

10549

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. Office No. **T-10549**

LOCALITY

State **FLORIDA**

General locality **OLD TAMPA BAY**

Locality **BIG ISLAND**

19 58

CHIEF OF PARTY

Arthur L. Wardwell, Tampa Photo. Office

LIBRARY & ARCHIVES

MAY 25 1960

DATE

USCOMM-DC 5087

10549

DESCRIPTIVE REPORT - DATA RECORD

T- 10549✓

Project No. (II): Ph-171✓

Quadrangle Name (IV):

Field Office (II): Tampa District Office✓

Chief of Party: J. E. Waugh✓

Photogrammetric Office (III): Tampa✓

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 1958

Date reported to Nautical Chart Branch (IV):

Applied to Chart No.

Date:

Date registered (IV): 12 Jan 1960

Publication Scale (IV):

Publication date (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): DOG, 1908✓

Lat.: 27° 54' 22" 135 (681.4 m)✓ Long.: 82° 38' 26" 440 (723.1 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

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

SHORELINE

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

DESCRIPTIVE REPORT - DATA RECORD

Field Inspection by (II): *George E. Varnadoe*
W. M. Reynolds

Date: November 1957 ✓

Planetable contouring by (II): Inapplicable ✓

Date:

Completion Surveys by (II):

Date:

Mean High Water Location (III) (State date and method of location):

November 1957
Air Photo Compilation ✓

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

Date: 4 June 1957 ✓

Projection and Grids checked by (IV): " "

Date: 4 June 1957 ✓

Control plotted by (III): R. R. Wagner

Date: 4 Sept. 1957 ✓

Control checked by (III): R. J. Pate

Date: 4 Sept. 1957 ✓

Radial Plot or Stereoscopic
Control extension by (III):

R. J. Pate
R. R. Wagner

Date: 20 Nov. 1957 ✓

Stereoscopic Instrument compilation (III):
Planimetry
Contours

Inapplicable

Date:

Date:

Manuscript delineated by (III): I. I. Saperstein

Date: May 1958 ✓

Photogrammetric Office Review by (III): J. A. Giles

Date: June 1958 ✓

Elevations on Manuscript
checked by (II) (III): Inapplicable

Date:

DESCRIPTIVE REPORT - DATA RECORD

Camera (kind or source) (III): **None-lens and WILD AVIOGON**

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PHOTOGRAPHS (III)

Number	Date	Time	Scale	Stage of Tide
55971✓	7 April 1957✓	1030✓	1:10,000✓	+ 0.3✓
55972✓	"	1030	"	+ 0.3✓
55973✓	"	1031✓	"	+ 0.3✓
56071✓	16 April 1957✓	0902✓	"	+ 0.5✓
56072✓	"	0903✓	"	+ 0.5✓
56073✓	"	0903✓	"	+ 0.5✓
57L 1616✓	"	1055✓	"	+ 0.5✓
57L 1617✓	"	1056✓	"	+ 0.5✓
57L 1618✓	"	1056✓	"	+ 0.5✓
57L 1619✓	"	1057✓	"	+ 0.5✓

59W 7745 to 7749 19 Aug. 1959 app. 1:7000
(incl)

Predicted Tide (III)

Reference Station: TAMPA BAY
Subordinate Station: SAFETY HARBOR, OLD TAMPA BAY
Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range
-	1.4	1.6
-	1.9	2.5

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): 8✓

Shoreline (More than 200 meters to opposite shore) (III): 14.5✓

~~Shoreline (Less than 200 meters to opposite shore) (III):~~

Control Leveling - Miles (II): Inapplicable✓

Number of Triangulation Stations searched for (II): 5✓

Recovered: 3✓

Identified: 2✓

Number of BMs searched for (II): 0✓

Recovered: 0✓

Identified: 0✓

Number of Recoverable Photo Stations established (III): 0✓

Number of Temporary Photo Hydro Stations established (III): 31✓

Remarks:

Only tidal bench marks were searched for.✓

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SUMMARY
TO ACCOMPANY SHORELINE MANUSCRIPTS
T-10548 and T-10549

These are two surveys of shoreline mapping Project PH-171 (27380). The project consists of 27 manuscripts and covers the Tampa Bay area of Florida. T-10548 and T-10549 cover the southwest portion of Old Tampa Bay and adjacent land areas.

The project was assigned to the Tampa District Office with instructions of May 1957. It was designed to support hydrographic surveys and subsequent revision of nautical charts. Field inspection and recovery of control was accomplished during 1957, the radial plot, compilation and scribing in 1958 based on nine-lens photography of April 1957.

T-10549 was revised in the Washington Office from photography of August 1959 and corrected Ozalid print (as submitted by Tampa District Office 5 October 1959) to indicate changes in shoreline and approaches of the new causeway under construction.

Gronar 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-10549

PHOTOGRAMMETRIC PLOT REPORT

Submitted with T-10558.

31. DELINEATION:

The graphic method was used. The field inspection was adequate and no difficulty was encountered in the interpretation of the photographs.

Two sets of photographs were used in the delineation, nine-lens and single-lens infra-red ratio prints. The scales of both sets of photographs were fair but clouds obscured much of the detail on some of the single-lens prints.

32. CONTROL:

See Photogrammetric Plot Report.

33. SUPPLEMENTAL DATA:

Florida State Road Department furnished two (2) plans for the fill and bridge (now under construction) which will cross Old Tampa Bay. The plans were used and forwarded to the Washington Office, Nautical Chart Branch.

34. CONTOURS AND DRAINAGE:

Contours inapplicable. Drainage has been drafted according to photographic interpretation.

35. SHORELINE AND ALONGSHORE DETAILS:

The shoreline inspection was adequate, although in some cases it did not agree with the infra-red photography. The shoreline was delineated in some instances, using the infra-red prints because of their clarity of detail.

The shallow areas were delineated by office interpretation of the photographs. The oyster bars were indicated by the field inspector. There are no shoals. The only low-water lines shown are around the oyster bars.

37. LANDMARKS AND AIDS:

None.

38. CONTROL FOR FUTURE SURVEYS:

No recoverable topographic stations were recovered or established.

Thirty-one (31) photo-hydro stations were established and are included in Item 49 with a description for each.

39. JUNCTIONS:

T-10543 to the north: - water area.
T-10548 to the west: - in agreement.
T-10550 to the east: - in agreement
T-10554 to the south: - shoreline turns to east before reaching southern neat line.

40. HORIZONTAL AND VERTICAL ACCURACY:

No statement.

46. COMPARISON WITH EXISTING MAPS:

Comparison has been made with U.S.G.S. stereocompilation "SAFETY HARBOR FLORIDA 797009" (2), scale 1:10,000, dated 1955. Both manuscripts compare favorably.

Comparison has been made with C&GS planimetric maps T-5825 and T-5828, scale 1:10,000, dated 1941. Only minor differences were noted.

47. COMPARISON WITH NAUTICAL CHARTS:

Comparison has been made with C&GS Chart 587, scale 1:40,000, edition of March 1928, revised 16 Sept. 1957.

The planimetric maps listed under Item 46 were probably the source of topography on the nautical charts and the same minor differences exist.

ITEMS TO BE APPLIED TO NAUTICAL CHARTS IMMEDIATELY:

None.

ITEMS TO BE CARRIED FORWARD:

None.

I. I. Saperstein
I. I. Saperstein
Cartographer (Photo)

APPROVED AND FORWARDED

Arthur L. Wardwell
Arthur L. Wardwell

T-10549.

Geographic Names.

Big Island

Big Island Pass

Bunker Hill Island

Cabbage Patch Point

Cedar Point

Florida

(title)

Grassy Creek

Grassy Point

Gulf Breeze Coast

(title)

Old Tampa Bay

Tampa Bay

(title)

4th Street Extension

9th Street Extension

Ulmerton Road Extension

Names approved 11-3-58

L. Heck

49. NOTES FOR THE HYDROGRAPHER

The following is a list of photo-hydro stations:

- 4818 - Small detached bush on oyster bar. Stake with flag driven by point and streamers.
- 4901 - Detached bush on oyster bar. Stake with flag driven by point.
- 4902 - Detached bush. Stake with flag and streamers by bush.
- 4903 - Center of end oyster bar. Stake with flag on point.
- 4904 - Mangrove bush on bank. Stake with flag in front of bush, strips of cloth tied on limbs.
- 4905 - Detached mangrove bush. Stake with flag driven beside bush. Strips of cloth tied in limbs.
- 4906 - Detached mangrove bush. Stake with flag driven beside bush. Strips of cloth tied in limbs.
- 4907 - Overhanging mangrove limbs. Stake with flag beneath limbs. Strips of cloth tied in limbs.
- 4908 - Point of grass, offshore from mangrove and about 100 ft. behind 2 oyster bars. Stake with flag driven in point.
- 4909 - Lone mangrove bush on oyster bar. Stake with flag driven beside bush. Streamers tied on limbs.
- 4910 - Mangrove bush on oyster bar. Stake with flag driven beside bush. Streamers tied on limbs.
- 4911 - Mangrove bush on oyster bar. Stake with flag driven beside bush. Streamers tied on limbs.
- 4912 - Lone mangrove bush on oyster bar. Stake with flag beside bush. Streamers tied on limbs.
- 4913 - Mangrove bush on oyster bar. Stake with flag driven beside bush. Streamers tied on limbs.
- 4914 - Northwesternly end of grass spot. Offshore from edge of mangrove. Stake with flag driven in point.
- 4915 - Center of grass spot on inshore edge of oyster bar. Stake with flag driven in point.
- 4916 - Corner of oyster bar, just offshore from edge of mangrove. Stake with flag driven in point.
- 4917 - Southerly gable on cabin.

- 4918 - End of U shaped sand spot between two oyster bars. Stake with flag driven in point.
- 4919 - End of grass spot on inshore side of oyster bar. Stake with flag driven in point.
- 4920 - Tip of mangrove point. Stake with flag driven beside point. Streamers tied on limbs.
- 4921 - Tip of mangrove point. Stake with flag driven in point. Streamers tied to limbs.
- 4922 - Overhanging mangrove limbs at point. Stake with flag driven beneath limbs. Streamers tied to limbs.
- 4923 - Mangrove bush on oyster bar. Stake with flag beside bush. Streamers tied to limbs.
- 4924 - Detached mangrove bush. Stake with flag beside bush. Streamers tied to limbs.
- 4925 - Northerly end of grass spot. Stake with flag driven in point.
- 4926 - Mangrove bush stake with flag driven beside bush. Streamers tied to limbs.
- 4927 - Mangrove bush larger of 2. Stake with flag driven beside bush. Streamers tied to limbs.
- 4928 - Tip of mangrove. Stake with flag driven in point. Streamers tied to limbs.
- 4929 - Center of end of grass spot. Stake with flag driven in point.
- 4930 - End of grass point. Stake with flag driven in point.
- 4931 - Mangrove bush. Stake with flag driven beside bush. Streamers tied to limbs. Falls on T-10550.

A State Highway Department tower has been plotted east of Big Island from a position furnished by the State Highway Department. The position of the tower has not been verified.

50.

PHOTOGRAMMETRIC OFFICE REVIEW

T- 10549

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

4a Classification label Unclassified

CONTROL STATIONS

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

ALONGSHORE AREAS

(Nautical Chart Data)

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

PHYSICAL FEATURES

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

CULTURAL FEATURES

27. Roads XX 28. Buildings XX 29. Railroads XX 30. Other cultural features JG

BOUNDARIES

31. Boundary lines XX 32. Public land lines XX

MISCELLANEOUS

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

40. J. A. Giles Reviewer

M. M. Slavney
Supervisor, Review Section of Unit
M. M. Slavney

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 COMPUTATION

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

PROJECT NO. Ph-171 T-10549

Time and date of exposure 1030 7 Apr 1957 Reference station Tampa Bay Mean range 1.8
Date of field inspection Nov 1957 Subordinate station Safety Harbor, Old Tampa Bay Ratio of ranges H.W. = +0.5
L.W. = 0.0

	Time		Height feet	Height x Ratio of ranges	High tide Low tide Range of tide	Time		Low tide at Ref. Sta. Time difference Corrected time at Subordinate station	Time	
	h.	m.				h.	m.		h.	m.
High tide	20	13	1.5	2.0	High tide	18	28	Low tide at Ref. Sta.	1	47
Low tide	3	32	-0.8	-0.8	Low tide	+1	45	Time difference	+1	45
Duration of rise or fall	16	41		2.8	Range of tide	20	13	Corrected time at Subordinate station	3	32

	h.	m.		feet		feet		Photo. No.
Time H. T. or L. T.	3	32	Ht. H. T. or L. T.	- 0.8	Feature bares			
Required time	10	30	Tabular correction	1.1	Stage of tide above MLW			55972
Interval	6	58	Stage of tide above MLW	0.3	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			

COMM-DC-57848

Computed by 115 Checked by P.S.P.

TIDE COMPUTATION

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

PROJECT NO. Ph-171 T-10549

Time and date of exposure 1056-16 Apr 1957 Reference station Tampa Bay Mean range 1.2
Date of field inspection Nov. 1957 Subordinate station Safety Harbor, Old Tampa Bay Ratio of ranges H.W. = 4.05
L.W. = 2.0

	Time		Height feet	Height x Ratio of ranges	Range of tide
	h.	m.			
High tide	16	06	1.8	2.3	1.9
Low tide	9	51	0.4	0.4	
Duration of rise or fall	6	15			

	Time		High tide at Ref. Sta. Time difference	Corrected time at Subordinate station
	h.	m.		
High tide at Ref. Sta.	14	21		
Time difference			+ 1 45	
Corrected time at Subordinate station	16	06		

	Time		Low tide at Ref. Sta. Time difference	Corrected time at Subordinate station
	h.	m.		
Low tide at Ref. Sta.	8	06		
Time difference			+ 1 45	
Corrected time at Subordinate station	9	51		

	h.	m.	Ht. H. T. or L. T. Tabular correction Stage of tide above MLW	feet	Feature bares Stage of tide above MLW Feature above MLW	feet	Photo. No.
Time H. T. or L. T.	9	51		0.4			
Required time Interval	10	56		0.1			572 1617
	1	05		0.5			
Time H. T. or L. T.			Ht. H. T. or L. T. Tabular correction Stage of tide above MLW		Feature bares Stage of tide above MLW Feature above MLW		
Required time Interval							
Time H. T. or L. T.			Ht. H. T. or L. T. Tabular correction Stage of tide above MLW		Feature bares Stage of tide above MLW Feature above MLW		
Required time Interval							
Time H. T. or L. T.			Ht. H. T. or L. T. Tabular correction Stage of tide above MLW		Feature bares Stage of tide above MLW Feature above MLW		
Required time Interval							
Time H. T. or L. T.			Ht. H. T. or L. T. Tabular correction Stage of tide above MLW		Feature bares Stage of tide above MLW Feature above MLW		
Required time Interval							
Time H. T. or L. T.			Ht. H. T. or L. T. Tabular correction Stage of tide above MLW		Feature bares Stage of tide above MLW Feature above MLW		
Required time Interval							

Computed by H.S. Checked by P.F.D.

TIDE COMPARISON

U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

PROJECT NO. PH- 171 T-10549

Time and date of exposure 0903 16 Apr 1957 Reference station Tampa Bay Mean range 1.8
Date of field inspection Nov. 1957 Subordinate station Safety Harbor, Old Tampa Bay Ratio of ranges L.W. = +0.5
L.W. = 0.0

	Time		Height feet	Height x Ratio of ranges	Time h. m.	Time h. m.	Time h. m.
	h.	m.					
High tide	16	06	1.8	2.3	14	21	8 06
Low tide	9	51	0.4	0.4	+1	45	+1 45
Duration of rise or fall	6	15		1.9	16	06	9 51

	h.	m.	feet	feet	Photo. No.
Time H. T. or L. T. Required time Interval	9	51	0.4	Feature bares Stage of tide above MLW Feature above MLW	56072
Time H. T. or L. T. Required time Interval	9	03	0.1	Feature bares Stage of tide above MLW Feature above MLW	
Time H. T. or L. T. Required time Interval	0	48	0.5	Feature bares Stage of tide above MLW Feature above MLW	
Time H. T. or L. T. Required time Interval				Feature bares Stage of tide above MLW Feature above MLW	
Time H. T. or L. T. Required time Interval				Feature bares Stage of tide above MLW Feature above MLW	
Time H. T. or L. T. Required time Interval				Feature bares Stage of tide above MLW Feature above MLW	
Time H. T. or L. T. Required time Interval				Feature bares Stage of tide above MLW Feature above MLW	
Time H. T. or L. T. Required time Interval				Feature bares Stage of tide above MLW Feature above MLW	

COMMA-DC-57848

Computed by 115 Checked by RES

Tampa District Office
P O Box 190 Tampa 1 Florida

T 10549

5 October 1959

To: Chief, Photogrammetry Division
Coast and Geodetic Survey
Washington, D. C.

Subject: Nautical Chart Correction - Tampa Bay Florida, PH-171

When Air Photo Mission 702 was recently in this area, we requested they photograph the east and west approaches of the third Bay Bridge across Tampa Bay. The bridge is scheduled to be opened about the middle of December.

Upon receipt of the photographs we corrected our file ozalid copies of surveys T-10545 and T-10549 which are being forwarded to you along with the photographs under separate cover.

Please furnish this office an ozalid print of each survey. If it is decided to correct the registered copy of the manuscripts, we prefer an ozalid print of the corrected copy.

Your attention is called to the discrepancy in alignment as shown on T-10549.

Applied
RWS

Arthur L. Wardwell
CDR, C&GS
Tampa District Officer

WAR/o

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REVIEW REPORT OF
SHORELINE MANUSCRIPTS T-10548 and T-10549
September 1959

62. Comparison with Registered Topographic Surveys

T-1409a	1:20,000	1875
T-1409b	1:20,000	1875
T-4185	1:20,000	1926
T-5825	1:10,000	1939
T-5828	1:10,000	1939
T-8380	1:20,000	1942

Changes in shoreline and culture in this area have been continuous over the years as evidenced by above-listed surveys. Additional changes have come about since the survey of 1942, though not extensively. Subject surveys are to supersede above-listed topographic surveys of common area and detailing for nautical charting purposes.

63. Comparison with Maps of Other Agencies

SAFETY HARBOR, FLA., 1:24,000, 1956 U.S. Geological Survey. Differences exist in shoreline at the entrances of Allen Creek and Cross Bayou. There is good agreement between these surveys otherwise.

64. Comparison with Contemporary Hydrographic Surveys

56931	1:20,000	1958 (Blueprint)
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Shoreline and control was furnished for this hydrographic survey by subject surveys and no effective changes were noted.

65. Comparison with Nautical Charts

587, 1:40,000, Edition of 1958, Revised to 7/6/59
1257, 1:80,000, Edition of 1943, Revised to 3/2/59

There are minor changes in shoreline at entrances of Allen Creek and Cross Bayou, that have not been applied to the nautical charts. No other disagreements were noted.

- 2 -

66. Adequacy of Results and Future Surveys

Subject surveys were found to be within the requirements of adequacy and accuracy for this type of survey.

Reviewed by

Joseph J. Streifler
Joseph J. Streifler

Approved by

L. C. Laude
Chief, Review Section
Photogrammetry Division

Max Whitlatch
Chief, Nautical Chart Branch
Chart Division

Bill Swanson
Chief, Photogrammetry
Division

J. Bowie
Chief, Coastal Surveys Division

18 May 60