

8598

Diagon Diag. Ch. No. - 124B-2

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

PHOTOGRAMMETRY

Type of Survey Shoreline Survey

Field No. _____ Office No. T-8598

LOCALITY

State Florida

General locality East Coast

Locality Key Biscayne and Virginia Key

1946

CHIEF OF PARTY

Lt. Comdr. George E. Morris, Jr.

LIBRARY & ARCHIVES

DATE Feb 16 - 1949

B-1870-1 (1)

8598

DATA RECORD

T-8598

Quadrangle (II):

Project No. (II):

Field Office: Tampa

Chief of Party: Lt. Comdr. J. C. Bose

Compilation Office: Tampa

Chief of Party: Lt. Comdr. J. C. Bose

Instructions dated (II III):
 August 4, 1945 Supplemental
 Instructions, Project 312 B

Copy filed in Descriptive
 Report No. T- (VI)
 Division of Photogrammetry
 Office Files

Completed survey received in office:
 June 3, 1946

Reported to Nautical Chart Section:

Reviewed: July 12, 1946 Applied to chart No.

Date:

Corrected: March 22, 1948

Redrafting Completed:

Registered: ~~Jan 10, 1949~~
~~Feb 10, 1949~~
~~Mar 10, 1949~~

Published: Vault copy only
 (not to be published)

Compilation Scale: 1:10,000

~~Published Scale: 1:10,000~~

Scale Factor (III): 1.0

Geographic Datum (III): N.A. 1927

Datum Plane (III):
 Old Tower, final, 1883

Reference Station (III): Cape Florida

Lat.: 25°-39'-58.243" (1792.3m) Long.: 80°-09'-22.339" (623.0m)
(This position is on the NA 1927 datum) Adjusted
 Unadjusted

State Plane Coordinates (VI): Florida East Zone

X = 777,934.34

Y = 485,229.28

Military Grid Zone (VI)

PHOTOGRAPHS (III)

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
45C1614-1618 incl.	3-9-45	11:25	1:10,000	0.1' above M.L.W.

Tide from (III): Reference Station Mayport, Florida with corrections
to Cape Florida (W. side) Key Biscayne

Mean Range: 1.7'

Spring Range: 2.0'

Camera: (Kind or source) U.S.C.&G.S. 6" focal length.

Field Inspection by: L.F.H.

date: 9-6 to 9-1945

Field Edit by: J. D. Weiler

date: Feb. 1947

Date of Mean High-Water Line Location (III):

Date of field inspection Sept. 6-9, 1945, before hurricane of Sept.
15, 1945.

Projection and Grids ruled by (III) Base is a print date:
of T-5627 on

" " " checked by: acetate. date:

Control plotted by: date:

Control checked by: date:

Radial Plot by: date:

Detailed by: date:

Reviewed in compilation office by: date:

Elevations on Field Edit Sheet
checked by: date:

SCALE FACTOR

[illegible]

1 FT. = .3048006 MEYER
COMPUTED BY:.....

DATE.

CHECKED BY:

DATE _____

M-2389-12

Photogrammetric (Shoreline) Survey T-8598

Project CS-312-B

This shoreline survey is essentially a revision of the shoreline details on planimetric map T-5627. Revised details are designated in red on the manuscript and were compiled from photographs taken March 9, 1945, and from the field inspection of September 6 to 9, 1945.

The field inspection and office compilation were accomplished by the Tampa Photogrammetric Office under supplemental instructions for Project CS-312-B, dated August 4, 1945. Project CS-312 is a topographic mapping project for the production of 7½ minute topographic quadrangles. The layout of the topographic maps to be produced on this project is shown on the enclosed topographic index. These topographic maps will be published at scale 1:24,000, and will supersede for publication the planimetric maps now existing in the same area. The existing planimetric maps are shown on the enclosed planimetric indexes 129-F to 129-H.

With reference to the planimetric maps now existing within the limits of project CS-312, maps Nos. T-5626 to 5633 are modern and accurate planimetric base maps at scale 1:10,000. The instructions for project CS-312 call for the revision of shoreline details on these sheets so that the larger scale information will be available for future hydrographic investigation and for nautical chart compilation and correction.

Field Inspection.--Field inspection was accomplished by a field party of the Tampa Photogrammetric Office under the direction of Lt. Comdr. Bose from 6-9 September 1945 using 1:10,000 scale ratio prints of photographs 45-C-1614-18, inclusive.

The mean high-water line was inspected before the 15 September 1945 hurricane as indicated on the field inspection photographs. The existence of several offshore features, V12, piling, as shown on survey T-5627 were not verified by the field inspection party. A check for any changes in the position of the mean high-water line and for the existence of these offshore features during the field edit of the topographic quadrangle T-8433 is recommended. See correction (discrepancy) sheet 8598.

Compilation.--The manuscript consisted of a black print of planimetric map T-5627 on cellulose acetate. Shoreline corrections and additions were made in red on this print from the 1:10,000 scale single-lens ratio prints, and from the field inspection notes. These corrections include the mean high water line, offshore details, and interior planimetry.

Review and Smooth Drafting.--Since this revision of planimetric map T-5627 is essentially a new shoreline survey with field inspection in September 1945, it is being given a new number and filed as Shoreline Survey T-8598. It will be reviewed in this office as a new survey. After smooth drafting, if necessary, the new sheet will then be printed and filed in the vault. It will not be published.

S. V. Griffith

Inspected:
S. V. Griffith

M. G. Misulia

Michael G. Misulia
Photogrammetrist,
Review Section
Div. of Photogrammetry

PLANIMETRIC INDEX 129-F

Review of Photogrammetric (Shoreline)
Survey T-8598
Division of Photogrammetry

Radial Plot

Since T-8598 is essentially a revision of the existing planimetric map T-5627, compiled from aerial photographs dated 9 March 1945, a new radial plot was not necessary. The radial plot as run by the Tampa Photogrammetric Office was checked and found in error because of the incorrect pricking of triangulation station Hurricane, 1935 and failure to make use of triangulation station Key Biscayne, 1894 as identified by the field inspection party. The photograph centers and pass points were, therefore, removed from the manuscript and all of the corrections and additions were applied by holding to the existing detail. No major changes were found necessary.

Detailing

During the review the revision of details was verified with the field inspection photographs and additions and corrections were made to the manuscript in green acid ink. Since the manuscript consisted only of two large islands, all of the interior planimetry was also reviewed and corrected wherever deemed necessary.

Field Inspection

This work was accomplished 6 to 9 ^{Sept.} ~~March~~ 1945. Additional field inspection is contemplated in connection with project 312-B. However, the field inspection is adequate to serve the purpose of this survey with the possible exception of the mean high-water line and offshore features as discussed under "Field Inspection" in the Descriptive Report.

Comparison with Previous Topographic Surveys

T-8598 supersedes those areas of the following surveys which it covers:

U.S.C.&G.S.	T-336	1:20,000	1851
	T-3375	1:20,000	1913
	T-3758	1:20,000	1919
	T-3760	1:20,000	1919
	T-4529	1:20,000	1927
	T-5627	1:10,000	1935

The area of T-8598 will also be covered by topographic quadrangle T-8434, project 312-B.

Landmarks

Landmarks within the limits of T-8598 will be reported when T-8434 is completed. *In description report for T-8434.*

Comparison with Nautical Charts

The ^{mangrove} ~~ham~~grove area in the extreme northwestern part of Virginia Key as shown on Chart 547 differs considerably from that as shown on the manuscript. This area is believed to consist mainly of grass, sand and scattered mangrove. *See descriptive report for T-8434*

Application to Nautical Charts

T-8589 has not been applied to charts 547, 847 and 848 as of the date of this report.

Reviewed by:

Michael G. Misulia

Michael G. Misulia 7/12/46 *K.H.H.*

Under the direction of:

S. V. Griffith

Chief, Review Section *K.H.H.*

Approved by:

B.G. Jones 2/49

Tech. Assistant to the Chief,
Division of Photogrammetry

J.R. Edmonson
Chief, Nautical Chart Branch
Division of Charts

K.T. Adams

Chief, Division of Photogrammetry

C.K. Green

Chief, Division of Coastal Surveys
K.R.

See "correction report" attached. (After Field Edit Report)

FIELD EDIT REPORT
PHOTOGRAMMETRIC SHORELINE SURVEY
QUADRANGLE T-8598
PROJECT CS-312-B

Field edit of this sheet was made during January and February 1947, by John D. Weiler, Photogrammetrist.

46. Methods. -In field editing the data for sheet T-8598, inshore features were inspected by truck, and shoreline features from a small boat. All cultural data added to the map manuscript was either plotted from topographic features, or out in by planetable methods.
47. Adequacy of the MAP MANUSCRIPT. -The manuscripts were adequate and correct except for numerous changes made since the date of the original field inspection, and details omitted during that inspection. The area covered by the 1:10000 manuscript is duplicated by 1:20000 quadrangle T-8434, and many of the questions asked on the discrepancy sheets are common. As far as possible, all field edit data was compiled on the manuscript copy of T-8434, and reported on in the description report for that quadrangle.

Attention is called to numerous corrections to fixed aids shown and positions of new aids to be added; all new aids, and all aids requiring changes in map position, have been submitted on Form 567 with quadrangle T-8434.

Respectfully Submitted


John D. Weiler
Photogrammetrist

*See
Chart
Setty No.
280 (1947)*

Approved and Forwarded


Ross A. Gilmore, Chief of Party

Division of Photogrammetry
Correction Report of
Shoreline Map Manuscript T-8598

26. Control.--

A list of the triangulation stations was made during the correction of this sheet. It will be found on Form M-2388-12 immediately following the data record.

28. Detailing.--

The field edit corrections and other corrections made during the review of T-8434 were made in green ink. This survey is now consistent with Topographic Survey T-8434.

37. Datum.--

The projection for the map manuscript is based on the North American datum. It should be changed to one based on the North American datum of 1927 when the final drafting of this survey is done. See page 1 of the Data Record.

*See shown on the manuscript
and the print for registration.*

Jack Rihn
Jack Rihn
22 March 1948

The detail in the area between latitude 25°45' and 25°45'15" is also included on T-8596 where it is complete and rightfully belongs.

The detail now shown on T-8598 north of 25°45' is not complete. When this map is represented all detail, including minute lines, will be deleted with the exception of the detail of Virginia Key which will be retained.

S. V. Griffith
2/2/49

- ATLANTIC OCEAN*
- BEAR CUT
- BEAR CUT BRIDGE (under const.)
- BISCAYNE BAY
- BISCAYNE CHANNEL
- CAPE FLORIDA
- CAPE FLORIDA CHANNEL
- DUCK LAKE
- FLAMINGO ISLAND
- HURRICANE HARBOR
- KEY BISCAYNE
- MONKEY ISLAND
- NORTHWEST POINT
- RICKENBAKER CAUSEWAY (under const.)
- SOUTH BASIN
- SOUTHWEST POINT
- SWAN POND
- THE PINES (locality)
- THE PINES CANAL
- VIRGINIA BEACH
- VIRGINIA KEY
- WEST POINT
- Florida* (for title)

Roads

- AIR LINE ROAD
- LANDING ROAD
- PALM ROAD
- PINE ROAD
- NASSAU ROAD - NASSAU
- NORTH CROSS ROAD
- OCEAN ROAD
- SOUTH LINE ROAD

* = Decis. of BGN.

• = Approved name.
10-13-48.
A. J. W.

17 September 1946

To: Lieut. Comdr. George E. Morris, Jr.
U. S. Coast and Geodetic Survey
Box 1689
Tampa, Florida

Subject: Shoreline survey manuscripts T-8592 to T-8599
inclusive, project 312-B.

The subject manuscripts together with discrepancy prints and descriptive reports are being forwarded to you today for additional work as indicated in this letter.

During the Washington Office review a number of small changes have been made in the shoreline manuscripts from examination of the field photographs. These changes are indicated in the review reports, which are included in the descriptive reports. Since your quadrangle manuscripts in this area were reproduced and the planimetric features printed prior to review of the shoreline manuscripts, the changes made in the Washington Office as discussed in this paragraph shall be incorporated on the quadrangle manuscripts.

The Washington Office review of the shoreline manuscripts also has indicated a number of instances where details preferably should have some further field investigation. These instances are noted on the discrepancy prints. The details shall be investigated as a part of the field edit of the quadrangles, and both the shoreline manuscripts and the quadrangle manuscripts revised in accordance with the results of the field edit investigation. Most of the cases cited are rather minor, but can be investigated during the normal field edit of the quadrangles and consequently should require but little extra time.

When completed in your office the shoreline manuscripts within the limits stated in the following paragraph shall show all of the planimetric details identical with the quadrangles. The shoreline manuscripts may be retained in your office and forwarded with the completed quadrangle manuscripts.

The approximate inshore limits of each shoreline manuscript are indicated by a red or blue line. No changes on the shoreline manuscripts should be made inshore of this line since details inshore of the line will be eliminated when the shoreline manuscripts are reproduced and permanently registered or filed.

17 September 1946

This line may be considered as tentative and you may alter it slightly to include some particular feature on the shoreline manuscripts. Conversely, you may alter the line to avoid extending the delineation of buildings any further inshore on the shoreline manuscripts than they are now shown.

The most confusing single item on the shoreline manuscripts is the bridge information. In many cases no clearances are given. In others, the clearances given differ with the U. S. Engineer Bridge Book. In order to resolve this situation into something complete and usable for nautical charts, you will please do the following on the shoreline manuscripts:

(1) All of the bridges, including the small ones, shall be shown.

(2) Bridge clearances are desired only for bridges over navigable waterways. In this instance, the term navigable waterways shall apply to waterways customarily used by power boats, whether commercial or pleasure. The term navigable waterways shall not include waterways customarily used only by pulling boats and very small pleasure craft.

(3) Your record of bridge clearances as determined by field measurements shall be compared with the Engineer Bridge Book, edition of 1941. Where differences exist, a recording of your values and the Bridge Book values shall be made and submitted to the U. S. District Engineer for his information and comment. A copy of the letter to the District Engineer and his reply, if any, shall be included in each descriptive report within the area covered by the letter. Or, this information shall be included in one descriptive report and cross-referenced to the others.

In a number of instances the shoreline survey discrepancy sheets have the note "Check bridge data". These may be ignored. You are not required to check your own field observations unless correspondence with the District Engineer Office indicates this to be desirable.

As you may remember, the descriptive reports for these shoreline surveys were prepared in the Washington Office. This was in accordance with instructions. However, since the office reviewer was not familiar with the area, please read the reports and make any changes or notations which you consider desirable.

Acting Director.

SURVEY NO. T8598

[illegible]

M-2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.