

T-11709

Original ✓

T-11709

T-11709

Form 504 U. S. DEPARTMENT OF COMMERCE COAST AND GEODETIC SURVEY DESCRIPTIVE REPORT	
Type of Survey	SHORELINE
Field No.	Office No. T-11709
LOCALITY	
State	VIRGINIA
General locality	CAPE HENRY
Locality	VIRGINIA BEACH
<u>1962 - 1963</u>	
CHIEF OF PARTY Ray M. Sundean, Chief of Field Party V.R. Sobieralski, Tampa District Officer	
LIBRARY & ARCHIVES	
DATE	

DESCRIPTIVE REPORT - DATA RECORD

T -11709

PROJECT NO. (II):

PH-6209

FIELD OFFICE (III):

Bayside, Virginia

CHIEF OF PARTY

Ray M. Sundean

PHOTOGRAMMETRIC OFFICE (III):

Tampa, Florida

OFFICER-IN-CHARGE

V. Ralph Sobieralski

INSTRUCTIONS DATED (II) (III):

Field - Sept. 12, 1962
 Supplement 1 " Oct. 16, 1962
 Office - Oct. 30, 1962

METHOD OF COMPILATION (III):

Kelsh plotter

MANUSCRIPT SCALE (III):

1:10,000

STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III):

1:4,000

DATE RECEIVED IN WASHINGTON OFFICE (IV):

DATE REPORTED TO NAUTICAL CHART BRANCH (IV):

APPLIED TO CHART NO.

DATE:

DATE REGISTERED (IV):

GEOGRAPHIC DATUM (III):

N.A. 1927

VERTICAL DATUM (III): MHW

~~MEAN SEA LEVEL~~ 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):

DECCA 1955

LAT.: ✓ ✓ ✓

36°49'15.562" (479.7 m)

LONG.: ✓ ✓ ✓

75°58'06.119" (151.7 m)

 ADJUSTED UNADJUSTED

PLANE COORDINATES (IV):

y = 187,481.78 FT. ✓

x = 2,740,970.90 FT. ✓

STATE

Virginia

ZONE

South

ROMAN 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 (III): R. S. Tibbetts		DATE: Nov. 1962
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION): Air photo compilation Date of photographs: Sept. 2, 1962 <i>Field Edit Cichy 1963</i>		
PROJECTION AND GRIDS RULED BY (IV): A.R. (W.O.)		DATE Sept. 1962
PROJECTION AND GRIDS CHECKED BY (IV): L.F.B. (W.O.)		DATE " "
CONTROL PLOTTED BY (III): V. P. Cackowski		DATE Jan. 1963
CONTROL CHECKED BY (III): R. D. Purvis		DATE " "
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III): W. Heinbaugh (W.O.)		DATE " "
STEREOSCOPIC INSTRUMENT COMPILATION (III):	PLANIMETRY I. I. Saperstein Reviewed R. E. Smith	DATE Feb. 1963
	CONTOURS Inapplicable	DATE
MANUSCRIPT DELINEATED BY (III): I. I. Saperstein Reviewed by: W. H. Shearouse		DATE Feb. 1963
SCRIBING BY (III): P. W. Leikhim Reviewed by: W. H. Shearouse		DATE June 1963
PHOTOGRAMMETRIC OFFICE REVIEW BY (III): W. H. Shearouse		DATE July 1963
REMARKS:		

DESCRIPTIVE REPORT - DATA RECORD

CAMERA (KIND OR SOURCE) (III):

Wild single lens "S" and "W"

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
62-S-3258 thru 3262	3/24/62	11:44	1:20,000Dia-	+ 2.1
" 1255A	9/2/62	08:44	1:30, positives	±2.0
62-W-4055	5/3/62	12:30	" "	-0.2

Predicted TIDE (III)

	RATIO OF RANGES	MEAN RANGE	SPRING RANGE
REFERENCE STATION: Hampton Roads	-	2.5	3.0
SUBORDINATE STATION: Cape Henry	H.W. +0.3	2.8	3.4
	L.W. 0.0		
SUBORDINATE STATION:			

WASHINGTON OFFICE REVIEW BY (IV): W.H.Shearouse (Tampa District Office)

DATE: December 1963

PROOF EDIT BY (IV):

DATE:

NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (III): 10*

RECOVERED: 6*

IDENTIFIED: 6

NUMBER OF BM(S) SEARCHED FOR (III): 6

RECOVERED: 4

IDENTIFIED: 4

NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III): 0

NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III): 0

REMARKS:

No form 526 submitted for HOLLIES TOWER A (USE) 1925 and VIRGINIA BEACH, MAYFLOWER APT. BLDG. EAST and WEST LIGHTS, 1953

4

COMPILATION RECORD

COMPLETION DATE

REMARKS

COMPILATION RECORD	COMPLETION DATE	REMARKS
Compiled	February 1963	superseded
Alongshore area revised from field edit. Compilation complete.	May 1963	

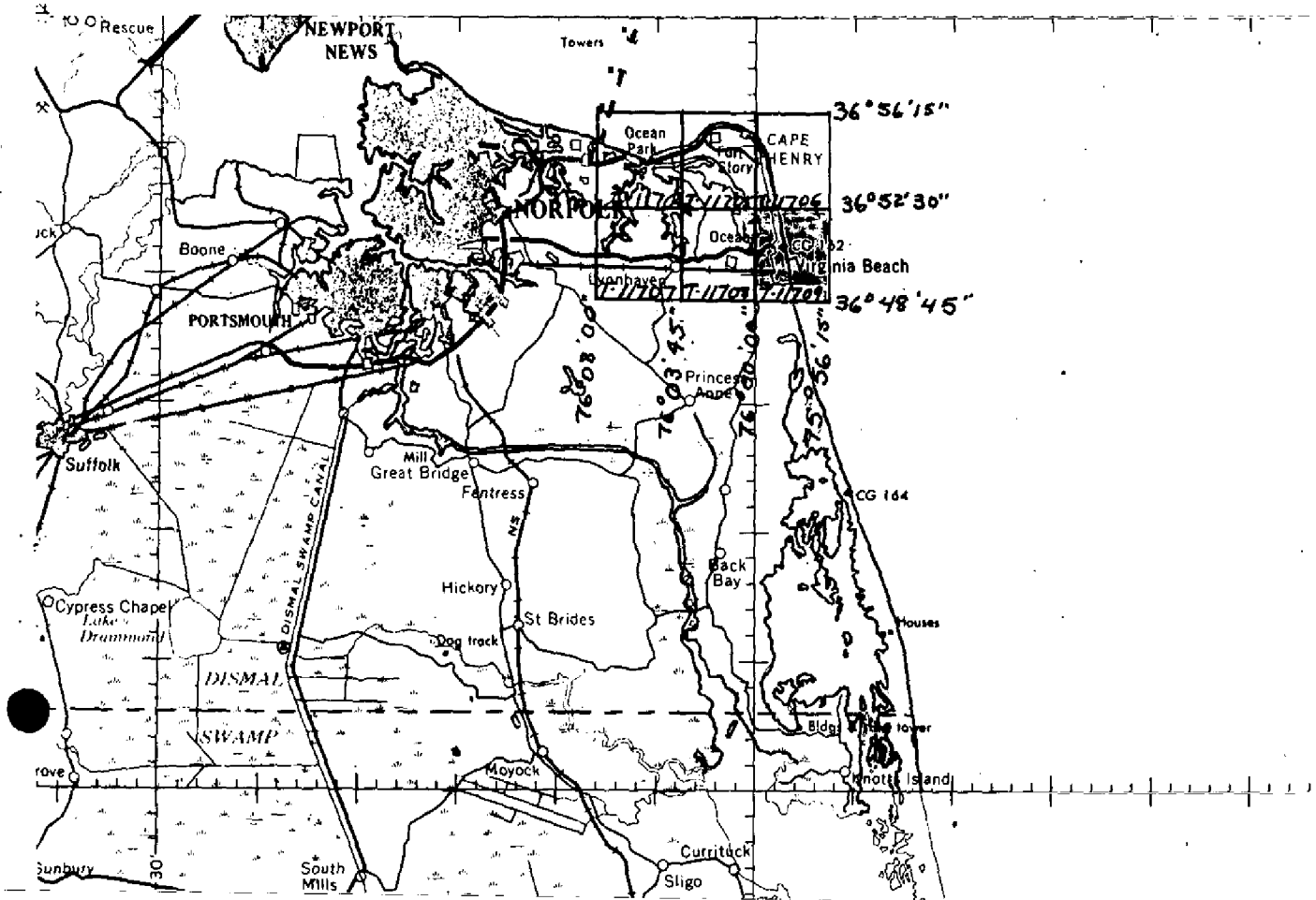
PROJECT PH-6209

LYNNHAVEN BAY VA.

SHORELINE MAPPING

SCALE 1:10,000

SHEET NO.	LINEAR MILES SHORELINE	AREA SQ. MILES
11704	18	5
11705	13	6
11706	4	15
11707	10	14
11708	5	14
11709	6	6



SUMMARY TO ACCOMPANY DESCRIPTIVE REPORT T-11709

Shoreline map T-11709 is one of six similar maps in project 21051 (PH-6209) and is the southeasterly map in the project. It covers the easterly extremity of Linkhorn Bay and the Atlantic Ocean shoreline in the vicinity of Virginia Beach, Virginia, including Rudee Inlet. This is a Kelsh project in advance of hydrographic surveys which are being made in the same area. Field operations preceding compilation included field inspection, recovery and identification of horizontal control, and identification of topographic stations and landmarks for charts. Kelsh compilation was at a scale of 1:10,000, from 1:30,000 scale single lens photographs taken in May and September 1962 and 1:20,000 scale single lens photographs taken in March 1962. A film negative was made and furnished for preparation of the hydrographer's boat sheet. Ratio (1:10,000 scale) photographs were subsequently provided for field edit and hydro support purposes. The compilation manuscript is a vinylite sheet 3 3/4' in latitude by 3 3/4' in longitude which was scribed and reproduced on cronaflex following photogrammetric office review. One each, cronar film positive and negative, are provided for record and registry.

FIELD INSPECTION REPORT IS BOUND WITH REPORT FOR T-11704

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
DESCRIPTIVE REPORT
CONTROL RECORD

MAP T. 11709

PROJECT NO. PH 6209

SCALE OF MAP 1:10,000

SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR y-COORDINATE LONGITUDE OR x-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)
Virginia Beach Municipal Water Tank, 1953	P.C. P. 247	N.A. 1927	195 039.32							
"	G.P. P. 824	"	36 50 31.980				985.8			
			75 59 23.523				582.8			
Decca 1955	P.C. P. 262	"	187,481.78							
			2,740,970.90							
"	G.P. P. 855	"	36 49 15.562				479.7			
			75 58 06.119				151.7			
Cavalier Hotel, Cupola 1929	P.C. P. 110	"	204,831.66							
			2,735,962.04							
"	G.P. P. 73	"	36 52 08.381				258.4			
			75 59 02.012				49.8			
Virginia Beach, Mayflower Apartment Bldg, west light 1953	P.G. P. 247	"	202,394.36							
			2,737,154.83							
"	G.P. P. 824	"	36 51 43.975				1355.6			
			75 58 48.139				1192.4			
Hollies Tower A (U.S.E.) 1925	P.C. P. 260	"	206,607.32							
			2,735,466.91							
"	G.P. P. 294	"	36 52 26.063				803.4			
			75 59 07.521				186.3			
Virginia Beach, Mayflower Apartment Bldg, east light 1953		"	202,414.11							
			2,737,234.95							
"	G.P. P. 824	"	36 51 44.149				1360.9			
			75 58 47.147				1167.9			

COMPILATION REPORT
T-11709

The Photogrammetric plot report is bound with T-11704.

31. DELINEATION

The Kelsh plotter was used. The field inspection was fair, although there was no shoreline inspection south of Rudee Inlet.

All details have been compiled south of Lat. 36°50'15" in accordance with the layout submitted by the Washington Office.

32. CONTROL

See bridge report.

33. SUPPLEMENTAL DATA

None.

34. CONTOURS AND DRAINAGE

Inapplicable.

35. SHORELINE AND ALONGSHORE DETAILS

All but the north 300 meters of the Atlantic Coast shoreline was taken from the September 1962 photographs. All the interior shoreline and details were taken from the March 1962 photography. There was no shoreline inspection south of Rudee Inlet.

A check of the entire MHWL has been requested of the field editor.

All piers have been shown as indicated by the field inspection. Some additional piers seen on the photographs were also delineated.

36. OFFSHORE DETAILS

None.

37. LANDMARKS AND AIDS

Five landmarks have been reported for charting and are listed on Form 567. There are no aids.

38. CONTROL FOR FUTURE SURVEYS

No control was established but numerous shoreline pass points were located by the Kelsh plotter as an aid to the photo-hydro support party.

39. JUNCTIONS

Junction has been made with T-11706 to the north and T-11708 to the west. There is no survey to the south and water to the east.

40. HORIZONTAL AND VERTICAL ACCURACY

No statement.

46. COMPARISON WITH EXISTING MAPS

Comparison has been made with USGS "VIRGINIA BEACH" quadrangle 1:24,000 edition of 1955. The manuscript appears to be in good agreement with the quadrangle except for a new pier about 75 meters north of Rudee Inlet.

47. COMPARISON WITH NAUTICAL CHARTS

Comparison has been made with Chart 1222, 1:80,000, 19th Edition Dec. 25, 1961 revised June 16, 1962. The major change is Rudee Inlet which has been cut through at Lat. $36^{\circ}49.8'$. The wreck shown on the chart at approximate Lat. $36^{\circ}50.2'$ Long. $75^{\circ}58.2'$ could not be seen on the photographs and should be investigated by the hydrographer.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None.

ITEMS TO BE CARRIED FORWARD

None.

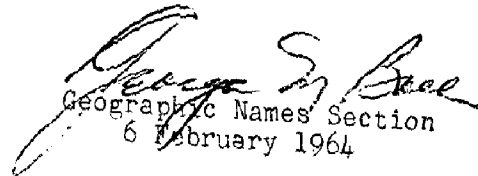
I. I. Saperstein
I. I. Saperstein
Cartographer

APPROVED AND FORWARDED: 26 JUL 1953

V. Ralph Sobieralski
V. Ralph Sobieralski
Tampa District Officer

48. Geographic Names List

Bird Neck Point
Lake Christine
Lake Holly
Lake Rudee
Lake Wesley
Lakeview
Linkhorn Bay
Owl Creek
Rudee Inlet
Seatack
Virginia Beach


Geographic Names Section
6 February 1964

49. NOTES FOR THE HYDROGRAPHER

Numerous shoreline pass points were located by the Kelsh plotter as an aid to the photo-hydro support party.

The wreck shown on Chart 1222 at approximate Lat. $36^{\circ}50.2'$, Long. $75^{\circ}58.2'$ could not be seen on the photographs. Its existence should be investigated.

1. PROJECTION AND GRIDS: WHS
 2. TITLE: WHS
 3. MANUSCRIPT NUMBERS: WHS
 4. MANUSCRIPT SIZE: WHS
 5. Classification label: unclassified

CONTROL STATIONS
 5. HORIZONTAL CONTROL STATIONS OF THIRD-ORDER OR HIGHER ACCURACY: WHS
 6. RECOVERABLE HORIZONTAL STATIONS OF LESS THAN THIRD-ORDER ACCURACY (TOPOGRAPHIC STATIONS): XX
 7. PHOTO HYDRO STATIONS: XX
 8. BENCH MARKS: WHS
 9. PLOTTING OF SEXTANT FIXES: XX
 10. PHOTOGRAMMETRIC PLOT REPORT BRIDGE (W.O.):
 11. DETAIL POINTS: KELSH (IIS)

ALONGSHORE AREAS (Nautical Chart Data)
 12. SHORELINE: WHS
 13. LOW-WATER LINE: XX
 14. ROCKS, SHOALS, ETC.: WHS
 15. BRIDGES: XX
 16. AIDS TO NAVIGATION: XX
 17. LANDMARKS: WHS
 18. OTHER ALONGSHORE PHYSICAL FEATURES: WHS
 19. OTHER ALONGSHORE CULTURAL FEATURES: WHS

PHYSICAL FEATURES
 20. WATER FEATURES: WHS
 21. NATURAL GROUND COVER: WHS
 22. PLANETABLE CONTOURS: XX
 23. STEREOSCOPIC INSTRUMENT CONTOURS: XX
 24. CONTOURS IN GENERAL: XX
 25. SPOT ELEVATIONS: XX
 26. OTHER PHYSICAL FEATURES: WHS

CULTURAL FEATURES
 27. ROADS: WHS
 28. BUILDINGS: WHS
 29. RAILROADS: XX
 30. OTHER CULTURAL FEATURES: WHS

BOUNDARIES
 31. BOUNDARY LINES: XX
 32. PUBLIC LAND LINES: XX

MISCELLANEOUS
 33. GEOGRAPHIC NAMES: WHS
 34. JUNCTIONS: WHS
 35. LEGIBILITY OF THE MANUSCRIPT: WHS
 36. DISCREPANCY OVERLAY: XX
 37. DESCRIPTIVE REPORT: WHS
 38. FIELD INSPECTION PHOTOGRAPHS: WHS
 39. FORMS: WHS
 SIGNATURE OF REVIEWER: William H. Shearouse
 SIGNATURE OF SUPERVISOR, REVIEW SECTION OR UNIT: Milton M. Slavney

40. FIELD COMPLETION ADDITIONS AND CORRECTIONS TO THE MANUSCRIPT - Additions and corrections furnished by the field completion survey have been applied to the manuscript. The manuscript is now complete except as noted in remarks on reverse side.

SIGNATURE OF COMPILER: R. R. Wagner
 SIGNATURE OF SUPERVISOR: Milton M. Slavney

Field Edit Report, T-11709

No Field Edit Report has been received.

The shoreline was corrected with field reference measurements as requested (See Item 35).

One landmark was reported by the Field Editor. It was added to the 5 under Item 37 and was submitted to the Washington Office under date of May 16, 1963.

PHOTOGRAMMETRIC REVIEW BRANCH

~~NOTIFICATION OF REVISIONS TO CHARTS~~
LANDMARKS FOR CHARTS

TO BE CHARTED
TO BE REVISED
TO BE DELETED

STRIKE OUT TWO

Tampa District Office, Tampa, Fla. May 16 1963

I recommend that the following objects which ~~have~~ (have not) been inspected from seaward to determine their value as landmarks be charted on (~~deleted survey~~) the charts indicated.

The positions given have been checked after listing by

I. I. Saperstein

V. Ralph Sobieraleski

Chief of Party

STATE	CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION			METHOD OF LOCATION AND SURVEY	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED	
				LATITUDE*	LONGITUDE*	DATUM							
		" "		" "									
		D.P. METERS		D.P. METERS									
VIRGINIA	RADIO TOWER (WBOP)	At Virginia Beach ht = 153 (163)		36 50	75 59	N.A. 1927	Photo Plot T-11709	Sept. 26, 1962	X			1222, 1227	
	TANK	(Virginia Beach Municipal Water Tank, 1951) ht = 130 (142)		36 50	75 59	"	T-11709	Sept. 19, 1962	X			" "	
	HOTEL FL R LITS	(Virginia Beach, Mayflower Apt. Bldg., East Light, 1951) ht = 173 (183)		36 51	75 58	"	T-11709	Sept. 25, 1962	X			" "	
	HOTEL CUPOLA	(Virginia Beach, Mayflower Apt. Bldg., West Light, 1952) ht = 173 (183)		36 51	75 58	"	"	"	X			" "	
	HOTEL CUPOLA	(Cavalier Hotel, Cupola, 1929) ht = 138 (158)		36 52	75 59	"	"	"	X			" "	
	C.O. TOWER	Virginia Beach Coast Guard Radio Tower ht = 188 (198)		36 51	75 59	"	Photo Plot T-11709	Sept. 27 1962	X			" "	
	TANK	At Virginia Beach ht = 135 (154)		36 52	75 59	"	"	May 2, 1963	X			" "	

This form shall be prepared in accordance with Hydrographic Manual, Publication 20.2, Sec. 1-55, 2-39, 6-36, 7-18 to 22 inclusive, and Fig. 79. Positions of charted landmarks and nonfloating aids to navigation, if redetermined, shall be reported on this form. Revisions shall show both the old and new positions. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

* TABULATE SECONDS AND METERS

REVIEW REPORT T-11709
SHORELINE
JANUARY 6, 1964

61. GENERAL STATEMENT

See Summary accompanying Descriptive Report.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS

T-8299 1:20,000 1944

This map supersedes the listed prior survey for nautical chart construction.

63. COMPARISON WITH MAPS OF OTHER AGENCIES

U.S.G.S. - VIRGINIA BEACH, VA. 1:24,000 1955

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS

Comparison was made with a copy of boat sheet H-8724, 1:10,000 scale, dated October 1, 1962.

Due to field edit corrections, shoreline changes along the ocean front north and south of Rudee Inlet were made on the map manuscript. These corrections should be shown on the smooth hydrographic sheet.

65. COMPARISON WITH NAUTICAL CHARTS

Comparison was made with chart 1227, 1:80,000 scale, 6th edition, revised August 6, 1962.

General configuration of the Atlantic Ocean shoreline as well as that of the lakes and Linkhorn Bay are in fair agreement. Due to the large scale difference accurate comparison of shoreline was not made. However, indentures and coves appear on the manuscript which do not show on the chart. One area at approximate latitude 36°49.6', longitude 75°59' is being dredged and developed.

Positions of landmarks, TANK, and R. TR. (WBOF) at approximate latitude 36°50.5', longitude 75°59.5' have been accurately determined. The symbol on the chart is for approximate location.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS

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

Future surveys should investigate shoreline changes caused by dredging operations in progress in the southwest end of Lake Rudee.

REVIEWED BY:

William H. Shearouse
William H. Shearouse

22 APR 1964

APPROVED BY:

V. Ralph Sobieralski
V. Ralph Sobieralski
Tampa District Officer

APPROVED BY:

Charles L. Leman
Chief, Cartographic Branch
L. J. Woodcock
Chief, Photogrammetry Division

Chief, Chart Division

TIDE COMPUTATION

PROJECT NO. Ph- 6209 T-11709

Time and date of exposure 1144 Jan 24, 1962 Reference station Hampton Roads Mean range 2.8
 Date of field inspection Jan 1962 Subordinate station Page Harbor Ratio of ranges LW 0.0
 HW +0.3

High tide	Time		Height feet	Height x Ratio of ranges	High tide at Ref. Sta. Time difference Corrected time at Subordinate station	Time	
	h.	m.				h.	m.
10	04		2.3	2.6		10	56
15	48		0.0	0.0		-	52
5	44			2.6		10	04

Time H. T. or L. T. Required time Interval	h.	m.	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	Height x Ratio of ranges	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	feet		Photo. No.
						feet	feet	
10	04		Ht. H. T. or L. T. Tabular correction Stage of tide above MLW			2.6 0.5		625 3260
11	44		Ht. H. T. or L. T. Tabular correction Stage of tide above MLW			2.1		
1	40		Ht. H. T. or L. T. Tabular correction Stage of tide above MLW					
			Ht. H. T. or L. T. Tabular correction Stage of tide above MLW					
			Ht. H. T. or L. T. Tabular correction Stage of tide above MLW					
			Ht. H. T. or L. T. Tabular correction Stage of tide above MLW					
			Ht. H. T. or L. T. Tabular correction Stage of tide above MLW					
			Ht. H. T. or L. T. Tabular correction Stage of tide above MLW					

Computed by M. S. Hayes Checked by R. J. P.

