

6256

U. S. COAST & GEODETIC SURVEY
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Form 504
Ed. June, 1928

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

R. S. PATTON, Director

State: FLORIDA

DESCRIPTIVE REPORT

Topographic } Sheet No. A
~~Hydrographic~~

LOCALITY

FLORIDA BAY FROM

Pie Key

BAKERS CREEK TO

Tavernier Creek

BOUNDING OUT.

1935

CHIEF OF PARTY

E. R. McCarthy

U. S. GOVERNMENT PRINTING OFFICE: 1925

6256

DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES

APR 22 1935

NO.

Acc. No.

The Topographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. A

REGISTER NO. **6256**

State FLORIDA

General locality FLORIDA BAY

Locality Pie Key Tavernier
~~BAKER'S CUT TO COMPENS. CUT~~ Creek

Scale 1:20,000 Date of survey August, 1934

Vessel Field Party No. 3 Field Party No. 14

Chief of party H. A. Cotton E. R. McCarthy

Surveyed by H. J. Seaborg

Inked by H. J. Seaborg

Heights in feet above to ground to tops of trees

Contour, Approximate contour, Form line interval feet

Instructions dated Nov. 17, 1933

Remarks:

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
R. S. PATTON, DIRECTOR

DESCRIPTIVE REPORT
TO ACCOMPANY
TOPOGRAPHIC SHEET NO. A.

FLORIDA BAY FROM BAKER'S CUT
TO COWPENS CUT.

FLORIDA

Party No. 14

Party No. 8

E. R. McCarthy,
Lieut.(j.g.) C&GS,
Chief of Party.

H. A. Cotton,
Chief of Party.

DESCRIPTIVE REPORT
TO ACCOMPANY
TOPOGRAPHIC SHEET NO. A

AUTHORITY:

Instructions of the Director dated Nov. 17, 1934³.

LIMITS:

That part of Florida Bay between Baker's Cut and Cowpens Cut and extending from the inside or west shore of Key Largo, north^{west} into Florida Bay. This sheet embraces Pie, Butternut, and Low Keys on the west and includes Tavernier Creek and Harbor.

CONTROL:

Two stations of the main scheme (second order) executed by this party appear on this sheet namely: Pigeon USED 1934 and Low 2 1934. The rest of the area is controlled by seven intersection stations of third order accuracy.

METHODS:

This topo sheet was primarily used as one of the control sheets for hydrography, sheet No. 5. Most of the signals and objects were located by plane-table cuts. Signals "Tut" and "Lot" were located by sextant cuts and plotted on the sheet with a three arm steel protractor. The record of the cuts will be found in the cut book accompanying hydro. sheet No. 5. A plane-table traverse was run through Tavernier Creek. Short sections of shoreline were obtained at the triangulation stations and at some of the recoverable topo stations to supplement the aerial photo topography. The section of H.W.L shown to the southwest of signal "Ape" was obtained by taking three point sextant fixes and plotting using a three arm steel protractor. The fixes are recorded in the cut book for hydro. sheet No. 5.

TRAVERSE THROUGH TAVERNIER CREEK:

This traverse was run from triangulation station "Root" 1934, southeast through the creek and closed on "Flag", which is a telephone pole located by plane-table cuts. This traverse was

TRAVERSE THROUGH TAVERNIER CREEK (CONTINUED):

one and one-half miles long and the error of closure was 14 meters. However, due to the difficulty in running the traverse and in consideration of the importance of the creek, it was deemed by the Chief of Party, sufficiently accurate to adjust the traverse as run originally. The signals were numbered consecutively from 1 to 19 through the creek. Signals "Bridge", "Sign" and "Dock" were located by rod shots.

Mangrove growth on both sides of this creek and a very soft muddy bottom made the ordinary plane-table set-ups impossible. In order to set up and use the instrument a small skiff was prepared and used in the following manner: The skiff was placed at the station, sunk to the bottom and held in place by spuds at either end (the water depth varied from 1 to 2½ feet). One leg of the tripod was then placed through a well constructed in one side of the skiff, the other two legs being over the outside edge of the skiff. The topographer was then free to move inside the sunken skiff without disturbing the instrument set-up.

DESCRIPTION OF AREA SURVEYED:

The general aspect of this area is much the same, presenting a more or less uniform tree line in all directions with practically no distinguishing features either artificial or natural of note. The west shore of Key Largo is coral rock down to Tavernier Harbor but the shoreline, a mile on either side of Tavernier Creek, is of mangrove growth. The Keys in this area are also mangrove covered.

CHANGES:

There are a number of changes due to the growth of mangrove. The several Keys south of Sever 2 as shown by the present chart have now grown into one large Key. The entire area about Tavernier Creek and extending to the north into Tavernier Harbor has been filled in by mangrove growth leaving only the Creek proper and a few small sloughs passable by boat. The small light east of Hammer Point has grown over to a large extent, also, to the south of "Ape" appears some H.W.L. built by the deposition of fine shell. Throughout this entire area can be seen the sprouts of mangrove growing in the water which may be the beginning of a new key.

AIR-PHOTO CONTROL:

Signals "Pie", "~~Bill~~", and "Flag" are about the only usable points located by topography on this sheet. It was noted in the field that signals 1,2,4,11,12,13,14, 15,16,17 and 19 through Tavernier Creek were on the mangrove edge.

GEOGRAPHIC NAMES:

All the names as appear on the present chart are still in usage.

LANDMARKS:

The only landmark is Square Tower 1934 and that is not visible from all points in the main route of travel. (See attached list.

MISCELLANEOUS:

The railroad bridge at the head of Tavernier Creek has a clear span of 25' and a clearance at H.W. of 7'. This bridge is fixed on masonry piles. The highway bridge has a clear span of 36 feet with a clearance at H.W. of 7 feet except for two "I" beams in the center span whose clearance is 5½ feet. This bridge is wood on piles.

The chart location of Rock Harbor should be moved to the position of Square Tower 1934 as this building is the Post Office and present center of the community.

Respectfully submitted,

H. J. Seaborg
H. J. Seaborg,
Deck Officer, C&GS.

Approved and Forwarded:

E. R. McCarthy
E. R. McCarthy,
Lieut.(j.g.) C&GS,
Chief of Party.

LIST OF BEACONS TOPO SHEET "A"

Miami, Fla.

March

5

E. R. McCarthy

Beacon 41	Lighted	25-05	868	80-28	77	N.A.	Topo	1249
Beacon 48	Red	25-05	911	80-28	111	N.A.	Topo	1249
Beacon 50	Lighted	25-05	722	80-28	163	N.A.	Topo	1249
Beacon 43	Black	25-05	685	80-28	122	N.A.	Topo	1249
Beacon 52	Lighted	25-04	1067	80-29	397	N.A.	Topo	1249
Red & Black Beacon Topo "Tri"		25-04	569	80-29	353	N.A.	Topo	1249
Beacon 45	Lighted	25-03	1055	80-30	1344	N.A.	Topo	1249
Beacon 54	Lighted	25-02	102	80-31	242	N.A.	Topo	1249
Beacon 53	Red	25-01	1702	80-31	329	N.A.	Topo	1249
Beacon 47	Lighted	25-01	825	80-31	1645	N.A.	Topo	1249
Beacon 49	Black	25-01	776	80-32	16	N.A.	Topo	1249
Beacon 51	Black	25-01	692	80-32	112	N.A.	Topo	1249
Beacon 58	Red	25-01	856	80-31	1564	N.A.	Topo	1249
Beacon 60	Red	25-01	805	80-32	36	N.A.	Topo	1249
Beacon 62	Lighted	25-01	719	80-32	132	N.A.	Topo	1249
Beacon 53	Lighted	25-00	1731	80-32	1526	N.A.	Topo	1249
Beacon 55	Lighted	25-00	738	80-33	764	N.A.	Topo	1249
Beacon 64	Red	25-00	733	80-33	806	N.A.	Topo	1249

Landmarks

Top Sheet "A"

Miami, Fla.

March

5

E. R. McCarthy

TOWER

(Tri. Square Tower)

25-04 1394.9 80-27 865.1 N.A. Tri 1249

MEMORANDUM BY CHIEF OF PARTY.

The field work was done under the direction and supervision of Lt. Comdr. H.A.Cotton and the inking and office work was done under my supervision.

E.R. McCarthy

E.R. McCarthy
Lieutenant (j.g.) C. & G.S.
Chief of Party.

LIST OF BEACONS TOPO SHEET 'A'

Page 1 of 1 pages

Miami, Florida

April 17, 1935

E.R.McCarthy, Lieut. (j.g.)

Beacon 41	Lighted	25-05	868	80-28	77	N.A.	Topo	1249
Beacon 48	Red	25-05	911	80-28	111	N.A.	Topo	1249
Beacon 50	Lighted	25-05	722	80-28	163	N.A.	Topo	1249
Beacon 43	Black	25-05	665	80-28	122	N.A.	Topo	1249
Beacon 52	Lighted	25-04	1067	80-29	597	N.A.	Topo	1249
Red & Black Beacon								
Topo. Sta. 'TRI.'		25-04	569	80-29	353	N.A.	Topo	1249
Beacon 45	Lighted	25-03	1055	80-30	1344	N.A.	Topo	1249 - 1250
Beacon 54	Lighted	25-02	102	80-31	242	N.A.	Topo	1249 - 1250
Beacon 56	Red	25-01	1702	80-31	329	N.A.	Topo	1249 - 1250
Beacon 47	Lighted	25-01	825	80-31	1645	N.A.	Topo	1249 - 1250
Beacon 49	Black	25-01	776	80-32	16	N.A.	Topo	1249 - 1250
Beacon 51	Black	25-01	692	80-32	112	N.A.	Topo	1249 - 1250
Beacon 58	Red	25-01	856	80-31	1664	N.A.	Topo	1249 - 1250
Beacon 60	Red	25-01	805	80-32	36	N.A.	Topo	1249 - 1250
Beacon 62	Lighted	25-01	719	80-32	132	N.A.	Topo	1249 - 1250
Beacon 53	Lighted	25-00	1751	80-32	1525	N.A.	Topo	1249 - 1250
Beacon 55	Lighted	25-00	738	80-33	764	N.A.	Topo	1249 - 1250
Beacon 64	Red	25-00	733	80-33	806	N.A.	Topo	1249 - 1250

These beacons have been plotted and their positions
verified in the field.

E.R.McCarthy, Lieutenant (j.g.) C. & G.S.
Chief of Party

Topo Sheet 'A'

Miami, Florida

April 17.

5

E.R.McCarthy, Lieut. (j.g.)

TOWER
(Square Tower)

25 -04 1394.9 80-27 663.1 N.A. Trian-
gulation 1249

This landmark has been inspected from the water area for
visibility.

E.R.McCarthy
Lieutenant (j.g.) C. & G.S.
Chief of Party.