

8802

Diag'd. on Diag. Ch. 1249

1249

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey PHOTOGRAMMETRICField No. T-8802 Office No. _____

LOCALITY

State FLORIDAGeneral locality FLORIDA S.E. COASTLocality ELLIOTT KEY1947

CHIEF OF PARTY

Lieut. Comdr. George E. Morris, Jr.

LIBRARY & ARCHIVES

DATE June 28, 1948

2088

DATA RECORD

T- T-8802

Quadrangle (II): Elliot Key, Fla.

Project No. (II): Ph-10(46)

Field Office: Stuart, Fla.

Chief of Party: Ross A. Gilmore
Lieut. Comdr.

Compilation Office: Tampa, Fla.

Chief of Party: George E. Morris, Jr.
Lieut. Comdr.

Instructions dated (II III): 21 October 1946

Copy filed in ^{Div. of Photogrammetry Office} Descriptive
Report No. ~~T~~ (VI) Files

Completed survey received in office: 23 Jan 48

Reported to Nautical Chart Section:

Reviewed: 12 Apr 48

Applied to chart No. 1249

Date: 10/17/47

Redrafting Completed:

Registered: 10 June 48

Published:

Compilation Scale: 1:20,000

Published Scale: 1:24,000

Scale Factor (III): None

Geographic Datum (III): N.A. 1927 ✓

Datum Plane (III): M.S.L. ✓

Reference Station (III): Ott, 1930 ✓

Lat.: 25° 26' 36."745 (1130.7m) Long.: 80° 12' 05"589 (156.2m)

Adjusted ✓

~~1000000000~~

State Plane Coordinates (VI): Florida East Zone

X = 763,483.49 Feet

Y = 404,220.88 Feet

Military Grid Zone (VI)

PHOTOGRAPHS (III)

<u>Number</u>	<u>Date</u>	<u>Time</u>	<u>Scale</u>	<u>Stage of Tide</u>
16317	27 April	0853	1:20,000	1.0
16318	1946	0854	"	"
16319	"	0855	"	"
16320	"	0856	"	"
16321	"	0857	"	"

Tide from (III): Adams Key - Ref. Sta. Mayport

Mean Range: 1.3

Spring Range: 1.6

Camera: (Kind or source) U.S.C. & G.S. 9-Lens, 8 $\frac{1}{4}$ " focal length

Field Inspection by: J.H. Clark
J.E. Hundley
I.I. Saperstein

date: Dec. 1946
Feb. 1947

Field Edit by: J. D. Weiler

date: Nov. 1947

Date of Mean High-Water Line Location (III): Dec. 1946 - Feb. 1947

Projection and Grids ruled by (III) T.L.J. Wash. Office date: Dec. 1946

" " " checked by: " " " date: Dec. 1946

Control plotted by: R.J. Pate date: 6 Feb. 1947

Control checked by: R. Dossett - M.M. Slavney date: 7 Feb. 1947

Radial Plot by: M.M. Slavney date: 21 March 1947

Detailed by: C.H. Baldwin date: April-July 1947

Reviewed in compilation office by: J.A. Giles date: July 1947

Map Manuscript
Elevations on ~~Field Edit Sheet~~ J.A. Giles
checked by:

date: July 1947

STATISTICS (III)

Land Area (Sq. Statute Miles): 4.2

Shoreline (More than 200 meters to opposite shore): 28.7 Statute Miles

Shoreline (Less than 200 meters to opposite shore): 2.5 " "

Number of Recoverable Topographic Stations established: 26

Number of Temporary Hydrographic Stations located by radial
plot: None

Leveling (to control contours) - miles: 10.5

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:

MAP T-8802

PROJECT NO. Ph-10(46)

SCALE OF MAP 1:20,000

SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ψ -COORDINATE LONGITUDE OR χ -COORDINATE	DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS
				FORWARD	(BACK)		FORWARD	(BACK)	
Sands Cut 1849	G.P. N. A. Access. No. 509	1927	25° 29' 35" 291 80 10 37.045				1085.9 (760.3) 1034.7 (641.1)		
Bache Shoal Beacon No. 6 ** 1934	392	"	25 29 45.138 80 08 39.407	Destroyed			1388.9 (457.4) 1100.6 (575.2)		
Log, 1908	380	"	25 29 07.782 80 10 35.703				239.5 (1606.8) 997.3 (678.6)		
Beacon No. 9 ** 1934	382	"	25 29 10.234 80 08 56.668	Destroyed (Replaced by Light)			314.8 (1531.5) 1591.2 (84.7)		
Triumph Reef Beacon No. 10 ** 1934	380	"	25 28 44.303 80 06 55.568	Falls off sheet			1363.2 (483.0) 1552.1 (123.8)		
Beacon No. 11 ** 1934	382	"	25 28 38.407 80 09 14.263	Destroyed			1181.8 (664.5) 398.4 (1277.6)		
Ell, 1930	390	"	25 28 16.929 80 11 32.795				520.9 (1325.4) 916.1 (760.0)		
Beacon No. 10 ** 1934	382	"	25 28 07.693 80 10 01.733	Destroyed			234.0 (1612.3) 48.4 (1627.7)		
Point Adelle 2, 1908	380	"	25 27 12.771 80 11 23.620				393.0 (1453.3) 659.9 (1016.4)		
Beacon No. 13 ** 1934	382	"	25 26 52.958 80 09 52.076	Lost '35			1629.6 (216.7) 1455.0 (221.4)		
Beacon No. 15 ** 1934	382	"	25 26 18.642 80 09 53.735	Destroyed			573.6 (1272.6) 1501.4 (175.1)		
Beacon No. 12 ** 1934	382	"	25 26 20.290 80 10 20.028	Lost			624.3 (1221.9) 587.6 (1089.0)		

1 FT. - 3048006 METER Plotted R. J. Pate

COMPUTED BY: R. J. Pate

DATE 17 Jan., 1947

checked R. Dossett

CHECKED BY: R. Dossett

DATE 2/7/47

DATE 18 Jan, 1947

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR ψ -COORDINATE LONGITUDE OR x -COORDINATE		DISTANCE FROM GRID IN FEET, OR PROJECTION LINE IN METERS		DATUM CORRECTION	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS		FACTOR DISTANCE FROM GRID OR PROJECTION LINE IN METERS	
					FORWARD	(BACK)		FORWARD	(BACK)	FORWARD	(BACK)
- Ott, 1930	G. P. N.A. Access. No. 1927 389	"	25° 26' 36.745	80 12 05.589				1130.7 (715.5)			
- Elliott, 1908	380	"	25 25 02.402	80 12 12.977				156.2 (1520.3)			
Elliott Key Beacon No. 1934	383	"	25 25 10.718	80 10 47.534	Destroyed			73.9 (1772.3)			
- Rubi, 1930	322	"	25 23 40.504	80 14 59.104				362.7 (1314.1)			
Ton (Sunderland) 1934	384	"	25 22 57.638	80 13 45.801	Lost			329.8 (1516.4)			
Ton 1934	384	"	25 22 57.638	80 13 45.801				1328.4 (348.4)			
- Beagon No. 1934	383	"	25 23 05.140	80 11 26.602	Destroyed (Replaced by Light)			1246.3 (600.0)			
- Beagon No. 1934	383	"	25 22 49.397	80 11 10.496				1652.1 (25.0)			
Beacon No. 1934	383	"	25 23 01.193	80 10 51.340	Destroyed			1773.5 (72.7)			
Beacon No. 1934	383	"	25 22 52.186	80 10 37.926				1280.3 (397.0)			
Beacon No. 1934	383	"	25 22 42.505	80 10 13.375	Lost '35			1766.9 (79.3)			
- Ajax, 1934	382	"	25 24 10.042	80 07 57.057				1249.0 (428.3)			

FIELD INSPECTION REPORT
TO ACCOMPANY QUADRANGLE T-8802

ELLIOTT KEY

PROJECT Ph-10(46)

28 April 1947

1 - DESCRIPTION OF THE AREA

This standard $7\frac{1}{2}$ minute quadrangle (N2522.5 - W8007.5/7.5) lies in the southern part of Dade County, Florida about 13 miles east of Homestead, on the east side of Biscayne Bay. Elliott Key, one of the larger of the Florida Keys, is included in the quadrangle along with several smaller keys and parts of medium sized keys. The entire area within the quadrangle is accessible only by boat. Elliott Key lying approximately in the center of the quadrangle, is about 7 miles long, and varies from $\frac{1}{4}$ mile to $\frac{1}{2}$ mile in width. None of the land within the quadrangle is under cultivation of any sort.

The shoreline in general is mangrove-covered coral or mangrove growing up in the water. Most of the sand beaches in the area are on the ocean side of the keys, and will be found on the northern portion of Elliott Key and on that portion of Sands Key which lies within the quadrangle.

2 - COMPLETENESS OF FIELD INSPECTION

Field inspection on the quadrangle has been completed, the greater part of which was actually shoreline inspection. Field inspection is shown on the three photographs: 16318, 16319 and 16320.

3 - INTERPRETATION OF PHOTOGRAPHS

Almost the whole of the land area is woods; the darkest tone being mangrove and the medium woods tone consisting of jungle growth.

4 - HORIZONTAL CONTROL

All known horizontal control, consisting of U.S.C. & G.S. triangulation only, was searched for. Triangulation station SANDS CUT, 1849, was remarked and 2 reference marks established. Triangulation station RUBI, 1930 was remarked.

Five U.S.C. & G. S. stations were recovered and identified on the photographs, three by the substitute-point method and two by picking direct. Station RUBI, which was picked direct, is in a small cove and can be seen on the photographs. Station OTT was also picked direct.

U.S.C. & G.S. stations recovered but not identified, and reasons therefore, are:

1. ELL, 1930: could not identify any object on the photograph to use for substitute station.
2. PT. ADELIE 2, 1908: could not identify any object on the photograph to use for substitute station.
3. ELLIOTT, 1908: could not identify any object on the photograph to use for substitute station.

Control identification is on photographs Nos. 16318, 16319 and 16320.

5 - VERTICAL CONTROL

A supplemental level line of approximately $10\frac{1}{2}$ miles was run from Tidal B.M. 2 on Adams Key to Tidal B.M. 2 on Ragged Key No. 5, setting intermediate elevations at useful points. Closure was 0.33 feet low. Intermediate elevations were given a graduated adjustment. All elevations linked on the photographs, including those of Tidal Bench Marks, are referred to half-tide or mean sea level.

Level notes are recorded in Vol. 2, Wye leveling, Ph-10(46).

6 - CONTOURS AND DRAINAGE

Contouring was done with planetable on the three photographs numbered as follows: 16318, 16319 and 16320. Areas in which no contours or elevations are shown on the photographs were, nevertheless, inspected for a possible contour. One planetable loop was run from EK-1 on Elliott Key, to Old Rhodes Key, to Porgy Key, and back to EK-1, with a closure of 0.4 ft. A loop was run with wye level from Adams Key to Totten Key and return to establish a spot elevation on Totten Key. This loop was not recorded as a level line, the wye level being used to replace the alidade because of the long shots necessary.

7 - MEAN HIGH-WATER LINE

The apparent shoreline was delineated along the outside of the mangrove; the actual MHWL was shown on the fast land. Tick marks were shown on the photograph at the beginning and ending of the fast land.

In general, a boat was used and passed as close inshore as possible to delineate the MHWL.

8 - LOW-WATER LINE

In some cases where the mangrove grows up from the water, the low water line, as well as the high-water line, is inside the apparent shoreline indicated on the photographs. Where the low-water line appears, it has been marked with the approximate low water line symbol.

9 - WHARVES AND SEORLINE STRUCTURES

The wharfs within the area of the quadrangle are as follows:

1. Pier on the S side of Adams Key (Photo 16318).
2. Pier on the N side of Porgy Key (Photo 16318).
3. Pier on the W side of Elliott Key, about 2 miles N of the S end of the key (Photo 16319).
4. Pier on the W side of Elliott Key, about 3 miles S of the N end of the key (Photo 16319)

All piers are noted on the photographs.

There is a private, concrete seaplane ramp on the south side of Adams Key.

10 - DETAILS OFFSHORE FROM HIGH-WATER LINE

Further investigation should be made by the next hydrographic party of the shoal area, baring about 6" at low water, just west of Adams Key.

The charted wreck on the west side of Elliott Key, Lat. 25°29.0, Long. 80°11.2' (Charts 849 and 1249) should be deleted, since no visible remains exist.

The piling charted (chart 1249) in the vicinity of Pacific Reef Daybeacon 3 does not show above the water, and no underwater remains were detected; however, further investigation is recommended to determine if underwater remains exist.

A large pile on Ajax Reef was located by theodelite cuts.

11 - LANDMARKS AND AIDS TO NAVIGATION

Two "LONE PLAM TREE" landmarks (chart 1249) have been destroyed and are recommended for deletion. A building recommended for charting as a landmark is on the east side of Elliott Key. Refer to the Project Report on Landmarks for further details. *Report is filed in File Section, Div. of Photogrammetry.*

All fixed aids to navigation within the quadrangle limits, including a number of private aids in Caesar Creek, were located. For a list of aids and methods of location see the Project Report on Fixed Aids to Navigation.

See also Chart Letter No. 591 (1947).

12 - HYDROGRAPHIC CONTROL

No hydrographic signals were required on this project.

13 - LANDING FIELDS AND AERONAUTICAL AIDS

A private seaplane ramp will be noted on the south side of Adams Key. The ramp is concrete.

Other than the ramp, there are no landing fields nor aeronautical aids within this quadrangle.

14 - ROAD CLASSIFICATION

The road to be found on Elliott Key is shown, where passable, as class 4. This is a single-lane "woods" road, the only road within the quadrangle.

15 - BRIDGES

There are no bridges over navigable waterways within the area of the quadrangle.

16 - BUILDINGS AND STRUCTURES

All buildings to be shown are circled on the photograph in red ink, or identified as topographic stations.

Buildings not to be shown have been deleted in green.

17 - BOUNDARY MONUMENTS AND LINES

This quadrangle lies entirely within Commissioners District 4, Dade County, Florida. The only boundary lines within the quadrangle are parts of the limits of Election Precincts Nos. 90, 91, and 92. Refer to the Special Report on Boundaries, Project Ph-10 in File (46), for location of these lines.

*Section, Div. of
Photogrammetry.*

18 - GEOGRAPHIC NAMES

Geographic Names will be the subject of a Special Report for the entire Project. *Filed in Geographic Name Section, Div of Nautical Charts.*

19 - TOPOGRAPHIC STATIONS

Permanent recoverable topographic stations were established using a standard bronze topographic disc, or a natural object, such as a gable of a house or chimney. Stations were spaced so that, with the triangulation previously established, topographic control stations are available at about 1-mile intervals.

20 - SYMBOLS

Symbols may be found on the back of Photo 16318.

21 - PUBLIC LAND LINES

No section corners were recovered within this quadrangle. In quiry from engineers and surveyors, as well as the few inhabitants, disclosed the belief that none of the original corners are recoverable. No roads nor other photographic details were found which could be noted as following section lines. An approximation of the original sub-division might be made by matching, as nearly as possible, the shoreline on the original township plats to the shoreline of this quadrangle.

Irving I. Saperstein
Irving I. Saperstein, Engr. Draft.

James H. Clark
James H. Clark, Engr. Aid

James E. Hundley
James E. Hundley, Phot. Aid

Approved and Forwarded:

Ross A. Gilmore
Ross A. Gilmore, Chief of Party

COMPILATION REPORT
TO ACCOMPANY
ELLIOT KEY QUADRANGLE T-8802

26 and 27 CONTROL AND RADIAL PLOT:

← Filed in Div. of Photogrammetry, General Files.

A special report was prepared by Mr. M. M. Slavney, Photogrammetric Engineer, and submitted to the Washington Office 29 May, 1947.

Station TON, ("ED") 1934 was recovered and form 526 submitted for same. According to Descriptions of Triangulation Stations, No. 424 page 7, this station is a marked Topographic Station located by plane table. Due to the foregoing information, this station is being shown on the map manuscript with a $2\frac{1}{2}$ mm circle.

28 DELINEATION:

The nine lens photographs covering this quadrangle were of good scale.

The field inspection was complete. It is on one road within the limits of this quadrangle. It is on Elliot Key and extends northward from the southern end of the key about $\frac{4}{5}$ of its length. The southern portion of this road (from approx. lat $25^{\circ} 23' 40''$ to lat. $25^{\circ} 24' 50''$) according to the field inspector is impassable even on foot, but it is believed to be of enough importance as a topographic land mark, to be shown as an abandoned road.

29 SUPPLEMENTAL DATA:

None

30 MEAN HIGH WATER LINE:

See field inspection report item No. 7

31 LOW WATER AND SHOAL LINES:

See field inspection report item No. 8

32 DETAILS OFFSHORE FROM HIGHWATER LINE:

See field inspection report item No. 10

33 WARVES AND SHORELINE STRUCTURES:

See field inspection report item No. 9

34 LANDMARKS AND AIDS TO NAVIGATION:

See field inspection report item No. 11. The private aids along the channel at Caesar Creek have been plotted and assigned the same numbers as those given them by the field party; for identification only.

This station, 32 meters from triangulation station Tonn, 1934, was located by theodolite with third order accuracy. (azimuth and distance) It has been shown by the triangle symbol on the manuscript. J.R.

35 HYDROGRAPHIC CONTROL:

None required for this project.

36 LANDING FIELDS AND AERONAUTICAL AIDS

See field inspection report item No. 13

37 PUBLIC LAND LINES:

See field inspection report item No. 21. No attempt was made to establish section lines in this area. See special report submitted by Mr. William A. Rasure, Photogrammetric Engineer, 9 July, 1947 with quadrangle T-8803.

38 COMPARISON WITH EXISTING TOPOGRAPHIC QUADRANGLES:

There are no existing topographic quadrangles in this area.

39 COMPARISON WITH NAUTICAL CHARTS:

A comparison was made with U. S. C. & G. S. nautical charts No. 848 and 849, both bearing print date of 27 October 1945. No discrepancies were noted; the shoreline generally being in good agreement.

Respectfully submitted,

C. H. Baldwin

C. H. Baldwin,
Engr. Draftsman

Approved and forwarded:

George E. Morris, Jr.
George E. Morris, Jr.
Chief of Party.

FIELD EDIT REPORT

QUADRANGLE T-8802

"ELLIOTT KEY"

PROJECT Ph-10 (46)

The Field Edit of this quadrangle was completed during November, 1947 by John D. Weiler, Photogrammetrist.

46. METHODS

In field editing the map manuscript, a small launch was used for shoreline edit. Questionable areas on the Keys were inspected by walking if the discrepancy was not visible from the boat. All aids to navigation were visually verified. Data added to the map manuscript were either plotted from topographic features or cut in by planetable methods.

47. ADEQUACY OF THE MAP MANUSCRIPT

The original inspection, plotting of aids, and the compilation of this quadrangle ~~were~~ well done. Most of the field edit notes on the manuscript copy are self explanatory.

Two pile channel markers at the west entrance to Caesar Creek were relocated, and one marker has been destroyed. One new channel marker on the east side of Caesar Creek was located.

Caesar Creek Lt. 16 was destroyed by the September, 1947 hurricane and has been replaced in a new position. This light was located during the field edit by planetable and forms 524 and 567 are being submitted. Refer to Chart Letter No. 100 (1948).

The impassable section of the road on Elliott Key is too obsolete to serve as a landmark and should be deleted.

Form 526 for 1934 triangulation stations is submitted as requested in the descriptive report.

All roads were reclassified according to Photogrammetry Instructions No. 10 and amendment dated 24 October 1947.

48. VERTICAL ACCURACY TEST

No vertical accuracy tests were specified for this project.

49. PUBLIC LAND LINES

See Review Report

No information could be obtained for reconstruction of section lines in this quadrangle and it is recommended that they be omitted. See Special Report by William A. Rasure, incorporated with descriptive report for Quadrangle, T-8803. It was very difficult to find anyone other than strictly local people to pass judgement on the completeness

All changes in aids to navigation noted by the Field Edit were reported to Nautical Charts 4 Feb 1948 JF

of the map manuscript; however, it was reviewed by Mr. John Arkema, a fisherman residing on Elliott Key for the last twenty years. He found no errors,

John D. Weiler

John D. Weiler
Photogrammetrist

Supervised:

William A. Rasure

William A. Rasure
Photogrammetric Engineer

Approved and Forwarded

Ross A. Gilmore

Ross A. Gilmore
Chief of party

GEOGRAPHIC NAMES

Survey No.

T-8802

ELLIOTT KEY, Fla.

1 Name on Survey

On Chart
No.

On previous survey
No.

On U. S. quadrangle
Maps

From local
information

On local Maps

P. O. Guide or Map

Rand McNally Atlas

U. S. Light List

A

B

C

D

E

F

G

H

K

Florida

USGB

1

Dade County

2

Atlantic Ocean

3

Biscayne Bay

USGB

4

Elliott Key

5

Ajax Reef

6

Pacific Reef

7

Pacific Reef Channel

8

Old Rhodes Key

9

Totten Key

10

Hurricane Creek

11

Porgy Key

12

Caesar Creek

13

Caesar Rock

14

Christmas Point

15

Meigs Key

16

Raid Key

17

Rubicon Keys

18

Adams Key

19

Petrel Point

20

Sawyer Cove

21

Billys Point

22

Margot Fish Shoal

23

Point Adelle

24

Sea Grape Point

25

Coon Point

26

Sands Cut

27

GEOGRAPHIC NAMES

Survey No.

T-8802

2 Name on Survey

On Chart
No.

On previous survey
No.

On U. S. quadrangle
Maps

From local
information

On local Maps

P. O. Guide or Map

Rand McNally Atlas

U. S. Light List

A

B

C

D

E

F

G

H

K

Sands Key

1

Bache Shoal

2

3

4

Names underlined in red are
approved. 4/9/48 L. Heck.

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Division of Photogrammetry
Review Report of
Topographic Map Manuscript T-8802

Subject numbers not used in this report have been adequately covered in other parts of the Descriptive Report.

26. Control.--Triangulation station AJAX, 1934 (not described) has not been shown on the map manuscript, although it has not been reported lost or destroyed. The field party located a pile within 1.5 meters of the station's position, but were unable to prove it to be the station. The pile was made a recoverable Topographic station, and has been shown as such on the map manuscript.

37. Public Land Lines.--Additional information, received after Field Edit, made it possible to show the public land lines on the map manuscript. Section lines whose positions were in some doubt were shown by dashed lines. Refer to the Review Report of T-8806 for sources of information.

43. Comparisons with Previous Surveys.--This survey supersedes:

T-408	(1853)	1:20,000
T-4600	(1928)	1:20,000


in all common areas.

45. Comparison with Nautical Charts.--Prior to review, this survey was examined in the Division of Nautical Charts for critical changes. No changes were made, during review, affecting the charts.

48. Accuracy.--This map complies with national map accuracy standards.

49. Overlay.--An overlay has been prepared showing control, etc., and the new format for quadrangles. This map will be edited and published by the Geological Survey.

Reviewed by:



Jack L. Rihn
12 April 1948

APPROVED:

S. V. Griffith
Chief, Review Section
Div. of Photogrammetry

R. E. Dunning
Chief, Nautical Chart Branch
Division of Charts

K. T. Adams
Chief, Div. of Photogrammetry

C. H. Green
Chief, Div. of Coastal
Surveys

NAUTICAL CHARTS BRANCH

SURVEY NO. 7-8802

Record of Application to Charts

[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.