

9937

Diagram No. 905-2

NOAA FORM 76-35A

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

DESCRIPTIVE REPORT

Type of Survey Hydrographic
Field No. PE-10-4-81
Registry No. H-9937.....

LOCALITY

State U.S. Virgin Islands
General Locality .. St. Croix
Sublocality Fredericksted to Hams Bluff...

1981

CHIEF OF PARTY
CDR D.E. Nortrup

LIBRARY & ARCHIVES

DATE October 14, 1986

☆U.S. GOV. PRINTING OFFICE: 1985-566-054

9937

ACRG
CAT
25632
25644 *inset*
25641
25640
} CARTOS:
SIGN OFF
IN BACK

HYDROGRAPHIC TITLE SHEET

H-9937

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.

PE-10-4-81

State U.S. Virgin Islands

General locality St. Croix

Locality Vicinity ~~Hams Bluff~~ Frederiksted to Hams Bluff

Scale 1:10,000

Date of survey 27 March, 1981 - 21 Apr. 1981

Instructions dated 13 November, 1981

Project No. I 149-MI, PE-81

Vessel NOAA Ship PEIRCE (2830), Launches 1017 (2837), 1009 (2839)

Chief of party CDR Donald E. Nortrup, Commanding

Surveyed by T.W. Ruzala, E.J. Fields, E.S. Varney, L.F. Simoneaux, J.W. Bailey

Soundings taken by echo sounder, hand lead, pole Ross #5000 *Fineline Echo Sounder*

Graphic record scaled by E.J.F., E.S.V., L.F.S., J.W.B., C.M.

Graphic record checked by E.J.F., J.W.B., C.M.

Protracted by *D.V. Mason* Automated plot by *Xynetics 1201 Plotter (AMC)*

Verification by *D.V. Mason*

Soundings in *and tenths* fathoms ~~xxx~~ at ~~MLLW~~ MLLW

REMARKS: All times recorded in this survey are GMT.

Appended notes in red in the Descriptive Report were made during office processing.

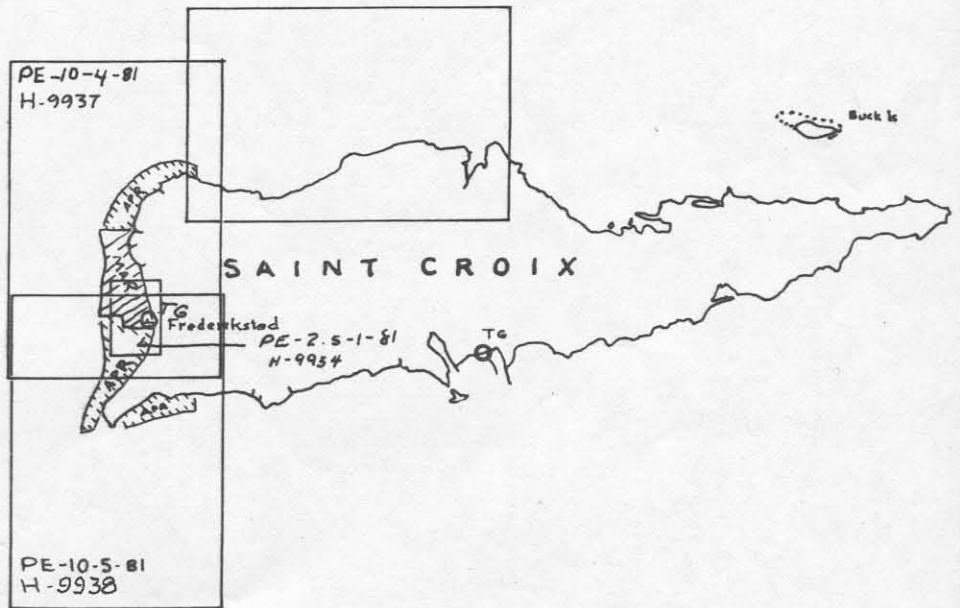
STANDARDS CK'D 10-16-86

C. Loy

AWOIS/SURF MSM 10/27/86

PROGRESS SKETCH
 OPR-I149
 SAINT CROIX, VIRGIN ISLANDS
 18 MAR thru 23 APR, 1981
 NOAA Ship PEIRCE
 DONALD E. NORTRUP, CDR NOAA
 COMD'G
 From Chart 25640

65°00'
 + 18°00'



65°00'
 + 17°30'

MAR	APR	
3.0	13.0	SQ N M SOUNDING
27.6	59.7	LN M MISC DISTANCE
1.0	19.8	LN M DIST TO AND FROM
81.0	173.3	LN M SOUNDING LINE
10	61	BOTTOM SAMPLES (GRAB)
-	0	WATER SAMPLES ANALYZED (SALINITY)
-	1	CONTROL STATIONS
-	0	NANSEN CAST
1	1	TIDE GAGE

DESCRIPTIVE REPORT
TO ACCOMPANY
HYDROGRAPHIC SURVEY H-9937
FIELD NUMBER PE-10-4-81

A. PROJECT

This survey is part of OPR-I149-MI,PE-81, St. Croix, Virgin Islands. It was conducted in accordance with Project Instructions dated 13 November 1980, from Associate Director, Marine Surveys and Maps, forwarded via the Director, Atlantic Marine Center. There was one change that affected this survey. The teletype message is appended to this section.

B. AREA SURVEYED

This survey was conducted in the vicinity of Hams Bluff extending south along the western coast of St. Croix. The actual survey limits are as follows:

150 Fathom Curve	Northern Limit
17°42'42.5"North	Southern Limit
63°51'33.0"West	Eastern Limit
	(Geographic Survey Limit)
Shoreline	Actual Eastern Limit
150 Fathom Curve	Western Limit

The ~~julian~~ dates for this survey are ~~julian~~ day 086, 27 March, 1981, ~~and~~ ^{through} ~~J.D.~~ 111, 21 April 1981. _{day}

C. SOUNDING VESSELS

The hydrography was conducted using the ship's type I aluminum launches, both of which were equipped with the hydroplot systems. The EDP number designations are as follows:

Launch 1017	VesNo 2837
Launch 1009	VesNo 2839

D. SOUNDING EQUIPMENT AND CORRECTIONS TO ECHO SOUNDINGS

This survey was conducted utilizing the Ross digital fathometer model #5000. The individual sounding equipment and serial numbers are as follows:

<u>Vessel</u>	<u>VesNo</u>	<u>Fathometer S/N</u>	<u>J.D.</u>
Launch 1017	2837	1078	086-088, 092, 109, 111
Launch 1009	2839	1079	189, 090, 110, 111

Complete phase checks were maintained on both units at the conclusion of each hydrographic line for instrument accuracy.

The correction for the velocity of sound in water were computed for the two vessels via one Nansen cast, which was obtained from the MT MITCHELL. Nansen cast graphs and direct comparison graphs were compared indicating very good agreement. The velocity correctors were applied as follows:

D. SOUNDING EQUIPMENT AND CORRECTIONS TO ECHO SOUNDINGS (cont'd)

<u>Depth Fathoms</u>	<u>Scale</u>
0-20	.1 Fathom interval
20-110	.2 Fathom interval
110 and deeper	as 1.0 Fathom interval

The Nansen cast obtained for this survey was to a depth of 105 fathoms on 19 February 1981 at 17°48.4 north and 64-40.2 west.

Settlement and squat for both launches was determined at Guantanamo Bay, Cuba on the following dates:

VesNo 2837	J.D. 54	23 February 1981
VesNo 2839	J.D. 65	6 March 1981

Speed changes, during the survey, were noted daily in all sounding volumes and the settlement and squat correctors were recorded in the Sounding Correction Abstracts. These correctors were found to be less than .1 of a fathom therefore were not entered on the TC/TI tape.

The Sounding Correction Abstracts were used to generate the TC/TI tape. The TC/TI tape listing and sounding correction abstracts are appended to this report as is the velocity tape listing and graphs.

E. HYDROGRAPHIC SHEETS

The field sheets were constructed and drawn up aboard the PEIRCE by the ship's PDP8/E computer and complot roll-bed plotter. The data is presented on two plotter sheets (scale 1:10,000, Skew 55,20,38). One plotter sheet contains mainscheme and crossline hydrography while the overlay sheet contains bottom samples and developments.

The final smooth sheet will be plotted by the Atlantic Marine Center. All field records and appropriate data will be forwarded to AMC for final verification. All sheet parameters are appended to this report.

F. CONTROL STATIONS

The hydrography was run in the range/azimuth mode with both theodolite and Del Norte occupying the same station.

The datum used is Puerto Rican. These stations with the exception of 022 Northside offset and 023⁵N.W. light Frederiksted Pier were third order, class I positional accuracy standards or better. The two additional stations, 022, 023⁵, were established by the PEIRCE for calibration and additional theodolite location purposes in accordance to section 1.3.1 of the Hydrographic Manual. A complete list of all stations and signals is included in Section "F" of the appendix.

The computations for the additional control stations are located in the supplemental data files, which accompany this report.

G. HYDROGRAPHIC POSITION CONTROL

Positioning of the sounding vessels was by range/azimuth method using Wild T2 theodolite and Del Norte microwave ranging system. Theodolite and electronic transponders were colocated.

G. HYDROGRAPHIC POSITION CONTROL (cont'd)

The electronic equipment and serial numbers used for this survey are as follows:

<u>EQUIPMENT</u>	<u>VESNO</u>	<u>S/N</u>	<u>J.D.</u>
DMU/Master	2839	188/169	086-088, 092
		188/1068	109, 111
	2837	188/169	089, 090
		192/162	099, 100
		515/217	111
Remote Code 72	2839	256	086-088, 092 109
Code 72	2837	256	089, 090, 100
Code 74	2839	262	111
Code 76	2837	1135	111
T ₂	2839	22153	086-088, 092, 109
		75507	111
		2837	22153 75507

Baseline calibrations were performed during the following dates:

<u>DATE</u>	<u>J.D.</u>	<u>LOCATION</u>	<u>DISTANCE (M)</u>
6 March 1981	065	Guantanamo Bay, Cuba	3625.0
3 April 1981	093	Frederiksted, St. Croix	2443.03
13 April 1981	103	Frederiksted, St. Croix	2495.0
22 April 1981	112	Frederiksted, St. Croix	2443.1

Daily calibration checks of DMU/Master pairs were performed by fixed point calibration at the N.W. light on Frederiksted Pier. This position and the predetermined distances are appended in the supplemental Del Norte data files for this survey.

The calibration checks performed at the beginning and end of each day remained within acceptable limits at the scale of the survey. Therefore, baseline calibration data was applied to positioning data as correctors.

The Del Norte and theodolite occupied the same control station with T₂'s initializing on other known control stations. On J.D. 109, the theodolite occupied station #023, North side offset while the Del Norte was set over station 007 North side. This set up as were all set ups are logged in the daily sounding records.

H. SHORELINE

All shoreline for this survey was transferred from the Class III shoreline manuscript TP-00001, Scale 1:10,000. The shoreline as it appears on TP-00001 adequately represented the area surveyed.

H. SHORELINE (cont'd)

Field edit was not performed, as per-project instructions, but all dangers to navigation as noted on TP-00001 were investigated with subsequent DP's being taken wherever possible.

I. CROSSLINES

Throughout this survey a total of 13.7 nautical miles of crosslines were run. This constitutes 17% of the total mainscheme hydrography.

Crossline mainscheme agreement up to and including the forty fathom curve is very good. The largest noticeable discrepancy is 2 fathoms. Larger differences are apparent in water deeper than forty fathoms. These irregularities are due to the large vertical difference across a small horizontal distance, indicating poor agreement.

J. JUNCTIONING

There were no prior surveys available for junctioning. Junctioning was accomplished with H-9934, PE-2.5-1-81 and H-9938, PE-10-5-81 both of which were run concurrently. General agreement with respect to both surveys indicates consistent trends with no breaks or irregularities in bottom contours.

Specific junctioning with respect to H-9934, PE-2.5-1-81 indicates a very good agreement. Comparisons indicate all junctioning is less than a fathom. Junctioning agreements with H-9934, PE-10-5-81 are as previously mentioned. Quantitative statements are difficult to make due to the positioning of the junctioning hydrographic lines. Intersection was not obtained with the two surveys.

Junctioning was also done with the photobathymetric overlay manuscript TP-00001. Agreement was generally very good again indicating good inshore junctioning at the 3 fathom curve.

See Eval. Rpt., sec 5

K. COMPARISON WITH PRIOR SURVEYS

Comparisons were made with the following prior survey.

<u>REGISTRY NO.</u>	<u>SCALE</u>	<u>YEAR SURVEYED</u>
4653a	1:20,000	1924 - 1925

Rocks from prior survey carried forward to pres. survey.

Prior survey 4653a covers the entire area surveyed. The agreement of this survey with 4653a is very good to excellent. Contour agreements up to and including the 50 fathoms curve are excellent. The agreement of contours deeper than 50 fathoms are good. The differences in agreement can be attributed to the date of the prior survey and close proximity of the deeper contour lines. A 2 5/6 fathom sounding from prior survey 4653a was not developed or located. This shoal sounding is located within the photobathymetric limits and all future chartings of this sounding should be referenced from the photobathymetry overlay.

2 5/6 fath. sdg. from wire drag; carried forward to pres. survey.

There were no prior survey items located on this survey.

L. COMPARISON WITH THE CHART

Comparison was made to Chart 25644 (formerly C&GS 937), West Coast of St. Croix, Frederiksted Roads, 8th Edition, 6 May 1978. Scale is 1:20,000.

As previously stated in Section "K", the inshore soundings and contour agreement is very good with the deeper soundings indicating localized discrepancies. ~~All~~ ^{All} discrepancies are deeper than the soundings acquired during this survey. *Do not concur. See Eval. Rpt., sec. 6a and b.*

It is recommended that the data acquired in conjunction with the photobathymetry supersede all previously charted data. *Do not concur. See D.R., sec. K.*

Investigation of shoreline and navigational hazards was conducted on J.D. 100. Several detached positions were taken to delineate these hazards. All hazards to navigation were found to be within the 18 foot curve as indicated on the shoreline manuscript. All pertinent data is compiled within the sounding volumes and on field sheets. It is recommended that these features be charted as investigated. *Concur*

On ~~J.D.~~ ^{day} 109, an investigation of a 14 fathom shoal sounding in surrounding 16 fathoms of water was conducted. Two detached positions were acquired over the shoal soundings. Diver investigation was conducted the same day. Two individual small wrecks were found and investigated. They both were found to be of no navigational hazard. It is recommended that these items not appear on the chart. All information is compiled in Section "L" of the appendices, Diver Report. *Only one wk. per Diver Rpt.*
Do not concur. See Diver Report. A sunken wreck covered by 15.1 fathoms shown on smooth sheet.

M. ADEQUACY OF SURVEY

This survey, in conjunction with photobathymetry, is complete and adequate to supersede the presently charted soundings for this area. *Do not concur. See Eval. Rpt., sec. 6*

N. AIDS TO NAVIGATION

One floating aid to navigation is located within this survey. A radar beacon with a fixed white light is located approximately at 17°44'17"N by 63°54'53.5"W and is maintained by the U.S. Navy. The radar beacon was located by a detached position and appears on the field sheet. *as a lighted buoy.*

Ham's Bluff light is the only fixed aid to navigation located within this survey and has a third order position. All characteristics conform to the U.S. Coast Guard Light List, 1981. *Frederiksted Pier Lights (priv. maintd) and Frederiksted Harbor Light plotted on survey.*

O. STATISTICS

Category	VesNo 2837	VesNo 2839	Total
Nautical Miles Sounding Lines	37.4	67.9	105.3
Square Miles of Hydrography	1.2	2.4	3.6
Nansen CastMT MITCHELL.....		
Bottom Samples	12	13	25
Tide Stations	-	-	1

P. MISCELLANEOUS

Twenty-five bottom samples were taken, a copy of the Oceanographic Log Sheet-M is included in Appendix "H".

Q. RECOMMENDATIONS

It is recommended that data compiled for this survey supersede all existing charts and information. Specific recommendations regarding charted features are located in Section "K" and Section "L". *Do not concur - See Eval. Rpt.*

R. AUTOMATED DATA PROCESSING

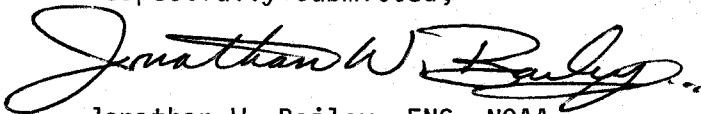
The following programs were used in acquiring and processing data for this survey:

<u>PROGRAM</u>	<u>VERSION</u>
RK 181	2/23/78
RK 212	4/01/74
RK 216	2/05/76
RK 300	10/21/80
RK 330	5/04/76
RK 360	2/02/76
AM 500	11/10/72
RK 530	5/10/76
AM 602	5/20/75
RK 606	8/22/74
RK 612	3/22/78

S. REFERENCE TO REPORTS

The ship's personnel installed one tide gage during this survey (See field tide note appended). This report, leveling records, and monthly tide records have been submitted to the Tides and Water Levels Branch, Rockville, Maryland.

Respectfully submitted,



Jonathan W. Bailey, ENS, NOAA

FR WTEQ
DE NMA

NR2

R 261950Z MAR 81
FM NOAACAM NORVA
TO NOAAS PEIRCE/WTEQ
CM
BT
UNCLAS

In 6 F00

- A. OPR-I149-MI/PE-81 PROJECT INST
1. PARA 6.5.2 REF A INTENDED ALLOW COVERAGE AREAS DEEPER THAN 150 FMS ON 1:80K SCALE SHEETS BY SHIP. COVERAGE 1:17K SHEETS NEED NOT EXTEND PAST 150 FM. COVERAGE ENTIRE 1:3K CHART INSET AREA (FREDERICSTED) MUST BE SURVEYED 1:2.5K CURVE.
 2. CAVEAT: C351 ADVISES THAT LINE SPACING IN AREAS COVERED BY PROPOSED 1:30K CHART MUST NOT EXCEED 800 METERS AND MUST PROVIDE ABILITY FOR SHIP AND LAUNCH JUNCTION.
 3. C351 CONSIDERS FOREGOING IMPLICIT IN PARA 6.5.2 REF A. NO AMENDMENT NECESSARY.
 4. EXCEPTION TO ABOVE IN CHRISTIANSTED. HBR., SEPARATE MSG TO MR MITCHELL.
- BT

[Handwritten signature]

1501Z K

M
NMA DE WTEQ RRRR CSL 261841Z AND 261950Z KKK

V
1502

I. AREA OF INVESTIGATION

A. Location - West Coast of St. Croix Island, Frederiksted Road. Area is approximately 250 yards SW of the end of the town pier.

B. Geographi^S Position - Lat. 17°42'50.9"N and Long. 64°53'26.12".

C. Chart 25644

Use pos. 3215, 2nd out for least depth and wreck's position.

II. PURPOSE

Local divers reported the existence of a wreck in about 100 feet of water southwest of the Frederiksted pier. Investigation was to ascertain the location and nature of this wreck.

III. SURVEY PROCEDURE

Although terrestrial ranges were provided by local residents, this wreck was located by Launch 1009 (VesNo 2839) during standard development. A surface marker was deployed in the vicinity of the wreck as a reference point and diver descent line.

Divers visually examined the wreck, recorded depths from calibrated gauges and measured the dimensions of the item. Visibility was approximately 100 feet and a thorough~~out~~ investigation is assured.

IV. DIVE DATA

Divers: T. Ruzala/J. Bailey
 Time: 1404-1426 = 22 min. (BT=20 min.)
 Depth: 105 feet maximum
 Current: None
 Visibility: 100 feet

V. RESULTS

1. The wreck was located in 97-105 feet of water. It is resting in a sand patch, surrounded by coral, on a bottom which drops off rapidly in a westerly direction.
2. The wreck is that of a wooden boat, 42 feet long and 18 feet wide. The least depth is that of the engine block at 91 feet with an adjacent bottom depth of 97 feet. *Least depth is 15.1 fathoms.*
3. The remainder of the boat is basically deteriorated and resting no more than 1 to 2 feet off the bottom.
4. There is no associated scattered wreckage. The wreck as found is the entire item.



42' WRECK
Frederiksted Hbr.
St. Croix, V.I. - '81

V. RECOMMENDATIONS

No charting action is recommended. Because of the depth of water, characteristics of this wreck, that is its relatively small size and position on the slope and the coral surrounding it on three sides (the fourth is the bottom drop-off), it is physically impossible and totally illogical to consider this as a danger to navigation. However, if a symbol must be assigned, it should be that designating a non-dangerous wreck.

Do not concur. Chart sunken wreck as 15¹ NK

APPROVAL SHEET
H-9937

Field operations contributing to the accomplishment of this survey were conducted under my supervision with frequent personal checks of progress and adequacy. This report and the final field sheet have been closely reviewed and found to represent a complete survey which, in conjunction with the photobathymetry in the survey area, is adequate to supersede all prior surveys for charting purposes.

*Do not concur
See Eval. Rpt.*



D.E. Nortrup
CDR., NOAA
Commanding Officer
NOAA Ship PEIRCE S-328

U.S. DEPARTMENT OF COMMERCE
September 23, 1981 NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

TIDE NOTE FOR HYDROGRAPHIC SHEET

Processing Division: Atlantic Marine Center:

Hourly heights are approved for

Tide Station Used (NOAA Form 77-12): 975-1584 Frederiksted, VI

Period: March 27 - April 2, 1981

HYDROGRAPHIC SHEET: H-9937

OPR: I-149

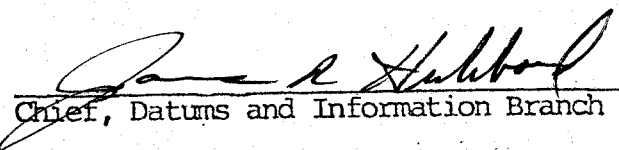
Locality: West End of St. Croix, VI

Plane of reference (mean lower low water): 2.23 ft.

Height of Mean High Water above Plane of Reference is 0.77 ft.

REMARKS: Recommended Zoning:

Zone Direct


Chief, Datums and Information Branch

GEOGRAPHIC NAMES

H-9937

Name on Survey	Source of Name											
	A	B	C	D	E	F	G	H	K			
	ON CHART NO.	ON PREVIOUS SURVEY NO.	ON U.S. QUADRANGLE MAPS	FROM LOCAL INFORMATION	ON LOCAL MAPS	P.O. GUIDE OR MAP	GRAND McNALLY ATLAS	U.S. LIGHT LIST				
BUTLER BAY												1
BUTLER BAY (locality)												2
CARIBBEAN SEA												3
FREDERIKSTED												4
HAMS BAY												5
HAMS BAY (locality)												6
HAMS BLUFF												7
MAROON HOLE												8
NORTH SIDE (locality)												9
PROSPERITY (locality)												10
SAINT CROIX												11
SPRAT HALL (locality)												12
SPRAT HOLE												13
U.S. VIRGIN ISLANDS (title)												14
WILLIAM (locality)												15
												16
												17
												18
												19
												20
												21
												22
												23
												24
												25

Approved:

Charles E. Harrington
Chief Geographer - W/C62x5

FEB 12 1986

HYDROGRAPHIC SURVEY STATISTICS
REGISTRY NO.: H-9937

Number of positions	901
Number of soundings	3588
Number of control stations	8

	<u>TIME-HOURS</u>	<u>DATE COMPLETED</u>
Preprocessing Examination	5	16 JUL 81
Verification of Field Data	586	11 DEC 85
Quality Control Checks	78	
Evaluation and Analysis	37	11 FEB 86
Final Inspection	4	20 FEB 86
TOTAL TIME	710	
Marine Center Approval		19 MAR 86

Transmittal letter of survey and survey records will be included in the Descriptive Report to identify the records accompanying the survey.

MOA23-117-86

LETTER TRANSMITTING DATA

DATA AS LISTED BELOW WERE FORWARDED TO YOU
BY (Check):

- ORDINARY MAIL AIR MAIL
- REGISTERED MAIL EXPRESS
- GBL (Give number) _____

TO:

Chief, Data Control Branch, N/CG243
Room 151, WSG-1
Hydrographic Surveys Branch
Rockville, MD 20852

DATE FORWARDED

9 October 1986

NUMBER OF PACKAGES

two (2)

NOTE: A separate transmittal letter is to be used for each type of data, as tidal data, seismology, geomagnetism, etc. State the number of packages and include an executed copy of the transmittal letter in each package. In addition the original and one copy of the letter should be sent under separate cover. The copy will be returned as a receipt. This form should not be used for correspondence or transmitting accounting documents.

H-9937 (PE-10-4-81)

OPR-I149-MI/PE-81--U. S. Virgin Islands

Pkg 1: (tube)

- 1 Smooth Sheet
- 1 Position Overlay
- 2 Excess Overlays (Levels 1/3 and 2&3/3)
- 1 Original Descriptive Report

Pkg 2: (box)

- 1 Cahier-Position Printout/Control Listing
- 1 Cahier-Sounding Printout/L-File Listing
- 1 Package of material removed from Original Descriptive Report (to be filed with original survey records)

FROM: (Signature)

Robert G. Roberson

RECEIVED THE ABOVE
(Name, Division, Date)

Return receipted copy to:

Chief, Hydrographic Surveys Branch,
N/MOA23
Atlantic Marine Center
439 W. York Street
Norfolk, VA 23510-1114

ATLANTIC MARINE CENTER
EVALUATION REPORT

REGISTRY NO.: H-9937

FIELD NO.: PE-10-4-81

U.S. Virgin Islands, St. Croix, Frederiksted to Hams Bluff

SURVEYED: March 27 through April 21, 1981

SCALE: 1:10,000

PROJECT NO.: OPR-I149-MI,PE/81

SOUNDINGS: Ross Model 5000
Fineline Echo Sounder
Lead Line, Diver's Depth Gauge

CONTROL: Range/Azimuth -
(DeI Norte/Theodolite)

Chief of Party D. E. Nortrup
Surveyed by T. W. Ruszala
..... E. J. Fields
..... E. S. Varney
..... L. F. Simoneaux
..... J. W. Bailey
Automated Plot by Xynetics 1201 Plotter (AMC)

1. INTRODUCTION

- a. There were no unusual methods of surveying performed during this survey.
- b. Changes in the Descriptive Report were made in red during office processing.

2. CONTROL AND SHORELINE

- a. The source of control is adequately described in sections F and G of the Descriptive Report.
- b. Shoreline originates with Class III registered maps TP-00001 and TP-00006 of 1977. The maps consist of two parts, the shoreline map and a photobathymetric overlay.
- c. Soundings in red were determined by photobathymetric methods using photographs of 1977. These soundings were transferred from the map overlay and provide supplemental information for areas not covered by the hydrographic survey.
- d. The obstruction at MHW at latitude 17°43'34"N, longitude 64°53'18"W depicted on TP-00001 was searched for at low water with negative results. As

the probable identity of the obstruction is listed as a buoy from information furnished by the Photogrammetric Branch, the obstruction is considered of a temporary nature and is not shown on the smooth sheet.

3. HYDROGRAPHY

a. Depths at crossings are in good agreement considering the nature of the bottom.

b. The standard depth curves are adequately delineated, except for the 0-depth curve and portions of the 1-fathom depth curve. These could not be drawn completely due to their proximity to shore.

c. The development of the bottom configuration and the determination of least depths are considered adequate.

4. CONDITION OF SURVEY

The smooth sheet and accompanying overlays, hydrographic records, and reports comply with the requirements of the Hydrographic Manual.

5. JUNCTIONS

Adequate junctions were effected with H-9938 (1981) on the south and with H-9993 (1982) on the west during the verification of those surveys. In accordance with Hydrographic Survey Guideline No. 22, a formal junction was precluded with H-9934 (1981) because the survey was archived at headquarters prior to the verification of the present survey. The label "ADJOINS" precedes the registry number in the junctional notes. In general, hydrography and photobathymetric depths on the present survey are in harmony with soundings on H-9934 which, at a scale of 1:2,500, is a more comprehensive survey. However, within the area of overlap a sunken wreck covered by 15.1 fathoms of water at latitude 17°42'50.53"N, longitude 64°53'26.46"W is only depicted on the present survey.

The junction with H-9997 (1982) on the northeast will be completed during verification of that survey.

6. COMPARISON WITH PRIOR SURVEYS

a. H-4653a (1924-1925) 1:20,000

This prior survey covers the entire area of the present survey. While there are areas of agreement, a comparison of prior and present depths beyond the 20-fathom depth curve reveals significant differences along the deep slope. In shoaler depths, only minor differences of less than 1 fathom indicate a relatively stable bottom. Differences can be attributed to the different surveying methods used, scale differences, and the irregularity of the bottom. Several inshore rocks from the prior survey have not been disproved and have been carried forward to supplement the present survey.

The 10- and 16-fathom depths charted at latitude 17°44'13"N, longitude 64°53'57"W and latitude 17°44'12"N, longitude 64°53'59"W, respectively, from the prior survey fall along the steep slope in depths of 21 to 29 fathoms on the present survey. These prior soundings on the offshore segment of a sounding line were probably plotted in error due to weak fixes and should be deleted from the chart.

With the above additions, the present survey is adequate to supersede the prior survey within the common area.

b. H-4653b (1925) WD 1:20,000

This wire-drag survey covers portions of the present survey area. No conflicts between present depths and effective wire-drag depths were found.

Some soundings, groundings, and bottom characteristics have been carried forward from the wire-drag survey to supplement the present survey.

7. COMPARISON WITH CHART 25644 (8th Edition, May 6, 1978)

a. Hydrography

The charted hydrography primarily originates with the previously discussed surveys which need no further consideration, supplemented by some depths from miscellaneous sources.

The obstruction fish haven charted in the vicinity of latitude 17°45'08"N, longitude 64°53'48"W from information furnished by the U.S. Army Corps of Engineers (Chart Letter 1604 of 1977) should be retained on the chart.

Except as noted above, the present survey is adequate to supersede the charted information within the common area.

b. Aids to Navigation

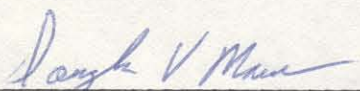
The aids to navigation on the present survey are in substantial agreement with their charted positions and adequately mark the features intended. The U.S. Navy maintained beacon "Y," PA charted at latitude 17°44'16"N, longitude 64°53'52"W is described as an anchored 4-foot diameter float (lighted) by the hydrographer. This item is shown as a lighted buoy on the present survey and is not mentioned in the U.S. Coast Guard Light List for 1981.

8. COMPLIANCE WITH INSTRUCTIONS

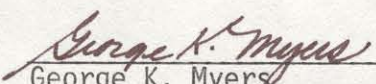
This survey adequately complies with the project instructions, ~~except as noted in section 4 of this report.~~ *gm*

9. ADDITIONAL FIELD WORK

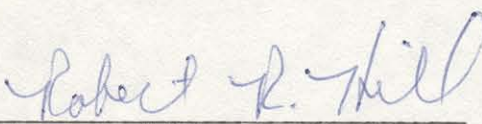
This survey is considered a good basic survey and no additional field work is recommended.



Douglas V. Mason
Cartographic Technician
Verification of Field Data



George K. Myers
Chief, Standards Section (N/CG242)
Hydrographic Surveys Branch
Evaluation and Analysis



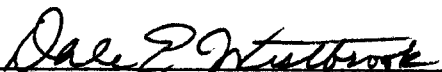
Robert R. Hill
Senior Cartographic Technician
Verification Check



Inspection Report
H-9937

The completed survey has been inspected with regard to survey coverage, delineation of depth curves, development of critical depths, cartographic symbolization, and verification or disproval of charted data. The survey complies with National Ocean Service (NOS) requirements except as noted in the Evaluation Report. The survey records comply with NOS requirements except where noted in the Evaluation Report.

Inspected



Dale E. Westbrook
Deputy Chief, Hydrographic Surveys
Branch (N/CG24x1)

Approved



Wesley V. Hall, RADM, NOAA
Director, Atlantic Marine Center

DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Ocean Survey
Washington, D.C.

Hydrographic Index No. 180C

INDEX
HYDROGRAPHIC SURVEYS
Complete through March 1979

1967-1976
VIRGIN GORDA TO ST. THOMAS AND ST. CROIX
VIRGIN ISLANDS

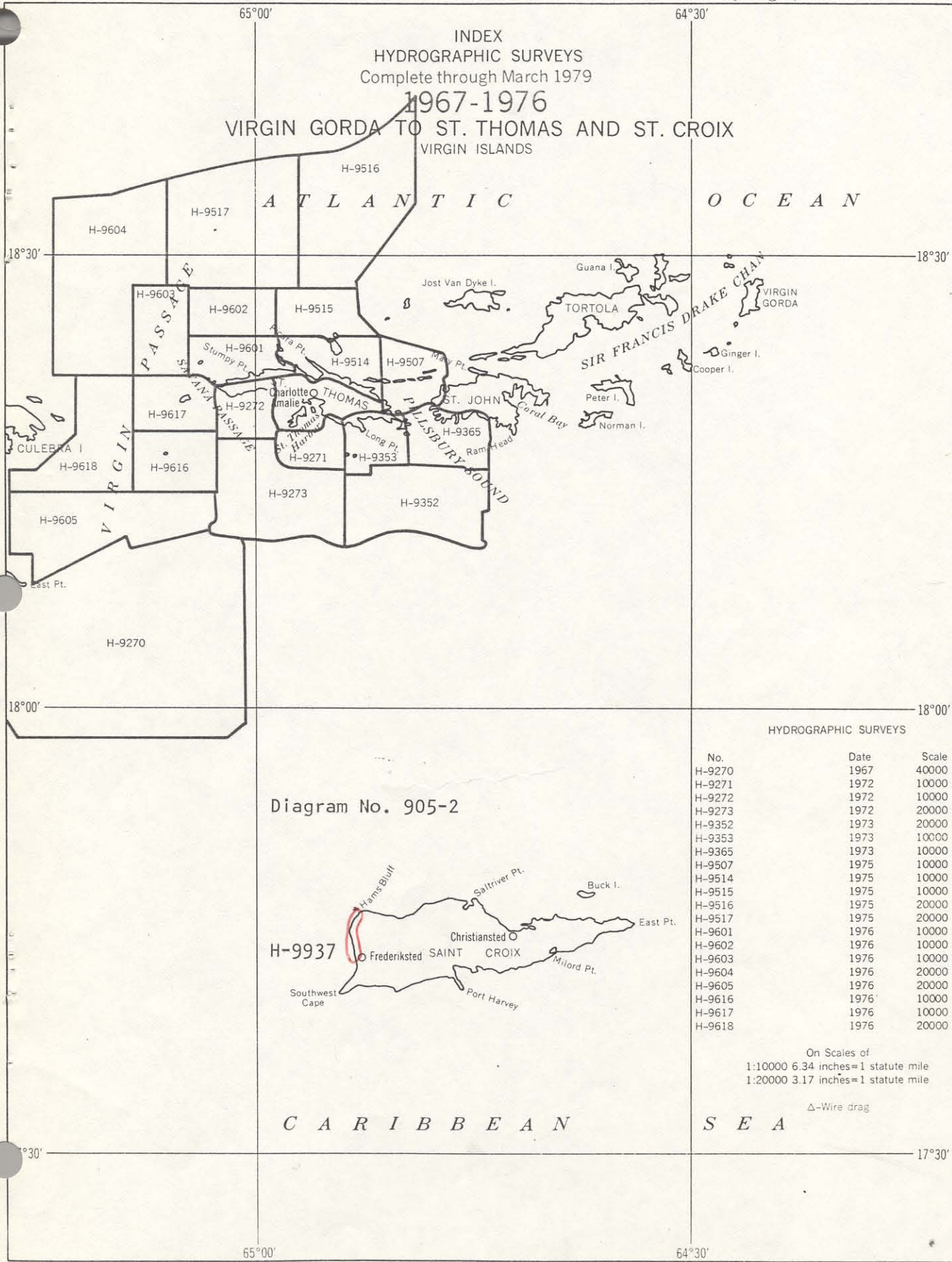


Diagram No. 905-2

HYDROGRAPHIC SURVEYS

No.	Date	Scale
H-9270	1967	40000
H-9271	1972	10000
H-9272	1972	10000
H-9273	1972	20000
H-9352	1973	20000
H-9353	1973	10000
H-9365	1973	10000
H-9507	1975	10000
H-9514	1975	10000
H-9515	1975	10000
H-9516	1975	20000
H-9517	1975	20000
H-9601	1976	10000
H-9602	1976	10000
H-9603	1976	10000
H-9604	1976	20000
H-9605	1976	20000
H-9616	1976	10000
H-9617	1976	10000
H-9618	1976	20000

On Scales of
1:10000 6.34 inches=1 statute mile
1:20000 3.17 inches=1 statute mile

△-Wire drag

