

TP-00001

TP-00001

NOAA FORM 76-35

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

## DESCRIPTIVE REPORT

Type of Survey ... Shoreline/Photobathymetry.....

Job No. ... CM-7718 ..... Map No. ... TP-00001 ...

Classification No. Class III Edition No. ... 1st\*.....

Two Parts

### LOCALITY

State ... Saint Croix, Virgin Islands.....

General Locality ... Northwest Coast.....

Locality ... Frederiksted to Davis Beach.....

19 77 TO 19

### REGISTRY IN ARCHIVES

DATE .....

☆ U.S. GOVERNMENT PRINTING OFFICE: 1973-761-775

\* This map edition will not be field edited.

NOAA FORM 76-36A (3-72)		U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.		TYPE OF SURVEY <input checked="" type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED		SURVEY TP. 00007 (2 Parts) MAP EDITION NO. ( ) MAP CLASS III JOB PH-CM-7718	
DESCRIPTIVE REPORT - DATA RECORD							
PHOTOGRAMMETRIC OFFICE Photogrammetry Division (Rockville)				LAST PRECEDING MAP EDITION			
OFFICER-IN-CHARGE Cdr. Walter S. Simmons				TYPE OF SURVEY <input type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED		JOB PH- MAP CLASS SURVEY DATES: 19__ TO 19__	
I. INSTRUCTIONS DATED							
1. OFFICE Instructions-OFFICE-Job CM-7718, Chart Compilation and Photobathymetry, St. Croix, Virgin Island, 8/21/78. Instructions-AEROTRIANGULATION-Job CM-7718 Chart Compilation and Photobathymetry, St. Croix, Virgin Island, 8/3/78				2. FIELD Instructions-PHOTOGRAPHY-Job CM-7718 Shoreline Mapping and Photobathymetry, St. Croix, Virgin Island, 10/26/77 Instructions-FIELD-Job CM-7718, Shoreline Mapping and Photobathymetry, St. Croix, Virgin Islands, 9/21/77			
II. DATUMS							
1. HORIZONTAL: <input type="checkbox"/> 1927 NORTH AMERICAN				OTHER (Specify) Puerto Rico Datum			
2. VERTICAL: <input checked="" type="checkbox"/> MEAN HIGH-WATER <input checked="" type="checkbox"/> MEAN LOW-WATER <input type="checkbox"/> MEAN LOWER LOW-WATER <input checked="" type="checkbox"/> MEAN SEA LEVEL				OTHER (Specify)			
3. MAP PROJECTION Lambert Conformal Conic				4. GRID(S)			
				STATE Virgin Island		ZONE St. Croix	
5. SCALE 1:10,000				STATE		ZONE	
III. HISTORY OF OFFICE OPERATIONS							
OPERATIONS				NAME		DATE	
1. AEROTRIANGULATION BY METHOD: Analytic Block LANDMARKS AND AIDS BY				R. Kelly		4/6/79	
				R. Kelly		"	
2. CONTROL AND BRIDGE POINTS PLOTTED BY METHOD: Coradomat CHECKED BY				Henry Felices		4/17/79	
				N/A			
3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY COMPILATION CHECKED BY				Henry Felices		11/6/79	
				Gregory Fromm		"	
INSTRUMENT: B-8S/ALTEK Bathymetry <del>XXXXXX</del> BY				Robert W. Rodkey, Jr.		9/20/80	
SCALE: 1:10,000 CHECKED BY				G. Fromm		"	
4. MANUSCRIPT DELINEATION PLANIMETRY BY				Henry Felices		11/9/79	
				G. Fromm		3/13/80	
METHOD: Bathymetry <del>XXXXXX</del> BY				Robert Rodkey, Jr.		9/20/80	
Smooth Drafting & Scribing CHECKED BY				G. Fromm		11/25/80	
HYDRO SUPPORT DATA BY				Robert Rodkey, Jr.		9/20/80	
SCALE: 1:10,000 CHECKED BY				G. Fromm		11/25/80	
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY				N/A			
6. APPLICATION OF FIELD EDIT DATA BY				Field Edit Canceled			
				N/A			
7. COMPILATION SECTION REVIEW BY				G. Fromm		11/25/80	
8. FINAL REVIEW BY				Robert W. Rodkey, Jr.		11/2/81	
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY				Robert W. Rodkey, Jr.		12/21/81	
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY				G. Fromm		3/19/82	
11. MAP REGISTERED - COASTAL SURVEY SECTION BY				D. L. Neeffe		4-26-82	

NOAA FORM 76-36B  
(3-72)U. S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
NATIONAL OCEAN SURVEY

## COMPILATION SOURCES

TP-00001 (2 Parts)

## 1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC-10(Z)

Focal length=153.14mm

TYPES OF PHOTOGRAPHY  
LEGEND

## TIME REFERENCE

## TIDE STAGE REFERENCE

☐ PREDICTED TIDES☒ REFERENCE STATION RECORDS☐ TIDE CONTROLLED PHOTOGRAPHY

(C) COLOR

(P) PANCHROMATIC

(I) INFRARED

## ZONE

Atlantic

☒ STANDARD

## MERIDIAN

60th

☐ DAYLIGHT

NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE
77(C)9812, 14, 16, 18,20	12/7/77	0833-0838	1:20,000	+23 Ft. MHW
77(C)9152-9154	11/14/77	0830-0844	1:20,000	+19 Ft. MHW

REMARKS The stages of Tide listed above were determined from "FREDERIKSTED" tide gage records.

## 2. SOURCE OF MEAN HIGH-WATER LINE:

The source of the mean high-water is the photography listed above under Item 1. Refer to paragraph #35 of the Compilation Report bound with this Descriptive Report.

## 3. SOURCE OF MEAN LOW-WATER OR MEAN LOWER LOW-WATER LINE:

The source of the mean low-water is the photography listed under Item 1. Refer to paragraph #35 of the Compilation Report bound with this Descriptive Report. The reef symbol represents the MLW line on this map.

## 4. CONTEMPORARY HYDROGRAPHIC SURVEYS (List only those surveys that are sources for photogrammetric survey information.)

SURVEY NUMBER	DATE(S)	SURVEY COPY USED	SURVEY NUMBER	DATE(S)	SURVEY COPY USED

## 5. FINAL JUNCTIONS

NORTH	No	EAST	SOUTH	WEST	No
Contemporary Survey		TP-00002 *	TP-00006 *	Contemporary Survey	

REMARKS \* Consist of two parts - Shoreline Manuscript plus Photobathymetric overlay. Final junction was made to both parts.

NOAA FORM 76-36C  
(3-72)U. S. DEPARTMENT OF COMMERCE  
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
NATIONAL OCEAN SURVEY

## HISTORY OF FIELD OPERATIONS

TP-00001

1. ☒ FIELD ~~INSPECTION~~ OPERATION☐ FIELD EDIT OPERATION

OPERATION	NAME	DATE
1. CHIEF OF FIELD PARTY Photo Party 62	Robert S. Tibbetts	Oct. 1977
2. HORIZONTAL CONTROL	RECOVERED BY R. E. Ledbetter	10/31/77
	ESTABLISHED BY	
	PRE-MARKED OR IDENTIFIED BY R. E. Ledbetter	10/31/77
3. VERTICAL CONTROL	RECOVERED BY	
	ESTABLISHED BY R. E. Ledbetter	10/28/77
	PRE-MARKED OR IDENTIFIED BY R. E. Ledbetter	10/28/77
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (Triangulation Stations) BY	N/A
	LOCATED (Field Methods) BY	N/A
	IDENTIFIED BY	N/A
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION	
	<input type="checkbox"/> COMPLETE	
	<input type="checkbox"/> SPECIFIC NAMES ONLY	
	<input checked="" type="checkbox"/> NO INVESTIGATION	N/A
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY	N/A
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	N/A

## II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

2. VERTICAL CONTROL IDENTIFIED

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
77Z(C) 9814	Washington 1919	77Z(C) 9814	Vertical Panel #1
77C(C) 9696		77C(C) 9696	

3. PHOTO NUMBERS (Clarification of details)

None

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

None

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME

5. GEOGRAPHIC NAMES: ☐ REPORT ☒ NONE6. BOUNDARY AND LIMITS: ☐ REPORT ☒ NONE

7. SUPPLEMENTAL MAPS AND PLANS

None

8. OTHER FIELD RECORDS (Sketch books, etc. DO NOT list data submitted to the Geodesy Division)

Field Control Report  
 Control Identification Cards (Vertical and Horizontal)  
 NOAA Form(s) 76-72 (List of Directions)  
 Photographs of Vertical Control Panels

Vols. I and II  
 Horizontal Observations  
 Vol I WYE Leveling Book

NOAA FORM 76-36C  
(3-72)

## RECORD OF SURVEY USE

TP-00001 (2 Parts)

## I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
Shoreline Map plus Photobathymetry map overlay	11/25/80	Class III Shoreline Map. Field edit canceled.		1/13/81
Shoreline/Photobathymetry Maps final reviewed prior to registration.	11/2/81	Class III shoreline Map. Field edit canceled.	3/22/82	

## II. LANDMARKS AND AIDS TO NAVIGATION

## 1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

NUMBER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS
3 Pages		3/22/82	76-40 listing(s)

2. ☐ REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: \_\_\_\_\_
3. ☐ REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE FORWARDED: \_\_\_\_\_

## III. FEDERAL RECORDS CENTER DATA

1. ☒ BRIDGING PHOTOGRAPHS; ☒ DUPLICATE BRIDGING REPORT; ☒ COMPUTER READOUTS.
2. ☒ CONTROL STATION IDENTIFICATION CARDS; ☐ FORM NOS 567 SUBMITTED BY FIELD PARTIES.
3. ☒ SOURCE DATA (except for Geographic Names Report) AS LISTED IN SECTION II, NOAA FORM 76-36C. ACCOUNT FOR EXCEPTIONS:

4. ☐ DATA TO FEDERAL RECORDS CENTER. DATE FORWARDED: 3/26/82

## IV. SURVEY EDITIONS (This section shall be completed each time a new map edition is registered)

SECOND EDITION	SURVEY NUMBER TP - _____ (2)	JOB NUMBER PH - _____	TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	
THIRD EDITION	SURVEY NUMBER TP - _____ (3)	JOB NUMBER PH - _____	TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	
FOURTH EDITION	SURVEY NUMBER TP - _____ (4)	JOB NUMBER PH - _____	TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	

TP-00001

## SUMMARY

This map is one of nine 1:10,000 scale shoreline/photobathymetric maps that comprise Job CM-7718. The map was compiled in two parts; part 1 is the base shoreline manuscript and part 2 is the photobathymetric overlay.

The project area encompasses the island of Saint Croix, U.S. V.I. and the Buck Island National Monument.

The purpose of this survey is to provide data for use in the maintenance of published charts and new chart construction.

Field operations began in October 1977. Operations generally consisted of aerial photography, tidal observations, and the recovery, establishment, and identification of horizontal and vertical control. Horizontal control was premarked (paneled), vertical control was premarked and photoidentified. There was no field inspection performed.

High and low altitude natural color photographs were furnished to complete this job. Basic aerotriangulation photography was flown at 1:50,000 scale, compilation photography at 1:20,000 scale. The high altitude photography was taken in November 1977 with the Wild RC-8(C) camera, the 1:20,000 scale photography in November/December 1977 with the RC-8(E).

Eight strips of color photography, two 1:50,000 scale and six 1:20,000 were bridged by analytic aerotriangulation methods and adjusted to ground on the Virgin Island State Plane Coordinate System. The two high altitude strips were bridged to provide control for bridging the lower altitude strips. Sixteen horizontal and seventeen vertical control stations were used in the block adjustments of the six 1:20,000 scale strips. This work provided the horizontal and vertical control for compilation.

Aerotriangulated control points from the two southern low altitude bridged strips were transferred to one adjacent 1:20,000 scale strip, 77-Z(C)9265-9280. This allowed densification and a seaward extension of photobathymetry compilation on TP-00006 through TP-00009.

Tidal data information for this job was furnished by the Tides and Water Level Division (OA/C23). This information consisted of reference station records for four tide gages and was used in determining the tidal stage at the time each compilation photography was taken.

Compilation was performed in the Special Projects Section (Rockville). Compilation was accomplished through standard photogrammetric methods utilizing the Wild B-8S stereoplotter interfaced

with an ALTEK digitizing system. This map is based on an office interpretation of the 1:20,000 scale photographs. The depths and six-foot interval depth curves depicted on the photobathymetric overlay are referred to the MLW datum established by NOS. A tide zone factor was applied to each photobathymetric model in order to reference all digital data to the MLW datum.

Basic map line work is smooth compilation drafted. Discrete depths were scribed using the Calcomp 718 flatbed plotter to produce a stable base scribecoat negative. The depth curves were then hand scribed on this scribecoat. Using photographic processes, the scribecoat negative was used to produce a stable base positive, the photobathymetric overlay.

This map edition will not be upgraded. Post-compilation photogrammetric field operations were canceled July 2, 1980. Hydrographic surveying is scheduled in the area covered by this map. Field data developed to upgrade this map will be incorporated as part of the hydrographic survey and/or forwarded to the Marine Chart Division for blueprint.

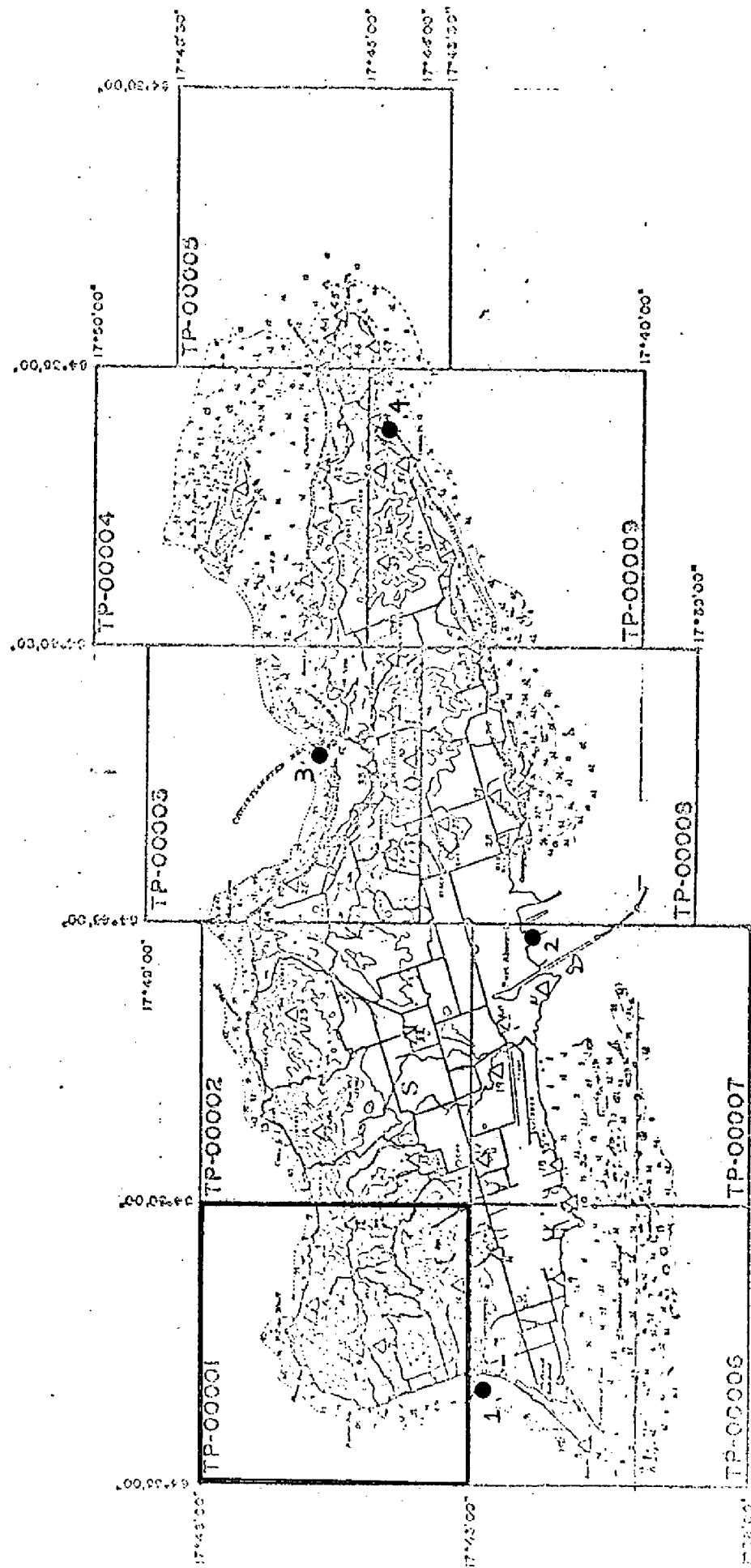
Final review was performed by the Special Projects Section (Rockville). The map was found to be satisfactory and meets the requirements of Bureau Standards and the National Standards for Map Accuracy.

This Discreptive Report contains all pertinent reports and listings of data used to complete the map.

**JOB CM-7718**  
**ST. CROIX, VIRGIN ISLANDS**  
**SHORELINE MAPPING & PHOTOBATHYMETRY**  
**SCALE 1:10,000**

**● TIDE GAGES**

- 1 Frederiksted
- 2 Limetree Bay
- 3 Christiansted
- 4 West Indies Lab





## FIELD INSPECTION

There was no field inspection prior to compilation. Field work accomplished was limited to the recovery and identification of the horizontal and vertical control necessary for aerotriangulation.

## CONTROL REPORT

Job CM-7718  
St. Croix, Virgin Islands

GENERAL STATEMENT:

In accordance with project instructions, circled stations were premarked as reported on NOAA Form 76-53. All triangulation stations were premarked with 1:50,000 scale arrays. Horizontal control was limited to stations that were needed to meet aerotriangulation requirements. No recovery notes were written because a Satellite Triangulation Party had recovered stations in the previous month. No new stations were established.

Substitutions were made for Panels No. 4 and No. 5. Permission to premark or photo identify BULOWS MINDE was refused by the property owner. A site, 736.392 meters north of station WORK, 1919, was premarked. Computations are enclosed. Station MOND, 1919 was premarked direct as an extra station. Station FANCY, 1919 was premarked in place of Station SEVEN, 1919.

In all cases Panel Array No. 1 was used. However, on several occasions the full array could not be placed. These deviations have been indicated on the Control Station Identification Card (NOAA Form 76-53).

VERTICAL CONTROL: Vertical Panels 1 thru 5, 8 thru 11, 13 thru 15, 17 and 18 were all premarked with Array No. 3. However, on several occasions the full array could not be placed. These deviations have been indicated on NOAA Form 76-53 (Control Station Identification Card). Elevations were determined from bench marks or by water transfers.

At Vertical Panel sites 6, 7, 12, 16 and 19, a boat was maneuvered into an area where bottom detail was abundant. At this time the depth of the water was taken from the bow of the boat. An aerial photograph of the boat position was then taken from a circling aircraft. These methods are noted in the following paragraphs.

## VERTICAL PANEL No. 1

The Panel was placed on the northwest side of St. Croix. The area is known as Hamns Buff. The Panel is approximately 75 feet south of the shoreline. The elevation of the water was determined by levels from Bench Mark "1 AZ 1957". The water elevation was transferred to a point close to the Panel. Levels were run from this point to the Panel. The Panel's elevation is 10.721 feet above mean sea level.

## VERTICAL PANEL No. 2

The Panel was placed in a grass field in an area known as North Star Estates. The elevation was determined by a water transfer, levels were run from the water level to the Panel. Panel is 22.738 feet above 1.75 feet on Christiansted Tide Staff.

## VERTICAL PANEL No. 3

The Panel was placed near the shoreline in an area known as Judith Fancy. The elevation was determined by a water transfer, levels were run from the water level to the Panel. Panel is 10.475 feet above 1.70 feet on Christiansted Tide Staff.

## VERTICAL PANEL No. 4

The Panel was placed on the south side of Green Cay, a small island off the northeast shoreline of St. Croix. The elevation was determined by a water transfer, levels were run from the water level to the Panel. Panel is 0.62 feet above 1.80 feet on Christiansted Tide Staff.

## VERTICAL PANEL No. 5

The Panel was placed near the shoreline on the northeast side of St. Croix in an area known as Mary's Fancy. The elevation was determined by a water transfer, levels were run from the water level to the Panel. Panel is 5.90 feet above 3.85 feet on West Indies Laboratory Tide Staff.

## VERTICAL PANELS No. 6 and No. 7

Vertical Panels No. 6 and No. 7 were boat stations off the northwest and northeast shoreline of Buck Island respectfully. At both stations, a photograph and a depth of water was taken on the inner and outer sides of the reef.

## VERTICAL PANEL No. 8

The Panel was placed on the east side of St. Croix. The elevation was determined from Bench Mark No. 1, 1975 located at the West Indies Laboratory. An elevation of 10.00 feet was assumed for the Bench Mark. Levels were run to the water, and then on to the Panel. Panel is 7.24 feet above the assumed elevation of BM No. 1, 1975. BM No. 1 1975 = 8.05

## VERTICAL PANEL No. 9

This is an orange colored Panel placed on a wreck that is grounded on the reef just south of Great Pond Bay. The elevation was determined by a direct water transfer from the water level to the Panel. Panel is 7.5 feet above the water level, 1015 AST 3 Nov. 1977.

## VERTICAL PANEL No. 10

The Panel was placed in a boat yard east of the town of Christiansted; approximately 200 feet south of the bulkhead and piers. The elevation was determined by levels from Bench Mark "9 CES 1957 4". The elevation of the Panel is 2.038 feet above mean sea level.

## VERTICAL PANEL No. 11

The Panel was placed in an open parking lot approximately 150 feet west of Centerline Road in an area known as Peter's Rest. The elevation was determined by levels from Bench Mark "7 CES 1957-207". The elevation of the Panel is 190.750 feet above mean sea level.

## VERTICAL PANEL No. 12

Vertical Panel No. 12 was a boat station off the southeast shore of St. Croix near Half Penny Bay. A photograph of the boat and depth of the water was taken simultaneously.

## VERTICAL PANEL No. 13

The Panel was placed on an island southwest of Hess Oil Company Refinery. The elevation was determined by levels from Bench Mark "1401 C 1977". An assumed elevation of 30.00 feet was used. The difference in elevation between the Bench Mark and Panel is -11.584 feet.  $\text{Line T} = \text{C}$

"1401 C 1977" = 14.77 MSL

## VERTICAL PANEL No. 14

The Panel was placed in an empty lot located approximately 1/4 mile north of Centerline Road in the central part of the island. The elevation was determined by levels from Bench Mark "5 CES 1957 188". The elevation of the panel is 147.502 feet above mean sea level.

## VERTICAL PANEL No. 15

The Panel was placed at "T" intersection along Centerline Road in the central part of the island. The elevation was determined by levels from Bench Mark "3 CES 1957 127". The elevation of the panel is 109.405 feet above mean sea level.

## VERTICAL PANEL No. 16

Vertical Panel No. 16 was south of the airport and south of an ship wreck. A photograph of the boat and a depth of the water was taken simultaneously.

## VERTICAL PANEL No. 17

The Panel was placed north of the Wind Mill located at the Whim Great House Estates. The elevation was determined by levels from Bench Mark "3 CES 1957 127". The elevation of the panel is 92.155 feet above mean sea level.

## VERTICAL PANEL No. 18

An area at the west end of the pier at Fredricksted is to be used as the Panel. Several points in this area were leveled to from Bench Mark "1 AZ 1957". This was done to verify that the area of the pier was level. The elevation of the area varies from 7.626 feet to 7.566 feet above mean sea level. See NOAA Form 76-53 for detailed sketch of area leveled.

## VERTICAL PANEL No. 19

Vertical Panel No. 19 has 4 different intersection positions and 1 boat

position off the shoreline at the southwest cape of St. Croix. Positions 1 thru 4 are located by a baseline from Triangulation Station 51197. Computations enclosed. Position 5 is a photograph of a boat with a depth observed at the time of photography. Positions along the shoreline of the southwest cape are as follows:

10 Nov 1977	Intersection Position No. 1	Depth 13.0 ft	Time 11:10 AST
10 Nov 1977	Intersection Position No. 2	Depth 13.5 ft	Time 11:19 AST
10 Nov 1977	Intersection Position No. 3	Depth 58.0 ft	Time 11:54 AST
10 Nov 1977	Intersection Position No. 4	Depth 8.6 ft	Time 12:45 AST
13 Nov 1977	Boat Position No. 5	Depth 7.5 ft	Time 9:19 EST

#### 20. Extra Vertical Panel

The panel was placed on a wrecked landing craft that is approximately due south of the Alexander Hamilton Airport. The panel was 3.75 feet above the water level at 1005 AST 11/7/77. *Lime Tree*

Respectfully Submitted,

Approved and Forwarded:

*R. E. Ledbetter*  
*R. E. Ledbetter*  
 Ronald E. Ledbetter

*Robert S. Tibbetts*  
 Robert S. Tibbetts  
 Chief, Photo Party 62

Photogrammetric Plot Report  
St. Croix, Virgin Islands  
CM-7718 March 1979

21. Area Covered

This report covers nine 1:20,000 sheets, TP-00001 thru TP-00009 of Saint Croix, Virgin Islands.

22. Two strips of 1:50,000 scale photography were bridged by analytic aerotriangulation methods to establish control for bridging 1:20,000 scale compilation photography and adjusted to ground on the Virgin Islands State Plane Coordinate system using the block adjustment program. Six strips of 1:20,000 scale compilation photography were bridged by analytic aerotriangulation methods. In using the 185 photo block program to adjust the six strips it was found that this program could not handle 109 photographs, however using the same block program it was determined that the 185 block program would handle 100 photographs. Two blocks were run to adjust the six strips to ground on the Virgin Islands State Plane Coordinate system. One block used strips one through five and the other block used strips two through six. Visible landmarks and fixed aids to navigation were located during bridging of the 1:20,000 scale photography.

Ratio values were determined on the 1:20,000 bridging photography and provided along with other bridging data to compilation.

23. Adequacy of Control

The horizontal control provided was adequate except for Work, 1919 (panel) which proved to be in error in the 1:50,000 scale strip and block adjustments. No apparent reason was found to justify error. All other control held within the accuracy required by National Standards of Maps at 1:50,000 and 1:20,000 scale.

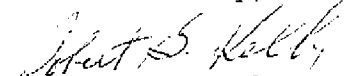
24. Supplemental Data

Local shoreline and U.S. Geological Survey quadrangles were used to provide vertical elevations for preliminary strip adjustments.

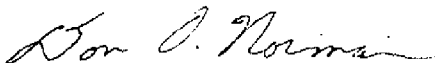
25. Photography

RC-8 color film positives were adequate as to coverage, overlap and definition.

Submitted by,

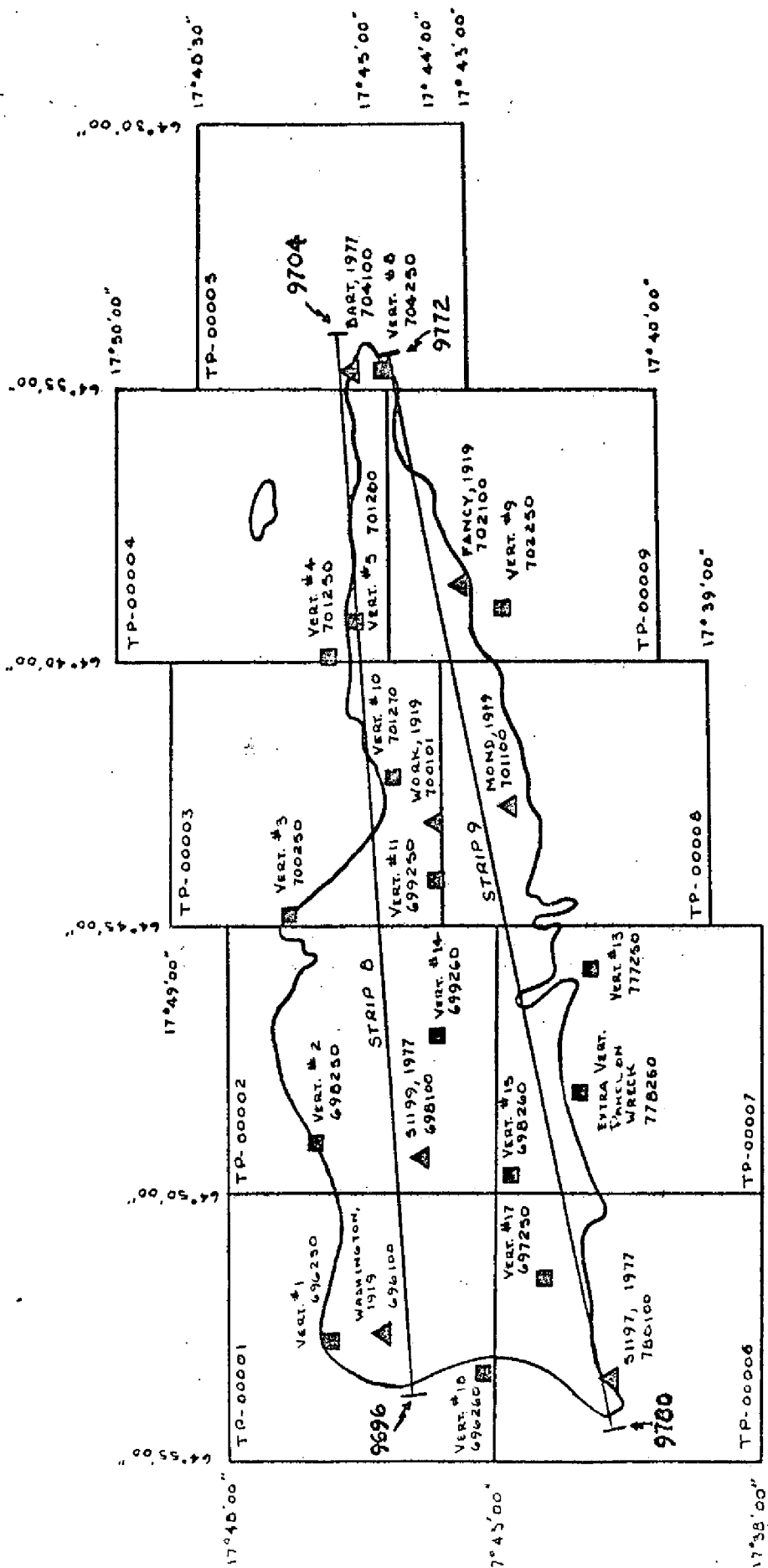
  
Robert B. Kelly

Approved and forwarded:



Don O. Norman  
Chief, Aerotriangulation Section

SAINT CROIX, VIRGIN ISLANDS  
SHORELINE MAPPING  
SCALE 1:50,000  
JOB CM-7718







## ST. CROIX BLOCK STRIPS 175

17

		.997	2.815	
	696100	1041446.517	72288.765	314.779
		- 1.139	1.296	
	698100	1063453.739	68106.923	252.785
		- .191	- .405	
	700101	1096836.121	66247.038	164.488
		- .413	- .506	
△	701100	1099135.587	57744.424	97.348
		- .099	.367	
△	704100	1149132.554	75898.178	224.647
		- .080	- .361	
△	730100	1036597.741	47727.177	3.507
				- .658
□	250220	1037855.244	47434.682	-5.342
	250250	1037855.220	47434.093	-3.657
				- .105
□	316220	1132925.320	83111.322	-13.695
				.095
	316221	1132830.376	87741.950	-7.795
	316280	1132925.413	83111.773	-9.617
	316281	1132830.407	87741.592	-5.498
				1.693
	317220	1127833.814	89807.280	-18.693
	317221	1128488.075	89853.375	-9.834
	317280	1127838.817	89807.135	-13.162
	317281	1128488.055	89253.322	-6.780
				.123
	318220	1065094.072	55981.101	60.923
				- 2.116
	318281	1072621.038	55947.150	20.504
		.280	.445	- .404
△ □	696250	1039963.265	79110.146	10.317
		.371	.007	.139
△ □	696260	1037835.121	59513.124	7.457
		- 3.652	- 1.441	.101
	697250	1047295.481	54836.798	92.256
		- .009	.280	- .139
△ □	698250	1062934.736	70692.574	23.099
		- .429	.135	- .111
△ □	698260	1059231.380	59378.303	109.294
		.325	.053	- .138
△ □	699250	1090280.642	65546.566	190.612
		.177	1.352	- 2.880
	699260	1075362.125	65270.776	144.622
		.119	- .031	.318
△ □	700250	1086758.333	33998.650	11.243
		- .011	- .165	.038
△ □	701250	1114681.838	78844.112	1.208
		- 1.615	.208	- .653
	701260	1118473.147	77741.317	5.507
		- .029	.280	- .126
△ □	701270	1103292.061	72353.391	1.912

		.045	- .336	- .985
△ □	704250	1149094.526	75067.192	14.305
		- 1.827	- .249	- 1.740
	778250	1067233.315	51480.005	2.760
	696850	1036002.220	64419.714	28.222
	697850	1032332.328	63544.308	529.719
	699850	1071973.676	84256.702	6.458
	699860	1076209.586	80536.579	869.863
	699870	1084551.749	73684.116	493.606
	700850	1089461.060	80913.623	36.273
	701850	1102127.830	73141.771	38.993
	701860	1105201.610	74153.706	12.920
	703850	1128432.932	87209.159	4.583
		.068	.065	
△	703860	1123980.587	86765.551	-2.151
	704870	1136563.611	73127.153	72.430
	775550	1098421.916	67833.598	254.501
	777850	1072800.380	55870.167	21.140
	778850	1065294.530	55402.655	60.712
	780350	1032562.315	47072.005	7.900

CARD COUNT= 00047

## ST. CROIX BLOCK STRIPS 2-6

		+ .267	+ .777	
△	696100	1041445.787	72236.727	614.779
		- .884	+ .238	
△	698100	1063454.194	63105.270	252.849
		- .039	- .450	
	700101	1096686.273	66246.993	163.136
		- .289	- .089	
△	701100	1099155.711	57744.911	97.357
		- .165	+ 2.382	
	702100	1124017.685	63720.752	245.739
		- .128	+ .407	
△	704100	1149182.525	75698.18	225.162
		- .196	- .220	
△	730100	1036597.625	47727.316	3.396
				+ .264
□	230223	1037855.188	47434.722	-6.236
	230280	1037855.146	47434.742	-3.903
				+ 1.899
	316220	1132925.395	88111.746	-11.901
				+ 1.706
	316221	1132690.464	87741.487	-5.994
	316230	1132925.485	88111.706	-7.823
	316281	1132690.488	87741.549	-3.697
				- 1.847
	317220	1127639.132	89807.327	-18.849
				+ .178
□	317221	1128468.422	89253.352	-9.522
	317280	1127639.135	89807.185	-13.315
	317281	1128468.410	89253.297	-6.464
				+ .141
	518290	1065062.962	55078.400	60.941
				- 2.313
	518291	1072621.216	55944.896	20.307
				+ .576
□	608220	1069695.773	46442.589	-11.224
	608280	1069695.752	46442.602	-7.743
				- .041
□	614220	1103112.779	55645.407	-5.141
	614280	1103112.761	55645.419	-3.392
				+ .407
△ □	696260	1037685.157	59513.066	- .277
				7.319
		- 4.460	- 1.307	+ .080
	697250	1047294.683	54538.932	92.235
				+ .226
△ □	698250	1062035.021	79692.390	+ .164
				23.402
		- 1.916	- 1.518	+ .068
□	698260	1059279.893	59376.920	109.473
				+ .602
□	699250	1090260.919	65646.363	- 1.789
				188.961
		+ .711	+ .220	- 4.041
	699260	1075362.659	65269.644	143.461

△ □ 700250	1086798.128	83998.188	10.512
△ □ 701250	1114681.957	73844.794	1.162
701260	1118873.491	77741.276	5.964
△ 701270	1103892.079	72853.331	-1.354
△ □ 702250	1122402.658	61410.139	8.483
□ 704250	1149094.745	75067.359	15.018
□ 777250	1080994.736	49930.826	2.909
□ 778250	1067232.554	51176.912	4.187
696850	1036002.131	69418.130	27.227
697850	1052331.097	69544.203	528.264
699860	1076210.180	80534.719	870.781
699870	1084531.948	73683.22	492.462
700850	1089481.416	80918.237	38.123
701850	1102127.615	73141.142	37.615
701860	1105201.635	74453.669	-11.784
703850	1128033.252	87209.693	4.915
△ 703860	1133960.531	86765.519	-.055
704801	1143164.015	76530.799	22.196
704802	1145038.727	72954.481	41.698
704870	1139568.385	75727.809	76.252
775850	1098422.015	67333.459	253.228
777850	1072608.389	55867.614	20.555
778850	1065293.613	55099.804	60.753
778860	1055636.967	49679.867	20.135
780850	1032591.908	47076.127	8.561

CARD COUNT= 00055

## LISTING OF RATIO VALUES

GM7718

St. Croix, USVI

Ratio Values for natural color photography to acheive 1:10,000 -

77Z(C) 9812	thru 9830	- 2.04X
77Z(C) 9865	thru 9885	- 2.03X
77Z(C) 9893	thru 9897	- 2.02X
77Z(C) 9152	thru 9165	- 2.02X
77Z(C) 9916	thru 9926	- 2.03X
77Z(C) 9372	thru 9374	- 2.02X
77Z(C) 0074	thru 0090	- 2.01X
77Z(C) 0101	thru 0115	- 1.98X
77Z(C) 9325	thru 9349	- 2.01X
77Z(C) 9229	thru 9247	- 2.03X
77Z(C) 9405	thru 9408	- 2.03X
77Z(C) 9263	thru 9231	- 2.02X

## DESCRIPTIVE REPORT CONTROL RECORD

MAP NO.	JOB NO.	GEODETIC DATUM	ORIGINATING ACTIVITY	REMARKS
TP-00001	CM-7718	POERTO RICO	Photogrammetry Div. (Rockwell)	
STATION NAME	SOURCE OF INFORMATION (V.L. INDEX)	AEROTRI-ANGULATION POINT NUMBER	COORDINATES IN FEET STATE ZONE	GEOGRAPHIC POSITION φ LATITUDE λ LONGITUDE
HAM BLUFF LIGHT HOUSE, 1919	G.P. P103		X= Y=	φ 17-46-15.979 λ 64-52-16.629
LA GRANGE CHIMNEY, 1919	G.P. P104	202402	X= Y=	φ 17-43-16.148 λ 64-52-42.526
PROSPERITY CHIMNEY, 1919	G.P. P104	202402	X= Y=	φ 17-43-40.584 λ 64-53-01.946
SPRAT HALL MILL, 1919	G.P. P104	201401	X= Y=	φ 17-44-30.437 λ 64-53-23.761
BUTLERS BAY MILL, 1919	G.P. P119	202403	X= Y=	φ 17-44-54.750 λ 64-53-35.490
NORTH SIDE ESTATE MILL, 1919	G.P. P119		X= Y=	φ 17-45-38.230 λ 64-53-19.000
BADKIN MILL, 1919	G.P. P106	205401	X= Y=	φ 17-45-10.306 λ 64-50-18.243
WASHINGTON, 1919	P.C., P3 G.P., P103	696100	X= Y=	φ 17-45-02.421 λ 64-52-38.076
			X= Y=	φ λ
			X= Y=	φ λ
			X= Y=	φ λ
COMPUTED BY		DATE	COMPUTATION CHECKED BY	DATE
LISTED BY		DATE	LISTING CHECKED BY	DATE
HAND PLOTTING BY		DATE	HAND PLOTTING CHECKED BY	DATE

## Compilation Report

TP-00001

Reference is made to the Photogrammetric Plot Report bound with this Descriptive Report. In addition to the six strips of 1:20,000 scale photography bridged to compile the nine maps covering this survey area, one more strip was used. This strip 77-Z(C) 9265-9280, also 1:20,000, was used to compile portions of the photobathymetric data (depths and depth curves) shown on maps TP-00006 through TP-00009. Control for this strip was transferred by means of the Wild PUG instrument from two of the adjacent strips bridged.

31. Delineation

This survey was accomplished in two parts. Part 1 is the base shoreline map and Part 2 is the photobathymetric overlay. This entire survey was compiled at 1:10,000 scale using the Wild B-8S stereoplotter interfaced with an ALTEK digitizing unit. The base shoreline map was compiled using the B-8S stereoplotter. The detail shown on the Photobathymetric overlay was compiled using the B-8S/ALTEK system. Photography used for compilation is the 1:20,000 scaled natural color taken in 1977.

32. Control

Refer to the Photogrammetric Plot Report bound with this Descriptive Report.

The identification, density, and placement of horizontal and vertical control was adequate.

33. Supplemental Data

Tidal data information for this job was furnished by the Tides and Water Level Division (OA/C23). This information consisted of reference station records for four tide gages and was used to determine the stage of tide for each frame of the photography used in the compilation phase.

34. Contours and Drainage

All drainage is from office interpretation of the natural color photography.

35. Shoreline and Alongshore Details

The mean high-water line and shoreline structures were compiled by office interpretation of the natural color photography.



The reefs depicted represent the approximate mean low-water line and were compiled using underwater contouring compilation methods. Vertical control for this compilation was furnished by field methods and the photogrammetric plot.

There was no preliminary field inspection of the shoreline.

### 36. Offshore Details and Photobathymetry

No unusual problems were encountered compiling the offshore detail depicted on the shoreline base map (Part 1).

Submerged coral and rock formations shown on the base shoreline map indicate the characteristics of the seabed and do not necessarily represent a hazard to navigation.

Photobathymetric discrete depths and depth curves (underwater contours) were compiled using the B-8S/ALTEK system. The depth curves were compiled using conventional underwater contouring methods. The reef lines depicted on the base shoreline map represent the zero depth curve (MLW). Discrete depths were compiled in digital form and then processed through a series of computer software routines to provide the depths as shown on the photobathymetric overlay (Part 2).

The photobathymetric data compiled is referenced to the mean low-water datum established by NOS.

Suspended silt and sun spots restricted the placement and density of discrete depths in some areas.

### 37. Landmarks and Aids

Refer to the 76-40 listing(s) bound with this Descriptive Report for those charted landmarks and non-floating aids identifiable on the compilation photography.

The landmarks and fixed aids shown on the base map were not investigated by field personnel.

### 38. Control for Future Surveys

No Form 524 was submitted.

### 39. Junctions

Refer to Form 76-36B, item #5, bound with this Descriptive Report.

40. Horizontal and Vertical Accuracy

This map complies with the National Map Accuracy Standards.

41. thru 45. Inapplicable46. Comparison with Existing Maps

A comparison was made with the following USGS quadrangle(s):

Frederiksted, V.I., 1:24,000 scale, 1958 Edition

No significant differences were noted.

47. Comparison with Nautical Charts

A comparison was made with the following charts:

25640, scale 1:326,856, 26th Edition, dated 7/29/78

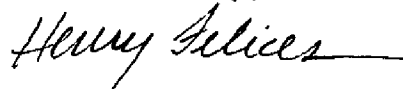
25641, scale 1:100,000, 16th Edition, dated 5/20/78

25644, scale 1:20,000, 8th Edition, dated 5/6/78

Items to be applied to Nautical Charts immediately - None

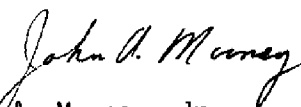
Items to be carried forward - None

Submitted by,



Henry Felices

Approved and Forwarded:



John A. Mooney, Jr.  
Chief, Special Projects Section  
(Rockville)  
Photogrammetry Division

TP-00001  
REVIEW REPORT  
SHORELINE/PHOTOBATHYMETRY (PHOTOGRAMMETRIC)

61. GENERAL STATEMENT

Refer to "Summary to Accompany Descriptive Report" for general information in regards to the completion of this map.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS

The geographic area covered by this map was mapped in 1919 at a scale of 1:10,000. Since nearly sixty (60) years have lapsed, no comparison between this map and those prior surveys was made.

63. COMPARISON WITH MAPS OF OTHER AGENCIES

Refer to the Compilation Report, Item 46, for information on this subject.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

The latest hydrographic surveys of this geographic area were conducted in the 1924 thru 1926 field seasons. The photobathymetric data was compared to the forementioned hydrographic surveys.

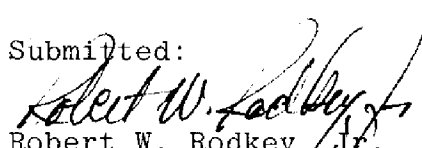
65. COMPARISON WITH NAUTICAL CHARTS

Refer to the Compilation Report, Item 47, for information on this subject.

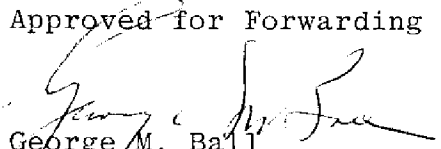
66. ADEQUACY OF RESULTS AND FUTURE SURVEYS

This map complies with the project instructions and meets the requirements for Bureau Standards and the National Standards of Map Accuracy.

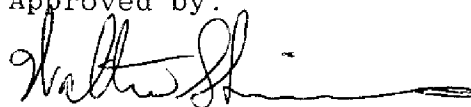
Submitted:

  
Robert W. Rodkey, Jr.  
Final Reviewer

Approved for Forwarding by:

  
George M. Ball  
Chief, Photogrammetric Branch

Approved by:

  
Walter S. Simmons  
Chief, Photogrammetry Division

5/1/80

GEOGRAPHIC NAMES

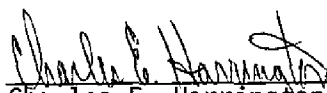
FINAL NAME SHEET

CM-7718 (St. Croix, Virgin Islands)

TP-00001

Añaly Bay	Hams Bluff
Butler Bay	La Grange
Butler Bay (locality)	Maroon Hôle
Caribbean Sea	North Side
Davis Beach	Prosperity
Fort Frederik	Sprat Hall
Frederiksted	Sprat Hole
Hams Bay	William
Hams Bay (locality)	

Approved By:

  
Charles E. Harrington, C3x5  
Chief Geographer

INFORMATION ON DISSEMINATION OF PROJECT MATERIAL

CM-7718  
St. Croix, U.S., V.I.

NATIONAL ARCHIVES/FEDERAL RECORDS CENTER

Brown Jacket

Aerotriangulation Photographs  
Plot Report  
Computer printouts  
Tide computations and data  
Field Control Report  
Control Identification Cards (Vertical & Horizontal)  
NOAA Form(s) 76-72 (List of Directions)  
Photographs of Vertical Control Panels  
Horizontal Observations, Vol. I and II  
Wye Level Book, Vol. I  
NOAA Form 76-40 (duplicate copies)  
Listing of Ratio Values

Project Completion Report

BUREAU ARCHIVES

Registered Maps  
Descriptive Reports

REPRODUCTION DIVISION

Reduction negative of each map

OFFICE OF STAFF GEOGRAPHER

Geographic Names Standard

MARINE CHART DIVISION

Chart Maintenance Prints

\* SVY TP-00001 \* \* RPT UNIT SPS,PB,ROCKVILLE,MD.\* PAGE 1 OF 3 \*  
\* JOB CM-7718 \* \* STATE VIRGIN ISLANDS \*  
\* PRJ ST CROIX \* \* LOCALITY ST CROIX \*ORIGINATING ACTIVITY \*  
\* DTM P. RICO \* \* DATE 12/06/79 \* COMPILATION \*

\* POSITIONS DETERMINED \* NO FIELD EDIT-CLASS III MAP \* FIELD REPRESENTATIVE \*  
\* AND/OR VERIFIED BY \* HENRY FELICES \* OFFICE COMPILER \*  
\* FIELD AND OFFICE \* HENRY FELICES \* DIGITIZER \*  
\* ACTIVITIES \* HENRY FELICES \* DATA PROCESSER \*

\* KEY FOR ENTRIES UNDER METHOD AND DATE OF LOCATION \*  
\* OFFICE \* FIELD(CONT,D) \*  
\* 1.OFFICE IDENTIFIED AND LOCATED OBJECTS. \* B.PHOTOGRAMMETRIC FIELD POSITIONS\*\* SHOW  
\* THE NUMBER AND DATE (INCLUDING MONTH, DAY \* THE METHOD OF LOCATION OR VERIFICATION,  
\* AND YEAR) OF THE PHOTOGRAPH USED TO \* DATE OF FIELD WORK AND NUMBER OF PHOTO-  
\* IDENTIFY AND LOCATE THE OBJECT ARE SHOWN. \* GRAPH USED TO LOCATE AND IDENTIFY THE  
\* EXAMPLE 75E(C)6042 \* OBJECT.  
\* 8-12-77 \* EXAMPLE P-8-V  
\* \* 8-12-77 \*  
\* \* 74L(C)2982 \*

\* FIELD \*  
\* 1.NEW POSITION DETERMINED OR VERIFIED \*  
\* KEY TO SYMBOLS \*  
\* F-FIELD P-PHOTOGRAMMETRIC \*  
\* L-LOCATED VIS-VISUALLY \*  
\* V-VERIFIED 5-FIELD IDENTIFIED \*  
\* 1-TRIANGULATION 6-THEODOLITE \*  
\* 2-TRAVERSE 7-PLANETABLE \*  
\* 3-INTERSECTION 8-SEXTANT \*  
\* 4-RESECTION \*

\* A.FIELD POSITIONS\* SHOW THE METHOD OF \*  
\* LOCATION AND DATE OF FIELD WORK. \*  
\* EXAMPLE F-2-6-L \*  
\* 8-12-76 \*

\* FIELD POSITIONS ARE DETERMINED BY FIELD \*  
\* OBSERVATIONS BASED ENTIRELY UPON GROUND \*  
\* SURVEY METHODS \*

\* NOTE: WHERE THE NAME OF AN AID INCLUDES THE IMMEDIATE GEOGRAPHIC HEADING UNDER WHICH IT IS LISTED, \*  
\* A DASH (-) IS USED TO INDICATE THE GEOGRAPHIC HEADING WHICH IS PART OF THE OFFICIAL NAME. \*

2. TRIANGULATION STATION RECOVERED  
WHEN A LANDMARK OR AID WHICH IS ALSO A TRI-  
ANGULATION STATION IS RECOVERED, A TRIANG.  
REC. WITH DATE OF RECOVERY IS SHOWN.  
EXAMPLE TRIANG. REC.  
8-12-76

3. POSITION VERIFIED VISUALLY ON PHOTOGRAPH  
SHOWN BY V-VIS AND DATE.  
EXAMPLE V-VIS  
8-12-75

\*\*PHOTOGRAMMETRIC FIELD POSITIONS ARE  
DEPENDENT ENTIRELY OR IN PART UPON CONTROL  
ESTABLISHED BY PHOTOGRAMMETRIC METHODS.



76-4  
LISTING

PHOTOGRAMMETRIC BRANCH  
PHOTOGRAMMETRY DIVISION

NATIONAL OCEAN SURVEY NOAA  
DEPARTMENT OF COMMERCE USA

DATA TAB  
VERSION  
782707

** SVY	TP-00001 *			* RPT UNIT	SPS,PB•ROCKVILLE,M.D.*	PAGE 3 OF 3	*
** JOB	CM-7718 *	LANDMARKS FOR CHARTS		* STATE	VIRGIN ISLANDS		*
** PRJ	ST CROIX *	TO BE REVISED		* LOCALITY	ST CROIX	*ORIGINATING ACTIVITY*	*
** DTM	P. RICO *			* DATE	12/06/79	* COMPILATION	*

\*-----\*  
\* THE FOLLOWING OBJECTS HAVE NOT BEEN INSPECTED FROM SEAWARD TO DETERMINE THEIR VALUE AS LANDMARKS \*  
\*-----\*

[illegible]

CHY	LA GRANGE CHIMNEY 1919)	17	43	16.15	496.5	NOT	*772(C)9153*	*	25641	*
*	*	*	64	52	42.53	1253.1	DGT2D*	11/14/77	*	25644

TOWER	* RADAR TOWER	* 17 43 13.85	* 425.8	* 77Z(C)9154*	* DITTO *
*	*	* 64 51 27.86	* 820.9	* 11/14/77 *	*

** CHY	*	(PROSPERITY CHIMNEY 1919)	*	17	43	40.58	1247.5	NOT *77Z(C)9153*	*	DITTO *
**	*		*	64	53	01.95	57.5	OGTZO* 11/14/77 *	*	*

	* OLD *	(SPRAY HALL MILL 1919)	*	17	44	30.44	935.8	NOT *77Z(C)9812*	*	25644 *
** MILL *			*	64	53	23.76	700.0	DGTZD* 12/07/77 *	*	

* * OLD	* (BUTLERS BAY MILL 1919)	* 17 44 54.75	1683.1	NOT *772(C)9812*	* 25641 *
* * MILL	*	* 64 53 35.49	1045.5	DGT2D* 12/07/77 *	* 25644 *
-----					-----

* OLD	* (NORTH SIDE ESTATE MILL 1919)	* 17 45 38.23	1175.3	NOT *77Z(C)9814*	* * DITTO *
* MILL	*	* 64 53 19.60	577.4	OGTZO* 12/07/77 *	* *

** OLD	*	(BODKIN WILL 1919)	* 17 45 10.31	317.0	NOT *77Z(C)9818*	* *	DITTO *
** MILL	*		* 64 50 18.24	537.3	DGTZO* 12/07/77 *	* *	
<hr/>							
** OLD	*		* 37 05 08.51	144.2	-ZZZ(C)C9844+	* *	CITIZEN

NAME	STATUS	DATE	TIME	LOCATION	REMARKS
OLV	*	17	46	04.61	141.7
MILL	*	64	52	50.54	1488.7
BN	*	17	44	16.02	492.5
SPRAT	*	17	44	16.02	492.5
BADAR	*	17	44	16.02	492.5
REFL	*	17	44	16.02	492.5
BEACON	*	17	44	16.02	492.5

[illegible]

\* 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011 1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023 1024 1025 1026 1027 1028 1029 1030 1031 1032 1033 1034 1035 1036 1037 1038 1039 10



RWR  
8/81

## MAP FEATURES OF POSSIBLE LANDMARK VALUE

MAP NO.	JOB NO.	GEOGRAPHIC AREA	GEODETIC DATUM	ORIGINATING ACTIVITY	CHARTS AFFECTED
TP-00001	CM7718	St. Croix, USVI	Puerto Rico	SPS - Rockville, Md. (Compilation)	
DESCRIPTION	PHOTO NUMBER	PLANE COOR. (FT) STATE Puerto Rico ZONE St. Croix (5202)	GEOGRAPHIC POSITION φ LATITUDE λ LONGITUDE		
Tower	77Z (B) 9152	X 1,039,090.637 Y 62,725.126	φ 17-43-27.83 λ 064-53-03.28		25641 25644
Radio Tower - RCA (refer to C.L.#L-633/79)	77Z (C) 9812	X Y	φ 17-44-32.82 λ 064-53-31.03		ditto
Tower	77Z (C) 9816	X 1,043,475.328 Y 79,661.388	φ 17-46-15.37 λ 064-52-16.43		ditto
Old Mill	77Z (C) 9816	X 1,046,660.502 Y 75,171.501	φ 17-45-30.59 λ 064-51-43.87		ditto
Old Mill	77Z (C) 9818	X 1,052,173.078 Y 76,565.840	φ 17-45-43.94 λ 064-50-46.71		ditto
		X Y	φ λ		
		X Y	φ λ		
		X Y	φ λ		
		X Y	φ λ		
		X Y	φ λ		
		X Y	φ λ		
		X Y	φ λ		
		X Y	φ λ		
		X Y	φ λ		

POSITIONS FURNISHED ARE PHOTOGRAMMETRIC POSITIONS - MAP FEATURES HAVE NOT BEEN INSPECTED

LISTED BY	DATE	LISTING CHECKED BY	DATE
Robert W. Rodkey, Jr.	9/1/81	Robert W. Rodkey, Jr.	9/8/81

SUPPLEMENTAL DATA

LISTING OF "OBSTRUCTIONS"  
(continued)

<u>TP SHEET</u>	<u>GEOGRAPHIC POSITION</u>		<u>PROBABLE IDENTITY</u>	<u>REMARKS</u>
TP-00007	17-42-33.13	64-46-15.28	pile	above MLW
TP-00007	17-42-26.41	64-46-12.55	buoy or pile	above MLW
TP-00007	17-42-25.47	64-46-10.67	buoy or pile	above MLW
TP-00007	17-41-53.27	64-45-21.39	buoy	above MLW
TP-00007	17-41-51.50	64-45-21.18	buoy	above MLW
TP-00007	17-41-52.61	64-45-20.62	buoy	above MLW
TP-00007	17-41-50.45	64-45-19.80	buoy	above MLW
TP-00008	17-42-10.05	64-42-07.96	buoy	above MLW
TP-00008	17-42-12.40	64-42-06.76	buoy	above MLW
TP-00008	17-42-14.53	64-42-00.17	buoy	above MLW
TP-00008	17-42-24.93	64-41-31.51	buoy or marker	above MLW
TP-00008	17-42-15.33	64-41-30.09	buoy	above MLW
TP-00008	17-42-25.22	64-41-30.22	buoy or marker	above MLW
TP-00008	17-42-46.26	64-40-11.15	buoy	above MLW
TP-00008	17-42-48.97	64-40-03.82	buoy	above MLW
TP-00009	17-42-49.89	64-39-53.81	buoy	above MLW
TP-00009	17-42-51.79	64-39-48.90	buoy	above MLW
TP-00009	17-42-48.94	64-39-47.60	buoy	above MLW
TP-00009	17-42-56.29	64-39-47.23	buoy or marker	above MLW
TP-00009	17-42-49.99	64-39-44.33	buoy	above MLW
TP-00009	17-42-57.73	64-39-43.45	buoy or marker	above MLW
TP-00009	17-43-12.73	64-37-57.63	buoy	above MLW
TP-00009	17-44-25.54	64-35-26.12	buoy	above MLW

SUPPLEMENTAL DATA

LISTING OF "OBSTRUCTIONS"

The position for all obstructions listed is a photogrammetric position. Information as to the probable identity and other pertinent facts are furnished for each obstruction.

The listing is organized according to pertinent TP sheet.

<u>TP SHEET</u>	<u>GEOGRAPHIC POSITION</u>		<u>PROBABLE IDENTITY</u>	<u>REMARKS</u>
TP-00001	17-43-34.29	64-53-18.46	buoy	above MLW
TP-00001	17-46-18.82	64-52-34.43	(manmade object)	6-12 ft. of water
TP-00002	17-45-57.85	64-49-51.43	(manmade object)	@ MLW
TP-00002	17-47-13.21	64-47-18.12	buoy	above MLW
TP-00002	17-46-32.72	64-45-35.94	none available	@ MLW
TP-00002	17-46-31.56	64-45-36.03	none available	@ MLW
TP-00002	17-46-57.40	64-45-25.27	buoy	above MLW
TP-00002	17-46-57.45	64-45-24.15	buoy	above MLW
TP-00002	17-46-53.04	64-45-09.90	buoy	above MLW
TP-00002	17-46-42.39	64-45-09.08	buoy	above MLW
TP-00002	17-46-41.99	64-45-09.00	buoy	above MLW
TP-00005	17-44-53.60	64-34-13.43	buoy	above MLW
TP-00005	17-44-58.60	64-34-23.97	buoy	above MLW
TP-00006	17-42-12.24	64-53-12.59	(object on bottom-less than six ft. of water)	
TP-00006	17-41-15.06	64-51-46.07	(manmade object)	@ MLW
TP-00007	17-40-37.35	64-47-41.56	buoy	above MLW
TP-00007	17-41-49.84	64-47-17.35	snag	@ MLW
TP-00007	17-41-47.37	64-47-14.55	snag	@ MLW
TP-00007	17-41-46.75	64-47-14.46	snag	@ MLW
TP-00007	17-41-47.33	64-47-13.82	snag	@ MLW
TP-00007	17-41-51.02	64-47-09.30	snag	@ MLW
TP-00007	17-41-47.72	64-47-08.87	snag	@ MLW
TP-00007	17-41-48.13	64-47-07.27	snag	@ MLW
TP-00007	17-41-51.47	64-47-00.77	snag	@ MLW
TP-00007	17-41-50.32	64-46-43.82	pile	above MLW
TP-00007	17-41-49.70	64-46-43.11	pile	above MLW
TP-00007	17-41-09.11	64-46-32.28	buoy	above MLW