

10553

ORIGINAL

Diag. Cht. No. 1257-3.

Form 504*

U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey **SHORELINE**

Field No. **Ph-171** Office No. **T-10553**

LOCALITY

State **FLORIDA**

General locality **HILLSBORO BAY**

Locality **ARCHIE CREEK
TO
MC KAY BAY**

19 58

CHIEF OF PARTY

Arthur L. Wardwell, Tampa Photo. Office

LIBRARY & ARCHIVES

DATE **MAY 25 1960**

COMM-DC 61300

10553

DESCRIPTIVE REPORT - DATA RECORD

T - 10553

Project No. (II): PH-171 ✓ Quadrangle Name (IV):

Field Office (II): Tampa, Fla. ✓

Chief of Party: Arthur L. Wardwell ✓

Photogrammetric Office (III): Tampa, Fla. ✓

Officer-in-Charge: Arthur L. Wardwell ✓

Instructions dated (II) (III): 8 May 1957 ✓

Copy filed in Division of
Photogrammetry (IV)

Method of Compilation (III): Graphic ✓

Manuscript Scale (III): 1:10,000 ✓

Stereoscopic Plotting Instrument Scale (III): Inapplicable ✓

Scale Factor (III): None ✓

Date received in Washington Office (IV): OCT 7 1958

Date reported to Nautical Chart Branch (IV):

Applied to Chart No.

Date:

Date registered (IV): 14 Jan 1960

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): N.A. 1927 ✓

Vertical Datum (III): M.H.W. ✓

~~Elevations shown as (25) refer to mean high 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): BLACK, 1957 ✓

Lat.: 27° 54' 26".260 (808.3 m.) ✓ Long.: 82° 25' 42".249 (1155.3 m.) ✓

Adjusted
Unadjusted

Plane Coordinates (IV):

State:

Zone:

Y=

X=

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

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U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

Areas contoured by various personnel
(Show name within area)
(II) (III)

DESCRIPTIVE REPORT - DATA RECORD

Field Inspection by (II): George E. Varnadoe

Date: July 1957

Planetable contouring by (II): Inapplicable

Date:

Completion Surveys by (II): Inapplicable

Date:

Mean High Water Location (III) (State date and method of location): July 1957. Spoil areas along east
Air photo Compilation
Side of ship channel located by planetable May, 1958

Projection and Grids ruled by (IV): J. B. Phillips

Date: 4-16-57

Projection and Grids checked by (IV): H. D. W.

Date: 4-18-57

Control plotted by (III): I. I. Saperstein

Date: 6-10-57

Control checked by (III): M. M. Slavney

Date: 6-10-57

Radial Plot ~~of Stereoscopic~~
~~Stereoscopic Instrument~~ (III): M. M. Slavney

Date: 6-30-57

Stereoscopic Instrument compilation (III):
Planimetry
Contours Inapplicable

Date:

Date:

Manuscript delineated by (III): R. Dossett

Date: Oct 1957

Photogrammetric Office Review by (III): I. I. Saperstein

Date: Jan 1958

Elevations on Manuscript
checked by (II) (III): none

Date:

DESCRIPTIVE REPORT - DATA RECORD

Camera (kind or source) (III): **9-lens and WILD Aviogon**

PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
53886	4-7-57	0937	1:10,000	+ 0.2
53887	"	0937	"	"
53888	"	0938	"	"
57 L 1559	4-16-57	1003	"	+ 0.7
57 L 1560	"	1003	"	"
57 L 1561	"	1004	"	"

Predicted Tide (III)

Reference Station: **TAMPA BAY (St. Petersburg)**
Subordinate Station: **TAMPA, HILLSBORO BAY**
Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range
-	1.4	1.6
-	1.8	2.4

Washington Office Review by (IV):

Final Drafting by (IV):

Drafting verified for reproduction by (IV):

Proof Edit by (IV):

Date:

Date:

Date:

Date:

Land Area (Sq. Statute Miles) (III): **10**
Shoreline (More than 200 meters to opposite shore) (III): **8.5**
~~Shoreline (Less than 200 meters to opposite shore) (III):~~
~~Control leveling - Miles (II):~~ **Inapplicable**
Number of Triangulation Stations searched for (II): ***5**
Number of BMs searched for (II): **0**
Number of Recoverable Photo Stations established (III): **0**
Number of Temporary Photo Hydro Stations established (III): **0**

Recovered: **1**
Recovered: **0**

Identified: **1**
Identified: **0**

Remarks:

***Five additional triangulation stations were established and identified**

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SUMMARY
TO ACCOMPANY SHORELINE MANUSCRIPTS
T-10552 and T-10553

These surveys are part of shoreline Project FH-171 (27380). The project covers the Tampa Bay, Florida area and was designed to aid in hydrographic surveys for the purpose of revising existing nautical charts. Subject surveys cover the northern portion of Hillsborough Bay and the adjoining land area.

The field work -- field inspection and recovery of control -- was accomplished during 1957; the radial plot and compilation from nine-lens photography of April 1957 and scribing of reproduction copy during 1957-58 by the Tampa District Office. Advanced shoreline information and control was utilized during hydrographic surveys of 1957 and no disagreements were noted in the comparison of these surveys.

Cronar film positives at the compilation scale of 1:10,000 and the Descriptive Reports will be registered and filed in the Bureau Archives.

September 1959

FIELD INSPECTION REPORT

SUBMITTED WITH T-10558

COMPILATION REPORT T-10553

PHOTOGRAMMETRIC PLOT REPORT

Submitted with T-10558.

31. DELINBATION

The graphic method was used.

The photographs were of reasonably good scale and sufficiently clear to insure satisfactory interpretation of details.

Field inspection was adequate.

32. CONTROL

Reference Photogrammetric Plot Report.

33. SUPPLEMENTAL DATA

None.

34. CONTOURS AND DRAINAGE

Contours are inapplicable.

Drainage has been shown as it appears on the photographs.

35. SHORELINE AND ALONGSHORE DETAILS

The shoreline inspection was adequate.

Spoil areas along east side of ship channel located by plan table May, 1958

All alongshore structures have been delineated according to field inspector's notes.

The low-water line has been delineated as indicated by field inspection notes.

The poles of the overhead power cable crossing McKay Bay have been shown in their true positions.

36. OFFSHORE DETAILS

None.

37. LANDMARKS AND AIDS

Form 567 for all landmarks and aids, throughout the entire project, is being submitted under separate cover. 1 May 1958 w.a.R. ✓

38. CONTROL FOR FUTURE SURVEYS

~~Photo~~ Hydro stations were located by planetable. There are no descriptions of them as the signals were built at the time of the survey. Refer to planetable sheets TFU-A and TFU-B. No topographic stations were established. ✓

39. JUNCTIONS

A satisfactory junction has been secured with T-10547 on the north, T-10552 on the west, T-10557 on the south and USGS Tampa, Fla., 1:24,000 on the east. ✓

40. HORIZONTAL AND VERTICAL ACCURACY ✓

No statement required.

46. COMPARISON WITH EXISTING MAPS

Comparison has been made with C&GS planimetric map No. T-5837, scale 1:10,000, compiled from photographs taken Nov. 1938 and Dec. 1939, and supplemented by other surveys to Sept. 1941. The most outstanding change noted was at Black Point where considerable filling and new building structures are in process of construction. Generally the shoreline compared favorably.

Comparison was also made with USGS map, Tampa (No. 890709-Sheet 2), scale 1:10,000, compiled instrumentally in 1955. The same comparison as above holds true. The junction with it was favorable.

47. COMPARISON WITH NAUTICAL CHARTS

Comparison was made with Nautical Chart No. 587, 9th edition, published Aug. 14, 1943, scale 1:40,000, revised to 7 Dec. 1957. The same comparison as that of item 46 is applicable.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY

None.

ITEMS TO BE CARRIED FORWARD.

None.


Rudolph Dossett
Carto Photo Aid

APPROVED & FORWARDED


Arthur L. Wardwell
Chief of Party

T-10553.

Geographic Names.

Archie Creek

Atlantic Coast Line (Tampa Southern not listed in Railway Guide)

Black Point

Delaney Creek

Florida (title)

Gulf Coast (title)

Hillsborough Bay (1958 BGN decision for long form of name)

McKay Bay

Port Sutton

Tampa Bay (title)

Tampa Electric Power Plant

(Gannon Station)

Twentysecond Street Causeway, or 22nd Street Causeway

U.S. 41

Branch U.S. 41 (over 22nd Street Causeway)

Names approved 11-3-58

L. Heck

49. NOTES FOR THE HYDROGRAPHER

~~Photo~~-hydro stations were located by planetable. There are no descriptions of them as the signals were built at the time of the survey. Refer to planetable sheets TPU-A and TPU-B.

No topographic stations were established.

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PHOTOGRAMMETRIC OFFICE REVIEW

T. 10553

1. Projection and grids IIS 2. Title IIS 3. Manuscript numbers IIS 4. Manuscript size IIS

Unclassified

CONTROL STATIONS

(a. Classification label)

5. Horizontal control stations of third-order or higher accuracy IIS 6. Recoverable horizontal stations of less than third-order accuracy (topographic stations) IIS 7. Photo hydro stations IIS 8. Bench marks XX
9. Plotting of sextant fixes XX 10. Photogrammetric plot report IIS 11. Detail points IIS

ALONGSHORE AREAS

(Nautical Chart Data)

12. Shoreline IIS 13. Low-water line IIS 14. Rocks, shoals, etc. IIS 15. Bridges IIS 16. Aids to navigation IIS 17. Landmarks IIS 18. Other alongshore physical features IIS 19. Other along-shore cultural features IIS

PHYSICAL FEATURES

20. Water features IIS 21. Natural ground cover IIS 22. Planetable contours XX 23. Stereoscopic Instrument contours XX 24. Contours in general XX 25. Spot elevations XX 26. Other physical features IIS

CULTURAL FEATURES

27. Roads IIS 28. Buildings IIS 29. Railroads IIS 30. Other cultural features IIS

BOUNDARIES

31. Boundary lines XX 32. Public land lines XX

MISCELLANEOUS

33. Geographic names IIS 34. Junctions IIS 35. Legibility of the manuscript IIS 36. Discrepancy overlay XX 37. Descriptive Report JG 38. Field inspection photographs IIS 39. Forms JG

40. I. I. Saperstein Reviewer Jesse A. Giles Supervisor, Review Section or Unit

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

Supervisor

43. Remarks:

TIDE COMPARATION

U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

PROJECT NO. Ph-171 T-10553

Time and date of exposure 0937, 7 Apr 1957

Reference station Tampa Bay (St. Petersburg)

Subordinate station Tampa Hillsboro Bay

Mean range 1.8

Date of field inspection July 1957

Ratio of ranges

	Time		Height feet	Height x Ratio of ranges	Time	
	h.	m.			h.	m.
High tide	18	43	1.57 ± 0.4	1.9	18	28
Low tide	20	2	-0.8	-0.8	+0	15
Duration of rise or fall	16	41		2.7	18	43
			Range of tide		Corrected time at Subordinate station	
					Low tide at Ref. Sta.	
					Time difference	
					Corrected time at Subordinate station	

	h.	m.		feet		feet	Photo. No.
Time H. T. or L. T.	2	02	Ht. H. T. or L. T.	-0.8	Feature bares		55886
Required time	9	37	Tabular correction	1.0	Stage of tide above MLW		55887
Interval	7	35	Stage of tide above MLW	+0.2	Feature above MLW		
Time H. T. or L. T.			Ht. H. T. or L. T.		Feature bares		
Required time			Tabular correction		Stage of tide above MLW		
Interval			Stage of tide above MLW		Feature above MLW		
Time H. T. or L. T.			Ht. H. T. or L. T.		Feature bares		
Required time			Tabular correction		Stage of tide above MLW		
Interval			Stage of tide above MLW		Feature above MLW		
Time H. T. or L. T.			Ht. H. T. or L. T.		Feature bares		
Required time			Tabular correction		Stage of tide above MLW		
Interval			Stage of tide above MLW		Feature above MLW		
Time H. T. or L. T.			Ht. H. T. or L. T.		Feature bares		
Required time			Tabular correction		Stage of tide above MLW		
Interval			Stage of tide above MLW		Feature above MLW		
Time H. T. or L. T.			Ht. H. T. or L. T.		Feature bares		
Required time			Tabular correction		Stage of tide above MLW		
Interval			Stage of tide above MLW		Feature above MLW		

Computed by R. H. Harnett

Checked by W. H. H.

TIDE COMBINATION

U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

PROJECT NO. Ph-171 T-10555

Time and date of exposure 1003 16 Apr 1967 Reference station Tampa Bay (St Petersburg) Mean range 1.8

Date of field inspection July 1967 Subordinate station Tampa, Hillsboro Bay Ratio of ranges

	Time	
	h.	m.
High tide	14	30
Low tide	8	21
Duration of rise or fall	6	15

	Height feet	Height x Ratio of ranges
High tide	1.8 + 0.4	2.2
Low tide	0.4	0.4
Range of tide		1.8

	Time	
	h.	m.
High tide at Ref. Sta.	14	21
Time difference	7	0
Corrected time at Subordinate station	17	36

	Time	
	h.	m.
Low tide at Ref. Sta.	8	06
Time difference	4	0
Corrected time at Subordinate station	8	21

	h.	m.	feet	Photo. No.
Time H. T. or L. T.	8	21	0.4	1560
Required time	10	03	0.8	
Interval	1	42	0.7	
Time H. T. or L. T.				
Required time				
Interval				
Time H. T. or L. T.				
Required time				
Interval				
Time H. T. or L. T.				
Required time				
Interval				
Time H. T. or L. T.				
Required time				
Interval				
Time H. T. or L. T.				
Required time				
Interval				

COMM-DC-57848

Computed by R. Bassett Checked by WHS 14

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REVIEW REPORT OF
SHORELINE MANUSCRIPTS T-10552 and T-10553

September 1959

62. Comparison with Registered Topographic Surveys

T-1411a	1:20,000	1876
T-1411b	1:20,000	1875
T-4201	1:10,000 and 1:20,000	1926
T-4202	1:20,000	1926
T-5835	1:10,000	1939
T-5837	1:10,000	1939
T-5838	1:10,000	1939
T-8382	1:20,000	1942

This area has been subjected to continuous changes since the first survey of 1875. Since 1942 further changes --some extensive-- have made these surveys obsolete for nautical charting purposes. Subject surveys supersede above-listed surveys for these charting purposes of common area and detailing.

63. Comparison with Maps of Other Agencies

TAMPA, FLA., 1:24,000, 1956, U.S. Geological Survey. There are considerable disagreements in the eastern portion of Hillsborough Bay. The southern tip of Hooker Point has changed noticeably and there is now a chain of islands in a generally southern direction from said Hooker Point. They consist of spoil and are directly east of Hillsborough Channel, apparently the result of dredging operations of said channel. Further disagreements exist at Port Sutton (Black Point) and along the shoreline directly south of this.

64. Comparison with Contemporary Hydrographic Surveys

H-8379	1:10,000	1957
H-8380	1:10,000	1957

Shoreline and control was furnished for these hydrographic surveys from subject project and there is complete agreement.

65. Comparison with Nautical Charts

587, 1:40,000, Edition of 1958, Revised to 7/6/59
(with inset of Davis Islands and Vicinity at
1:10,000)

1257, 1:80,000, Edition of 1943, Revised to 3/2/59

Disagreements listed under Item #63 were found in this
comparison also. It is suggested that these changes
(made available by hydrographic surveys 8379 and 8380)
be applied to effected charts.

66. Adequacy of Results and Future Surveys

Subject surveys comply with project instructions.
They were found to be within the requirements for ad-
equacy and accuracy for this type of survey.

Reviewed by

Josef J. Streifler
Josef J. Streifler

Approved

L. E. Lande
Chief, Review Section
Photogrammetry Division

Max Skelton
Chief, Nautical Chart Branch
Chart Division

Wes Swanson
Chief, Photogrammetry Division

J. Bowie
Chief, Coastal Surveys Division

17 May 60