U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Photogrammetric Shoreline
Proj. No. 312 Office No. T-8596

LOCALITY
State Florida
General locality East Coast
Locality Miami

1946
CHIEF OF PARTY
J. C. Ross

LIBRARY & ARCHIVES
DATE April 16 - 1949
DATA RECORD
T- 8596

Quadrangle (II): Project No. (II): 312


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

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

Completed survey received in office:
September 1947

Reported to Nautical Chart Section:

Reviewed: 13 June 1946 Applied to chart No. Date:
Corrected, March 1948
Redrafting Completed: 8 Feb 1949

Registered: March 1949 Published: Not to be published

Compilation Scale: 1:10,000 Published Scale:

Scale Factor (III): None


Reference Station (III): Pier 1934

Lat.: 25°46'05.753" 177.0m. Long. 80°07'54.755" 1525.8m Adjusted
26°46'05.086" 152.5m 80°07'54.708" 1524.5m Unadjusted

State Plane Coordinates (VI):

\[ X = \quad Y = \]

Military Grid Zone (VI)

U.S.E. Grid Origin

Lat. 25°45'41.490" 1276.8m
Long. 80°07'43.484" 1211.7m

*1927 N.A. Datum shown as approximate central portion of T-1596. The displacement in northlatitudes the thirty-eighth meridian has been
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<th>Time</th>
<th>Scale</th>
<th>Stage of Tide</th>
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<td>1:10,000 (ratio)</td>
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<td>11:33</td>
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<td>~ 0.1' M.L.W.</td>
</tr>
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</table>

**Miami Beach (Ocean)**

Tide from (III): Miami, Yacht Basin, Biscayne Bay Reference Sta.
Mayport, Florida

Mean Range: 2.0'
Spring Range: 2.4'

Camera: (Kind or source) USCGS, single-lens, focal length = 6"

Field Inspection by: B.O.B. date: July 31, Dec. 25, 1945
H.A.D.
G.E.V.

Field Edit by: J. Weile date: Sept. 1947

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

Projection and Grids ruled by (III) date:

" " " " checked by: " " " " 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:
STATISTICS (III)

Land Area (Sq. Statute Miles):

Shoreline (More than 200 meters to opposite shore):

Shoreline (Less than 200 meters to opposite shore):

Number of Recoverable Topographic Stations established:

Number of Temporary Hydrographic Stations located by radial plot:

Leveling (to control contours) - miles:

Roman numerals indicate whether the item is to be entered by, (II) Field Party, (III) Compilation Party, or, (VI) the Washington Office.

When entering names of personnel on this record give the surname and initials (not initials only).

Remarks:

It was originally planned for T-8596 to be a planimetric map. A change in plans converted T-8596 to a shoreline map, supplemented by topographic quadrangle T-8433.

To avoid duplication in this report items which are only applicable to T-8596 have been mentioned. Also a copy of the final review report of T-8433 has been attached.

For items not mentioned in this report refer to descriptive report T-8433.
This shoreline survey is essentially a revision of the shoreline details on planimetric map T-5629. Revised details are designated in red on the manuscript and were compiled from photographs taken 9 March 1945, and from field inspection data of 31 July to 20 December 1945.

The field inspection and office compilation were accomplished by the Tampa Photogrammetric Office under supplemental instructions for project CS-312-B, dated 4 August 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 1:25,000, 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 and 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 from July to December 1945, using 1:10,000 scale ratio prints, the work being done by a field party of the Tampa Photogrammetric Office, Lt. Comdr. J. C. Bose in charge.

The mean high-water line along the Atlantic Ocean side of the planimetric map was inspected on 31 July 1945 which was before the hurricane of 15 September 1945. The existence of numerous offshore features such as, wrecks, piling, stakes, and ruins, shown on Survey T-5629, were not verified by the field inspection party. A check for any major changes in the position of the above-mentioned features and mean-high-water line is recommended.

Compilation.--The manuscript consisted of a black print of planimetric map T-5629 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.

Landmarks and Aids to Navigation.--

Four sheets of Forms 567 listing 54-non-floating aids to navigation which lie within the limits of T-8596, were forwarded to Nautical Charts. Only those aids which were added or moved were submitted in these lists.

The position of Miami Main Channel Light 25 was plotted on T-5629 in 1935. Since the light was rebuilt in 1943, the position as shown on T-5629 was deleted. The position of the light as shown on Chart 547 is believed to be correct, however, a check of its position is recommended during the Field Edit of the quadrangle T-8433.

Review.--The manuscript consisted of a black print of planimetric map T-5629 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 on the field inspection notes.

Michael G. Misulia, Review Section
Division of Photogrammetry
To: Lieut. Comdr. George S. Morris, Jr.
U. S. Coast and Geodetic Survey
Box 1689
Tampa, Florida

Subject: Shoreline survey manuscripts T-5592 to T-5599 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 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.
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.
FIELD EDIT REPORT

PHOTOMETRIC SHORELINE SURVEY

T-8596

PROJECT CS-312-B

The field edit of this sheet was completed during September, 1947 by John D. Weiler, Photogrammetrist.

46. METHODS

The shoreline area along the mainland, the Miami River, and the west side of Miami Beach was inspected with a small boat. The ocean side of Miami Beach was inspected by driving to the shore at accessible places or by walking along the beach. All data added to the ozalid copy of the map manuscript were either plotted from topographic features, or cut in by planetable methods.

47. ADEQUACY OF THE MAP MANUSCRIPT

The map manuscript was adequate and correct except for changes made since the date of the original field inspection and a few details overlooked in the compilation.

The sheet overlaps T-8597 to some extent, and some of the bridge data requested had been previously shown with T-8597. Bridge clearances were checked where indicated on the discrepancy sheet. All clearances checked were carefully measured with a steel tape, and where clearances so determined did not agree with data listed in the U.S. Engineers "List of Bridges Over Navigable Waters of the U.S.", dated July 1, 1941, the discrepancies have been reported to the local District Engineer. (See copy of letter attached to Field Edit Report, T-8433).

Attention is called to the Royal Palm Yacht Basin at the mouth of the Miami River. The entire area has been filled and a steel seawall erected.

Miami River Daybeacon IA, Miami South Channel Daybeacon 5, and Miami Yacht Basin Daybeacon 4 are temporarily out, but are in the process of being replaced in their original position.

The positions of Miami Lain Channel Lts. 23 and 25 were obtained by planetable cuts and should be added to the map manuscript. Form 567 is submitted.

Miami Main Channel Light 20 was shown as a beacon. This has been corrected.

Miami Main Channel Lt. 10 has been replaced with a lighted buoy.
The compiler did not show houses along the Biscayne Waterway. These buildings are visible on the aerial photographs and should be added to the map manuscript.

The field edit sheet for T-8596 should be cross checked with the field edit sheet for quadrangle T-8433 and shoreline changes shown on T-8433.

John D. Weiler
Photogrammetrist

Supervised:

Lewis V. Evans, III
Lieut. (jg) USCGGS

APPROVED AND FORWARDED:

Ross A. Gilmore
Chief of Party
U.S. Route 1
STATE ROUTE A1A
INTRACOASTAL WATERWAY
MIAMI RIVER
ATLANTIC OCEAN
BISCAYNE BAY
Biscayne Waterway
Indian Creek
Sunset Lake
Fishermans Channel
Meloy Channel
Collins Canal
City Yacht Basin
NORRIS CUT
GOVERNMENT CUT
MAIN CHANNEL
Lake Pancoast
MIAMI
MIAMI BEACH
Buena Vista
BAY SHORE GOLF COURSE
MIAMI BEACH MUNICIPAL GOLF COURSE
BRICKELL AVENUE
BISCAYNE BLVD
DADE BLVD
COLLINS AVENUE - ALTON ROAD
GENERAL DOUGLAS MAHARAH CAUSEWAY
VENETIAN CAUSEWAY
CITY DOCKS
BAY FRONT PARK
POLO PARK
BRICKELL PARK
BELLE ISLE PARK
LUMMUS PARK
STEARN'S PARK
SOUTH BEACH PARK
FLAMINGO PARK
WASHINGTON PARK

FLAGLER MONUMENT
QUARANTINE DOCK
MIAMI BEACH PIER
MIAMI BEACH KENNEL CLUB
U.S. QUARANTINE STA.
U.S. COAST GUARD STA.
U.S. ENGINEER RESERVATION
LIFE GUARD STATION
Point View
Brickell Point
Virginia Key
Star Island
Hibiscus Island
Palm Island
Belle Isle
Biscayne Island
San Marco Island
San Marino Island
Rivo Alto Island
De Lido Island
Fisher Island
Dodge Islands
Sunset Islands
Venetian Islands
Lummus Island
Burlingame Island
Johns Island
Collins Island
MIAMI CITY LIMIT
MIAMI BEACH CITY LIMIT

Approved Name
10-22-48
a.j.w.

Street name from
Miami - Miami Beach City Map
Note

The field work of overlapping quadrangle T8433 in Sept. 1947 included an examination of
variolines on T8596. The results of this field examination were offered to the manuscript
in March 1948.

O. J. Jones
Review of (Shoreline) Survey T-8596
Division of Photogrammetry

June 1946

Radial Plot.--Since T-8596 is essentially a revision of the shoreline of the existing planimetric map T-5629, compiled from aerial photographs dated 23 and 25 January 1935, a new radial plot was unnecessary.

The 1:20,000 photographs ratioed to 1:10,000, were oriented by holding to existing detail.

Detailing.--During this review, the revision of details was verified with the field inspection photographs and minor additions and corrections were made to the manuscript with green acid ink. These additions and corrections included shoal limits, buildings, and data from the field inspection photographs. Very few corrections were found necessary.

Additional personnel of the 8524 following the incident.

Comparison with previous Topographic Surveys.--T-8596 supersedes the following surveys in common detail.

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<th>Date</th>
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<tr>
<td>T-5629</td>
<td>1:10,000</td>
<td>1935</td>
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Comparison with Nautical Charts.--T-8596 has not been applied to chart 847, scale 1:20,000, dated March 1943 and chart 547, scale 1:10,000, dated June 1942 as of the date of this report.

This area will also be covered by topographic quadrangle T-6433, scale 1:20,000, which is in progress at this time.

Landmarks within the limits of T-8596 will be reported when T-6433 is completed.

Reviewed by:
Michael G. Misulia
Photogrammetrist
June 13, 1946

Under direction of:
S. V. Griffith
Chief, Review Section
Division of Photogrammetry

See note on page opposite.
APPROVED:

B.A. Jones 3/49
Technical Assistant to the Chief, Div. of Photogrammetry

W.R. Davenport
Chief, Nautical Chart Branch Division of Photogrammetry

K.T. Adams
Chief, Div. of Photogrammetry

W.M. Scaife
Chief, Div. of Coastal Surveys
<table>
<thead>
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<td>847</td>
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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.