

# FE 195

Diagram No. 905

NOAA FORM 76-35A

U.S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
NATIONAL OCEAN SURVEY

## DESCRIPTIVE REPORT (HYDROGRAPHIC)

Type of Survey ... Field Examination  
Field No. ....  
Office No. .... FE-195

### LOCALITY

State ... Virgin Islands  
General Locality ... St. Thomas  
Locality ... Scorpion Rock, Crown Bay  
..... Long Bay

19 64

CHIEF OF PARTY  
G.W. Moore

### LIBRARY & ARCHIVES

DATE ... May 14, 1964

☆ U.S. GOV. PRINTING OFFICE: 1978-666-172

NOTE: A new system for registering Field Examinations (FE's) was established in 1980. All FE's are consecutively numbered as shown hereon. The date shown in the new format is the actual date of survey. This material was previously registered as;

FE No.2 1964

FE 195



F E No. 2  
1964

C 71

Diag. Cht. No. 905.

Form 504

U. S. DEPARTMENT OF COMMERCE  
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. Reconnaissance Office No. \_\_\_\_\_

LOCALITY

State Virgin Islands

General locality St. Thomas

Locality Scorpion Rock, Crown Bay,  
Long Bay

19 64

CHIEF OF PARTY

Glenn W. Moore

LIBRARY & ARCHIVES

DATE

W 14 1964

USCOMM-DC 5087

1964

F E No. 2



**HYDROGRAPHIC TITLE SHEET**

INSTRUCTIONS - 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.

**Reconnaissance**

State Virgin Islands

General locality St. Thomas

Locality Scorpion Rock, Crown Bay, Long Bay

Scale 1:10,000 Date of survey 14 April 1964

Instructions dated Verbal, Via Telephone Project No. \_\_\_\_\_

Vessel USC&GS Ship EXPLORER

Chief of party Captain Glenn W. Moore

Surveyed by CDR L. S. Baker, LTjg C. W. Hayes, ENS E. N. Vail

Soundings taken by echo sounder, hand lead, pole

Graphic record scaled by W.L.J., O.C.S., C.D.B., E.N.V.

Graphic record checked by W.L.J., O.C.S., N.A.S., D.R.H.

Protracted by W.L.J.

Soundings penciled by W.L.J.

Soundings in fathoms feet at MLW MLLW \_\_\_\_\_

REMARKS: This survey was performed as a reconnaissance survey to correct Chart 933 for the changes caused by recent dredging operations.



DESCRIPTIVE REPORT TO ACCOMPANY HYDROGRAPHIC SURVEY  
RECONNAISSANCE SURVEY  
ST. THOMAS, VIRGIN ISLANDS  
Scale 1:10,000 USC&GS Ship EXPLORER

A. PROJECT

Hydrography was performed as a reconnaissance survey to correct Chart 933 for the changes caused by recent dredging operations.

B. AREA SURVEYED

This reconnaissance survey covers Scorpion Rock, Crown Bay, and Long Bay at St. Thomas Island.

C. SOUNDING VESSEL

All hydrography was accomplished in launches from the Ship EXPLORER.

Launch No. 1 - ENS E. N. VAIL, O. in C., Purple Day Letters  
Launch No. 2 - LTjg C. W. Hayes, O. in C., Brown Day Letters  
Launch No. 3 - CDR L. S. Baker, O. in C., Red Day Letters

D. SOUNDING EQUIPMENT

Fathometers and hand leads were used in the launches as follows:

Launch No. 1	DE 723, No. 807
Launch No. 2	DE 723, No. 255
Launch No. 3	DE 723, No. 258

The calibrated speed of the 723's is 800 Fms/sec. Velocity corrections were calculated from T.&S. values available from Project OPR 423.

E. SMOOTH SHEET

The smooth sheet was traced from Chart 933.

F. CONTROL

All control is shown on Chart 933 and on the smooth sheet in Red. Signals located for additional control or to verify doubtful signals on the Chart, are shown in blue.

G. SHORELINE

The new shoreline in Crown Bay was located by estimated distances from sextant fixes. This shoreline will change when the permanent bulkhead is installed and additional dredging is performed.



H. CROSSLINES

Adequate crosslines were run on Scorpion Rock but no attempt was made to run crosslines in Crown Bay. Long Bay has some crosslines - enough for a reconnaissance survey.

I. JUNCTIONS

There are no junctions made with this survey. Junctions do exist between launch No. 1 and No. 3. The agreement is good.

J. COMPARISON WITH PRIOR SURVEYS

The prior surveys were not available for comparison.

K. COMPARISON WITH CHART

Where dredging had not been performed, this survey agrees with Chart 933.

L. ADEQUACY OF SURVEY

A shoal 8-16 feet was found in Long Bay that did not show on the dredging company's survey but its existence was verified by Navy UDT divers. This reconnaissance survey can be considered adequate for chart corrections until a complete resurvey is made.

M. AIDS TO NAVIGATION

No additions should be added but one beacon has been removed at Lat.  $18^{\circ} 20.24'$ , Long.  $64^{\circ} 56.37'$ .

N. STATISTICS

<u>Launch</u>	<u>No. of Pos.</u>	<u>NM Sdg. Line</u>
1	142	16.1
2	55	2.04
3	108	9.7

P. RECOMMENDATIONS

That consideration be given to assigning a ship the job of a complete resurvey of Scorpion Rock, Crown Bay, and Long Bay, St. Thomas Island in the near future. Extremely large ocean liners enter the harbor on regular schedule. They should have updated charts for their use and safety, in light of the recent dredging that has been performed.



*Copies of charts were (3)  
mailed to Mr. Boreham  
5-26-64*

If and when corrections are made to Chart 933, it is recommended that a copy be sent to Mr. Donald S. Boreham, Assistant Commissioner, Marine & Aviation Services, Dept. of Commerce, St. Thomas, Virgin Islands.

Respectfully submitted

*Leonard S. Baker*  
Leonard S. Baker  
CDR, C&GS

Approved

*Glenn W. Moore*  
Glenn W. Moore  
CAPT, C&GS  
Comdg., Ship EXPLORER



TIDE NOTE  
To Accompany Reconnaissance Survey  
St. Thomas Island, Virgin Islands

A tide staff was established on the Coast Guard Pier, King's Pier. Levels were run to triangulation station PIER 1918. No elevations were available but a local engineer stated that elevations had been established to this mark by the C&GS.

Tide reducers were determined by comparing the staff readings with the predicted tides for 14 April. This gave a value of 1.3 feet on the staff as MLW, at 1200 Hrs.



GEOGRAPHIC NAMES LIST  
Reconnaissance Survey  
St. Thomas, Virgin Islands

No new geographic names were used on this survey.



SIGNAL NAMES  
Reconnaissance Survey  
St. Thomas, Virgin Islands

BUL	Chart	933
CHY	"	"
COW	"	"
DOL	"	"
FRO	"	"
GAL	"	"
GOV	"	"
HAY	"	"
HOT	"	"
LIGHT	"	"
PRO	"	"
RAD	"	"
REA	"	"
RUP	"	"
SIG	"	"
TAN	"	"

ABSTRACT OF CORRECTIONS TO ECHO SOUNDINGS

Settlement and squat test conducted at Roosevelt Roads Naval Station range on 3 March gave the following results:

Launch 1 - No correction  
2 - No correction  
3 - -1.0 foot

Velocity corrections were calculated from Temperature and Salinity casts made earlier for hydrographic Sheets EX 10-3-62, EX 5-1-64, and EX 10-1-64.

Values determined were:


DEPTH	CORRECTION IN FEET
0 - 2	0.0
2 - 6	+0.2
6 - 10	0.4
10 - 14	0.6
14 - 18	0.8
18 - 22	1.0
22 - 26	1.2
26 - 30	1.4
30 - 34	1.6
34 - 38	1.8
38 - 42	2.0
42 - 44	2.2



APPROVAL SHEET  
Reconnaissance Survey  
St. Thomas, Virgin Islands

The Field work on this survey was performed under my personal supervision. This survey was performed to determine the extent of the changes caused by the recent dredging in the area.

Additional work is required for a complete and adequate survey.

  
Glenn W. Moore  
CAPT, C&GS  
Comdg., Ship EXPLORER

RHC

TIDE NOTE FOR HYDROGRAPHIC SHEET

July 17, 1964

Nautical Chart Division: R. H. Carstens

Plane of reference approved in  
3 volumes of sounding records for

HYDROGRAPHIC SHEET F E No. 2 1964

Locality: St. Thomas, Virgin Islands

Chief of Party: G.W. Moore

Plane of reference is mean low water

~~Tide Station Used (Form C&GS 601)~~

Tide staff (from C&GS 277) St. Thomas

Height of Mean High Water above Plane of Reference is as follows: 1.0 ft.

Remarks

J. M. Symons

Chief, Tides and Currents Branch



HYDROGRAPHIC SURVEY STATISTICS  
HYDROGRAPHIC SURVEY NO. F.E.No.2-1964

RECORDS ACCOMPANYING SURVEY: To be completed when survey is registered.

RECORD DESCRIPTION		AMOUNT	RECORD DESCRIPTION		AMOUNT	
SMOOTH SHEET		1	BOAT SHEETS		2	
DESCRIPTIVE REPORT		1	OVERLAYS			
DESCRIPTION	DEPTH RECORDS	HORIZ. CONT. RECORDS	PRINTOUTS	TAPE ROLLS	PUNCHED CARDS	ABSTRACTS/ SOURCE DOCUMENTS
ENVELOPES	3					
CAHIERS						
VOLUMES	3					
BOXES						
T-SHEET PRINTS (List)						
SPECIAL REPORTS (List)						

OFFICE PROCESSING ACTIVITIES

The following statistics will be submitted with the cartographer's report on the survey

PROCESSING ACTIVITY	AMOUNTS			
	PRE-VERIFICATION	VERIFICATION	REVIEW	TOTALS
POSITIONS ON SHEET				305
POSITIONS CHECKED		23	0	23
POSITIONS REVISED		4	0	4
DEPTH SOUNDINGS REVISED		0	0	0
DEPTH SOUNDINGS ERRONEOUSLY SPACED		0	0	0
SIGNALS ERRONEOUSLY PLOTTED OR TRANSFERRED		0	0	0
	TIME (MANHOURS)			
TOPOGRAPHIC DETAILS		0	0	0
JUNCTIONS		0	0	0
VERIFICATION OF SOUNDINGS FROM GRAPHIC RECORDS		1	0	1
SPECIAL ADJUSTMENTS		0	0	0
ALL OTHER WORK		15	14	29
<b>TOTALS</b>				<b>30</b>
PRE-VERIFICATION BY	BEGINNING DATE		ENDING DATE	
VERIFICATION BY <i>Fredrick R. Scarcella</i>	January 27 1965		January 29 1965	
REVIEW BY <i>Fredrick R. Scarcella</i>	March 16 1965		March 22 1965	

Review--Field Examination No. 2-1964

1. The field examination was performed as a reconnaissance survey in accordance with telephonic instructions of April 6, 1964, from the Operations Division.
2. The survey was performed to correct Chart 933 for changes caused by recent dredging operations.
3. The results of the examination are shown on the accompanying smooth sheet on cloth tracing.
4. A comparison between the field examination and the drawing of chart 933 dated February 18, 1965, indicates the following:
  - a. The 16, 15 and 12 ft. soundings charted in the vicinity of Lat.  $18^{\circ}20.35'$ , Long.  $64^{\circ}55.55'$  were originally plotted on the smooth sheet of the present survey in error. These soundings are actually located about 100 meters to the northward where they fall in comparable depths. The location of the charted soundings should be revised to agree with their corrected smooth sheet location.
  - b. The 23 ft. charted on Scorpion Rock from H-4544 is not disproved by the present soundings and should be retained.
5. The Fathometer gain was excessively high in some areas and caused numerous strays, some of which may possibly be interpreted erroneously.
6. Sextant fixes in the Long Bay area are generally weak and sections of some sounding lines may be out of position. The 8 ft. obstruction shown in Lat.  $18^{\circ}20.16'$  Long.  $64^{\circ}55.38'$  was subsequently located 55 meters north of this position and deleted from the chart in accordance with chart letter 1139, 1964.



7. The Descriptive Report adequately covers all other matters pertaining to the examination. No further discussion is considered necessary.

Review by F. R. Scarcella  
3/18/65

Inspected by R. H. Carstens

Approved 4/9/65  
Louis G. Taylor





F.E. No. 2 - 1964

Chart - 905

ST THOMAS HBR  
(chart 933)

Approximate  
Boundary

LEeward PASSAGE

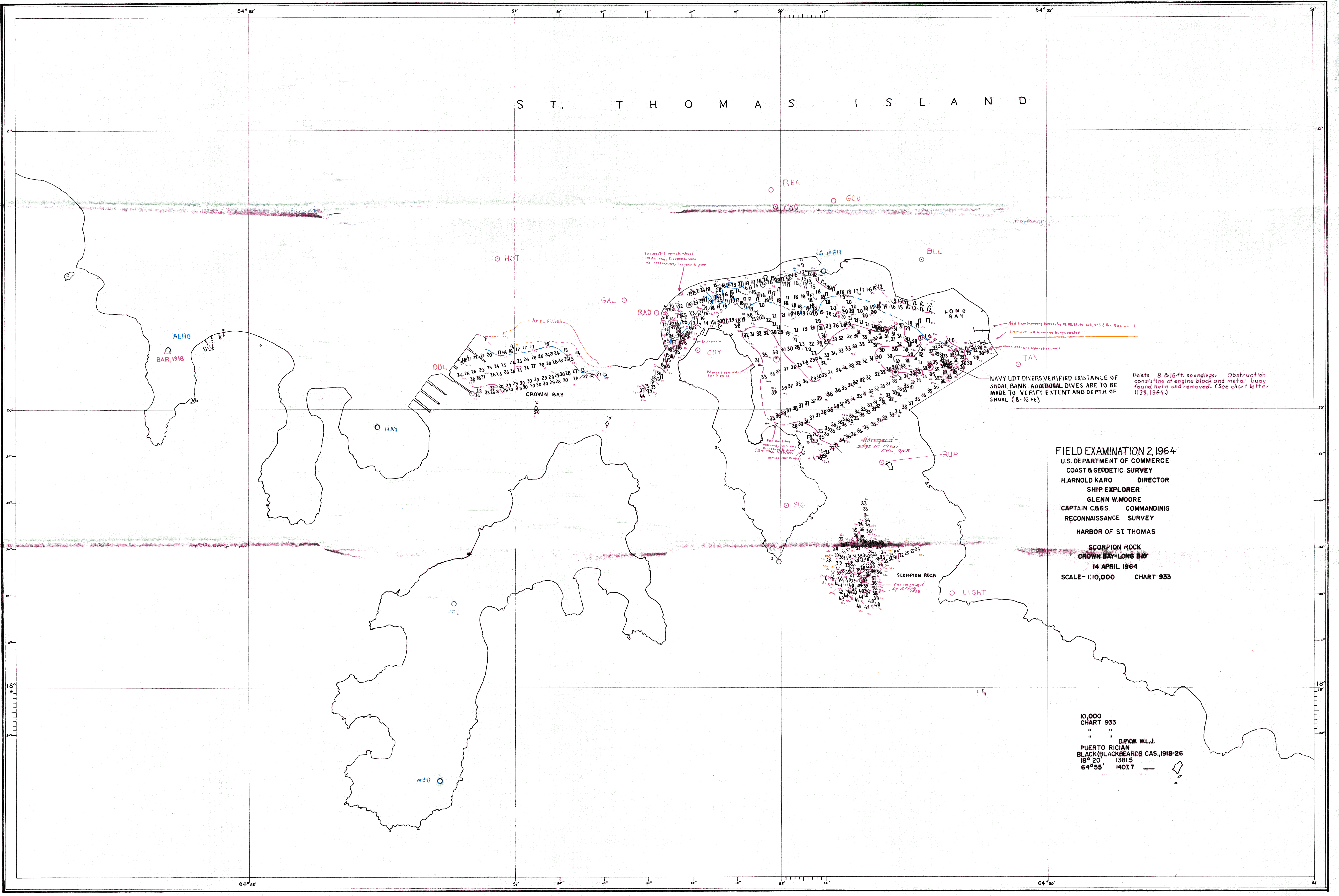
MIDDLE PASSAGE

PILLSBURY S





S T. T H O M A S I S L A N D



FIELD EXAMINATION 2, 1964  
U.S. DEPARTMENT OF COMMERCE  
COAST & GEODETIC SURVEY  
H. ARNOLD KARO DIRECTOR  
SHIP EXPLORER  
GLENN W. MOORE  
CAPTAIN C.B.G.S. COMMANDING  
RECONNAISSANCE SURVEY  
HARBOR OF ST. THOMAS  
SCORPION ROCK  
CROWN BAY-LONG BAY  
14 APRIL 1964  
SCALE-1:10,000 CHART 933

10,000  
CHART 933  
" "  
" " D.P.W.M. W.L.J.  
PUERTO RICIAN  
BLACK (BLACKBEARDS CAS, 1918-26  
18° 20' 1381.5  
64° 55' 1407.7

Delete 8 & 16-ft. soundings. Obstruction consisting of engine block and metal buoy found here and removed. (See chart letter 1139, 1964.)

NAVY UDT DIVERS VERIFIED EXISTENCE OF SHOAL BANK. ADDITIONAL DIVES ARE TO BE MADE TO VERIFY EXTENT AND DEPTH OF SHOAL (8-16 ft)

disregard -  
sigs in error -  
ENC 918

Two masts wreck about 100 ft. long, fragments used as restaurant, Secured to pier

Add new mooring buoys, No. 2, 28, 29, 30 (L.H. #3 (No. 802 L.H.))  
Remove all mooring buoys cancelled

Area Filled

Wreck appears against coast

Piling that looks like in water

Piling and piling removed, with one (small) pile left

wreck post visible



RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. F.E.No.2-1964

INSTRUCTIONS

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.

- 1. Letter all information.
- 2. In "Remarks" column cross out words that do not apply.
- 3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

CHART	DATE	CARTOGRAPHER	REMARKS
933	5-13-64	John P. Wein	Full Part Before <del>After</del> Verification Review Inspection Signed Via Drawing No. 9
904	7-6-64	John P. Wein	Full Part Before <del>After</del> Verification Review Inspection Signed Via Drawing No. thru chart 933 log # 9
933	1/26/65	John P. Wein	Full Part Before <del>After</del> Verification Review Inspection Signed Via Drawing No. 9 Deleted 8 ft shoal (see L-1139/64) added three soundings.
905	11-3-67	H. Johnson	Full Part Before <del>After</del> Verification Review Inspection Signed Via Drawing No.
933	1/3/68	John P. Wein	Full <del>Part Before</del> After Verification Review Inspection Signed Via Drawing No.
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Partially applied Cl 933 - JW - 5/64



chart 587 John P. Wein 3/5/64 Before review ~~Examiner P. R. Weinstein~~