

5542

1250

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

DESCRIPTIVE REPORT

Photo-
Topographic *ST* **75542**
~~Topographic~~ **75542**

State Florida

LOCALITY

Florida Keys

Grassy Key

Photos taken January, 1935
Field Inspection with ground surveys to 1938

~~1938~~

CHIEF OF PARTY

E. E. McCarthy

5542

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

✓TMP

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-5542

State Florida

General locality Florida Keys

Locality Grassy Key

Scale 1:20,000 photographs Date of ~~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.

1011.2

DATA SHEET

Sheet Register No. T-5542

| Portion of work | Performed by | Date completed |
|---------------------------|-----------------------|-------------------|
| Projection made by: | Washington Office | March, 1937 |
| Projection checked by: | E. R. M. | April 14, 1937 |
| Control plotted by: | E. R. M. | April 14, 1937 |
| Control checked by: | P. A. W. | April 14, 1937 |
| Radial plot developed by: | J. C. M. | May 11, 1937 |
| Radial plot verified By: | P. A. W. | May 19, 1937 |
| Compiled in pencil by: | P. A. W. and J. C. M. | February 18, 1938 |
| Inked By: (shoreline) | P. A. W. and J. C. M. | February 19, 1938 |
| (symbols) | J. C. M. | February 19, 1938 |
| (shoals) | P. A. W. and D. R. S. | February 24, 1938 |

STATISTICS

| | |
|--|------------|
| Statute miles of shoreline and bridges | 55.9 |
| Area, square statute miles, keys | 8.3 |
| Area, square statute miles, shoals | <u>2.2</u> |
| Total area, square statute miles | 10.5 |

Reference Station:
 Spoil, 1934 Lat: $24^{\circ}44' \overset{29.231''}{\times} - 30.035''$ ^{899.4 m.} (924.1 meters) unadjusted
 Long: $80^{\circ}58' \overset{42.955''}{\times} - 42.658''$ (1207.1 meters)
 North American Datum - 1198.7 m

Figures in blue -
 North American 1927 Datum -
 adjusted.

DESCRIPTIVE REPORT

to accompany

TOPOGRAPHIC MAP

REGISTER NO. T-5542

GRASSY KEY

FLORIDA KEYS

FLORIDA

Scale of compilation, 1:20,000

DESCRIPTION OF AREA:

The area of this sheet covers the topography of the very narrow string of the Florida Keys lying between Duck Keys on the east and ~~Key~~ *Vaca Key* ~~Vaccas Land~~ and Stirrup Key on the west. The keys in this particular locality of Florida Bay are grouped together very close and divide Florida Bay to the north and Hawk Channel to the south.

The character of the keys in this locality are similar to the keys dividing the bay from the ocean which are found in other areas of this project but high land and more hammock growth is found in this locality. Areas of mangrove are less in this area and most of these areas are confined to the ocean side of the keys whereas in other areas the major mangrove areas have been found on the bay side of the keys. This condition is probably due to the fact that there is no protection from the northwest and the mangrove is unable to withstand the periodic blows that come from this direction. Almost the entire shoreline on the north side of these keys is coral rock and shows erosion due to wave action. There are sand beaches on the south side of most of these keys except in areas where mangrove grows to the water edge. These sand beaches are of shell sand.

The Florida East Coast Railroad's Overseas Railroad traversed this section of the keys but due to the destruction caused by the hurricane of September, 1935, the right of way was abandoned. A short section of the fills and bridges shown on this sheet have been converted for highway traffic and is known as the Overseas Highway. This highway joins the existing Florida State Highway No. 4A near the ferry slip (now abandoned) on Grassy Key. This detail together with the abandoned railroad right of way has been shown on the map drawing.

At the present time there are few residents in the locality shown on this sheet. The only development, other than the railroad abandoned grade and the highway, which is in evidence at the present time is the fish house located on the north shore of the fill across

Key ~~Vaccas Cut.~~

*name rejected.
Is at N. end of Vaca Key.*

Name rejected
Is at N. end of
Vaca Key.

Vaca Key

According to local information, there was at one time a rather large settlement located on the south shore of Key Vaccas Land just west of Key Vaccas Cut. The inhabitants living here engaged in wrecking and used Key Vaccas Cut in going to and from the reefs and used the deeper water area found close in to Key Vaccas Land as an anchorage for their small boats. No evidence of the settlement is visible on the ground at the present time and only a few clearings remain. This settlement was known as Conch Town. Apparently there were quite a few inhabitants of this area in times past when the wrecking industry was an industry which paid handsome dividends. There are evidences of many cleared fields in other areas covered by this sheet but no houses remain. All of these have probably been destroyed by hurricanes.

GENERAL INFORMATION:

The area of this sheet is covered by a single flight of five lens photographs. This flight is centered over the road at the east neat line and slightly north of the land area at the west neat line. The photographs in this flight covering the area shown on this sheet are from No. 11 to No. 26 inclusive. These were obtained during January, 1935. Field inspection at various

*dates to March, 1938.
See review at back for details
later than the date of the
photo graphs.*

*Photographs taken
Jan. 15, 1935 at 12:00 noon
The predicted tide
was low.
(1.5-2.0 ft range of tide)*

CONTROL:

The triangulation stations used in the compilation of this sheet are on the North American Datum. The positions were obtained from the field computations of the various parties and are unadjusted. The sources of the triangulation are as follows:

- Publication, "Triangulation in Florida"
- H. A. Cotton, 1934.
- E. R. McCarthy, 1935.

This control was found adequate for compilation purposes for the small area of detail found on this sheet.

Δ 5 prig, 1934 lost. Recovery Note filed in Geodesy.

N.A. 1927 Datum shown by + added in office 10/20/55

COMPILATION METHODS:

The usual radial line method as described in the "Notes on the Compilation of Planimetric Line Maps" were used in the compilation of this sheet. No difficulty was encountered in the development of the radial plot. Few points were identifiable in the water areas of the photographs but it was possible to pick enough to carry the plot ahead. As the detail on this sheet did not extend far beyond the B print, only a few points were needed on the wing prints.

Some difficulty was encountered in obtaining locations on the highway fill and bridges between the east neat line and Grassy Key as this feature fell exactly under the center of the B print. In order

to obtain this detail it was necessary to transfer the center line of the old railroad and the positions of the abutments of the bridges from the graphic control sheet covering the area, Sheet Register No. T-6418a. With these positions plotted on the sheet it was possible to obtain the detail from the photographs.

INTERPRETATION OF PHOTOGRAPHS:

The detail of importance for charting was found to be very clear on the photographs covering the area of this sheet. Some difficulty was experienced in obtaining the delineation of shoals in the Florida Bay area and it was necessary to check the delineation as obtained from the photographs against the hydrographic sheet covering this area.

It was found during the course of the field inspection of the area that the temporary construction trestles paralleling the Tom's Harbor and Duck Key Viaducts on the south side still remain partially in place. This detail of course did not show on the photographs and because the trestles are so close to the viaducts it was impossible to represent them on the finished map drawing. The remains to these trestles are marked only by the appearance of an occasional pile or bent from the original trestle and the detail is taken care of by a note on the name sheet.

In compliance with the Director's letter of February 9, 1938, (80-DRM), an attempt has been made to show the areas which are bare at low water. The hydrographic sheets covering the area of this map drawing did not record any minus or zero soundings but in the vicinity of Tom's Harbor an over-lay was provided for the hydrographic sheet from which the notes were obtained to determine the areas which were bare or awash. This over-lay was used as a guide from which to obtain the approximate line on the photographs and from the appearance of the areas in this locality, the interpretation was made possible in other areas of the sheet. It should be noted that the areas shown as bare are very approximate and are subject to corrections for it is very difficult to say for certain whether an area is bare without a thorough field inspection. *Low water areas are approx. miles. Either bare or awash.*

Difficulty was experienced in obtaining the delineation of the dredged cuts in the water area on the south side of the keys between Grassy Key and Crawl Key. There are two dredged cuts at this locality paralleling each other and it is not certain whether the south one enters the bight to the north at the east end. The cut that appears north of triangulation station ^{SPRIG} 1934 was made by the construction crews of the Overseas Railroad as well as the two cuts in the water area. The reason for these cuts is not known.

It was found impossible to determine the offshore limits of the shoal areas on the south side of the keys. The channels into the various cuts appeared clearly on the photographs and have been delineated on the map drawing.

Bridge Data

*Type and clearances of bridges are given on overlay.
Data probably obtained by field measurement.*

INFORMATION FROM OTHER SOURCES:

Except as noted earlier in this report, all topographic information appearing on this map drawing was obtained from the photographs covering the area of this sheet.

It was, of course, impossible to obtain the positions of the various sunken rocks, rock piles, piles and dolphins from the photographs and these were transferred from Sheet Register No. T-6418a, the graphic control sheet which embraces the same area. *This information not on T-6418a. The hydrographic surveys are apparently the source.*

Due to changes and erosion caused by the hurricane of September, 1935 it was found necessary to traverse the south beach of Grassy Key, from about a thousand meters east of the southwest end to the mangrove area at the northeast end. This traverse was started on a three point fix on the west end and tied into the approximate location of recoverable station SAL. A small error was found in the traverse which was adjusted. *Station SAL was destroyed by hurricane. Foundations recovered and used.*

The size of the ferry slip on Grassy Key was enlarged slightly in order to accommodate ferries of greater beam. With the opening of the upper half of the Overseas Highway some months ago and the opening of the lower half on March 29, 1938 all of the ferry landings in the area of this project are abandoned and are no longer used. *The slip remains however.*

The detail of the connection of the Overseas Highway with the existing Florida State Highway No. 4A on the east end of Grassy Key was obtained from the engineers of the Overseas Highway Commission.

RECOVERABLE STATIONS:

There were three recoverable station which were lost in the conversion of the railroad grade to a highway. These were DUCK (west), TOM, and TAB. The loss of these stations have been previously reported by this party.

In addition, other recoverable stations not previously reported have been lost when the railroad tracks were removed from the railroad grade. These are as follows:

- F. E. C. Mile Post K. W. 60 ○ VOL
- F. E. C. Mile Post K. W. 59 ○ FIT
- K. W. 58 ○ POST
- K. W. 57
- Milepost K. W. 56 ○ MAR

Noted lost on Forms 524

Recoverable station B. M. R-69, 1934 was lost when the bench mark was re-set to make room for the construction of the highway. Although recoverable station, CHIMNEY ○ SAL was standing after the hurricane of September, 1935, the building was so weakened that it has since fallen down and the station was lost for accurate recovery.

** Re-set position of B.M. R-69, 1934 is shown on drawing. Probably located by radial plot.*

2 Forms 524 filed under T-6479a
10 " " " " " T-6418a

This sheet not yet in office 11/20/39

All of these stations appear on graphic control sheet Register No. T-6418a. Recovery cards are being submitted with this report in order to bring the loss of these stations to date.

COMPARISON WITH CONTEMPORARY SURVEYS:

Graphic control surveys made during 1935 cover most of the area shown on this sheet. These are Sheet Register No. 6418a and Sheet Field Letter H, 1935. (T-6479a)

Only a few stretches of sand beach on the south side of the keys are shown on these sheets. With the exception of the delineation of the shoreline on the south side of Grassy Key, the agreement is very good between these two surveys. The south shoreline of Grassy Key was altered by the hurricane of September, 1935, as has been previously explained in this report.

COMPARISON WITH PREVIOUS SURVEYS:

Copies of the original topographic surveys were not available in the field office for the purpose of making a comparison with the previous surveys in the area but general changes are noted by a comparison with a copy of Chart No. 1250, the published chart covering the area.

In general, this survey shows very good agreement with detail as shown on the present published chart. This is especially true in regard to the shoreline on fast land as exists on the north side of these keys. Areas of mangrove now extend to cover much larger areas than are shown on the original surveys but little of this on the north side of these keys. It is noted that an extensive growth of mangrove has appeared ~~the~~ connect the east end of the keys which are charted at present as Fat Deer Keys. This is a condition which can be expected in an area of this character as mangrove tends to grow on shoal banks in protected localities.

The map drawing shows the present charted area of Fat Deer Key to be in three sections where-as the published chart shows it to be in only two sections. As there is a deep channel near the east end of this key which separates it into three parts, it is doubtful if this condition ever existed. It is possible, of course, that hurricane tides might have caused this separation.

LANDMARKS:

A list of Landmarks for Charts was previously submitted by this party to cover the area of this sheet.

On May 25, 1937 an additional ^{list} was submitted to cover non-floating aids to navigation which were located by sextant fixes during the field inspection of the area. A copy of this list is attached to this report. *These aids located April 1937 are shown on the drawing.*

No landmarks other than aids to navigation are in the area covered by T-5542.

GEOGRAPHIC NAMES: ✓ GHE

No further discussion will be made as to the difficulty of obtaining the correct geographic names in the area of this project. Reference is made to various descriptive reports and special reports on this subject which have been submitted previously by this party. It is believed that every source of information in regard to geographic names has been contacted and the discussion as given below represent the best knowledge available.

The following names of land features are at present charted on the published charts of the area and are in local use:

- CHANNEL KEY
- DUCK KEY
- BAMBOO KEY
- GRASSY KEY

TOMS HARBOR KEYS is the name in local use for this group of keys but by some they are known as Toms Harbor Key and Toms Harbor Mangrove for the south and north ones of the group respectively. It might be said that the local use is to speak of these keys in the possessive. It is recommended that these keys be charted as they now appear on the published charts of the area.

The chart of the area groups two or three keys on the north side of Key Vaccas Land as Stirrup Keys. The present local use is to refer only to the largest of these as STIRRUP KEY. The origin of this name is not known but it must be very old as the land plats of Monroe County, made in 1874, show this name.

The land plats of Monroe County also show that the next key east of Stirrup Key was known as RUSSEL KEY in 1874. This name is in local use by the oldest inhabitants and spongers but not in local use to any great extent. The spelling was not verified but it is believed to be correct but at variance with the Russell families who at present inhabit the keys in the vicinity of Islamorada. The name is recommended by this party for charting.

It has been definitely established that the present location of Fat Deer Key as charted on the published chart is in error. The land plats of Monroe County show Fat Deer Keys to be the keys which are at present charted as Crawl Keys. Local use in regard to this name places FAT DEER KEY to the west of Stirrup Key. Somewhat the same conditions hold true in regard to this name as ~~is~~ in regard to Russel Key in that only the oldest spongers know this name. It has been impossible to determine the origin of the name. The key is also vaguely known as Hog Key and Thompson Key. The origin of Hog Key is not known but the name Thompson Key is after the owner of the fish house in Key Vaccas Cut. These latter two names find very little local use. Fat Deer Key is of importance to the spongers in the area because they use the wells nearby to replenish their fresh water supply.

For a discussion of WILLIAMS HAMMOCK and WILLIAMS HAMMOCK WELLS see the descriptive report for sheet Register No. T- 5543.

As explained in the descriptive report for sheet Register No. T-5543, KEY VACCAS LAND covers not only the area of Key Vaccas but also all of the land lying between Key Vaccas Cut and Bamboo Key Cut. After further investigation it was impossible to determine a different name for these keys and universal local use as explained above. Before the construction of the railroad there were three separate keys between Key Vaccas Cut and Long Point Key. The railroad referred to these keys, from west to east, as Crawl Key No. 1, Crawl Key No. 2, and Crawl Key No. 3. These names found no local use. The present published chart shows these keys as Crawl Keys. Some of the local inhabitants call the east and largest of these keys Fat Deer Key but this is believed to be in error as Fat Deer Key is definitely established on the bay side of this group of keys. It would be erroneous to chart this area as anything other than Key Vaccas Land or a part of Key Vaccas.

The small bare rock on the north side of the keys and to the west of Pulmedam Cut is known locally as KEY VACCAS ROCK. This feature is of importance to the fishermen taking their catch to the fish house in Key Vaccas Cut.

SANDY POINT, on the southeast side of Key Vaccas Cut, is a name in local use. The name is not of great importance at the present time but, it is said, very important when the settlement of Conch Town was located at this immediate vicinity. Only the oldest sponger known and use this name at present.

The name of a rather prominent feature in the area of this sheet is COCO PLUM BEACHES. This is a series of sand beaches broken by black mangrove trees growing in the water on the south side of the keys between Torch Key Cut and Bamboo Key Cut. The feature is also known as Broken Beaches and Stump Beaches but to a less extent. The origin is probably from the cocoplum tree.

The small key that is shown as a continuation of Coco Plum Beaches on the present chart of the area is known locally as DEER KEY. The name is seldom heard in the area but all of the older spongers know the key by this name.

BURNT POINT is a name that finds universal local use. All fishermen and spongers that frequent this area know this point by this name. There is some disagreement in the case of LONG POINT KEY as it is also known as Long Pine Key and Crawl Key No. 4 (by the railroad). The land plats of Monroe County verify the name Long Point Key and as it is descriptive of the feature it is recommended for charting. The name Burnt Point is said to be due to the fact that there is tall grass on the detached key and people stop here frequently and fire the grass.

CRAWL KEY and CRAWL KEY MANGROVE are both names in local use. The land plats of Monroe County show this feature but spell the name Kraal Key. The railroad right of way maps show this key as Crawl Key No. 5. The origin of the name is no doubt from a turtle or fish crawl that was located near this key at one time. Crawl Key Mangrove is also known as Little Crawl Key.

The shoal banks lying northwest of the abandoned ferry slip on Grassy Key are known locally as GRASSY KEY BANK. This name is in local use and no conflict in regard to the name could be found.

CHANNEL KEY BANKS appear partially on this sheet. Reference is made to the descriptive report for Sheet Register No. T-5511 for a discussion of this name.

The small boat anchorage lying between Duck Key and Toms Harbor Viaduct is known locally as TOMS HARBOR. This is apparently a very old name and is probably after a local person who used this locality as an anchorage. The channels leading into this harbor are known locally as CONCH KEY CHANNEL, DUCK KEY CHANNEL and TOMS HARBOR CHANNEL. The origin of the name Conch Key Channel is from the Conch Keys which appear on Sheet Register No. T-5511, just off the eastern limits of this sheet. The name Toms Harbor Channel is apparently applied to both of the channels at this locality. The one that is labeled is the best channel and most used. All of these names are in local use and are recommended for charting.

Before the construction of the railroad there were six channels through the keys between Grassy Key and Key Vaccas. These are no longer of importance for navigation but because the names are still used in speaking of these features, they are recorded here. These channels, from east to west, are GRASSY KEY CUT, CRAWL KEY CUT, BAMBOO KEY CUT, TORCH KEY CUT, PULMEDAM CUT and KEY VACCAS CUT. The origin of all but two of these are apparent. Pulmedam Cut is said to be so named because of the strong current that existed in this narrow channel before it was filled by the railroad. Some difficulty was apparently experienced by the old timers in pulling a boat through this channel. Torch Key Cut is said to originate from a small key on the south side that was formerly known as Torch Key. It has been impossible to identify this key on the present compilation and the name is no longer in use.

RECOMMENDATION FOR FURTHER SURVEYS:

It is believed that this survey fully covers the area and that further topographic 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.

notes in red by
T. M. Price
upon review
Sept. 15, 1938

Respectfully submitted,

John C. Mathisson
John C. Mathisson,
Jr. H. & G. Engr.,
U. S. Coast and Geodetic Survey.

Key West, Florida,
March 30, 1938

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

In order to settle a few minor conflicts between this report and previous name reports submitted by the party, the following additional information is furnished:

Page 6- Russel Key. (*Recor. this of map*)

The spelling of the numerous Russell families *There is* in Key West and the Keys is RUSSELL and as the key *another* was probably named after its original owner, this *Russell Key* spelling would seem to be more appropriate. *of 1850 (USGB)*

Page 7- Key Vaccas Land.

The middle of these three keys has been recently developed, a filling station, small hotel, boat dock, and restaurant have been built. The owner, Mr Ed Neff of Marathorn, has named the Key 'Bonefish Key' after the numerous bonefish which abound in the shoal waters to the south. He has placed several large signs on the key and as it has no local individual name, the above is suggested for charting.

Page 8-Pul-me-dam Cut.

It has been definitely established that the name as applied to feature shown on this sheet is correct and that the name as previously reported as being also applied to Key Vaccas Cut is in error.

Key Vaccas.

It has been noted on copies of the hydrographic and topographic sheets returned to the party that the name of this key has been changed in the office to Vaca Key. It has been found that there is no disagreement among the various local authorities that a final 's' should be added to the name and the spelling 'Vaccas' was obtained, not only from the Monroe County Land Plats, but from Sheet Register No T-651.

Page 3- Cuts south of Grassy and Crawl Keys.

These cuts were thoroughly sounded out. See report Hydrographic Sheet 6133- Shoal #10.

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

REVIEW OF AIR PHOTO COMPILATION NO. T-5542

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."

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

Remarks.

Decisions

| | Remarks. | Decisions |
|----|--|---|
| 1 | | |
| 2 | | |
| 3 | Local name for small key west of stirrup key Lat. 24°-44.1; Long. 81-03 | A duplication see Fat Deer Key below |
| 4 | | |
| 5 | | |
| 6 | | USGB decision |
| 7 | | spelling recommended in D.R. |
| 8 | No thru passage - obstructed by Hwy Fill | To agree with USGB decision Vaca Key |
| 9 | | |
| 10 | No importance | |
| 11 | | |
| 12 | No importance | |
| 13 | | |
| 14 | | |
| 15 | Once apart of Ehd 'Fat Deer Key' | |
| 16 | Lat. 24-44.9 Long. 80-58.6 | |
| 17 | | |
| 18 | Also called Long Pine Key | |
| 19 | | |
| 20 | | |
| 21 | | |
| 22 | | |
| 23 | | |
| 24 | | |
| 25 | | |
| 26 | | |
| 27 | | |

GEOGRAPHIC NAMES

Survey No. T-5542

| Name on Survey | Source | | | | | | | | | | |
|--|---------------------|------------------|---|--------|-----------|---|---|---|---|--|----|
| | A | B | C | D | E | F | G | H | K | | |
| ✓ Florida Bay ✓ | ✓ | | | | | | | | | | 1 |
| ✓ Stirrup Key ✓ | stirrup keys | The stirrup keys | | ✓ | ✓ | | | | | | 2 |
| ✓ Fat Deer Key ✓ | | | | ✓ | | | | | | | 3 |
| ✓ Williams Hammock ✓ | | | | T-5543 | | | | | | | 4 |
| ✓ Williams Hammock Wells ✓ | | | | T-5543 | | | | | | | 5 |
| ✓ Vaca Key ✓ Key Vacaas Land | | | | ✓ | | | | | | | 6 |
| ✓ Russel Key ✓ | one of stirrup keys | | | ✓ | ✓ | | | | | | 7 |
| Kaga Key Key Vacaas Cut | | | | ✓ | | | | | | | 8 |
| ✓ Sandy Point ✓ | | | | ✓ | | | | | | | 9 |
| Rutmedam Cut Vaca | | | | ✓ | | | | | | | 10 |
| ✓ Key Vacaas Rock ✓ | | | | ✓ | | | | | | | 11 |
| Tarah Key Cut | | | | ✓ | | | | | | | 12 |
| ✓ Coco Plum Beach ✓ | | | | ✓ | | | | | | | 13 |
| ✓ Bamboo Key ✓ | ✓ | | | ✓ | | | | | | | 14 |
| ✓ Deer Key ✓ | | | | ✓ | | | | | | | 15 |
| ✓ Crawl Key ✓ | | | | ✓ | Kraal Key | | | | | | 16 |
| Bamboo Key Cut | | | | ✓ | | | | | | | 17 |
| Long Point Key see Burnt Pt | | | | ✓ | ✓ | | | | | | 18 |
| Buxat Key | | | | | | | | | | | 19 |
| Clay Key Cut | | | | ✓ | | | | | | | 20 |
| Grassy Key Cut | | | | ✓ | | | | | | | 21 |
| ✓ Grassy Key ✓ | ✓ | | | ✓ | | | | | | | 22 |
| ✓ Grassy Key Bank ✓ | GWS | | | ✓ | | | | | | | 23 |
| ✓ Channel Key ✓ | ✓ | | | ✓ | | | | | | | 24 |
| ✓ Channel Key Banks ✓ | GWS | | | | | | | | | | 25 |
| ✓ Toms Harbor ✓ | | | | ✓ | | | | | | | 26 |
| ✓ Toms Harbor Channel ✓ | | | | ✓ | | | | | | | 27 |

Remarks.

Decisions

| | | |
|----|---|--|
| 1 | | |
| 2 | | |
| 3 | | |
| 4 | | |
| 5 | | |
| 6 | | |
| 7 | Also called 'Little Crawl Key' | |
| 8 | An old name Ch. 168 (1891) "Fat Deer Keys". See also D.R. this sheet. | |
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GEOGRAPHIC NAMES

Survey No. T-5542

| Name on Survey | Source of Information | | | | | | | | | | No. |
|-------------------------------|-----------------------|-----------------|---|---|---|---|---|---|---|--|-----|
| | A | B | C | D | E | F | G | H | K | | |
| <u>Toms Harbor Keys</u> | ✓ | | | ✓ | | | | | | | 1 |
| <u>Duck Key</u> | ✓ | | | ✓ | | | | | | | 2 |
| <u>Conch Key Channel</u> | | | | ✓ | | | | | | | 3 |
| <u>Duck Key Channel</u> | | | | ✓ | | | | | | | 4 |
| <u>Hawk Channel</u> | | | | | | | | | | | 5 |
| <u>Burnt Point</u> | | | | ✓ | | | | | | | 6 |
| Little Crawl Key | | | | ✓ | | | | | | | 7 |
| Crawl Key Mangrove | | | | | | | | | | | |
| <u>Fat Deer Key</u> | ✓ | T-651 (Keys) | | | | | | | ✓ | | 8 |
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Items underlined in this report approved
by JHE on 7/30/38

SECTION OF FIELD RECORDS

REVIEW OF AIR PHOTOGRAPHIC SURVEY T-5542

Scale 1:20,000

Photographs taken January 15, 1935;
Compiled April, 1937 to February, 1938.
Refer to Pages 1 and 2 of the Descriptive Report for additional data.

Chief of Party - E. R. McCarthy
Radial Plot by - J. C. Mathisson
Radial Plot Checked by - P. A. Weber
Inked by - J. C. Mathisson and P. A. Weber

Information from Other Sources.

The detail of T-5542 is of the date of the photographs except for the following:

1. From Hydrographic Surveys H-5952 and H-5947, March - June, 1935:

Rocks awash, rock piles, and piling.

2. Graphic Control Survey T-6418a, March, 1935:

Location of the bridge fills and abutments, and the center line of the highway east of Long. $80^{\circ}56'$.

3. Planetable survey made by field inspection party between October 1935 and February, 1938 (This planetable survey has not been received in the office).

Shoreline on the ocean side of GRASSY KEY between Long. $80^{\circ}46.4'$ and $80^{\circ}48.0'$

4. Overseas Highway Commission.

Detail of short link of highway connecting Florida State Highway 4a (built previous to photos) and the Overseas Highway (constructed on railroad bed after photographs were taken). This link is near the NE end of GRASSY KEY.

5. Sextant location, April, 1937.

3 lights in FLORIDA BAY.

COMPARISON WITH RECENT GRAPHIC CONTROL SURVEYS

T-6418a (1935) 1:20,000

T-6479a (1935) 1:20,000

The graphic control surveys were made for locating signals, beacons, etc. Very little shoreline or other detail is shown.

A large number of the objects located by these surveys were destroyed by the hurricane of September 2nd and 3rd, 1935.

T-5542 has been carefully compared with the graphic control surveys, the photographs, and recent hydrographic surveys, and has been corrected as necessary. In case of any difference remaining between the graphic control survey and T-5542, the latter should now be taken as correct.

All detail on the graphic control surveys, not changed or destroyed within the area of T-5542, is now shown on T-5542, except the magnetic declination, temporary topographic stations, tide gage positions, and two very small houses which were probably wrecked by the hurricane.

The magnetic declination within the area of T-5542 as determined by declinatoire during the graphic control surveys, was $02^{\circ}14'$ E., which agrees with that shown on the current charts.

COMPARISON WITH PREVIOUS TOPOGRAPHIC SURVEYS.

T-688 (1857) 1:20,000

T-689 (1857) 1:20,000

T-651 (1857) 1:20,000

Large changes have occurred since the previous topographic surveys were made, particularly along COCO PLUM BEACH. The photographs have been examined in each case of difference and T-5542 is adequate to supersede previous topographic surveys for the area covered.

COMPARISON WITH RECENT HYDROGRAPHIC SURVEYS.

H-5947 (1935) 1:20,000

H-5952 (1935) 1:20,000

H-6113 (1935) 1:20,000

H-6133 (1935-6) 1:20,000

The dashed line shown off-shore on T-5542 represents the edge of a channel or the approximate limit of a shoal area. In neither case does it represent a depth curve but only a break between very shallow water and deeper water.

The shoal line and the low water line on T-5542 were drawn for the special purpose of supplementing the hydrography where soundings were not closely enough spaced to show the configuration of the shoal. Where the hydrography was well developed, certain shoal areas have not been indicated on T-5542.

There were numerous minor differences between the low water and shoal lines shown on T-5542 and the soundings on the hydrographic sheets. T-5542 has been changed where the photographs were not clear and where the hydrographic development was complete. The remaining differences have been taken up with the hydrographic verifying unit and the hydrographic sheets corrected where necessary. (This work done by Murray and Jones, November, 1938.

COMPARISON WITH CHARTS

Chart 1250 (printing of 9/27/37)

The most important changes in current charts are indicated on a chart section attached to this review.

REMARKS

1. Recoverable Hydrographic and Topographic Stations.

Forms 524 for described stations appearing on T-5542 are filed as follows:

2 Forms 524 filed under T-6479a
10 Forms 524 filed under T-6418a

The following errors were found in the scaled geographic positions given on the above Forms 524:

| |
|--|
| 100 meters in the longitude listed for B.M.No.2(d) Toms Harbor |
| 10 " " " " " " B.M.No.2(d) Grassy Key |
| 10 " " " latitude " " Reed (d) |

2. Lights and Beacons

East Turtle Shoal Beacon "45" was located by triangulation in 1934 and is shown thus on T-5542. In 1936 this aid was changed to a light which, the Notice to Mariners states, was built on the same structure formerly occupied by the beacon. T-5542, however, has not been revised to show this change since the exact position of the light was not available. For charting, the light may be shown in the position of the former beacon with sufficient accuracy.

Fat Deer Key Beacon "32", was located by triangulation in 1934 and is shown thus on T-5542. According to the Notice to Mariners, this beacon was destroyed in 1935, restored in 1936 and temporarily removed in 1938. It has been left on T-5542 in its 1934 position for lack of any better location.

West Turtle Shoal Beacon "47" and Coffin Patch Beacon "J" were located by triangulation in 1934 and are shown thus on T-5542. According to the Notice to Mariners these beacons were destroyed in 1935 and replaced in 1935-6, but they have been left on T-5542 in the 1934 position for lack of any better location.

3. Bridge Data

The type of bridge and the clearance data for the two bridges on T-5542, as given on the name overlay of the map drawing, agrees with the contemporary hydrographic surveys and the current charts. These bridges could not be identified in the U.S.E. bridge book.

4. Changes

The only change made to T-5542 upon review was the removal of various low water lines and shoal lines where they conflicted with the hydrographic sheets and where the photographs were indefinite.

5. Projection

The cellulose acetate upon which this map drawing is made has distorted since the projection was drawn. The change to date resulting from temperature and humidity differences is as follows:

Long way of sheet : 1 part in 419
Short way of sheet : 1 part in 235

6. Accuracy

It is believed that a probable error of 5 to 10 meters obtain throughout most of the work, except in the position of the shoal and low water lines.

ADDITIONAL WORK

Except for a determination of any possible change caused by the rebuilding and restoring of the lights and beacons in HAWK CHANNEL since their 1934 location, this survey is complete and adequate for chart compilation in the area covered.

Reviewed in office by T. M. Price, September 22, 1938

Inspected by B. G. Jones,



Thos. B. Reed
Chief, Section of Field Records

Examined and Approved:


K.T. Adams
Chief, Division of Charts


J. L. Penock
Chief, Section of Field Work


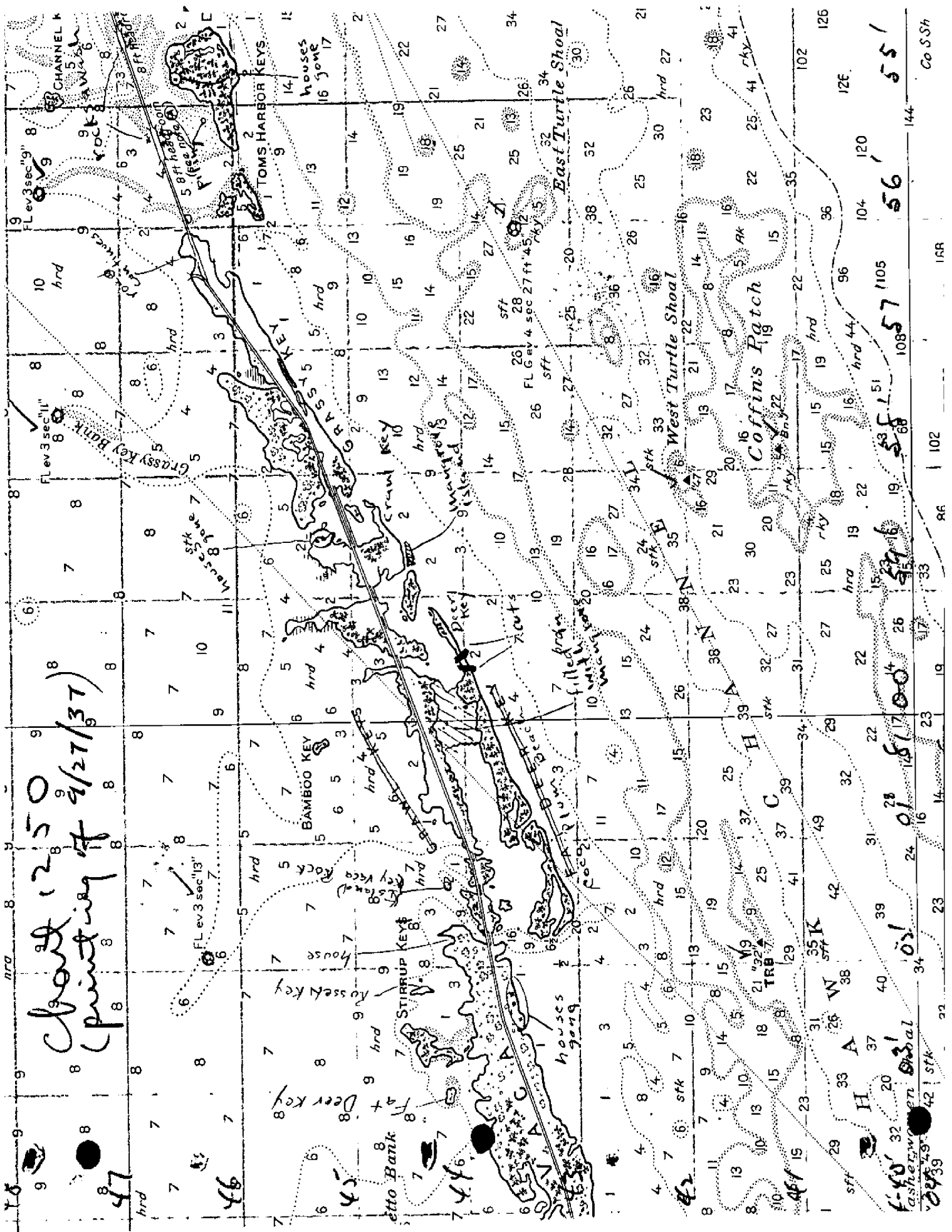

J. H. Wade
Chief, Division of Hydrography
and Topography.

Chart 1250
 (printing of 4/27/37)



102
 105
 108
 110
 115
 120
 126
 144

Co. S. Sh

1/2000

Team take
eat maintenance unit



town hall

time 90

group

barrel 2.10 liters

8% alcohol

150
150
150

frames each degree

16 5.0 10 35

Substrate

bar east green

120.000

2 power 2