TP- 00002

TP- 00002

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-00002

Classification No. Class III Map *Edition No.* 1st*
Two Parts

LOCALITY

State Saint Croix, Virgin Islands

General Locality North Coast

Locality Davis Beach to Salt River Bay

19 77 TO 19

REGISTRY IN ARCHIVES

DATE

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

NOAA FORM 76-36A (3-72) — U. S. DEPARTMENT OF COMMERCE, NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.

DESCRIPTIVE REPORT - DATA RECORD

TYPE OF SURVEY: [X] ORIGINAL [ ] RESURVEY [ ] REVISED

SURVEY TB 00002 (2 Parts)

MAP EDITION NO. (1)

MAP CLASS III

JOB PH. CM-7718

PHOTOGRAMMETRIC OFFICE: Photogrammetry Division (Rockville)

OFFICER-IN-CHARGE: Cdr. Walter Simmons

LAST PRECEEDING MAP EDITION

TYPE OF SURVEY: [ ] ORIGINAL [ ] RESURVEY [ ] REVISED

JOB PH-

MAP CLASS

SURVEY DATES: 19__ TO 19__

I. INSTRUCTIONS DATED

1. OFFICE	2. FIELD
Instructions-OFFICE-Job CM-7718, Chart Compilation and Photobathymetry, St. Croix, Virgin Island, 8/21/78. Instructions-AEROTRIANGULATION-CM-7718, Chart Compilation and Photobathymetry, St. Croix, Virgin Isalnd, 8/3/78.	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: [ ] 1927 NORTH AMERICAN — OTHER (Specify): Puerto Rico Datum

2. VERTICAL: [X] MEAN HIGH-WATER [X] MEAN LOW-WATER [ ] MEAN LOWER LOW-WATER [X] MEAN SEA LEVEL — OTHER (Specify):

3. MAP PROJECTION: Lambert Conformal Conic

4. GRID(S): STATE: Virgin Islands; ZONE: St. Croix; STATE: ; ZONE:

5. SCALE: 1:10,000

III. HISTORY OF OFFICE OPERATIONS

OPERATIONS	NAME	DATE
1. AEROTRIANGULATION — BY	Robert Kelly	4/6/79
METHOD: Analytic Block — LANDMARKS ~~AND ROADS~~ BY	" "	"
2. CONTROL AND BRIDGE POINTS — PLOTTED BY	Henry Felices	4/17/79
METHOD: Coradomat — CHECKED BY	N/A	
3. STEREOSCOPIC INSTRUMENT COMPILATION — PLANIMETRY BY	H. Felices	11/28/79
CHECKED BY	Robert W. Rodkey, Jr.	"
INSTRUMENT: B-8S/ALTEK — Bathymetry ~~XXXXXXX~~ CONTOURS BY	" "	1/5/81
SCALE: 1:10,000 — CHECKED BY	Gregory Fromm	"
4. MANUSCRIPT DELINEATION — PLANIMETRY BY	H. Felices	12/5/79
CHECKED BY	G. Fromm	3/19/80
Bathymetry ~~XXXXXXX~~ BY	R. Rodkey, Jr.	1/5/81
METHOD: Smooth Drafting & Scribing — CHECKED BY	G. Fromm	1/12/81
HYDRO SUPPORT DATA BY	R. Rodkey, Jr.	1/5/81
SCALE: 1:10,000 — CHECKED BY	G. Fromm	1/12/81
5. OFFICE INSPECTION PRIOR TO FIELD EDIT — BY	N/A	
6. APPLICATION OF FIELD EDIT DATA — BY	Field Edit Canceled	
CHECKED BY	N/A	
7. COMPILATION SECTION REVIEW — BY	G. Fromm	3/19/80
8. FINAL REVIEW — BY	R. Rodkey, Jr.	11/4/81
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH — BY	"	12/21/81
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH — BY	G. Fromm	3/19/82
11. MAP REGISTERED - COASTAL SURVEY SECTION — BY	A. L. Woodfee	4-20-82

NOAA FORM 76-36A — SUPERSEDES FORM C&GS 181 SERIES

* U.S. G.P.O. 1972-769382/582 REG.#6

NOAA FORM 76-36B
(3-72)

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

COMPILATION SOURCES

TP-00002 (2 Parts)

1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC-10(Z)
Focal length=153.14mm

TIDE STAGE REFERENCE
- ☐ PREDICTED TIDES
- ☒ REFERENCE STATION RECORDS
- ☐ TIDE CONTROLLED PHOTOGRAPHY

TYPES OF PHOTOGRAPHY LEGEND
(C) COLOR
(P) PANCHROMATIC
(I) INFRARED

TIME REFERENCE
ZONE: Atlantic — ☒ STANDARD
MERIDIAN: 60th — ☐ DAYLIGHT

NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE
77Z(C) 9818, 20, 22, 24 9826, 28, 30	12/7/77	0833-0838	1:20,000	+.25 Ft. MHW

REMARKS: The stages of Tide listed above were determined from "CHRISTIANSTED" 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.

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	EAST	SOUTH	WEST
No Contemporary Survey	TP-00003 *	TP-00007 *	TP-00001 *

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-00002

I. [X] 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	N/A	
	PRE-MARKED OR IDENTIFIED BY	R. E. Ledbetter	10/28/77
3. VERTICAL CONTROL	RECOVERED BY	N/A	
	ESTABLISHED BY	L. Davis, R. Ledbetter	10/28/77
	PRE-MARKED OR IDENTIFIED BY	L. Davis, R. Ledbetter	"
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: [ ] COMPLETE [ ] SPECIFIC NAMES ONLY [X] NO INVESTIGATION — BY	N/A	
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY		
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY		

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED
Pre-marked

2. VERTICAL CONTROL IDENTIFIED

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
77Z(C) 9157 77C(C) 9703	51199, 1977	77Z(C) 9160 77C(C) 9706	Vertical Panel #14
		77Z(C) 9820 77C(C) 9703	Vertical Panel #2

3. PHOTO NUMBERS (*Clarification of details*)

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME

5. GEOGRAPHIC NAMES: [ ] REPORT [ ] NONE

6. BOUNDARY AND LIMITS: [ ] REPORT [ ] NONE

7. SUPPLEMENTAL MAPS AND PLANS
Field Control Report

8. OTHER FIELD RECORDS (*Sketch books, etc.* **DO NOT** *list data submitted to the Geodesy Division*)
Field Control Report — Vols. I and II
Control Identification Cards (Vertical and Horizontal) — Horizontal Observations
NOAA Form(s) 76-72 (List of Directions) — Vol I WYE Leveling Book
Photographs of Vertical Control Panels

NOAA FORM 76-36C
(3-72)

★U. S. GOVERNMENT PRINTING OFFICE: 1973--768074/1057 REGION NO. 6

NOAA FORM 76-36D
(3-72)

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

RECORD OF SURVEY USE

TP-00002 (2 Parts)

I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
Shoreline Map plus Photobathymetry map overlay.	3/19/80	Class III Shoreline Map. Field edit canceled.		1/13/81
Shoreline/Photobathymetry Maps final reviewed prior to registration.	11/4/81	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. [X] BRIDGING PHOTOGRAPHS; [X] DUPLICATE BRIDGING REPORT; [X] COMPUTER READOUTS.
2. [X] CONTROL STATION IDENTIFICATION CARDS; ☐ FORM NOS 567 SUBMITTED BY FIELD PARTIES.
3. [X] 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)*

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

NOAA FORM 76-36D

☆U. S. GOVERNMENT PRINTING OFFICE: 1973--778075/1077 REGION NO. 6

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.

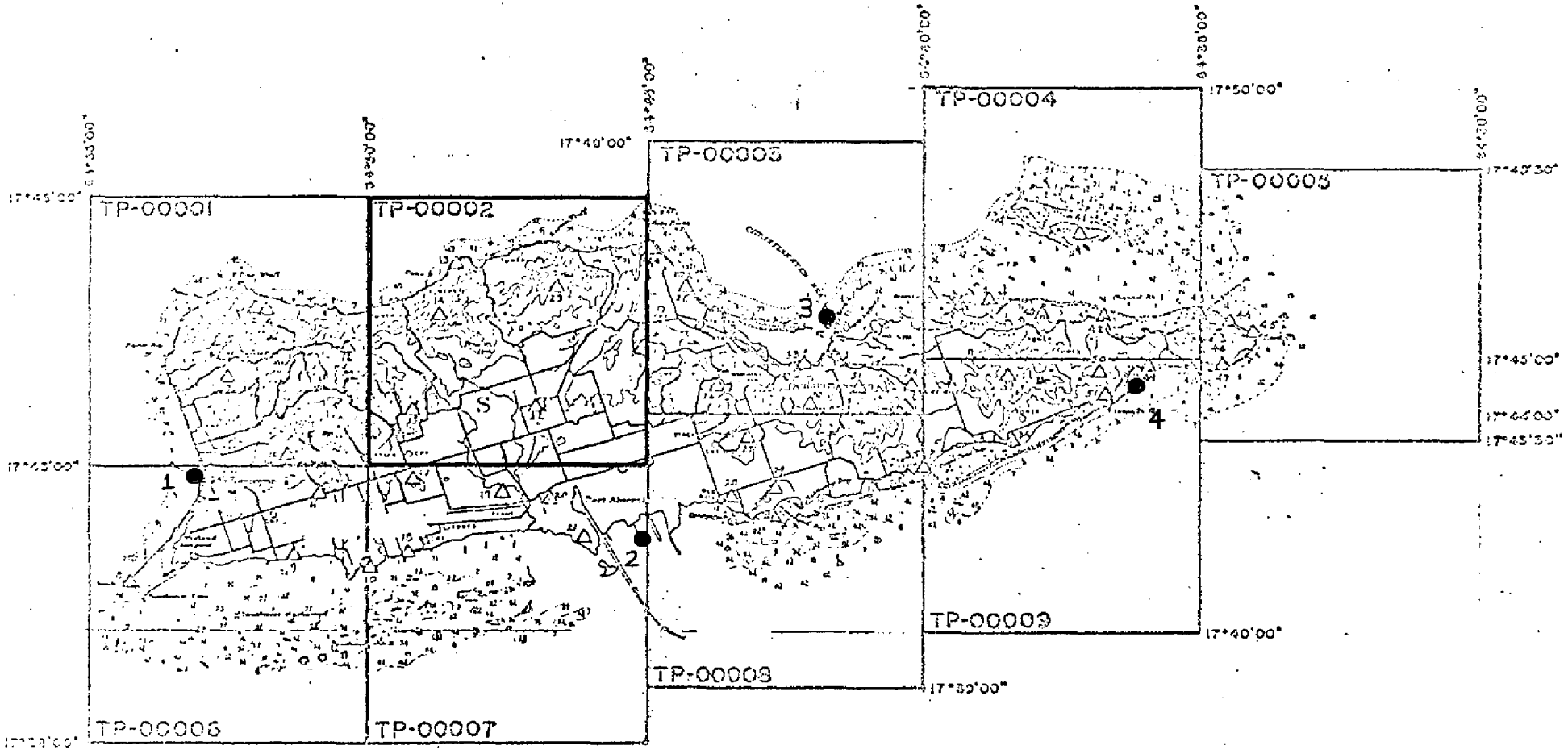
JOB CM-7718

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.

C7421

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SURVEY
Rockville, Md. 20852

9

July 2, 1980 OA/C3442:LVS

TO: OA/C342 - John D. Perrow

FROM: OA/C34 - Walter S. Simmons

SUBJECT: Registration of Maps for Job CM-7718
St. Croix, Virgin Islands

Request for field edit has been canceled for all maps in Job CM-7718.

You are hereby instructed to complete final review and register maps TP-00001 through TP-00009 as Class III.

cc:
C3442
C3424
C3421
CAM52

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 photgraphy 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

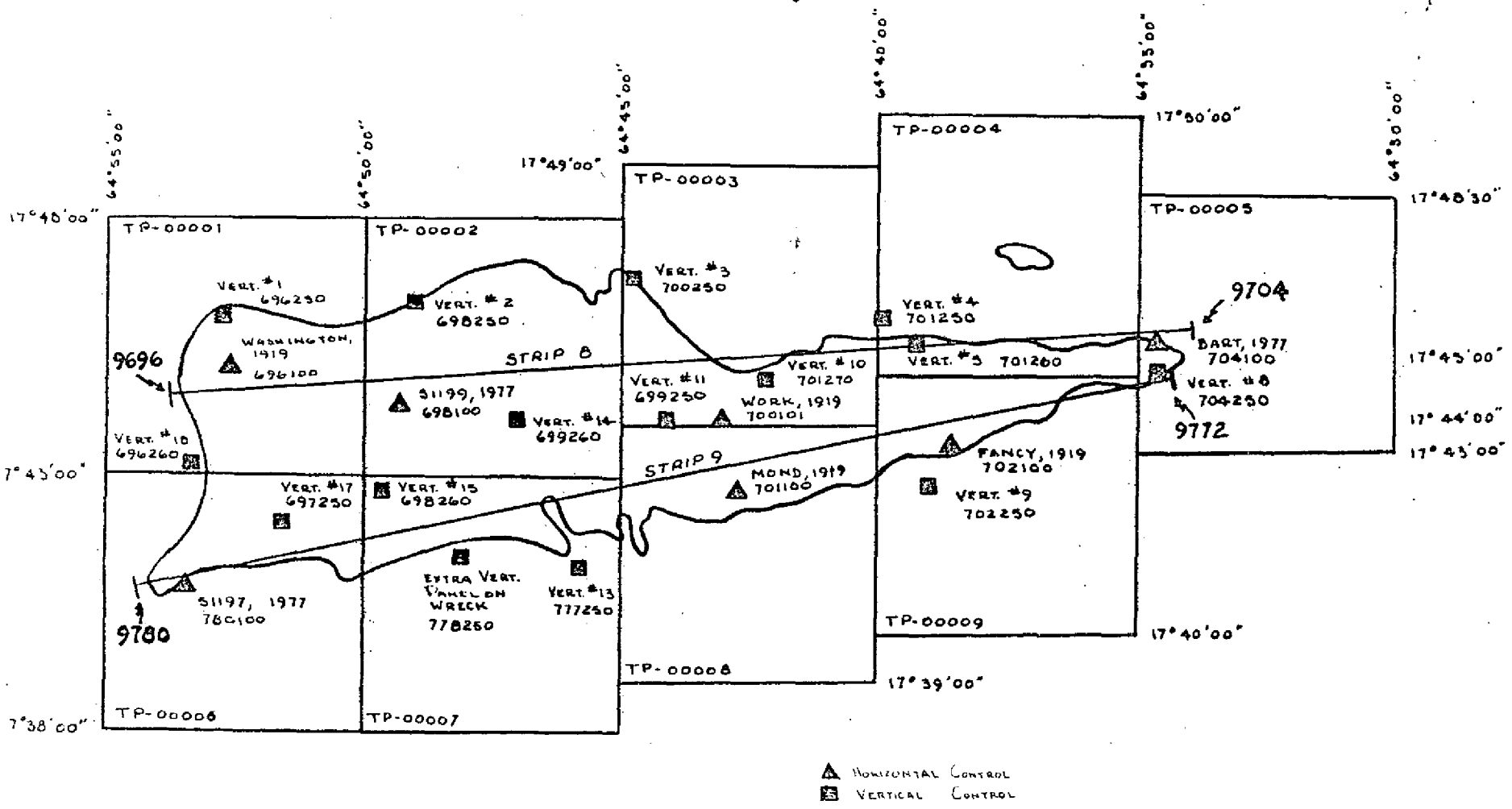
Don O. Norman
Chief, Aerotriangulation Section

JOB CM-7718

SAINT CROIX, VIRGIN ISLANDS

SHORELINE MAPPING

SCALE 1:50,000

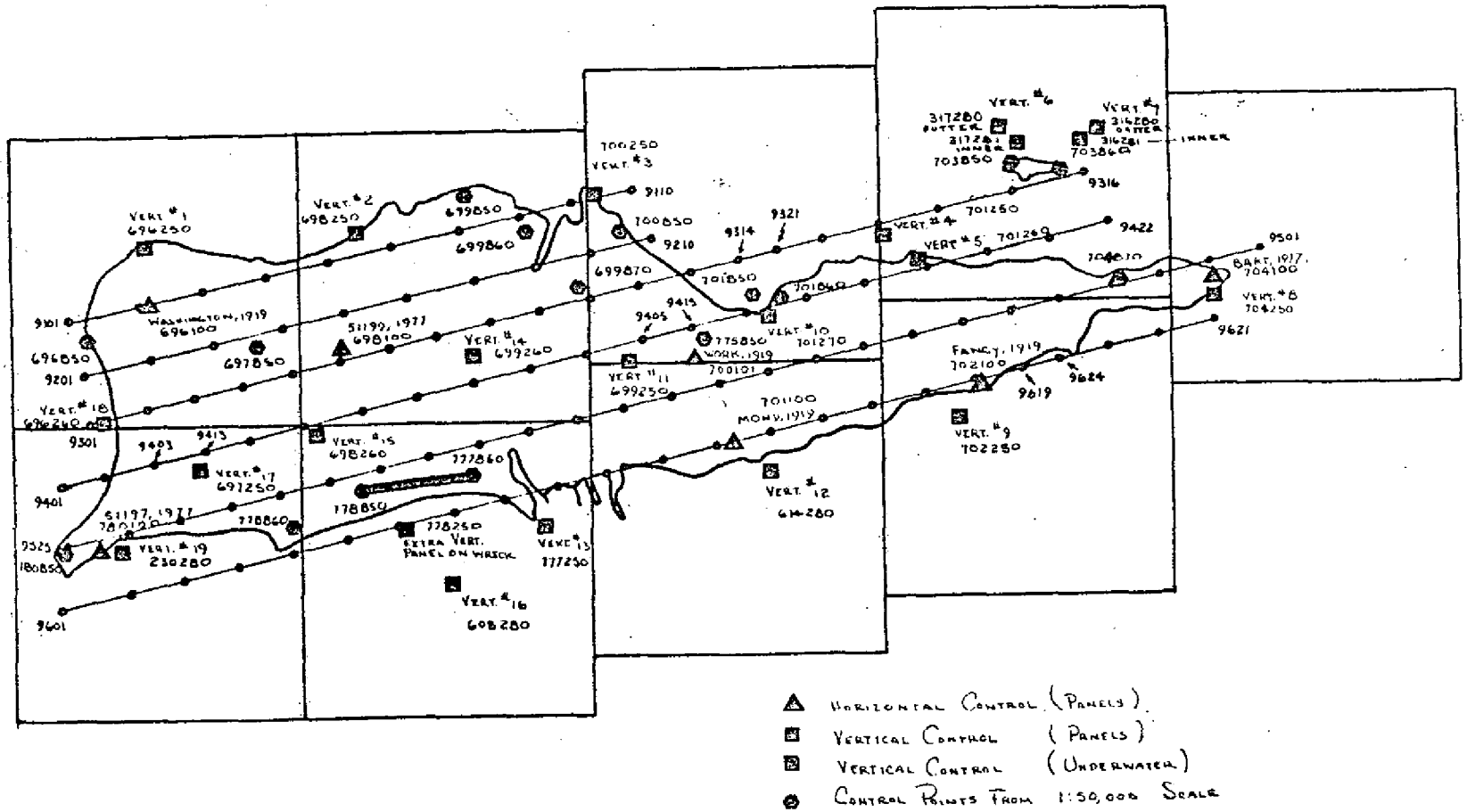


JOB CM-7718

SAINT CROIX, VIRGIN ISLANDS

SHORELINE MAPPING

SCALE 1:20,000



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	696100	1041446.517	72288.765	314.779
		-1.139	1.296	
	698100	1063453.939	68106.928	252.785
		-.191	-.405	
	700101	1096636.121	66247.038	164.488
△		-.413	-.506	
	701100	1099155.587	67744.494	97.348
△		-.099	.367	
	704100	1149182.554	75898.178	224.647
△		-.080	-.361	
	730100	1036597.741	47727.177	3.507
				-.658
□	230229	1037955.244	47434.682	-5.342
	230230	1037955.220	47434.693	-3.657
				-.105
□	316229	1132925.320	88111.322	-13.695
				.095
	316231	1132690.376	87741.950	-7.795
	316230	1132925.413	88111.773	-9.617
	316231	1132690.407	87741.592	-5.498
				1.693
	317220	1127623.814	89807.280	-18.693
	317221	1128486.075	89458.375	-9.834
	317230	1127638.817	89307.135	-13.162
	317231	1128488.065	89253.322	-6.750
				.123
	316230	1065054.972	55081.101	60.923
				-2.116
	316231	1072621.038	55947.150	20.304
		.280	.445	-.404
△ □	696250	1039963.265	79110.146	10.317
		.371	.007	.139
△ □	696260	1037635.121	59513.124	7.457
		-3.652	-1.441	.101
	697250	1047295.491	54836.798	92.256
		-.009	.280	-.139
△ □	698250	1062034.736	70692.574	23.099
		-.429	.135	-.111
△ □	698260	1059231.380	59378.303	109.294
		.325	.053	-.138
△ □	699250	1090260.642	65646.566	190.612
		.177	1.352	-2.880
	699260	1075362.125	66270.776	144.622
		.119	-.031	.318
△ □	700250	1086768.333	83995.690	11.243
		-.011	-.165	.038
△ □	701250	1114681.838	78844.712	1.208
		-1.615	.208	-.653
	701260	1118473.147	77741.317	9.607
		-.029	.280	-.126
△ □	701270	1103392.081	72352.391	1.912

		.045	- .336	- .985
△ □	704250	1149094.536	75067.192	14.305
		- 1.827	- .249	- 1.740
	776250	1067233.315	51480.005	2.760
	696850	1036082.220	69419.714	28.222
	697850	1052332.525	69544.308	529.718
	699850	1071973.676	84956.702	8.458
	699869	1076209.580	80535.579	869.863
	699870	1084581.749	73684.116	493.606
	700850	1089481.069	80918.623	38.273
	701850	1102127.636	73141.771	38.993
	701860	1105201.617	74[illegible]53.706	12.920
	703850	1128032.932	87209.[illegible]59	4.583
		.068	.065	
△	703840	1133980.507	86765.831	-2.151
	764870	1139560.611	79727.153	72.430
	775570	1098421.955	67833.508	254.501
	777850	1072608.380	58370.197	21.140
	773850	1065294.530	55702.655	60.712
	730850	1032592.315	47072.005	7.900

CARD COUNT= 00047

ST. CROIX BLOCK STRIPS 2-6

△	696100	+.267 1041445.787	+.777 72296.727	814.779
△	698100	-.884 1063454.194	+.238 68105.270	252.849
	700101	-.039 1096686.273	-.450 66246.993	163.136
△	701100	-.289 1099155.711	-.089 57744.911	97.357
	702100	-.165 1124017.685	+2.382 63720.752	245.739
△	704100	-.128 1149182.525	+.407 75898.18	225.162
△	730100	-.196 1036597.625	-.220 47727.318	8.396
□	230220	1037855.168	47434.722	+.264 -6.236
	230280	1037855.146	47434.742	-3.903
	316220	1132925.395	88111.746	+1.899 -11.901
	315221	1132690.464	87741.487	+1.706 -5.994
	316280	1132925.485	88111.706	-7.823
	316281	1132690.488	87741.549	-3.697
	317220	1127639.132	89807.327	-1.849 -18.849
□	317221	1128468.422	89253.352	+.178 -9.522
	317280	1127639.135	89807.185	-13.315
	317281	1128468.410	89253.297	-6.464
	518290	1065062.962	55078.400	+.141 60.941
	518291	1072621.216	55944.896	-2.313 20.307
□	608220	1069695.773	46442.589	+.576 -11.224
	608280	1069695.752	46442.602	-7.743
□	614220	1103112.779	55645.407	-.041 -5.141
	614280	1103112.761	55645.419	-3.392
△ □	696260	+.407 1037685.157	-.051 59513.066	-.277 7.319
	697250	-4.460 1047294.683	-1.307 54538.932	+.080 92.235
△ □	698250	+.226 1062035.021	-.096 79692.390	+.164 23.402
□	698260	-1.916 1059279.893	-1.518 59376.920	+.068 109.473
□	699250	+.602 1090260.919	-.150 65646.363	-1.789 188.961
	699260	+.711 1075362.659	+.220 65269.644	-4.041 143.461

△ □	700250	1086788.128	−.086	+.077	−.413
				83998.188	10.512
△ □	701250	1114681.957	−.011	−.183	−.008
				78844.794	1.162
	701260	1118873.491	−1.271	+.167	−.296
				77741.276	5.964
△	701270	1103892.079	+.031	+.230	−1.354
				72853.331	.684
△ □	702250	1122402.658	−.281	+.191	+.083
				61410.139	8.483
□	704250	1149094.745	+.104	−.169	−.272
				75067.359	15.018
□	777250	1080994.736	−.100	−.114	−.281
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□	778250	1067232.554	−2.584	−3.342	−.313
				51176.912	4.187
	696850	1036002.131	1.453	2.687	
				69418.130	27.227
	697850	1052331.097	.611	2.516	
				69544.503	528.264
	699860	1076210.180	5.003	1.563	
				80534.719	870.781
	699870	1084531.948	3.322	1.54	
				73683.22	492.462
	700850	1089481.416	1.167	.979	
				80916.237	38.123
	701850	1102127.615	.700	.156	
				73141.742	37.615
	701860	1105201.635	.274	1.073	
				74453.669	11.784
	703850	1128033.252	2.262	.229	
				87209.693	4.915
△	703860	1133960.531	.092	.053	
				86765.519	−.055
	704801	1143164.015		76530.799	22.196
	704802	1145038.727		72954.481	41.698
	704870	1139568.385	5.020	1.750	
				75727.809	76.252
	775850	1098422.015	.289	1.060	
				67833.459	253.228
	777850	1072608.389	1.724	3.149	
				55867.614	20.555
	778850	1065293.613	2.224	.876	
				55099.804	60.753
	778860	1055636.967	2.812	1.312	
				49679.667	20.135
	780850	1032591.908	1.702	2.825	
				47076.127	8.561

CARD COUNT= 00055

LISTING OF RATIO VALUES
CM7718
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

NOAA FORM 76-41 (6-75)

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

DESCRIPTIVE REPORT CONTROL RECORD

MAP NO.	JOB NO.	GEODETIC DATUM	ORIGINATING ACTIVITY
TP-00002	CM-7918	PUERTO RICO	Photogrammetric Branch (Rockville)

STATION NAME	SOURCE OF INFORMATION (V.I. Index)	AEROTRI-ANGULATION POINT NUMBER	COORDINATES IN FEET STATE ZONE	GEOGRAPHIC POSITION φ LATITUDE λ LONGITUDE	REMARKS
PROSPERITY MILL, 1919	G.P. P106		x=	φ 17-45-55.826 ✓	
			y=	λ 64-49-37.600 ✓	
NORTH STAR MILL, 1919	G.P. P106		x=	φ 17-46-10.883 ✓	
			y=	λ 64-49-03.845 ✓	
CANE BAY MILL, 1919	G.P. P106		x=	φ 17-46-21.440 ✓	
			y=	λ 64-48-45.720 ✓	
LA VALLEE CHIMNEY, 1919	G.P. P109		x=	φ 17-46-43.719 ✓	
			y=	λ 64-48-13.501 ✓	
RUSTOP TWIST MILL 1919	G.P. P119		x=	φ 17-46-55.670 ✓	
			y=	λ 64-47-18.940 ✓	
GROVE PLACE CHIMNEY, 1919	G.P. P108		x=	φ 17-43-38.608 ✓	
			y=	λ 64-49-31.235 ✓	
PLESSEN CHIMNEY, 1919	G.P. P107		x=	φ 17-43-13.510 ✓	Not plotted on map. Appears to be destroyed.
			y=	λ 64-49-16.050 ✓	
51199, 1977	REPORT ON DOPPLER STATIONS 5/15/78	698100	x=	φ 17-44-19.079 ✓	
			y=	λ 64-48-50.754 ✓	
			x=	φ	
			y=	λ	
			x=	φ	
			y=	λ	

COMPUTED BY	DATE	COMPUTATION CHECKED BY	DATE
LISTED BY Bob Rodkey	DATE 3/28/79	LISTING CHECKED BY Henry Skiles 2/27/80	DATE
HAND PLOTTING BY	DATE	HAND PLOTTING CHECKED BY	DATE

SUPERSEDES NOAA FORM 76-41, 2-71 EDITION WHICH IS OBSOLETE.

Compilation Report

TP-00002

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 77Z(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 scale 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 (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 was compiled by office interpretation of the natural color photography.

The approximate mean low-water line, reefs, and ledges were compiled using underwater contouring compilation methods. Vertical control

for this compilation was furnished by field methods and the photogrammetric plot. Reef and ledge symbols depicted on the base map represent the approximate mean low-water line.

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 characteristic of the seabed and do not necessary 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 by conventional underwater contouring methods. The MLW and 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 soundings in some areas.

37. Landmarks and Aids

Refer to the 76-40 listing(s) bound with this Descriptive Report for those charted landmarks identifiable on the compilation photography. There were no non-floating aids to navigation identified during compilation.

The landmarks 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. Inapplicable

46. Comparison with Existing Maps

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

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

Items to be applied to Nautical Charts immediately - None

Items to be carried forward - None

Submitted by,

Henry Felices

Henry Felices

Approved and Forwarded:

John A Mooney

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

TP-00002
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-00006

Caribbean Sea

Concordia

Frederiksted

Good Hope

Hesselberg

Hope and Carlton Land

Long Point

Long Point Bay

Sandy Point

Smithfield

Southwest Cape

Two Brothers

Westend Saltpond

Whites Bay (locality)

Approved By:

Charles E. Harrington, C3x5
Chief Geographer

TP-00002

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

76-40 LISTING | PHOTOGRAMMETRIC BRANCH PHOTOGRAMMETRY DIVISION | NATIONAL OCEAN SURVEY NOAA DEPARTMENT OF COMMERCE USA | DATATAB VERSION 782707

SVY TP-00002	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 12/12/79	COMPILATION	

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

KEY FOR ENTRIES UNDER METHOD AND DATE OF LOCATION

OFFICE

1. OFFICE IDENTIFIED AND LOCATED OBJECTS. THE NUMBER AND DATE (INCLUDING MONTH,DAY AND YEAR) OF THE PHOTOGRAPH USED TO IDENTIFY AND LOCATE THE OBJECT ARE SHOWN.
   EXAMPLE 75E(C)6042
   8-12-77

FIELD

1. NEW POSITION DETERMINED OR VERIFIED
   KEY TO SYMBOLS

F-FIELD	P-PHOTOGRAMMETRIC
L-LOCATED	VIS-VISUALLY
V-VERIFIED	
1-TRIANGULATION	5-FIELD IDENTIFIED
2-TRAVERSE	6-THEODOLITE
3-INTERSECTION	7-PLANETABLE
4-RESECTION	8-SEXTANT

   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

FIELD(CONT,D)

   B. PHOTOGRAMMETRIC FIELD POSITIONS** SHOW THE METHOD OF LOCATION OR VERIFICATION, DATE OF FIELD WORK AND NUNBER OF PHOTOGRAPH USED TO LOCATE AND IDENTIFY THE OBJECT.
   EXAMPLE P-8-V
   8-12-77
   74L(C)2982

2. TRIANGULATION STATION RECOVERED
   WHEN A LANDMARK OR AID WHICH IS ALSO A TRIANGULATION 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.

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.

76-40 LISTING

PHOTOGRAMMETRIC BRANCH
PHOTOGRAMMETRY DIVISION

NATIONAL OCEAN SURVEY NOAA
DEPARTMENT OF COMMERCE USA

DATATAB VERSION 782707

SVY TP-00002		RPT UNIT SPS,PB,ROCKVILLE,MD.	PAGE 2 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 12/12/79	COMPILATION	

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

CHARTING NAME	DESCRIPTION RECORD REASON FOR DELETION PUT TRIANGULATION NAMES IN ( )	POSITION LATITUDE LONGITUDE	DM DP	CMD ALTEK DGTZD	METHOD AND DATE OF LOCATION OFFICE	FIELD	CHARTS AFFECTED
TOWER	(PROSPERITY MILL 1919)	17 45 55.83 64 49 37.60	1716.3 1107.6	NOT DGTZD	*77Z(C)9820* 12/07/77		25641
TOWER	(NORTH STAR MILL 1919)	17 46 10.88 64 49 03.85	334.5 113.4	NOT DGTZD	*77Z(C)9820* 12/07/77		DITTO
TOWER	(CANE BAY MILL 1919)	17 46 21.44 64 48 45.72	659.1 1346.7	NOT DGTZD	*77Z(C)9822* 12/07/77		DITTO
CHY	(LA VALLEE CHIMNEY 1919)	17 46 43.72 64 48 13.50	1344.0 397.6	NOT DGTZD	*77Z(C)9822* 12/07/77		DITTO
TOWER	(RUST ON TWIST MILL 1919)	17 46 55.67 64 47 18.94	1711.4 557.9	NOT DGTZD	*77Z(C)9824* 12/07/77		DITTO
TOWER	OLD MILL TOWER	17 46 37.47 64 45 57.39	1151.9 1690.4	NOT DGTZD	*77Z(C)9826* 12/07/77		DITTO
CHY	(GROVE PLACE CHIMNEY 1919)	17 43 38.61 64 49 31.24	1187.0 920.4	NOT DGTZD	*77Z(C)9157* 11/14/77		DITTO

76-40 LISTING | PHOTOGRAMMETRIC BRANCH, PHOTOGRAMMETRY DIVISION | NATIONAL OCEAN SURVEY NOAA, DEPARTMENT OF COMMERCE USA | DATATAB VERSION 782707

SVY TP-00002		RPT UNIT SPS,PB,ROCKVILLE,MD.	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 12/12/79	COMPILATION	

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

CHARTING NAME	DESCRIPTION RECORD REASON FOR DELETION PUT TRIANGULATION NAMES IN ( )	POSITION LATITUDE LONGITUDE	DM DP	CMD ALTEK DGTZD	METHOD AND DATE OF LOCATION OFFICE	FIELD	CHARTS AFFECTED
	CHARTED LDMK(S) NOT VISIBLE ON COMPILATION PHOTOS AND APPEAR DESTROYED. FURNISHED CHARTED POSITION SHOWN.						
STACK	ST. GEORGE STACK	17 43 05.81 64 49 49.39	178.6 1455.3	NOT DGTZD			25641
	CHARTED LDMK(S) NOT VISIBLE ON COMPILATION PHOTOS AND APPEAR DESTROYED. CONDITION OF TRIANGULATION STATION IS UNKNOWN.						
CHY	(PLESSEN CHIMNEY 1919)	17 43 13.51 64 49 16.05	415.3 472.9	NOT DGTZD			25641

MAP FEATURES OF POSSIBLE LANDMARK VALUE

RWR
8/81

MAP NO.	JOB NO.	GEOGRAPHIC AREA	GEODETIC DATUM	ORIGINATING ACTIVITY
TP-00002	CM7718	St. Croix,USVI	Puerto Rico	Photogr.Div.,Rockville SPS - Compilation

DESCRIPTION	PHOTO NUMBER	PLANE COOR.(FT) STATE Puerto Rico ZONE St.Croix(5202)	GEOGRAPHIC POSITION φ LATITUDE λ LONGITUDE	CHARTS AFFECTED
Chimney	77Z(C)9157	X 1,061,130.471 Y 61,525.225	φ 17-43-14.05 λ 064-49-15.40	25641
TV Tower (refer to C.L.#L-633/79)	77Z(C)9877	X Y	φ 17-45-19.99 λ 064-47-55.38	25641
Old Mill	77Z(C)9822	X 1,066,974.495 Y 82,622.677	φ 17-46-42.70 λ 064-48-13.01	25641
Steeple (refer to C.L.#L-633/79)	77Z(C)9828)	X Y	φ 17-46-46.25 λ 064-45-07.95	25641
		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.	9/2/81	Robert W. Rodkey, Jr.	9/9/81

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.

TP SHEET	GEOGRAPHIC POSITION		PROBABLE IDENITY	REMARKS
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

SUPPLEMENTAL DATA

LISTING OF "OBSTRUCTIONS"
(continued)

TP SHEET	GEOGRAPHIC POSITION		PROBABLE IDENITY	REMARKS
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	64-40-08.82	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