

12953

12953

Form 504	
U. S. DEPARTMENT OF COMMERCE	
COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT	
Type of Survey	SHORELINE (Photogrammetric)
Field No.	Office No. T-12953
LOCALITY	
State	VIRGIN ISLANDS
General locality	SAINT THOMAS
Locality	SAINT THOMAS HARBOR
19 65-66	
CHIEF OF PARTY	
J. Bull, Director, Atlantic Marine Center	
LIBRARY & ARCHIVES	
DATE	

DESCRIPTIVE REPORT - DATA RECORD  
T-12953

PROJECT NO. (II):

JOB PH-6504

FIELD OFFICE (II):

CHIEF OF PARTY

PHOTOGRAMMETRIC OFFICE (III):

Atlantic Marine Center

OFFICER-IN-CHARGE

J. Bull, Director, Atlantic Marine Center

INSTRUCTIONS DATED (II) (III):

October 29, 1965

METHOD OF COMPILATION (III):

Kelsh

MANUSCRIPT SCALE (III):

1:5,000

STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III):

1:3,000 pantographed to 1:5,000

DATE RECEIVED IN WASHINGTON OFFICE (IV):

DATE REPORTED TO NAUTICAL CHART BRANCH (IV):

APPLIED TO CHART NO.

DATE:

DATE REGISTERED (IV):

GEOGRAPHIC DATUM (III):

Puerto Rico

VERTICAL DATUM (III): MHW

~~MEAN LOW WATER~~ EXCEPT AS FOLLOWS:

Elevations shown as (25) refer to mean high water

Elevations shown as (5) refer to sounding datum

i.e., mean low water or mean lower low water

REFERENCE STATION (III):

ROCK, 1918 ✓

LAT.:

18°19'27".492 (845.2m) ✓

LONG.:

64°56' 00".016 (0.5m) ✓

☒ ADJUSTED☐ UNADJUSTED

PLANE COORDINATES (IV):

y = 180,405.73 ft. ✓

x = 1,020,221.60 ft. ✓

STATE

Virgin Islands

ZONE

Puerto Rico  
Zone 1ROMAN NUMERALS INDICATE WHETHER THE ITEM IS TO BE ENTERED BY (II) FIELD PARTY, (III) PHOTOGRAMMETRIC OFFICE,  
OR (IV) WASHINGTON OFFICE.

WHEN ENTERING NAMES OF PERSONNEL ON THIS RECORD GIVE THE SURNAME AND INITIALS, NOT INITIALS ONLY.

DESCRIPTIVE REPORT - DATA RECORD

FIELD INSPECTION BY (II):		DATE:
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION):  Air Photo. compilation Date of photography 9 March 1965		
PROJECTION AND GRIDS RULED BY (IV):		DATE
A. E. Roundtree		October 1965
PROJECTION AND GRIDS CHECKED BY (IV):		DATE
J. Collum		October 1965
CONTROL PLOTTED BY (III):		DATE
B. H. Barnes		December 1965
CONTROL CHECKED BY (III):		DATE
A. C. Rauck, Jr.		December 1965
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III):		DATE
I. I. Saperstein		November 1965
STEREOSCOPIC INSTRUMENT COMPILATION (III):	PLANIMETRY K. Boyle, L. Graves (checked) R. Pate	DATE January 1966
	CONTOURS Inapplicable	DATE
MANUSCRIPT DELINEATED BY (III):		DATE
K. Boyle		January 1966
SCRIBING BY (III):		DATE
B. Barge		August, 1966
PHOTOGRAMMETRIC OFFICE REVIEW BY (III):		DATE
R. E. Smith		June 1966
REMARKS: Field Edit by D. R. Rich, LTjg March 1966		

FORM C&GS-181c  
(3-66)U.S. DEPARTMENT OF COMMERCE  
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION  
COAST AND GEODETIC SURVEY

## DESCRIPTIVE REPORT - DATA RECORD

CAMERA (KIND OR SOURCE) (III):

L camera

## PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
65-L-1497	March 9, 1965	16:16	1:15,000	-0.07
65-L-1498	"	16:16	"	-0.07
65-L-1499	"	16:16	"	-0.07
65-L-1552	"	16:37	"	-0.17
65-L-1553	"	16:37	"	-0.17
65-L-1554	"	16:37	"	-0.17

TIDE (III) Predicted

	RATIO OF RANGES	MEAN RANGE	<del>SEMI RANGE</del> RANGE
REFERENCE STATION: GALVESTON, TEXAS	--	--	Diurnal 1.4
SUBORDINATE STATION: Charlotte Amalie, St. Thomas Island	0.57	--	0.8
SUBORDINATE STATION:			

WASHINGTON OFFICE REVIEW BY (IV):

*Leo F. Beugnot, Atlantic Marine Center*

DATE:

*Feb. 1967*

PROOF EDIT BY (IV):

DATE:

NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II):

RECOVERED:

IDENTIFIED:

NUMBER OF BM(S) SEARCHED FOR (II): none

RECOVERED:

IDENTIFIED:

NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III): none

NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III): none

REMARKS:

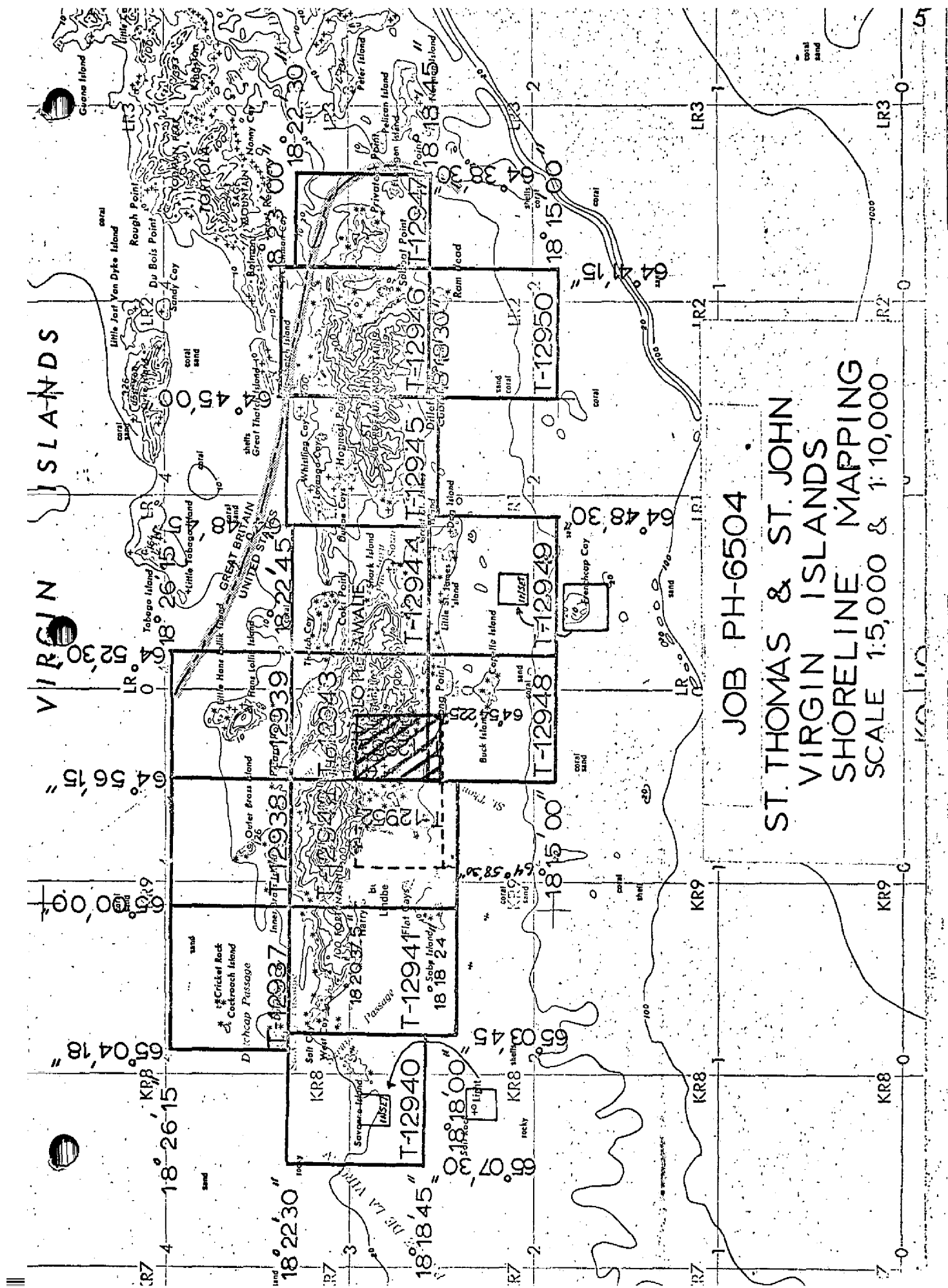


## COMPILATION RECORD

## COMPLETION DATE

## REMARKS

Alongshore area for hydro	January 1966	Superseded
Field Edit applied Manuscript complete	June 1966	<i>superseded</i>
<i>Corrected during Final Review</i>	<i>Feb. 1967</i>	



SUMMARY TO ACCOMPANY  
DESCRIPTIVE REPORT T-12953

Shoreline map T-12953 is one of two similar maps compiled at 1:5,000 scale in project PH-6504. The primary purpose of the maps was to provide new shoreline and photo-hydro support data for hydrographic surveys in the general area of St. Thomas Harbor.

Field operations preceding compilation consisted of recovery and identification of horizontal control. Compilation was at 1:5,000 scale using the 1:15,000 scale panchromatic photography obtained in March 1965. Cronaflex copies of the manuscript, field photographs and specially prepared photo-hydro support photographs were provided for preparation of the hydrographer's boatsheet, field edit and photo-hydro support purposes.

The manuscript is a vinylite sheet 2 minutes 13.5 seconds in latitude by 1 minute 52.5 seconds in longitude which was scribed and reproduced on cronaflex. One cronar positive and one cronar negative are provided for record and registry.

T-12953

There was no Field Inspection prior to compilation.



MAP T. 12593

PROJECT NO. PH-6504

SCALE OF MAP 1:5,000

SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR $\phi$ -COORDINATE LONGITUDE OR $\lambda$ -COORDINATE	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS		DATUM CORRECTION		N.A. 1927-DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS	
				FORWARD	(BACK)	FORWARD	(BACK)	FORWARD	(BACK)	FORWARD	(BACK)
FLAG, 1918	G.P.s P. 59	PR	18 19 55.061"	1692.8	✓						
			64 54 41.007"	1204.1	✓						
HASSEL, 1918	G.P.s P. 60	"	18 20 11.716	360.2	✓						
			64 56 14.485	425.3	✓						
ST. THOMAS SOUTH BASE, 1918	"	"	18 19 56.444	1735.3	✓						
			64 55 27.980	821.6	✓						
PIER, 1918	G.P.s P. 74	"	18 20 29.630	910.9	✓						
			64 55 50.419	1480.4	✓						
GREEN, 1918	"	"	18 18 43.059	1323.8	✓						
			64 54 31.178	915.6	✓						
KING (KING'S KHARF CONCRETE BLDG. FLAGPOLE), 1918	G.P.s P. 78	"	18 20 34.283	1054.0	✓						
			64 55 52.571	1543.5	✓						
BLUE (BLUEBEARD'S CASTLE, FLAGPOLE, 1918	G.P.s P. 79	"	18 20 32.149	988.4	✓						
			64 55 28.060	823.9	✓						
EAST POINT LIGHT- HOUSE, 1900	"	"	18 19 20.257	622.8	✓						
			64 55 21.451	629.9	✓						
ROCK, 1918	"	"	18 19 27.492	845.2	✓						
			64 56 00.016	0.5	✓						
COWELL'S BATTERY (SIG), 1900	P. 79	"	18 19 39.316	1208.7	✓						
			64 55 58.786	1726.2	✓						
LONGITUDE PIER, 1900	"	"	18 20 29.679	912.5	✓						
			64 55 48.898	1435.7	✓						
FORT CHRISTIAN FLAGSTAFF, 1900	"	"	18 20 32.238	991.1	✓						
			64 55 49.103	1441.7	✓						

1 FT. = 3048006 METER

COMPUTED BY:

DATE

CHECKED BY:

DATE

COMM-DC-57843

80



Photogrammetric Plot Report  
St. Thomas, Virgin Islands  
Job PH-6504

21. Area Covered

The project covers two 1:5,000 sheets in the southern part of St. Thomas. The sheets are T-12952 and T-12953.

22. Method

Only the northern strip of photography was bridged on the stereoplanigraph. The southern strip could not be bridged across water. Tie points have been established between the northern and southern strips of photographs to facilitate the setting up of models for the southern strip on the Kelsh. The adjustment was made by IBM 1620 methods.

23. Adequacy of Control

The control provided, along with the 1965 Harry S. Truman Airport survey control, was adequate with the following exceptions: CHIMNEY, 1918 S.P.A. could not be held in the bridge and was not resolved. The chimney itself, therefore, was used. BRUSH, 1918 was identified direct, could not be held within allowable limits because of lack of imagery.

All additional control held within National Map Accuracy Standards for 1:5,000 scale mapping.

24. Supplemental Data

USGS Quadrangle CENTRAL ST. THOMAS, VIRGIN ISLANDS, scale 1:24,000 dated 1955 was used to provide basic vertical control for bridging operations.

25. Photography

Photography was adequate in coverage, overlap and definition.

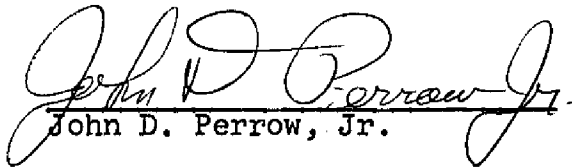
26. Plotting Constants

Plotting constants for 1:5,000 scale manuscripts were provided for all bridge points.

Submitted by:

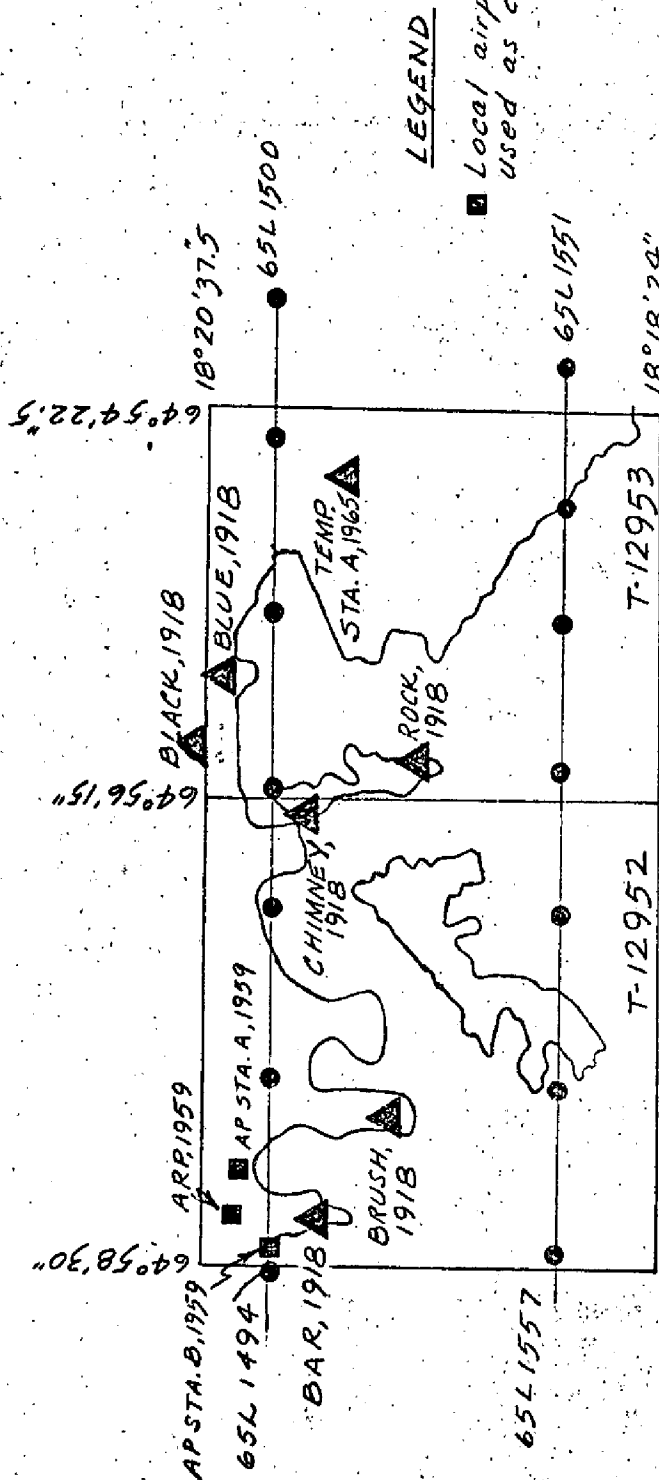
  
Irving I. Saperstein

Approved by:

  
John D. Perrow, Jr.

November, 1965





# AEROTRIANGULATION SKETCH

ST. THOMAS, V. I.

Ph- 6504

Nov. 1965

COMPILATION REPORT  
T-12953

The Photogrammetric Plot report is being submitted with this report.

31. DELINEATION

The kelsh plotter was used. There was no field inspection. Photography was satisfactory.

32. CONTROL

See Photogrammetric Plot report.

33. SUPPLEMENTAL DATA

None.

34. CONTOURS AND DRAINAGE

Inapplicable.

35. SHORELINE AND ALONGSHORE DETAILS

There was no field inspection. Shoreline and alongshore details were delineated from office interpretation of the photography. No low water line was shown.

36. OFFSHORE DETAILS

See Item 49.

37. LANDMARKS AND AIDS

There was no Landmarks or Aids located or verified by the Field Editor or the Hydrographer.

39. JUNCTIONS

1:5,000 scale manuscripts; T-12952 and T-12953 lie within the limits of 1:10,000 manuscripts; T-12942, T-12943 and T-12948. A satisfactory junction has been made with T-12952 to the west. The 1:10,000 scale manuscripts are to be compiled at a later date.

40. HORIZONTAL AND VERTICAL ACCURACY

No statement.

46. COMPARISON WITH EXISTING MAPS

Comparison has been made with U.S.G.S. Quadrangle CENTRAL ST. THOMAS, V.I. scale 1:24,000 dated 1955.

47. COMPARISON WITH NAUTICAL CHARTS


Comparison has been made with Chart No. 933 scale 1:10,000 8th edition dated April 26, 1965.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY


None.

ITEMS TO BE CARRIED FORWARD

None.

  
R. E. Smith  
Cartographer

Approved and forwarded:

  
J. Bull, CAPT, USESSA  
Director, Atlantic Marine Center

48. GEOGRAPHIC NAME LIST

BARREL OF BEEF	HAVENSIGHT POINT
BLUEBEARD HILL	KINGS WHARF
CAREENING COVE	LISENLUND HILL *
CARIBBEAN SEA	LONG BAY
CAY BAY**	MUHLENFELS POINT
CHARLOTTE AMALIE	PACQUEREAU BAY
COWELL BATTERY*	POINT KNOLL
COWELL POINT	RUPERT ROCK
EAST GREGERIE CHANNEL	<del>MORNING STAR BAY</del>
FORT CHRISTIAN	<del>SOLDIERS BAY**</del>
FREDERIKSBERG POINT	ST. THOMAS HARBOR
HASSEL ISLAND	ST. THOMAS ISLAND
	WEST INDIAN DOCK**

\* Not on A.J. Wraight's name list

\*\* From Chart No. 933

*\* Not shown on this survey*

#6

T-12953

49. NOTES FOR THE HYDROGRAPHER

Features believed to be of landmark value have been shown, but their visual or navigational value should be verified.

Rocks, piles, shoals, and other offshore features have been shown from office interpretation, they should be verified.

Three Lights or Buoys have been located from the Kelsh. These should be verified as to their positions and if they are lights or Buoys.

A discrepancy exists with notes for verification to the hydrographer and/or field editor is being forwarded with this report.

## PHOTOGRAMMETRIC OFFICE REVIEW

T-10983 12953

1. PROJECTION AND GRIDS RES	2. TITLE RES	3. MANUSCRIPT NUMBERS RES	4. MANUSCRIPT SIZE RES
CONTROL STATIONS			
5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY RES	6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (Topographic stations) XX		7. PHOTO HYDRO STATIONS XX
8. BENCH MARKS XX	9. PLOTTING OF SEXTANT FIXES XX	10. PHOTOGRAMMETRIC PLOT REPORT Bridge (WSC)	11. DETAIL POINTS Kelsh
ALONGSHORE AREAS (Nautical Chart Data)			
12. SHORELINE RES	13. LOW-WATER LINE XX	14. ROCKS, SHOALS, ETC. RES	15. BRIDGES XX
16. AIDS TO NAVIGATION XX	17. LANDMARKS XX	18. OTHER ALONGSHORE PHYSICAL FEATURES RES	19. OTHER ALONGSHORE CULTURAL FEATURES RES
PHYSICAL FEATURES			
20. WATER FEATURES RES		21. NATURAL GROUND COVER RES	22. PLANETABLE CONTOURS XX
23. STEREOSCOPIC INSTRUMENT CONTOURS XX	24. CONTOURS IN GENERAL XX	25. SPOT ELEVATIONS XX	26. OTHER PHYSICAL FEATURES RES
CULTURAL FEATURES			
27. ROADS RES	28. BUILDINGS RES	29. RAILROADS XX	30. OTHER CULTURAL FEATURES RES
BOUNDARIES			
31. BOUNDARY LINES XX		32. PUBLIC LAND LINES XX	
MISCELLANEOUS			
33. GEOGRAPHIC NAMES RES		34. JUNCTIONS RES	35. LEGIBILITY OF THE MANUSCRIPT RES
36. DISCREPANCY OVERLAY XX	37. DESCRIPTIVE REPORT RES	38. FIELD INSPECTION PHOTOGRAPHS XX	39. FORMS RES
40. REVIEWER RES R. E. Smith		SUPERVISOR, REVIEW SECTION OR UNIT ACR Albert C. Rauch, Jr.	
41. REMARKS (See attached sheet)			
FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT			
42. Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted under item 43.			
COMPILER RES R. E. Smith		SUPERVISOR ACR Albert C. Rauch, Jr.	
43. REMARKS			

F I E L D   E D I T   R E P O R T

ST. THOMAS HARBOR  
V.I.

MARCH 1966

USC&GS SHIP WHITING

LCDR JAMES P. RANDALL, USESSA, COMMANDING

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51: METHODS

For the most part the entire shoreline of St. Thomas Harbor was inspected from a skiff.

All corrections, deletions and additions have been noted on the appropriate photographs and discrepancy prints are cross referenced. Elevations of rocks were determined by use of a hand level. All wreck investigations will be done by the hydrographer (See Descriptive Report for Sheet WH-5-1-66).

All field edit information has been shown on the following sheets and photographs:

SHEETS: T-12952, T-12953

PHOTOS: 65L1552, 65L1554-1556, 65L1495-1498



- 2 -

## 52: ADEQUACY OF COMPILATION

Compilation is, with the following corrections, considered complete and adequate

T-12952

## Deletions:

1. Cable beginning at..... $18^{\circ}20'17''N$   
 $64^{\circ}57'55''W$
2. Unidentified object..... $18^{\circ}20'12''N$   
 $64^{\circ}57'52''W$
3. Pipeline..... $18^{\circ}20'00''N$   
 $64^{\circ}57'51''W$
4. Unidentified object from hydro  
Survey 4544a..... $18^{\circ}19'35''N$   
 $64^{\circ}57'48''W$
5. Old pier..... $18^{\circ}19'51''N$   
 $64^{\circ}57'19''W$
6. Pier ruins..... $18^{\circ}20'11''N$   
 $64^{\circ}57'12''W$   
 $09''W$
7. Daybeacon..... $18^{\circ}20'15''N$   
 $64^{\circ}56'23''W$
8. Wreck..... $18^{\circ}19'48''N$   
 $64^{\circ}56'54''W$

Additions: None

Corrections: None

T-12953

## Deletions:

1. Pier ruins..... $18^{\circ}19'56''N$   
 $64^{\circ}56'01''W$
2. Submerged rock..... $18^{\circ}19'20''N$   
 $64^{\circ}55'30''W$

Additions: None

Corrections: None



## 53: MAP ACCURACY

No accuracy tests were made except by the hydrographer. In all cases the plot appeared well within hydrographic needs. The photo-identification of station SPRAT, 1918, was made to help strengthen the plot on the South end of Water Island.

## 54: RECOMMENDATIONS

No recommendations are offered. The office interpretation of photo images is considered excellent.

## 55: EXAMINATION OF PROOF COPY

The following residents of Charlotte Amalie, St. Thomas have examined the discrepancy prints for any possible errors: James E. Simmons (res. 32 yrs.), Harbor Master; Robert W. Conway (res. 20 yrs.), Harbor Pilot.

## 56: SHORELINE

All the shoreline on sheet T-12953 is adequate as shown except the shoreline around "Rupert Rock" (18°19'50"N, 64°55'38"W). Field identification of shoreline was indicated on the photographs as requested on the discrepancy prints.

All shoreline on sheet T-12952 is adequate as shown except the shoreline around SPRAT POINT. Field identification of shoreline was indicated on the photographs as requested on the discrepancy prints.

APPROVAL SHEET

Submitted by:

*Donald R. Rich*Donald R. Rich  
LTjg, USESSA

Approved:

*James P. Randall*James P. Randall, LCDR, USESSA  
Commanding USC&GS Ship WHITING

REVIEW REPORT  
SHORELINE  
February 20, 1967

61. GENERAL STATEMENT

See Summary accompanying Descriptive Report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS

The only prior registered survey in this area is Registered Survey No. 4544a which contains the shoreline and the hydrography accomplished from August 1923 to October 1925.

It was noted during final review that the position of the reference station on Survey 4544a (EAST PT. L.H. "EAST") is given as latitude  $18^{\circ} 19' 622.9m$ , longitude  $64^{\circ} 55' 534.9m$ . The position in the List of G.P.'s for EAST POINT LIGHTHOUSE, 1900 is latitude  $18^{\circ} 19' 622.8m$ , longitude  $64^{\circ} 55' 629.9m$ . This may possibly account for some of the differences in the shoreline and the apparent shift in position of some rocks in the comparison of the old and new survey.

This map supersedes the older survey for Nautical Chart construction purposes.

63. COMPARISON WITH MAPS OF OTHER AGENCIES

Comparison was made with U.S.G.S. CENTRAL ST. THOMAS, V. I. quadrangle, 1:24,000 scale, edition of 1955. The comparison was generally favorable considering the difference in the scale of the two surveys.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

Comparison was made with a copy of boatsheet H-8877, 1:5,000 scale.

The shoreline on the boatsheet was taken from a copy of the Incomplete Manuscript and is not in agreement with that on the Advance Manuscript as many changes were made in the shoreline and positions of rocks during the application of Field Edit data and at the time of Final Review. A copy of the manuscript containing all of the changes was provided to the Hydrographic Processing Unit, Atlantic Marine Center, for smooth sheet use.

## 65. COMPARISON WITH NAUTICAL CHARTS

Comparison was made with Nautical Chart 933, 1:10,000 scale, 8th edition, April 26, 1965, corrected through Notice to Mariners No. 39, September 25, 1965. All differences and discrepancies between the chart and this survey have been noted on the comparison print.

Special attention is brought to what may be a submerged rock at latitude  $18^{\circ} 20' 17''$  longitude  $64^{\circ} 56' 12''$ . It is shown neither on the chart, survey 4544a nor the contemporary hydrographic survey. The image visible on photographs 65-L-1496, 1497, 1498 at this position could not be positively identified by the reviewer and is shown on the map as a submerged rock.

## 66. ADEQUACY OF RESULTS AND FUTURE SURVEYS

This survey complies with instructions and meets the National Standards of Map Accuracy.

Future surveys in the area should check for the submerged rock mentioned in Item 65 and obtain the heights of all rocks that are dangerous to navigation.

Reviewed by:

Leo F. Benquet

Approved by:

J. Bull  
C. Bull, RADM

Director, Atlantic Marine Center

Approved by:

Charles H. Hemen  
Chief, Photogrammetric Branch *ABG*

Jack E. Luth  
Chief, Photogrammetry Division

Chief, Nautical Chart Division

19'30"

E  
CHANNEL

ROCK 1918

Cowell Point

No rocks visible  
outside of reef limits  
Photos 1496-1497



1100.25

55.43

19'15"

Note

- Shoreline in red from Chart 933
- Shoreline in blue from Survey 4544a

Photos used in final Review

Photo	Date	Time	stage of Tide
65L 1497 thru 1499	Mar. 9, 1965	16:16	-.1'
65L 1552 " 1554	Mar 9, 1965	16:37	-.2'

19'00"

65-L-1554





HASSEL 1918

THOMAS HA

Not visible  
Photos 1496-1497

56'00"

184,000 FT.

20'00"

Not visible  
Photos 1496-1497

Carreening Cove

\* No rock awash  
visible - photos  
1496-1497

+\* Not visible - photos  
1496-1497

\* No rock visible  
Photos 1497-1498

19'45"

=182,000 FT.

HASSEL ISLAND

No submerged rock  
discernible - Photos  
1496-1497

EAST GREGER

No rocks awash visible  
Photos 1496-1497

COWELL'S BATTERY (SIG) 1900

Cowell Battery

343°45' TRUE  
11'54.55"



Long Bay

No wreck  
Visible # 1497-98

55' 30"

20' 00"

55' 15"

19' 45"

3 rocks discernible on photos  
1497-1498 - Classified as submerged  
by Field editor

Havensight Point

West Indian Dock

SAINT THOMAS SOUTH BASE 1918

awash MHW

awash MHW

Rupert Rock

Rocks not discernible  
Photos 1497-1498

only one rock visible  
in this area - photos  
1497-1498

Not visible  
1497-1498

appears as submerged  
rock

Pacquearea Bay



submerged rock discernible  
photos 1552-1553

only those rocks mapped  
are visible 1552-1554

Not discernible  
photos 1552-1553

Rk is part of  
reef

19'15"

55'30"

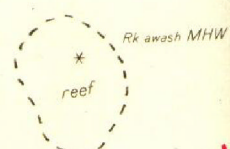
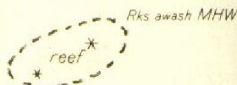
55'15"

19'00

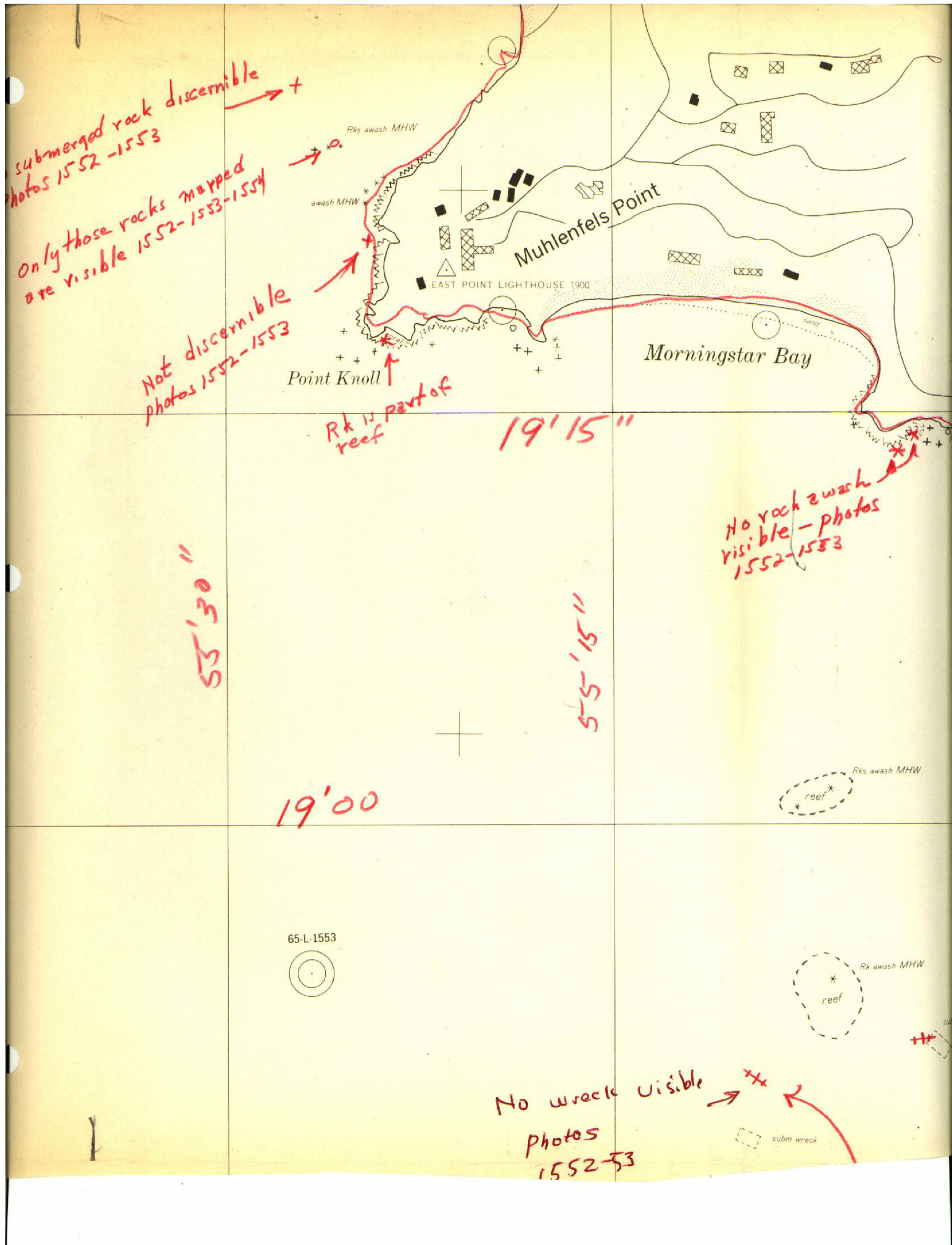
No rock awash  
visible - photos  
1552-1553

No wreck visible  
photos  
1552-53

65-L-1553



subm wreck





5-4 '45"

5-4 '30"

19'15"

Pond

No rock visible  
1552-1553

submerged rock - part of reef

19'00"

No rock awash visible  
photos 1552-1553

(2)  
reef

Barrel of Beef

65-L-1552

No rock awash  
visible 1552-1553

Limits of compilation

Wreck not visible  
on photo 1552-53



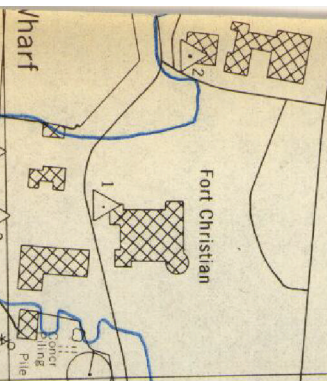
55°45"

x = 1,022,000 FT.

55°30"

x = 1,024,000 FT.

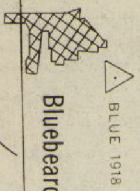
55°15"



Not visible  
photos 1497-1498

only one rock discernible  
of 1497-1498 - appears to  
be submerged →

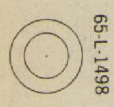
Frederiksberg Point



Bluebeard Hill

20'30"

Not discernible photos 1497-1498



65 L 1498

20'15"

