

5547

5547

Form 504
Rev. Dec. 1933
DEPARTMENT OF COMMERCE
U.S. COAST AND GEODETIC SURVEY
R. S. PATTON, DIRECTOR

DESCRIPTIVE REPORT

Photo
Topographic
Hydrographic

Sheet No. T-5547

State Florida

LOCALITY

Florida Keys

Content Keys to Barracuda Keys

~~1934~~
Photos taken Jan 15 + 18, 1935

CHIEF OF PARTY

E. R. McCarthy

Applied to C.M. 1251 - Nov. 1938 - O. S. B.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.

TOPOGRAPHIC TITLE SHEET

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. _____

REGISTER NO. T-5547

T5547

State Florida

General locality Florida Keys

Locality Content Keys to Barracuda Keys

Scale 1:20,000 Date of photographs ~~survey~~ January, 1935

Vessel Shore Party No. 14.

Chief of party E. R. McCarthy

Surveyed by See data sheet attached to descriptive report.

Inked by " " " " " " " "

Heights in feet above _____ to ground to tops of trees

Contour, Approximate contour, Form line interval _____ feet

Instructions dated November 17, 1933

Remarks: Compiled from air photographs at a scale of 1:20,000

for reproduction by the photo-lithographic process.

DATA SHEET

Sheet Register No. T-5547

Portion of work	Performed by	Date completed
Projection made by	Washington Office	March, 1937
Projection checked by	E. R. M.	April 22, 1937
Control plotted by	E. R. M.	April 22, 1937
Control checked by	P. A. W.	April 24, 1937
Radial plot developed by	J. C. M.	September 8, 1937
Compiled in pencil by	J. C. M.	November 29, 1937
Inked by (shoreline)	D. R. S.	December 28, 1937
(symbols)	J. C. M.	January 14, 1938
(shoals)	D. R. S.	February 26, 1938

STATISTICS

Statute miles of shoreline, keys	53.9
Statute miles of shoreline, ponds and creeks	<u>2.6</u>
Total statute miles of shoreline	56.5
Area, square statute miles, keys	5.3
Area, square statute miles, shoals	<u>18.2</u>
Total area, square statute miles	23.5

DESCRIPTIVE REPORT

to accompany

TOPOGRAPHIC MAP

REGISTER NO. T-5547

~~CONTENTS~~ KEYS TO ABARRACHUDA KEYS

FLORIDA KEYS

FLORIDA

1938

Scale of compilation, 1:20,000

DESCRIPTION OF AREA:

The topography shown on this map drawing lies on the northern edge of the group of keys forming the southwestern tip of the Florida Keys. It is an area characterized by many shoal banks and slightly deeper channels. The keys in the area of the sheet are small in area and are scattered. The largest and most important key in this locality is Johnston^{Key}. Here is found most of the high land in the area covered by this sheet. With the exception of Raccoon Key, a majority of the areas of the other keys are made up of a heavy growth of mangrove or mud flats that are covered with a scattered growth of short mangrove and grass. The north shorelines of the keys that border on the Gulf of Mexico are generally higher because a narrow sand beach has been built up at these localities.

This area of the Florida Keys is seldom visited by people other than spongers and fishermen. The area is used in sponging operations and as an anchorage by the spongers and fishermen. At one time, Johnston Key was occupied and farmed to some extent. A house, in a dilapidated condition, still stands near the southwest point of the key.

The Inside Route cuts across the southeast corner of this sheet. This route is little used by people who do not have local knowledge of the area. Most of the beacons are gone and the channel is only good for a draft of two feet or less. A short section of dredged channel has been dug for this route on the east side of Sugarloaf Channel.

GENERAL INFORMATION:

The main flight of five lens air photographs covering the area

Note The projection on T 5547 has been changed in the office using the N.A. 1927 adjusted triangulation positions to shift to the N.A. 1927 datum. The parallels of latitude have been shifted north 26 meters and the parallels meridians were not changed as the difference of 3 meters or 0.015 mm on the 1:20,000 scale was too small to change. applied by C.R. Wittman and checked by B.G. Jones

B.G. Jones 1/19/39

of this sheet is centered over the north edge of the shoal areas. In this flight Photo. No. 272 is centered near the east neat line while Photo. No. 299 is centered near the west neat line. Photos. No. 181 and 182 are centered in the extreme southeast corner of this sheet. These two photographs are a part of a flight through the center of this group of keys.

All of these five lens photographs were obtained during January, 1935.

CONTROL:

All of the triangulation stations used to control the compilation of this sheet was established during 1934 and 1935 by the party of W. H. Bainbridge. These positions are on the North American Datum and as they were obtained from the field computations the scheme is unadjusted.

** Refer to note on opposite page.*

The stations located in the area furnished adequate control for the radial plot.

COMPILATION METHODS:

The compilation methods as described in the 'Notes on the Compilation of Planimetric Line Maps' were used in the survey of this sheet.

To develop the radial plot for this sheet it was necessary to use the sheet to the south as a 'dog ear'. This was a little difficult because the scales of these two sheets were slightly different and it was found necessary to change the adjustment of the two sheets several times in carrying the plot forward.

Over-lapping points in the water area were difficult and almost impossible to pick between these two flights of photographs. The water areas in the 'A' wings of the northern flight did not photograph because these areas were light struck. However, enough points were picked to tie the two flights together and no adjustment was necessary.

INTERPRETATION OF PHOTOGRAPHS:

The shoreline detail and other detail of importance for charting appeared clear on the photographs covering the area of this sheet.

In order to delineate the areas that are bare at low water, the shoal soundings and minus soundings were transferred from the contemporary hydrographic sheets covering the area of this sheet from Johnston Key westward. As these sheets were on a scale of 1:10,000 it was necessary to reduce them to the scale of the map drawing. This was done on the projector. With these soundings on the sheet an approximation of the

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of the areas bare or awash at low water were obtained from the photographs. Only the areas covered by the hydrographic sheets are fully covered in this manner but there are several areas which are apparently bare that have been shown on the sheet which are outside the limits of the hydrographic surveys. It might have been possible to obtain the detail in other areas of this sheet without the aid of the hydrographic surveys but this was not done because time was limited.

The delineation of the shoal lines were found to be more difficult in the area of this sheet than in other areas of the project. This was probably due to the fact that the waters of the area are generally shoal and the shoal areas do not have a definite edge. For this reason some of the shoal areas have been left open on the map drawing. At other places the delineation of the shoal areas are very definite and little revision will be found to be needed after the receipt of the hydrographic sheet.

INFORMATION FROM OTHER SOURCES:

With the exception of the investigation to determine the geographic names, no information from other sources was used in the compilation of this sheet.

COMPARISON WITH CONTEMPORARY SURVEYS:

There are no contemporary topographic surveys of graphic control surveys located in the area covered by this map drawing.

COMPARISON WITH PREVIOUS SURVEYS:

A comparison of the topography of this area as shown on the present edition of the published chart shows fair agreement in regard to the representation of detail. No comparison was made for agreement in location because only the enlargement of the previous surveys were available in the field office.

Differences are noted in some of the detail in the vicinity of Johnston Key. One large key is shown to the east of this key. This key is actually divided into two parts. Differences are also noted in the sizes and shapes of the mangrove keys in the Johnston Key Mangroves group. On the chart these are shown to be much larger than they actually are on the present compilation.

LANDMARKS:

There are no prominent landmarks located in the area covered by this map drawing.

MISCELLANEOUS:

Only the beacons that were located by triangulation have been

shown along the Inside Route. A small iron pipe was used for these beacons and at the present time most of them have rusted and broken off at the water line. On the few that remain the markings have disappeared and it is almost impossible to identify them because the original location was not so good. Local spongers say that this marked route does not show the best water and they seldom if every use the channel atball.

GEOGRAPHIC NAMES:

Only three of the geographic names that are charted at present on the published chart are in local use. These are as follows:

JOHNSTON KEY
CONTENT KEYS
RACCOON KEY

Two other features which are correctly charted at present and appear only partially on this sheet are KNOCKEMDOWN KEY and WATER KEYS.

CRANE KEY and LITTLE CRANE KEY are names in local use. The first is charted as Eagle Key on the present chart while the latter is not named. These names are from the birds that are found in abundance in this isolated locality.

BAY CUDJOE KEY is the name in most local use but the key is also known as Inside Cudjoe Key, Outer Cudjoe Key and Bayway Cudjoe Key. The origin of the name is from Cudjoe Channel and that it is considered to be, and perhaps correctly, on the southern edge of Florida Bay. This name or one of the variations was found to be in strong local use and no verification could be found for Sawyer Key as it now appears on the chart and Sawyer's Key as it appears in the land plats of Monroe County.

The large key lying to the southeast of Bay Cudjoe Key is known locally as RIDING KEY. The origin of the name is said to be due to the fact that the fishermen and spongers who frequent this area are in a habit of riding out blows in the vicinity of this key.

It was impossible to determine the origin of TARPON BELLY KEYS but it was found that the name is used generally in the locality. The name, no doubt, has some reference to the tarpon which are said to run in large numbers in Cudjoe Channel. They are now charted as Michael Key.

BIG SWASH KEYS and LITTLE SWASH KEYS are so named because they are low and worthless. These two names are not used to any great extent but they have been verified by two or more of the local spongers. Big Swash Keys are charted as Budd Keys on the present chart and on the land plats of Monroe County but this name could not be verified.

PUMPKIN KEY is believed to be correctly charted although some of the local spongers and fishermen include the keys to the northwest

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in this group. The most intelligent of the spongers have informed the writer that Pumpkin Key was the one that lies closest to the waterway. It might be added that the local pronunciation is 'punkin'.

The limits of the BARRACUDA KEYS are believed to be as shown on the name sheet. It was impossible to obtain a definite statement from the local inhabitants. The area is little frequented and the name is seldom used. One of the keys near the west end of the group is now charted as Marvin Key. This name could not be verified and it is apparently not in use at the present time. The name is also found on the land plats of Monroe County.

JOHNSTON KEY MANGROVES and CRANE KEY MANGROVE take their names from the names of the keys nearby. Crane Key Mangrove is a very good landmark in the area.

TORCH KEY MANGROVES lie off the northwest point of Big Torch Key and from this fact derive their name.

SUGARLOAF CHANNEL and CUDJOE CHANNEL are names in local use. Sugarloaf Channel is also known to some extent as Johnston Key Channel at this northern end but because the name is well established near the railroad and highway crossing to the south, Sugarloaf Channel is recommended for charting. Likewise, Cudjoe Channel is known as Kemp Channel at the southern end but both of these names are well established and recommendations are that they be retained. (See the descriptive report for Sheet Register No. T-5545)

CUDJOE BASIN is in some local use for the name of the basin of slightly deeper water at the locality. The local use in this case is Cudjoe Lake but this designation has not been used since the word 'lake' has been removed from some of the names sheets covering the areas of Florida Bay.

In preparing the names sheets for this project, Florida Bay has been considered to end at the approximate locality of Big Spanish Channel and this sheet is considered to border on the Gulf of Mexico. The principal basis for this contention is the title of Chart 1251 which shows the area to be 'United States - Gulf Coast etc.'. It is noted that the inside route chart, Chart 3261, shows this body of water to be Florida Bay. If the designation as shown on the name sheet is in error, it is respectfully requested that it be changed.

RECOMMENDATION FOR FURTHER SURVEYS:

It is believed that this survey fully covers the area and that further surveys are not needed at the present time.

The location of well defined detail of importance for charting is believed to be within the allowable limits for accuracy.

Respectfully submitted,

John C. Mathisson

John C. Mathisson,
Jr. H. & G. Engr.,

U. S. Coast and Geodetic Survey.

Key West, Florida, April 5, 1938

Mathisson reported that field inspection was carried out at various times up to completion of the compilation.

REVIEW OF AIR PHOTO COMPILATION NO. T-5547

Chief of Party: E. R. McCarthy

Compiled by: See data sheet

Project: Shore Party No. 14

Instructions dated: Nov., 17, 1933.

- ✓ 1. The charts of this area have been examined and topographic information necessary to bring the charts up to date is shown on this compilation. (Par. 16a, b,c,d,e,g and i; 26; and 64)
- ✓ 2. Change in position, or non-existence of wharfs, lights, and other topographic detail of particular importance to navigation which affect the chart, is discussed in the descriptive report. (Par. 26; and 66 g,n)
- ✓ 3. Ground surveys by plane table, sextant, or theodolite have been used to supplement the photographic plot where necessary to obtain complete information, and all such surveys are discussed in the descriptive report. (Par. 65; and 66 d,e)
- ✓ 4. Blue-prints and maps from other sources which were transmitted by the field party contain sufficient control for their application to the charts. (Par. 28)
- ✓ 5. Differences between this compilation and contemporary plane table and hydrographic surveys have been examined and rectified in the field before forwarding the compilations to the office and are discussed in the descriptive report.
- ✓ 6. The control and adjustment of the photo plot are discussed in the descriptive report. Unusual or large adjustments are discussed in detail and limits of the area affected are stated. (Par. 12b; 44; and 66 c,h,i)
- ✓ 7. High water line on marshy and mangrove coast is clear and adequate for chart compilation. (Par. 16a, 43, and 44)

NOTE: Strike out paragraphs, words or phrases not applicable and modify those requiring it. Paragraph numbers refer to those in the Topographic Manual. Refer also to the pamphlet "Notes on the Compilation of Planimetric Line Maps from Five Lens Air Photographs." 4-07

- ✓ 8. The representation of low water lines, reefs, coral reefs and rocks, and legends pertaining to them is satisfactory. (Par. 36, 37, 38, 39, 40, 41)
- ✓ 9. Recoverable objects have been located and described on Form 524 in accordance with circular 30, 1933, circular letter of March 3, 1933, and circular 31, 1934. (Par. 29, 30, and 57)
- ✓ 10. A list of landmarks was furnished on Form 567 and instructions in the Director's letter of July 16, 1934, Landmarks for Charts, complied with. (Par. 16d, e; and 60)
- ✓ 11. All bridges shown on the compilation are accompanied by a note stating whether fixed or draw, clearance, and width of draw if a draw bridge. Additional information of importance to navigation is given in the descriptive report. (Par. 16c)
- ✓ 12. Geographic names are shown on the overlay tracing. The accepted local usage of new names has been determined and they are listed in the report, together with a general statement as to source of information and a specific statement when advisable. Complete discussion of place names differing from the charts and from the U. S. G. S. Quadrangles is given in the descriptive report, together with reasons for recommendations made. (Par. 64, and 66k)
- ✓ 13. The geographic datum of the compilation is North American and the reference station is correctly noted. (unadjusted)
- ✓ 14. Junctions with adjoining compilations have been examined and are in agreement. (Par. 66j)
- ✓ 15. The drafting is satisfactory and particular attention has been given the following:
 - ✓ 1. Standard symbols authorized by the Board of Surveys and Maps have been used throughout except as noted in the report.
 - ✓ 2. The degrees and minutes of Latitude and Longitude are correctly marked.

- ✓ 3. All station points are exactly marked by fine black dots.
 - ✓ 4. Closely spaced lines are drawn sharp and clear for printing.
 - ✓ 5. Topographic symbols for similar features are of uniform weight.
 - ✓ 6. All drawing has been retouched where partially rubbed off.
 - ✓ 7. Buildings are drawn with clear straight lines and square corners where such is the case on the ground.
- (Par. 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 48)

✓ 16. No additional surveying is recommended at this time.

✓ 17. Remarks:

✓ 18. Examined and approved;

E. R. McCarthy
E. R. McCarthy
Chief of Party

19. Remarks after review in office:

GEOGRAPHIC NAMES

Survey No. **T-5547**

Name on Survey	On Chart No. 1251		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,						
<u>Content Keys</u>	✓	T-652		✓				1
<u>Water Keys</u>	✓			✓				2
<u>Little Crane Key</u>				✓				3
<u>Crane Key</u>	Eagle Key	Eagle Key T-652		✓				4
<u>Crane Key Mangrove</u>				✓				5
<u>Raccoon Key</u>	✓	T-652		✓				6
<u>Torch Key Mangroves</u>				✓				7
<u>Hurricane Key</u>				✓				8
<u>Knockemdown Key</u>	✓	T-652		✓				9
<u>Budd Keys</u>	Budd Keys	Budd Keys T-652		✓			Budd Keys	10
<u>Big Swash Keys</u>	Michael Key	✓		✓			Michael Key	11
<u>Tarpon Belly Keys</u>				✓				12
<u>Cudjoe Channel</u>				✓				13
<u>Little Swash Keys</u>				✓				14
<u>Riding Key</u>	Sawyer Key	Sawyer K T-560		✓				15
<u>Bay Cudjoe Key</u>				✓				16
<u>Cudjoe Basin</u>				✓				17
<u>Sugarleaf Channel</u>				✓				18
<u>Pumpkin Key</u>				✓				19
<u>Johnston Key</u>	✓	Johnston K T-560		✓				20
<u>Johnston Key Mangroves</u>				✓				21
<u>Barracuda Keys</u>				✓				22
<u>Gulf of Mexico</u>	✓							23
<u>Marulo Key</u>	✓							24
								25
								26
								27

Names underlined in red approved
by MHE on 5/20/38

Remarks

Decisions

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10	<i>'Big Swash Keys' not used much as a name "Keys low and worthless." (D.R.)</i>	
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13		
14	<i>charted as Sawyer Key</i> }	
15		
16		
17	<i>See D.R. H-5925 for desc. of Chan. Sugarloaf Chan is on T-5545 8/2-1-28</i>	<i><u>Johnston Key Chan</u></i>
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Section of Field Records

REVIEW OF AIR PHOTOGRAPHIC SURVEY T-5547

Photographs taken January 15 & 18th, 1935.
Compiled - September 1937 to February 1938 inclusive.
Chief of Party - E. R. McCarthy.
Radial Plot by - J. C. Mathisson.
Detailed by - J. C. Mathisson.
Inked by - J. C. Mathisson and D. R. S.

All details shown on T-5547 are of the date of the photographs, January 15 & 18, 1935, and no information from other sources was used. Field inspection for the interpretation of the photographs was made at various times during the progress of the work, up to April 1938, but this inspection showed no changes since the date of the photography.

Graphic Control Surveys.

There are no graphic control surveys covering this area in the office at the present time (1-18-39). (See note p. 3)

Comparison with Previous Topographic Surveys.

T-494 - 1:20,000 (1855)
T-560 - 1:20,000 (1856)
T-652 - 1:20,000 (1857)

There have been numerous natural changes in shoreline since the earlier surveys were made, but it is not considered necessary to discuss these changes in detail. T-5547 is complete and adequate to supersede the sections of the above surveys which it covers.

Comparison with Contemporary Hydrographic Surveys.

H-5924 - 1:10,000 (1935)
H-5925 - 1:10,000 (1935)

All of the above surveys have been reviewed in the office prior to the review of T-5547.

Only a small section of H-5925 falls within the area of T-5547. Further comparison with H-5925 showed that a few of the shoal lines on T-5547 were in conflict with the hydrography and of no value for charting and these have been removed from the celluloid.

At this date, 1/19/39, the hydrography covering the eastern half of T-5547 is not yet in the office. Comparison with the hydrography in this area and further correction to the shoal lines and low water lines on T-5547 will be made upon receipt of the hydrographic sheets.

Comparison with Chart 1251, 1:80,000, corrected to December 1937.

Changes have been indicated on the attached chart section.

T-5547 was applied to Chart 1251 prior to review (November 1938) but none of the changes made during this review as noted under the preceding paragraph, "Comparison with the Hydrographic Surveys", affect the chart. *

Landmarks and Recoverable Topographic Stations.

There are no landmarks or recoverable topographic stations ✓ (Form 524) in this area.

Geographic Datum.

As submitted from the field this survey was compiled on the North American Datum. The N. A. 1927 Datum has been added in the office from the adjusted triangulation which has recently become available. The North American Datum has been removed from the map drawing. To change to the N. A. 1927 Datum the parallels of latitude were shifted north 26 meters. The meridians were not changed as the datum difference was only 3 meters or 0.15 mm. on the 1:20,000 scale.

Remarks.


The Descriptive Report and the detailing on T-5547 are complete. The drafting is excellent except for the extremely small mangrove symbols which have closed up in reproduction, making the print darker than desirable. These have not been recut on the negatives because of the considerable amount of time which would be required.

Reviewed in office by - H. D. Reed, Jr. Inspected by - B. G. Jones.

Examined and approved: T. B. Reed


Chief, Section of Field Records.


Chief, Division of Charts.


Chief, Section of Field Work.


Chief, Division of H. & T.

* additional ~~sea~~ intercoastal waterway
Beacons and relocation of two Beacons
are shown on T 6509 B received in the office
4/1/39.
Bgg

Note 4/14/39. Graphic control survey T-6509b was *received*
~~received~~ ^{reviewed} in this office about 4/1/39 after T-5547
had been completed and registered. The graphic control
survey has been compared with T-5547 on April 14, 1939.
The following details on the graphic control survey are
not on T-5547:

1. Temporary topographic stations.
2. A number of Intracoastal waterway beacons.
3. The following Intracoastal waterway beacons
located by triangulation and shown on T-5547 have been
moved and the new locations shown on T-6509b - Beacons
39 and 62.

The Beacons have not been transferred to ~~or~~
~~corrected on~~ T-5547 as they are of essentially temporary
construction and are frequently changed. *

Graphic control survey T-6509b has been reported
to nautical chart standards.

* The 1935 triangulation locations
of Bns. 39 and 62 have been removed
from the file copy of T-5547 (10/24/39).
B. J. Jones
4/15/39

