NOAA FORM 76-35

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

DESCRIPTIVE REPORT

•	8	otobathymetry Map No. TP-00009 Edition Nolst.* (Two Parts)			
LOCALITY					
State Saint Croix, Virgin Island					
General Locality Southeast Coast					
Locality Jack, Bay, to Millord Point					
	•				
1	9 77 TO	19			
REGISTRY IN ARCHIVES					

☆ U.\$. GOVERNMENT PRINTING OFFICE: 1973-761-775

NOAA FORM 76-36A U. S. DEPARTMENT OF COMMERCE (3-72) NATIONAL OCEANIC AND ATMOS PHERIC ADMIN.	TYPE OF SURVEY	SURVEY TP. 00009
	D' ORIGINAL	(2 Parts) MAPEDITION NO. (])
DESCRIPTIVE REPORT - DATA RECORD	RESURVEY	MAP CLASS III
	REVISED	јов Рн <u>- СМ-7718</u>
PHOTOGRAMMETRIC OFFICE	LAST PRECEED	ING MAP EDITION
Photogrammetry Division (Rockville)	TYPE OF SURVEY	JOB PH-
OFFICER-IN-CHARGE	ORIGINAL	MAP CLASS
Cdr. Walter S. Simmons	RESURVEY	SURVEY DATES:
car. waiter 5, 51111110ns	REVISED	19TO 19
I. INSTRUCTIONS DATED	· · · · · · · · · · · · · · · · · · ·	
ì. OFFICE	2.	FIELD
Instructions-OFFICE-Job CM-7718, Chart		GRAPHY-Job CM-7718,
Compilation and Photobathymetry,		and Photobathymetrý,
St. Croix, Virgin Islands, 8/21/78.	St. Croix, Virgin	Islands, 10/26/77
Instructions-AEROTRIANGULATION-Job CM-7718,	Instructions-FIELD	-Job CM-7718,
Chart Compilation and Photobathymetry,		and Photobathymetry,
St. Croix, Virgin Islands, 8/3/78.	St. Croix, Virgin	Islands, 9/21/77
II. DATUMS		
1. HORIZONTAL: [1927 NORTH AMERICAN	OTHER (Specity) Puerto	Rico Datum
MEAN HIGH-WATER	OTHER (Specify)	
2. VERTICAL:		
MEAN LOWER LOW-WATER		
X MEAN SEA LEVEL 3. MAP PROJECTION		
	STATE	ZONE
Lambert Conformal Conic	Virgin Islands	· -
5. SCALE 7:10,000	STATE	ZONE
III. HISTORY OF OFFICE OPERATIONS		<u></u>
OPERATIONS	NAME	DATE
1. AEROTRIANGULATION BY	Robert B. Kelly	4/6/79
METHOD: Analytic Block LANDMARKS AND AIDS BY	11 11 11	" "
2. CONTROL AND BRIDGE POINTS PLOTTED BY METHOD: Coradomát Checked by	Henry Felices N/A	. "
	R. W. Rodkey, Jr.	5/21/79
3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY COMPILATION CHECKED BY	G. Fromm	5/21/79
INSTRUMENT: B-8S/ALTEK Bathymetryconxxxxxx by	R. W. Rodkey, Jr.	- 6/21/79
SCALE: 1:10,000 CHECKED BY	G. Fromm	6/21/79
4. MANUSCRIPT DELINEATION PLANIMETRY BY	Henry Felices	9/28/79
CHECKED BY	G. Fromm	10/30/79
Bathymetry жихжжэ вү	R. W. Rodkey, Jr.	6/21/79
Smooth Drafting & Scribing CHECKED BY	G. Fromm R. W. Rodkey, Jr.	10/30/79 6/21/79
SCALE: 1:10,000 CHECKED BY	G. Fromm	10/30/79
5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY	N/A	10/30//3
6. APPLICATION OF FIELD EDIT DATA	Field Edit Cancel	ed
CHECKED BY	N/A G. Fromm	10/30/79
7. COMPILATION SECTION REVIEW BY 8. FINAL REVIEW BY	Robert W. Rodkey,	
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH BY	II II II	12/22/81
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH BY	G. FROMM	3/19/82
11 MAD REGISTERED COASTAL SURVEY SECTION	1 1 1 2 10 100 PD	1 3/17/06

NOAA FORM 76-36B U. S. DEPARTMENT OF COMMERCE (3-72) NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION					
COMPILATION SOURCES TP-00009 (2 Parts)					
1. COMPILATION PHOTOGRAPHY		<u>,</u>			
CAMERA(S) Wild RC-10(Z)				TIME REFI	ERENCE
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TIDE CONTROLLED PHOTOGRAF	111V	(I) INFRARED		MERIDIAN 60th	☐ DAYL1GHT
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77Z(C) 9244-9247	11/14/77	0913-0922	1:20,000	+.45 Feet M	
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77Z(C) 9405-9408	11/14/77	1101-1111	1:20,000	+.55 Feet M	HW
77Z(C) 9265-9266	11/14/77	0935-0944	1:20,000	+.53 Feet M	HW
			į		1
The stages of T tide gage recor		above were de	termined fr	om "WEST INDIE	S LAB"
2. SOURCE OF MEAN HIGH-WATER	LINE:				
The source of the mean high-water is the photography, except frames					
				•	
77Z(C) 9265-9266, listed above under Item.l. Refer to paragraph #35 of the					
Compilation Report bound with this Descriptive Report.					
		<u>-</u>			
3. SOURCE OF MEAN LOW-WATER OR MEAN LOWER LOW-WATER LINE:					
The source of the me	an low-water	r is the nhot	ography ex	rent frames	
The source of the mean low-water is the photography, except frames					
77Z(C) 9265-9266, listed under Item 1. Refer to paragraph #35 of the					
Compilation Report bound with this Descriptive Report.					
4. CONTEMPORARY HYDROGRAPHI	C SURVEYS (List	only those surveys t	hat are sources for p	photogrammetric survey	information.)
SURVEY NUMBER DATE(S)	SURVEY CO	PY USED SURVI	EY NUMBER D	ATE(S) SURV	EY COPY USED
5. FINAL JUNCTIONS					
TP-00004 *	TP-00005	SOUTI	IVO	WEST TD	-00008 *
		100110	emporary Su		
* Consist of t				us Photobathym	etric
overlay. Final junction was made to both parts.					

NOAA FORM /6-36C (3-72)		NATIONAL OCEA	NIG AND ATMOSPHERI	ENT OF COMMERCE C ADMINISTRATION AL OCEAN SURVEY	
	HISTORY OF FIELD	OPERATIONS		TP-00009	
I. X FIELD THOSE TO THE FIELD EDIT OPERATION					
OPERATION			NAME	DATE	
. CHIEF OF FIELD PARTY Phot	o'Party 62	Robert S. T	ibbetts	Oct. 1977	
	RECOVERED BY	L. H. Davis		10/26/77	
2. HORIZONTAL CONTROL	ESTABLISHED BY	N/A L.H. Davis		10/26/77	
PKE.	MARKED OR IDENTIFIED BY RECOVERED BY	N/A		10/20/11	
3. VERTICAL CONTROL	ESTABLISHED BY	L.H. Davis	· · · · · · · · · · · · · · · · · · ·	11/3/77	
	MARKED OR IDENTIFIED BY	L.H. Davis		" "	
RECOVERI	ED (Triangulation Stations) BY	N/A			
4. LANDMARKS AND	LOCATED (Field Methods) BY	N/A			
AIDS TO NAVIGATION	IDENTIFIED BY	N/A			
_	PE OF INVESTIGATION				
2. OF COLUMN THE HAMES	COMPLETE BY	1			
INVESTIGATION	SPECIFIC NAMES ONLY	N/A			
	NO INVESTIGATION	N/A		+	
	RIFICATION OF DETAILS BY	N/A N/A		-	
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1. HORIZONTAL CONTROL IDENTIFIED		2. VERTICAL CON	TROL IDENTIFIED		
Pre-marked		Premark	ed (Orange Pan	el)	
PHOTO NUMBER STA	TION NAME	PHOTO NUMBER	STATION DE		
77Z(C) 9246 and FANCY, 1919 77C(C) 9776		77Z(C) 9246 and 77C(C) 9776	Vertical Par	nel #9	
3. PHOTO NUMBERS (Clarification of details) None					
4.	AN IDENTIFICATION		· <u>-</u>		
4. LANDMARKS AND AIDS TO NAVIGATI	ON IDENTIFIED		,		
		 			
PHOTO NUMBER OB.	JECT NAME	PHOTO NUMBER	OBJECT	NAME	
5. GEOGRAPHIC NAMES: TREPORT X NONE A. ROUNDARY AND LIMITS: TREPORT NAMES					
5. GEOGRAPHIC NAMES: REPORT NONE 6. BOUNDARY AND LIMITS: REPORT NONE 7. SUPPLEMENTAL MAPS AND PLANS Field Control Report					
8. OTHER FIELD RECORDS (Sketch book Field Control Report Control Identification NOAA Form(s) 76-72 (Lis- Photographs of Vertical	Cards (Vertical and t of Directions)		Vols. I and	Observations	

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Shorelir Maps fir	ne/Photobathymetry nal reviewed o registration.	11/25/8	31	Class III Map. Fie canceled.	Shoreli ld edit	ne	3/22/82	; 	
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	RTS TO MARINE CHART DI		ITICAL	DATA BRANCH					
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3. 🗀 RI	EPORT TO MARINE CHART EPORT TO AERONAUTICAL	L CHART DI)ED: _	
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IV. SURVEY	Y EDITIONS (This section si		NUMBER		o edition is re		TYPE OF SUR	12 V	
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FOURTH	SURVEY NUMBER TP -	_(4) PH	NUMBER				TYPE OF SURV	RESŪ	R V É Y
EDITION	DATE OF PHOTOGRAPH	DATE	OF FIE	ELD EDIT	□n.	П ш.	MAP CLASS	v.	FINAL

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.

17-65'30" West Indies Lab 17.49.00 TP-00006 .00,00.49 17.43.00"

Christiansted

SHORELINE MAPPING & PHOTOBATHYMETRN

SCALE 1/10,000

Frederiksted Limetree Bay

TIDE GAGES

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 Indentification 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 Fanels 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. 68 No. 1 1975 2.05

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.

7 (1.7)

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. Lime Tree

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.

Respectfully Submitted,

Approved and Forwarded:

The state of the s

Robert S. Tibbetts Chief, Photo Party 62 Ronald E. Ledbetter





UNITED STATES DEPARTMENT OF COMMERC: National Oceanic and Atmospheric Administratio NATIONAL OCEAN SURVEY Rockville, Md. 20852 14

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

C3 421

CAM52

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 I: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.

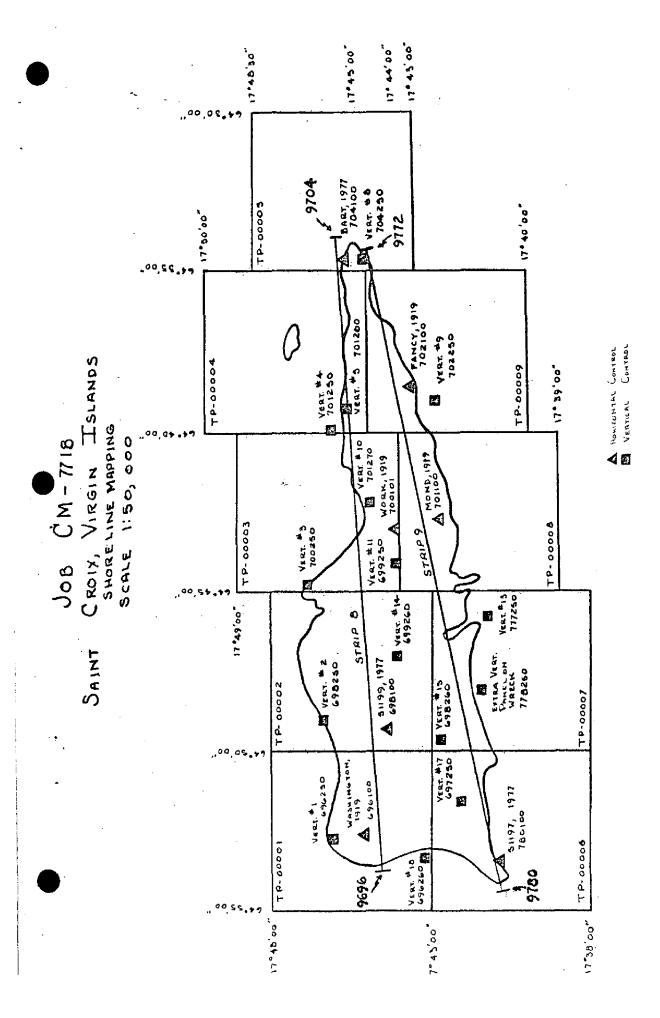
Submitted by,

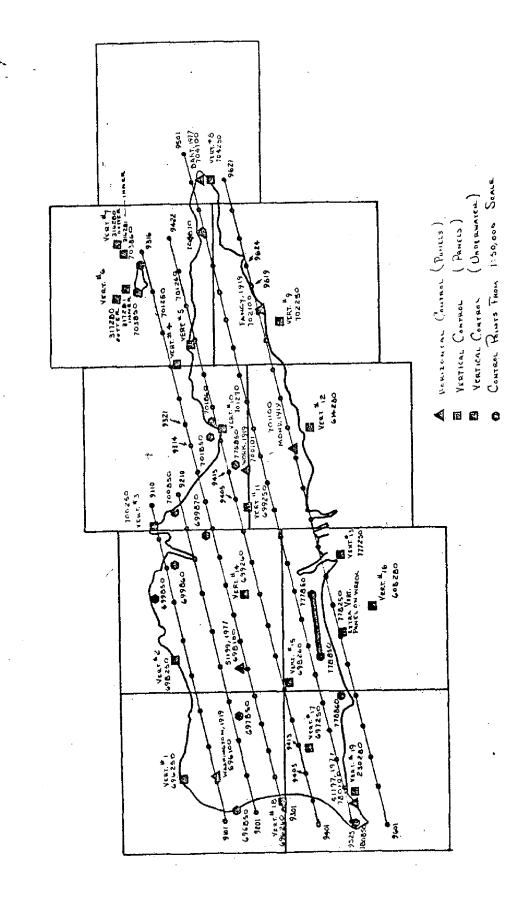
Robert B. Kelly

Approved and forwarded:

Don O. Norman

Chief, Aerotriangulation Section





JOB CM- 7718 CROIX, VIRGIN ISLANDS SHORELINE MAPPING

SAINT

1:20,000

SCALE

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Č.		1149094,636	75967.192	14.305
ζ.,	778250	- 1. 827 1067233.315	249 51400.005	- 1.740 2.760
Ċ	696850	1036002.220	69419.714	28.222
e	6 97 850	1052332.595	69544,368	529.718
•	699950	1071973.676	84956.702	6.458
0	69986 ⁹	1076209.588	80534.579	869,863
€.	699870	1084531.749	73684.116	493.606
	790850	1689481.060	80913.623	38.273
(731850	1102127.675	73141.771	38 . 993
(701860	1105201.611	74155.706	12.920
	703850	1128132.932	87209, 59	4.583
•	703840	.06 8 1133980,507	. 065 66765,531	-2.151
(764873	11395.0.611.	75/27.155	72.430
	775359	1098421.955	67835.508	254.501
C	777353	1072608.380	55570.197	21.140
•	773850	1065294.530	55/02,655	60.712
	7303°0	1052592.315	479 7 8.095	7.900
(-	CVDD COURT=	NGÚ47		·

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(ST. CRO	IX BLOCK S	TRIPS 276	
	△ 696100	+ .26 1041445.78	77 72236,727	814.779
Ċ	<u> </u>	88 1063454.19		252,849
C	700101	- <i>03</i>	3 66246,993	163,136
		28 1099155.71		97.357
O	702100	1124017.68		245.739
C	A 704100	1149182.52	8 5 75898, 18	225.162
C.		/ / 	6 47727.313	3,396
(<u> 23022</u> 0	1037855.18	8 47434.722	+ 264 -6.236
C -	230280	1037855.14	6 47434.742	-3,903
_	316220	1132925.39	5 88111.746	+ 1.899 -11.901
C	315221	1132690.46	4 87741.487	+ 1.706 -5,994
·(316230	1132925.48	5 88111.706	-7.823
	316281	1132690,48	87741.549	-3.697
.(317220	1127639,13	2 69807.327	- /.849 -18.849
(□ 317221	1128465.42	2 89253,352	+ .1 78 -9.522
	317280	1127639.13	5 89 ⁴ 07 . 185	-13.315
(317281	1128458.41	0 89453,297	-6.464
(518290	1065062.96	2 55078,400	4 , /4/ 60 . 941
	518291	1072621,21	6 55944.896	- 2.3/3 20.307
•	□ 608220	1069695.77	3 46442.589	+ .576 -11.224
· (608280	1069695.75	2 46442.602	-7.743
	- □ 614220	1103112.77	9 55645.407	-5.141
0	614280	1103112.76		-3.392
0	△ 🗆 696260	#	7 59513,066	277 7.319
	697250	- 4.46 1047294.68	3 54538.932	+ 080 92.235
C	△ □ 698250	1062035.02	1 / 79692,390	23:402
C	□ 698260	1059279.89	3 59376.920	+ 068 109,473
-	699250	1090260.91		- 1. 789 188.961
C	699260	1075362.65	9 65269.644	- 4.04/ 143,461

٠,	△ □700250	086 1086788.128	+.077 83998 . 188	4/3 10.512
		1114681.957	/83 79844:794	008 1.162
	70126년	-/,27/ 1118873.491	<i>+ 167</i> 77741 . 276	- <i>296</i> 5.964
	△ 701270	+ 03/ 1103892:079	<i>+ .230</i> 72853,331	-1.354 .684
, -	△ 🗖 702250	1122402.658	<i>+ ./9/</i> 61410,138	+ .083 5.483
Ō	□ 704250	1149094,745	75067:359	- 272 15,018
	777250	1080994.736	- //4 49930:826	- 28/ 2:909
	778250	-2.584 1067232.554	-3.3#2 51176.912	- 3/3 4:187
	696850	1036002.131	2.687 69418.130	27,227
	697 850	1052331.097	2.5/6 69544.003	528,264
•	699860	5.003	7.563 80534.719	870.781
	699870	3.322 1084531.948	73683, 22	492.462
	1 70 0850	1089481.418	80916,237	38.123
	701850	1102127.615	73141./42	37,615
3	701860	1105201.635	74453.669	41.784
<i>.</i>	. 703850	2.262 1128033.252	97209.693 	4.915
··	△ 7038€0	1133960.531	86765,519	-,055
8.0	704801	1143164.015	76530,799	22,196
	704802	1145038.727	72954,481	41.698
~	704870	5,020 1139568,385	75727.839	76.252
, ·	77 5850	1098422.015	1.060 67333,459 3.149	253,228
{ _	777850	1072608,389	3.149 55867.614	20.555
_	778850	2.22# 1065293.613	55099:904	60,753
U	. 778860	2.812 1055636.967 1.702	1,312 49679.867 2.825	20,135
0	780850	1032591,908	2.825 470 76, 127	8.561
	CARD COUNT=	00055		

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LISTING OF RATIO VALUES GM7718 St. Groix, 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) 9074 thru 9090 - 2.01X 77Z(C) 9101 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

** ** ** ** ** ** ** ** ** ** ** ** **				1 xxc 1,	A / /
(6-75)		DESCRIPTIVE	E REPORT CONTROL RECORD	NATION	MOSPHERIC ADMINISTRATION
MAP NO. TP-00009	JOB NO.	816		Photogrammetry	y Division (Reakwille)
STATION NAME	(V, T, MBEX) INFORMATION (Index)	AEROTRI- ANGULATION POINT NUMBER	COORDINATES IN FEET STATE ZONE	GEOGRAPHIC POSITION φ LATITUDE λ LONGITUDE	REMARKS
S19HT MILL, 1919	5,7	1atrses	x= y=	\$ 17-44-31.233 \$ 64-39-42.929	
(OTTON GROVE MILL, 1919	9 5/2/		χ= ή=		
FANCY, 1919	P.C., PZ G.P., P66	762.100	χ _s y=	1 7 1 1	Received 1977
			## ##	\$ ~	
			x= h=	Φ ~	
			χ= y=	φ κ	
			X= y=	Φ Κ	
			=ħ	φ	
			χ= η=	φ γ	
			<i>y=</i>	φ ~	
COMPUTED BY		DATE	COMPUTATION CHECKED BY		DATE
LISTED BY FAR. FA	FADLEY	DATE 3/19	LISTING CHECKED BY HAND PLOTTING CHECKED BY	Grown	DATE 4/13/19 DATE
		SUPERSEDES N	ERSEDES NOAA FORM 76-41, 2-71 EDITION WHICH IS OBSOLETE	CH IS OBSOLETE.	2.

Compilation Report TP-00009

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 scale, 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 mean low-water line and reefs/ledges were compiled using underwater contouring compilation methods. Vertical control for this compilation was furnished by field methods and the photogrammetric plot. Reef/ledge symbols 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 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 MLW and reef/ledge lines depicted on the base shoreline map represent the zero depth curve. The 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 identifiable on the compilation photography. There were no fixed aids to navigations located.

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):

East Point, 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

Items to be applied to Nautical Charts immediately - None $\ \ \,$

Items to be carried forward - None

Submitted by,

Robert W Rockey Jr

Approved and Forwarded:

John A. Mooney, Jr.

Chief, Special Projects Section

(Rockville)

Photogrammetry Division

TP-00009

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 Final Reviewer

Approved for Forwarding by:

George M. Balí

Approved by

Walter S. Simmons

Chief, Photogrammetric Branch Chief, Photogrammetry Division

GEOGRAPHIC NAMES

FINAL NAME SHEET

CM-7718 (St. Croix, Virgin Islands)

TP-00009

Caribbean Sea

Great Pond Bay

Cotton Grove

Hughes Point

Fannys Fancy

Madame Carty

Grapetree Bay

Milord Point

Grapetree Point

Robin Bay

Grass Point

Rod Bay

Great Pond

Turner Hole

Great Pond (locality)

Approved by:

Charles E. Harri 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

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19	┝

PHOTOGRAMMETRIC BRANCH PHOTOGRAMMETRY DIVISION

DATATAB 782707 NOAA COMMERCE USA

NATIONAL OCEAN SURVEY

DEPARTMENT OF

•				X1:100000000000000000000000000000000000
* SVY	* 60000-dl	* RPT UNIT	SPS, PB, ROCKVILLE, MD.*	PAGE 1 OF 2 *
* JOB	CM-7718 *	* STATE	VIRGIN ISLANDS *	H
+ PR∪	ST CROIX *	* LOCALITY	ST CROIX	*ORIGINATING ACTIVITY *
* DIM	P. RICO *	* DATE	12/06/79 *	COMPILATION *
	***************************************			**************************************

		S UNDER METHOD AND DATE OF LOCATI	FOR ENTRI	KEY	i Li
DATA PROCESSER	* !	HENRY	* :	ACTIVITIES	.
IGITIZER	¥	HENRY FELICES	*	FIELD AND OFFICE	м.
OFFICE COMPILER	*	ROBERT RODKEY	*	AND/OR VERIFIED BY	¥
RESENTA	*	NO FIELD EDIT-CLASS III MAP	*	POSITIONS DETERMINED	м.
	*		*		

RRIES UNDER METHOD AND DATE OF LOCATION	* FIELD(CONT,D)	* B.PHOTOGRAMMETRIC FIELD POSITIONS** SHOW	* THE METHOD OF LOCATION OR VERIFICATION.	* DATE OF FIELD WORK AND NUNBER OF PHOTO-	* GRAPH 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 TRI-
KEY FOR ENTRIES UNDER MET	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

ED OR VERIFIED	-PHOTCGRAMMETRIC IS-VISUALLY	-FIELD IDENTIFIED -THEODOLITE	PLANET SEXTAN
FIELD * 1.NEW POSITION DETERMINED * 257 TO SYMBOLS	-FIELD P	D LATION 5- E	k 3-INTERSECTION 7-P k 4-RESECTION 8-S

ANGULATION STATION IS RECOVERED. A TRIANG. REC. WITH DATE OF RECOVERY IS SHOWN.

TRIANG. REC.

EXAMPLE

8-12-76

3.POSITION VERIFIED VISUALLY ON PHOTOGRAPH

SHOWN BY V-VIS AND DATE. EXAMPLE V-VIS

8-12-75

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

-	* ESTABLISHED BY PHOTOGRAMMETRIC METHODS.	SURVEY METHODS
_	* DEPENDENT ENTIRELY, OR IN PART, UPON CONTROL	OBSERVATIONS BASED ENTIRELY UPON GROUND
*	* **PHOTOGRAMMETRIC FIELD POSITIONS ARE	*FIELD POSITIONS ARE DETERMINED BY FIELD
	•	

* 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 .

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THE	. L O ₩		CTS HAVE NO	SECTED FROM SEA	D TO DETERM	THEIR VALUE AS	LANDMARKS *
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SIGHT	-	GHT M	LL 1919	7 44 31.	960.1 NOT 264.8 DGTZ	(C)93 /14/7	
TOWE	* *	TTON	GROVE MILL 1919)	3 56.8 10.9	48.3 NOT * 21.7 DGTZD*	772(C)9246* 11/14/77 *	* 25641
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€ * * 3	* * *			* *	* *	* ★	* * * †
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	; ; ; ; * * 1				* * i	**************************************	; * * * * * * * * * * * * * * * * * * *
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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 F	POSTTION	PROBABLE IDENITY	REMARKS
		٠	,	
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
			<i>}</i> -	
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	bu oy	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	bu oy	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	b uoy	above MLW
				. •
TP-00006	17-42-12.24	64-53-12.59	(object on bottom	
			six ft. of water	
TP-00006	17-41-15.06	64-51-46.07	(manmade object)	G MIM
min 00007	17 /0 07 05	(1 13 13 50	•	· · · · · · · · · · · · · · · · · · ·
TP-00007	17-40-37.35	64-47-41.56	buoy	above MIW
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	@ MIM
TP-00007	17-41-47.72	64-47-08.87	snag	@ MLW
TP-00007	17-41-48.13	64-47-07.27	snag	6 MIM
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 MIW
TP-ባባባባ7	17-41-09.11	6 4-46- 32.28	buoy	above MLW

SUPPLEMENTAL DATA

LISTING OF "OBSTRUCTIONS" (continued)

TP SHEET	GEOGRAPHIC P	OSITION	PROBABI	E IDENITY	REMAR	<u>KS</u>
TP-00007	17-42-33.13	64-46-15.28	pile	٠	above	MLW
${ t TP-00007}$	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	17-41-51.59	64-45-21.18	buoy		above	MLW
TP-00007	17-41-52.61	64-45-20.62	buoy		above	MLU
TP-00007	17-41-50.45	64-45-19.80	buoy		above	MIII
	11-10-10-04				_ 7	
TP-00008	17-42-10.05	64-42-07.96	pnoa		above	
TP-00008	17-42-12.40	64-42-96.76	buoy		above	
TP-00008	17-42-14.53	64-42-00.17	buoy	_	above	
TP-00008	17-42-24.93	64-41-31.51	•	marker	above	
T2-00008	17-42-15.33	64-41-30.09	b uo y	•	above	
TP-00008	17-42-25.22	64-41-30.22	buoy or	marker	above	
TP-00008	17-42-46.26	64-40-11.15	buoy		evoda	MIW
TP-00008	17-42-48.97	64-49-93.82	ьноу		above	MIM
TP-00009	17-42-49.89	64-39-53.81	buoy		above	MIU
TP-00009	17-42-51.79	64-39-48.90	buoy		above	
TP-00009	17-42-48.94	64-39-47.69	buoy		above	
TP-00009	17-42-56.29	64-39-47.23	-	marker	above	
TP-00009	17-42-49.99	64-39-44.33	buoy	THE R LOW A.	above	
TP-00009	17-42-57.73	64-39-43.45	-	marker	above	
TP-00009	17-43-12.73	64-37-57.63	buoy or	Titles W. Editor Tr.	above	
TP-00009	17-44-25.54	64-35-26.12	buoy		above	
エモールいのう	11-44-57.74	0	buoy		a DOVE	7,1