. This signal is at the waters edge and will probably be carried away soon.

W. M. Scaife,  
Commanding HYDROGRAPHER.

H6627 

TIDAL NOTES

Gage Established by the  
Party in Abraham Bay, Bahamas

Approximate position:	22° - 22' N, 73° - 00' W
Mean Low Water:	3.2' on staff (field determination)
Highest Tide Observed:	6.2' on staff January 16, 1941
Lowest Tide Observed:	2.4' on staff November 29, 1940

BAR CHECK ABSTRACT

Sheet #3

MAYAGUANA ISLAND

H6627

BAHAMA ISLANDS

PROJECT H. T.258

DATE	DAY	TIME POS.#	INITIAL	DEPTH			REMARKS	
				TRUE	FATH.	CORRN.		
1941 Jan. 27	b	1 b	2.0	6.0	6.0	0.0	Stbd. Launch	
				12.0	12.2	- 0.2	" "	
				18.0	18.0	0.0	" "	
				30.0	29.9	+ 0.1	" "	
				36.0	36.0	0.0	" "	
No corrections required for "b" Day								
1941 Jan. 22	a	1 a	2.0	5.0	5.2	- 0.2	Port Launch	
				10.0	9.9	+ 0.1	" "	
				139 a (Bar check #1)	6.0*	7.2	- 1.2	*Bar check on
					12.1	13.4	- 1.3	20 fm line -
					18.2	19.0	- 0.8	True distances
					24.4	25.0	- 0.6	as noted.
					30.5	- -	- -	
					36.6	37.0	- 0.4	Neither deep
					42.7	- -	- -	check was
					48.8	48.0	+ 0.8	taken
					54.9	55.0	- 0.1	
					61.0	60.5	+ 0.5	
				67.1	66.8	+ 0.3		
				73.2	72.5	+ 0.7		
				79.4	78.0	+ 1.4		
				139 a (Bar check #2)	30.5	31.0	- 0.5	
					36.6	37.5	- 0.9	
					42.7	43.4	- 0.7	
					48.8	49.0	- 0.2	
					54.9	- -	- -	
61.0	61.8	- 0.8						
67.1	67.5	- 0.4						
73.2	73.5	- 0.3						
79.4	- -	- -						
85.4	85.0	+ 0.4						

For "a" Day see Graphic Analyzation attached.

STATISTICS SHEET - #3

Statute Miles of Sounding Lines:	33.2
Number of Soundings:	
Port Launch - Continuous profile	
Port Launch - Hand lead	25
Stbd. Launch - Continuous profile	
Number of positions:	303
Area in Square Statute Miles	0.7

### SURVEY METHODS

The starboard and port launches were used to survey the entire area.

Standard survey methods were used throughout. The two launches were equipped with Portable Depth Recorders No. 808A with fish No. 809.

Several soundings were obtained with the hand lead over critical shoals.

### FATHOMETER CORRECTIONS

A separate summary of bar-checks together with graphic analyzation of same for the starboard and port launches is attached.

Results indicated no corrections required for starboard launch "b" day.

For port launch "a" day, a minus correction of 0.5 feet was applied to all soundings under 41 feet.

All soundings deeper than 10 fathoms were corrected in accordance with Temperature and Salinity data submitted with Hydrographic Sheet No. 4 (field)

These corrections were as follows:

<u>Depth</u>		<u>Corrections</u>
0 fms. to 10 fms.		0
10 " " 15 "		+ 1'
15 " " 21 "		+ 2'
21 " " 28 "		+ 3'
28 " " 34 "		+ 4'
34 " " 42 "		+ 5'
42 " " 48 "		+ 6'
48 " " 52 "		+ 7'
52 " " 62 "		+ 8'

### CONTROL

Triangulation,utilizing a plane coordinate system with an assumed datum, and supplemented by intermediate topographic positions, furnished adequate control for this survey.



JUNCTURES

This survey joins Hydrographic Sheet No. 1 (field) to southeastward and Hydrographic Sheet No. 4 (field) to the southwestward. No current hydrographic survey was executed to north-westward.

ANCHORAGE

Anchorage for medium sized vessels, with shelter from northeasterly weather, may be had in coral and sand bottom along the comparatively narrow bench affording anchorage depths between the shoal water fronting the shore and the steep slope which begins about 500 to 600 meters from the shore.

Disadvantages to anchorage in this area are the presence of coral in which the anchor may become fouled and the limited width of the area suitable for anchoring.

DANGERS

The outstanding dangers are listed as follows:

	<u>Depth</u>	<u>Latitude</u>	<u>Longitude</u>
	34 feet	4700 N	8080 E
<i>Two</i>	36 1/2 "	3125 N	10040 E
	12 "	3050 to 3080 N	10200 E
	16 "	3260 N	9975 E
	32 "	2800 N	10350 E
	36 "	2950 N	10200 E

GEOGRAPHIC NAMES

Geographic names were obtained from Hydrographic Chart No. 2805.

MISCELLANEOUS

Depth curves were drawn in accordance with hydrographic manual.

The bottom is sandy and spotted with numerous coral heads.

Respectfully submitted

APPROVED & FORWARDED:

W. M. Scaife,  
Chief of Party, C. & G. S.

Edwin C. Baum,  
Jr. H. & G. Engineer,  
U. S. Coast & Geodetic Survey

## TIDE NOTE FOR HYDROGRAPHIC SHEET

Coastal Surveys April 19, 1941  
Division of ~~Hydrography and Topography~~:

Division of Charts: Attention: Mr. H. R. Edmonston ✓

Plane of reference approved in  
1 volume of sounding records for

HYDROGRAPHIC SHEET 6627

Locality West of Abraham Bay, Mayaguana Is land, Bahama Islands

Chief of Party: G. C. Mattison in 1940 - 1941  
Plane of reference is mean low water reading  
3.2 ft. on tide staff at Abraham Bay  
16.1 ft. below B. M. Triangulation Station "CAL"

Height of mean high water above plane of reference is 2.0 feet.

Condition of records satisfactory except as noted below:

(Signed) Paul C. Whiskey

Chief, Division of Tides and Currents.

## DIVISION OF CHARTS

## Surveys Section

REVIEW OF HYDROGRAPHIC SURVEY NO. 6627 (1941) FIELD NO. 3

Bahamas, Abraham Bay, West of Start Point  
Surveyed January 22-27, 1941, Scale 1:4,800  
Instructions dated November 9, 1940 (HYDROGRAPHER)

Soundings: Hand Lead  
Graphic Recorder

Control: Three-point Fixes on  
Shore Signals

Chief of Party - G. C. Mattison  
Surveyed by - E. R. McCarthy  
Protracted by - M. J. Timmerman and L. S. Roberson  
Soundings plotted by - C. W. Clark and W. B. Page  
Verified and inked by - Harold W. Murray  
Reviewed by - Harold W. Murray, April 26, 1941  
Inspected by - H. R. Edmonston

1. Shoreline and Signals

The shoreline and signals originate with T-6787a (1940) and T-6790 (1941).

2. Sounding Line Crossings

Agreement of such crosslines as were run or that result from the work is satisfactory.

3. Depth Curves

The usual depth curves may be satisfactorily drawn.

4. Junctions with Contemporary Surveys

- a. The junction with H-6625 (1940-41) on the east is satisfactory.
- b. The present survey joins H-6628 (1940-41) on the south. The junction is satisfactory except that several soundings of 433 to 555 feet fall in depths of about 200 to 300 feet. The bottom here slopes rapidly and the deeper soundings have been omitted. There is no actual overlap along the southeast portion of the junction but the gap of about 200 meters in width is approximately equal to the sounding spacing on the smaller scale survey.
- c. The Descriptive Report, page 3, states that no survey was made to the west of the present survey limits.

5. Comparison with Prior Surveys

No prior surveys have been made by this Bureau in the area covered by the present survey.

6. Comparison with H. O. Chart 2805 (New Print date January 1932)

Information on this small scale chart, scale 1:170,450 is very sparse and of a reconnaissance nature. The chart contains no information that needs specific consideration in this review.

7. Condition of Survey

- a. The sounding records and notations on the profile rolls were neat and legible.
- b. The field protracting and plotting were very accurate.
- c. The descriptive report is clear and satisfactorily covers all matters of importance.
- d. The notation "Co. Hds." was appended to the outstanding shoal soundings surrounded by deeper water on the strength of the statement in the descriptive report, page 3, that the bottom is spotted with numerous coral heads.

8. Compliance with Instructions for the Project

The plan, character, and extent of the survey satisfy the Instructions for the Project.

9. Additional Field Work Recommended

This is an excellent survey and no additional work is necessary. It may be advisable at some future date to investigate the 9-foot sounding falling in depths of 15 to 18 feet at 3,150 N., 10,270 E.

10. Superseded Surveys

There are no prior surveys in this area.

Examined and approved:



Thos. B. Reed,  
Chief, Surveys Section



Chief, Division of Charts



Chief, Section of Hydrography



Chief, Division of Coastal Surveys

Depth in Feet  
ON ORIGINAL  
DOCUMENT

# GRAPHIC ANALYZATION of BAR-CHECKS MAYAGUANA ISLAND BAHAMAS

FIELD SHEET No. 3 H6627  
PROJECT H.T. 258

Bar Check Correction in Feet

+1

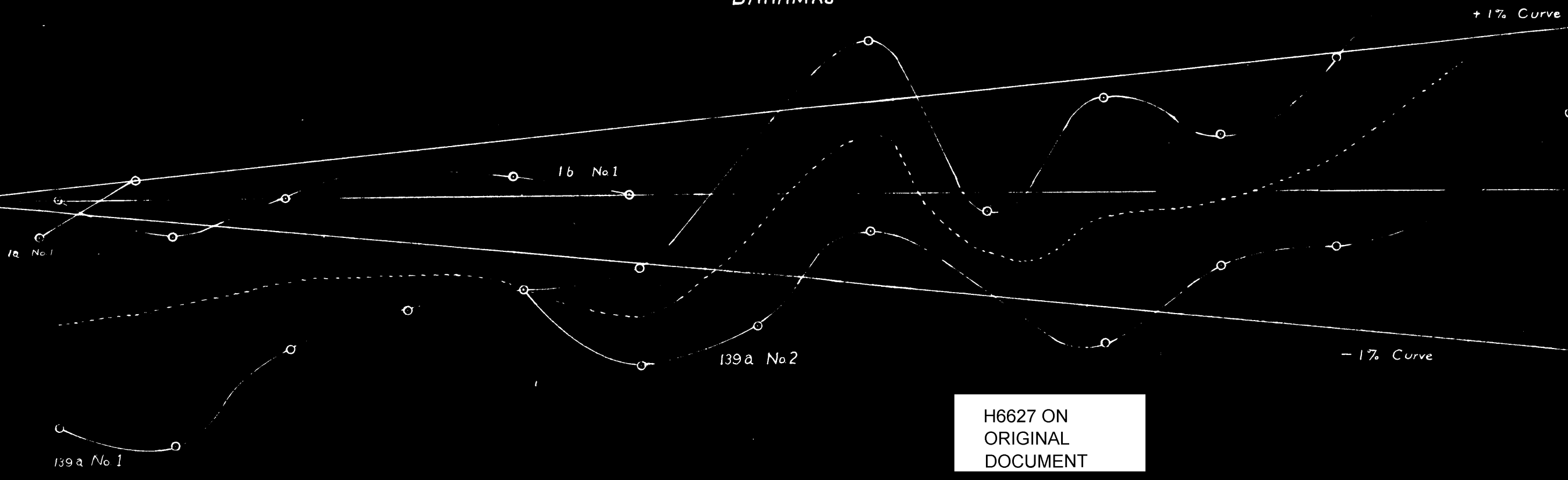
0

-1

-2

+1% Curve

-1% Curve



H6627 ON  
ORIGINAL  
DOCUMENT

0-41 Feet = -0.5 Feet Corr.  
42-60 Feet = 0.0 " Corr.

1b No. 1 (SEE PAGE 6)

### LEGEND

- STARBOARD LAUNCH -
- PORT LAUNCH -
- MEAN CURVE (STBD LH) -
- PERCENTAGE CURVES -

1a No. 1  
139a No. 1 (SEE PAGE 6)  
139a No. 2