

# 5538

## SUPPLEMENTAL T-5538

U. S. COAST & GEODETIC SURVEY  
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Form 504 Rev. April 1935	
DEPARTMENT OF COMMERCE U. S. COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT	
Air photo Topographic <del>Hydrographic</del>	Sheet No. T-5538
State <u>Florida</u>	
LOCALITY	
<u>Florida Bay</u>	
<u>Key Largo</u>	
1936	
CHIEF OF PARTY	
<u>E. R. McCarthy</u>	

U. S. GOVERNMENT PRINTING OFFICE

5538  
SUPPLEMENTAL T-5538

GENERAL

DESCRIPTIVE REPORT

for areas covered by

PHOTO-TOPOGRAPHIC SHEETS

REGISTER NOS.

T-5438 to T-5442 inclusive  
and

T-5538 to T-5541 inclusive

KEY LARGO TO LONG KEY AND CAPE SABLE

FLORIDA BAY

FLORIDA

1936

E. R. McCarthy,

Chief of Party.

John C. Mathisson,

In charge, photo unit.

AUTHORITY:

Written instructions for the execution of this photo-topographic survey were not received from the Washington Office. The work on this project was performed under the authority granted in the Director's Instructions for Combined Operations in the area, Project HT 158, issued to Lieut. Comdr. H. A. Cotton under date of November 17, 1933.

AREA COVERED BY PROJECT:

The area of this project covers the entire area of the Florida Keys from Key Largo to Key West and from Key Largo westward along the Florida mainland to Cape Sable. This report, however, covers only the Upper Keys from Key Largo to Long Key and Cape Sable, covering nine sheets of the fifteen total sheets in the entire project. This division in the General Descriptive Report was made for several reasons, principally because most of the work at this time has been accomplished in this area. In addition, the Keys in this area are alike in characteristics, differing from the ones to the southwest making up the group formally known as the Pine Islands. This division is also justified because most of the damage caused by the hurricane of September 2, 1935 was in this area.

Note The junctions with the  
1928 compilations will be repeated  
discussed in the individual descriptive  
reports of the compilations concerned.  
Bgg.

The compilations in the area covered by this report show all of the Keys in the area of Florida Bay between Sandy Key and Cross Key, the Keys along the Overseas Highway between Key Largo and Long Key and the mainland of the Florida peninsula between Cross Key and Cape Sable. The compilations show the many lakes and bays in this latter area that have not been previously located by any survey and cover part of the Everglades for a distance averaging approximately four or five miles north of the south shoreline of the mainland. These compilations comprise a re-compilation of the areas covered by Sheet Register Nos. T-4460, T-4461 and T-4601, compiled from four lense photographs during 1928. These new compilations do not fully cover the areas shown on the old compilations as they were re-compiled only where fully controlled by the new photographs. The photographs on hand did not afford detail to make a junction with the 1928 compilation, Sheet Register No., T-4577, on the west side of Barnes Sound.

*See opposite page*

The register numbers and titles of the nine sheet in the upper portion of the project are as follows:

Register Number	Title
T-5438	Cape Sable
T-5439	Flamingo
T-5440	Madeira Bay to Snake Bight
T-5441	Little Madeira Bay
T-5442	Corinne Keys to Cluett Key
T-5538	Key Largo
T-5539	Tavernier
T-5540	Upper Matecumbe Key
T-5541	Long Key

#### GENERAL DESCRIPTION OF AREA:

##### PHYSIOGRAPHY.

The topography and the formation of the Keys along the eastern edge of the project are entirely different from those found in the bay area. This is also true of the formations found along the mainland portion of the project.

The highest elevation found in the area is on Windley Key near the south end. Here the elevation reached approximately 15 feet above high tide. The average elevation of the Keys forming the Overseas Highway is approximately 8 feet above high tide. These Keys are of coral formation through the higher portions in the center of the several keys and are usually bound by extensive areas of mangrove growth. The high portions are known locally as "hammock land" and contain a thick tropical growth of sub-tropical trees and shrubs. There is little or no top soil on the Keys forming the eastern edge of the project. The coral rock is exposed where the areas are not covered by the usual hammock growth.

Most of the offlying keys are of mangrove formation. They were probably formed by the mangrove seedling taking root on the extensive mud shoals which are found in the area and in time forming a key of considerable area. Some of the keys have a growth of Buttonwood but

THIS

this tree together with the black, red and white mangrove are the only trees that have been noted on these offlying keys by the members of this party.

The formation of the keys in the Florida Bay area are generally in groups. This formation is due to the mangrove growing along the shoal areas which are long and narrow and gives the group a chainlike formation. These shoal areas are very extensive in the locality and it is conceivable that all of these keys that are on the shoal areas will some day be connected and have the same appearance that Shell Key and Cross Key now present. These keys were, no doubt, formed in this way. All of the keys in the Florida Bay area are not on these long shoals. Some are the result of mangrove growth on a small, detached shoal area.

The area along the mainland of the Florida peninsula is very low. There is a slightly higher strip along this area that contains a thick growth of sub-tropical trees and is about a foot or a foot and a half above high water. This strip varies <sup>100</sup> from about one half mile wide in some localities to a very narrow fringe at others. Immediately inshore of this band of hammock land there is usually found an extensive growth of mangrove which is cut up by many lakes and ponds. North of this mangrove area the land is given over to glades which is dotted with many small clumps of hammock. This area is characteristic of the Everglades which extends many miles northward to Lake Okeechobee.

From Cape Sable eastward to Flamingo the terrain just north of the high water line is much higher than is found further east. Here the land is known as a marl prairie and is covered with a growth of short grass. The ground is very soft and impassable for trucks and cars during the rainy season, from June to November.

The drainage on the mainland from Madeira Bay eastward to Long Sound is from north to south. During times of heavy rains in the Everglades the rivers and creeks flowing out of the area into Florida Bay are swift. This is especially true if the wind is from the north or northeast causing the water of the bay to be lower than normal. The wind from the south or southwest in combination with heavy rain fall over the Everglades causes abnormal high water which inundates all or most of the land normally above high water. The water in most of the lakes north of the high water line of the mainland is fresh and fit to be used as drinking water.

A natural phenomenon which has caused difficulties in the interpretation of the high water line on the photographs in the area of Florida Bay, is the nearly total absence of tidal effect. It is believed that nearly all of the tide at or near the mainland between Little Madeira Bay and Snake Bight is caused by wind. The western edge of the bay is bound by extensive areas of shoal water which ~~interrupts~~ the normal action of the tide and most of the water areas between the keys on the southeast side have been filled during the construction of the railroad and this has also shut off the tidal flow into the bay.

The growth on the hammock lands found in the area of this project is perhaps different than that found at any place in the United States. None of the common trees found in other sections of the country have been

noted here. The growth on these areas are of a tropical or sub-tropical nature. In addition to the many vines and shrubs, the following trees are found in the area: Stopperwood, Handlewood, Madeira Mahogany, Wild Lime, Pigeon Plum, Pond Apple, Buttonwood, Jamaica Dogwood, Manzanita, Palmetto Palm, Fan Palm, Royal Palm (rare), Madeira Palm, Gumbo Limbo, and Lignumvitae. This is only a partial list of the trees found here but perhaps includes the most numerous. The hammocks resemble a tropical jungle which are impenetrable because of the numerous trees and climbing vines. Aerial and terrestrial orchids are found on the hammocks that are difficult of access.

Periodically this area is visited by tropical hurricanes which are accompanied by intense winds. These hurricanes do very little damage to the area in respect to the high water line in the bay area as the water rises to protect this feature. Most of the damage has been noted in the destruction of trees and alteration of the high water line in sandy areas. It is believed that in an area where the trees have been destroyed they will return, in time, to their normal growth.

#### CULTURE:

Residents of the Keys are confined, almost entirely, to the chain of Keys forming the eastern edge of Florida Bay. There are several families engaged in fishing living at Flamingo, east of Cape Sable. An attempt has been made, with little success, with cultivation on the mainland near Davis Creek and Trout Creek, near Eagle Key.

The residents of the Keys depend almost entirely upon fishing and lime culture for their subsistence. There are many lime groves on the Keys and a few areas where tomatoes and certain types of melons are cultivated. To a foreigner it seems remarkable that the land is able to support any type of cultivation as there is little top soil and only a little leaf mold between the rocks. The type of lime known as the Key Lime does very well in the rocky soil and it's culture is the principal industry. Occasionally clearing are made to put in a field of limes but more often only the underbrush is cleared and the limes put in between the trees. For this reason it is difficult to identify the groves on the photographs. All growth is very abundant along the Keys, due no doubt, to the sub-tropical climate and rainfall.

The only town of any size or importance is Tavernier, located near the lower end of Key Largo. Key Largo (station), Rock Harbor, Anglers Park and Islamorada are smaller communities located along the Overseas Highway. The inhabitants in the entire area of this project number some 350 or 400. During the Winter months or Season the residents are usually engaged in catering to the winter tourists on fishing trips. Others engage in fishing on a commercial basis during the season only.

The Overseas Railroad of The Florida East Coast Railroad spans this

part of the Keys. The railroad was damaged considerably by the hurricane of Sept., 2, 1935 and it has been abandoned from Florida City to Key West. The railroad is still in use, however, by an occasional train from Florida City to Tavernier. *out*

The Overseas Highway parallels the railroad along the Keys between Key Largo (station) and Lower Matecumbe Key. At this point, vehicular traffic en route to Key West, is carried by ferry to No Name Key. At the present time work is starting on the construction of the Overseas Highway between Lower Matecumbe and No Name Key using the abandoned railroad bed and bridges for the purpose.

The Intercoastal Waterway extends the entire length of the project from Jewfish Creek to Key West. The dredged channels along the waterway as well as all of the beacons and aids to navigation have been shown on the various compilation affected.

#### PROJECT INFORMATION:

There are four flight strips of five lense photographs used in the compilations of the sheets covered by this report. The numbers of the photographs in these strips are as follows: 197 to 263; 339 to 434; 435 to 482 and 483 to 572. These photographs were obtained by the Fourth Air Photo Section, U. S. Army, Maxwell Field, Alabama on January 17, 22 & 26, 1935. The pilot was Capt., James G. Pratt and the cameraman was Tech. Sgt. George H. Fisher. The plane used in the photographic mission was a Fairchild Photographic Ship, serial number 31-464. Camera Number T3A-32\*2 was used to secure the photographs.

The scale of these photographs was obtained by the usual method as described in the "Notes on the Compilation of Planimetric Line Maps". Forty-seven distances between triangulation stations were used to obtain a scale of 1:20,280 for the photographs. All sheets in the portion of the project covered by this report were compiled at this scale.

An index of photographs drawn on a section of Chart No. 1112 is appended to this report.

#### GENERAL DESCRIPTION OF COMPILATION METHODS:

The usual method of radial line locations was used in the compilation of the sheets in this project. In the vicinity of the Keys along the eastern edge of the project where there was abundant control the usual radial plot was not required. *See opposite page.*

Some difficulty was experienced in obtaining a smooth radial plot across the southern end of the Florida peninsula i. e. across Sheet Register Nos. 5538, 5441, 5440 and 5439. The last fixed photograph in this flight is in the vicinity of Long Sound and the first fixed photograph to the west is a little west of Flamingo. The distance between these two fixed photographs is approximately 36 statute miles. In order to run the plot with any degree of accuracy, great care was exercised in the selection of the center points in order to select points that appeared well when they fell out on the "PD"

and "E" wings. On the first running of the plot the center of the first fixes photograph to the west fell 33 meters long in distance and 46 meters south in azimuth, a total error of 56 meters from its true location. These successive centers were marked on the celluloid as the plot progressed and after the tie-in was determined they were adjusted to their theoretical correct positions by proportion. These position were not accepted for the correct position but used only to carry the azimuth on the next running of the plot. By holding the azimuth to these locations and the distance to the several triangulation stations that appeared out on the "A" wing, the plot was closed on the second trial without error. The plot was made more difficult by a break in the flight line near the center. After the plot was completed, three points were located in the area on and to the north of the flight line and these tied in satisfactorily with the radial locations.

The trim distances of the wings prints were determined in the usual manner. However, when matching the wing prints to the "B" prints the detail did not check across the match line, generally being larger on the wing prints. This condition has lead to the belief that either the camera was not calibrated before the photographs were made or that little care was used in transforming the wing prints to the plane of the horizontal. It has been found that, in order to make the radial cuts come in near the edges of the wing prints, it is necessary to mount the wing prints with a gap of 1.2 millimeters between the wings and the "B" print. This was done after a study of the plot was made but not on all of the mounts.

Due to errors noted in the scales on the trimming board, the actual trim distances as obtained from the board is recorded:

	Right side	Left side
"A" wing prints	70.3 mm	70.1 mm
"C" " "	70.3 mm	70.1 mm
"D" " "	70.4 mm	70.1 mm
"E" " "	70.4 mm	70.3 mm

These distances will be of no use to future parties using the photographs taken with Camera No. 32-2 unless the same trimming board is used.

There are several areas in the project that are not covered by the photographs. One of these areas include the three or four Keys in the vicinity of the Keys on which triangulation station CORMORANT is located. Another area is on the west side of Barnes Sound where the photographs fail to furnish coverage for a junction with Sheet Register No. T-4577 of the 1928 compilations. Present plans are to obtain the topographic detail in these areas by planetable in order to complete the project.

Other areas in the project are weak in location because of the necessity of obtaining the detail as it appears on the outer edge of the wing prints. In cases of this nature the weak locations will be noted in the descriptive report of the several sheets.



The lay-out of sheets as used in the compilation of this project was approved by the Washington Office. The projection machine in the Washington Office was used to make the projections for these sheets. It is noted that the approved sheet lay-out showed the top neat line to be Lat.  $25^{\circ} 15'$  for Sheet Register No. 5440 but on the projection received from the Office the top Latitude was  $25^{\circ} 14'$  and no additional celluloid remained to increase the size of the sheet by one minute of latitude. The sheet, therefore, will be submitted with the detail carried to Lat.  $25^{\circ} 14'$  as the top neat line.

No sheet joins on North - OK as is - c.k.

Some difficulty was expected in running the radial plot through the sheets in the center of Florida Bay because most of the area is over water and in most cases the selection of a center point is impossible. This uncontrolled plot was for only 16 statute miles between photograph numbers 219 to 252 which were fixed photographs. There were control stations between these two stations but the existing control was not sufficient to fix the photographs. The plot was closed on the first attempt by fixing the photographs on either end and locating well defined center points on these photographs and at the same time obtaining azimuth cuts to intermediate photographs in the flight. These azimuth cuts to the well defined center points and the additional control in the area enabled the plot to be worked without difficulty.

#### INTERPRETATION OF PHOTOGRAPHS:

It is thought that a few general notes in regard to the interpretation of photographs might aid the Office in the verification of these sheets. The notes are given under two headings, water area and land areas. These notes are only generalizations. It will be found that there are numerous exceptions to the interpretations as given here. These are for the bay area only.

##### Water area:

The blackest shades in the water area is usually an indication of grassy bottom. These areas are not the deepest water as they may be as shoal as one and one half feet. The deeper water in the area is usually indicated by a medium gray shade. The light gray or white areas in the water bodies that are not outlined to indicate shoals are caused by the wind or a school of mullet or other fish.

Generally the shoal areas are definite on the photographs. They appear with a distinct edge where the edge of the shoal is definite. No attempt has been made to delineate the shoal edges where they grade gradually into deeper water without a definite edge. Most of these shoals that show well on the photographs are covered with a rather thick growth of mangrove seedlings that are not more than six or eight inches above the water surface and have only two or four leaves on the plant. These growths are very scattered on the shoals and in order not to confuse these areas with the definite Keys, only the thicker clumps that appear on them have been shown on the compilations.

Isolated shoal of small area are difficult to identify on the photographs. The contemporary hydrographic sheets of the area as well as the published

chart have been used to locate these small shoals. In most cases these hydrographic surveys verify the existence but in others they do not. In the latter case they will be noted in the descriptive report for the sheets on which they appear.

There are several dug or dredged channels in the area of this project. Where definite on the photographs they have been shown on the sheets.

#### Land areas.

The areas of mangrove appearing on the photographs of the area of this project are relatively easy of interpretation. They are the darker area that appear on the land. In numerous cases these mangrove growths are mixed with and grade off into a thick buttonwood area. In such areas the photographs present an appearance much like hammock land. In order to delineate the land areas accurately information was obtained from the Bureau of Entomology and Plant Quarantine of the Department of Agriculture. This Bureau has been active for the past three or four years in the entire area of this project, destroying the wild cotton which is the host plant of the pink boll worm. Their activities have taken them to all hammock and semi-hammock land in the area and the information obtained from them has been invaluable.

The edge of the higher land on Key Largo and the main group of keys to the southwest is very definite on the photographs. This edge has been delineated on the compilations with a solid line.

The lighter areas in the land portions of the photographs that do not show vegetation are mud flats. These areas are sometimes called marl flats or salt flats. The white appearance on the photographs is due to the salt deposit that is generally found during the dry season. During the rainy season these areas are usually inundated.

A medium shade of gray, where it is smooth and unspotted, is characteristic of some the smaller keys and is an indication of pickle weed or Sanphire. These areas have been shown on the compilation with a grass symbol.

#### CONTEMPORARY SURVEYS:

Sheet Register Nos. T-5538 to T-5541 are partially covered by contemporary hydrographic and topographic control surveys. These surveys were made by the parties of H. A. Cotton in 1934 and E. R. McCarthy during 1935.

The control sheets in this area show only the location of signal for hydrographic survey, the location of beacons and aids to navigation and scattered topographic information that is liable to misinterpretation. These sheets have been used to obtain the location of beacons and benchmarks and where they have not been located the location has been obtained from sextant fixes or radial cuts. All discrepancies noted in the various locations have been discussed in the descriptive reports of the sheets on which they appear.

The projector was used to compare the detail shown on the control sheets with that appearing on the various compilations.

The contemporary hydrographic sheets of the area were also used to verify the location and existence of the shoals appearing within the limits of this project. These were also compared on the projector.

There follows a table showing the common areas covered by the air photo compilations and the contemporary hydrographic and topographic control sheets. The numbers referred to are register numbers.

Compilations	Hydrographic Sheets		Control Sheets	
	Inside	Outside	Inside	Outside
T-5538	H-5542	H-5878a	6256	6359a 6361
T-5539	H-5595	H-5879a	6256 6257	6359a 6359b
T-5540	H-5595 H-5778	H-5888 H-5892a	6258 6257	6359b 6360a 6360b
T-5541	H-5778	H-5892a	6258	6360a 6360b
T-5441	H-5542			
T-5442	H-5778			

There are additional contemporary sheets covering the area embraced by compilation number T-5541 but this information is not at hand in the field office. Nos. T-5442 and T-5441 are only partially covered by the indicated sheets.

#### PREVIOUS AIR PHOTO COMPILATIONS:

The area of this project was partly covered by air photo compilations which were compiled during or after 1928. These old compilations partially cover the areas of Sheet Register Nos. T-5438, T-5439 and T-5538. The numbers of these older compilations are T-4460, T-4461, T-4577 and T-4601.

These sheets were compared with the present compilations and the results of this comparison are noted in the descriptive reports of the various compilations.

#### INFORMATION FROM OTHER SOURCES:

Little information from other sources was available in the area of this project. Excepting the original land survey and the survey made by the Florida East Coast Railroad for the construction of the Overseas

Railroad, few surveys of any importance have been made in the area of this project. Thus, little information was available to check the accuracy of the various compilations.

The original land survey in the area was made by contractor during 1872-73. This survey together with the railroad survey was used to obtain the geographic names. The names appearing on these surveys are not correct in all cases but they were used for comparison with names in present local use.

A General Land Office compilation titled "Map to accompany report on The Unsurveyed Public Lands, Monroe County, Florida" was useful in obtaining geographic names of features not shown on other maps. Most of these names appear along the mainland of the State of Florida between Flamingo and Little Madeira Bay.

Most of the geographic names now appearing on the published chart were found to be correct. A great deal of time was spent in obtaining the correct names in local use and comparing these with the names as they appear on the charts of the area. Names of unnamed features on the chart were also obtained by questioning the residents of the area. This was no easy task to obtain a name in universal use in areas little frequented by the local residents. The same was true in obtaining the correct spelling of some of the features. The matter of geographic names is discussed fully in the reports on the various sheets.

As a matter of interest, it has been noted that a few names in local use and appearing on the present charts of the area were applied to a map compiled by B. Romans, an English cartographer, who made a survey of the area in 1774. The title of this map is "Chart of Part of Eastern Florida".

In the matter of geographic names, reference is made to a report submitted by Lieut. (j.g.) E. R. McCarthy during the early part of 1936. The title of this report is "Report on Geographic Names, Florida Keys, Key Largo to Long Key".

#### CONTROL:

In addition to the control contained in the Report of 1911, Appendix 6, Triangulation in Florida, the control used in the compilation of the sheets in this project was obtained by the following field parties: Charles Shaw, 1928 and 1930; H. A. Cotton, 1934; J. Bowie, 1935, E. R. McCarthy, 1935 and 1936.

With the exception of the scheme of triangulation executed by J. Bowie during 1935, all of the above triangulation is on the North American Datum. A majority of the positions were obtained from unadjusted field computations. In order to change the positions of the stations located by Lieut. Bowie to the North American Datum, several stations which were common to this and other schemes were compared. In plotting these stations the following corrections were obtained for those appearing on Sheet Register No. 5539: + 0.521" to the Latitude and - 0.119" from the Longitude.

A list of the control used in the compilation of each sheet is appended to the report for the sheet.

BENCHMARKS AND RECOVERABLE H & T STATIONS:

A majority of the first order and tidal benchmarks located in the area of this project are shown on the Control Sheets of the area. These marks have been located independently from the photographs. In cases where the two locations have not checked, the position has been verified in the field and either the photo location altered to agree with the locations on the Control Sheets or Form 524 resubmitted to correct the discrepancy.

All of the Recoverable Hydrographic and Topographic Stations reported on Form 524 as well as all of the beacons and aids to navigation shown on the various Control Sheets have been plotted on the compilations. The locations have been verified when they were recoverable on the photographs. In addition, other recoverable stations have been located and reported on Form 524 which will be transmitted with the various sheets in the project.

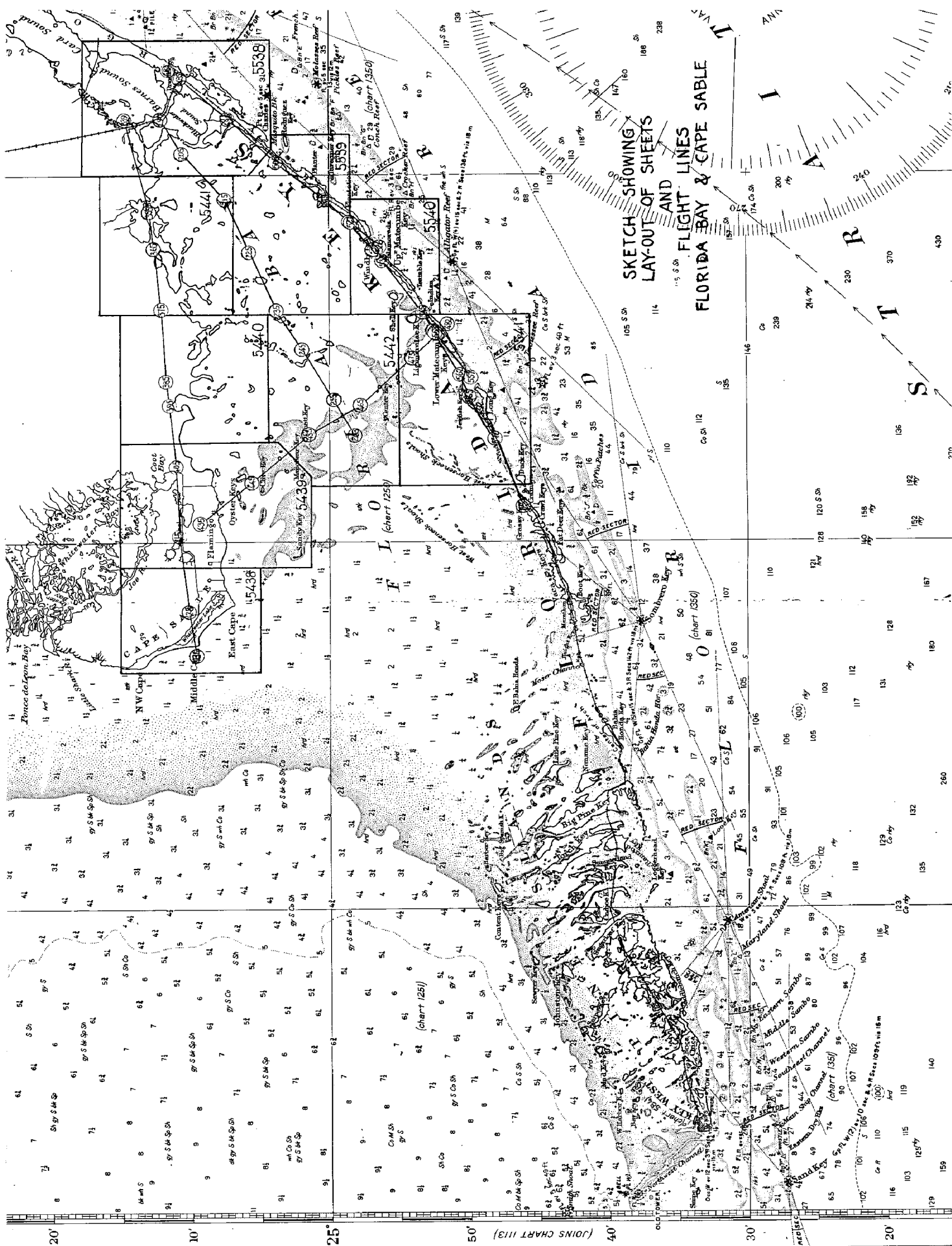
LANDMARKS:

Landmarks in the area along the eastern edge of the project have been reported previously and copies attached to the reports for the Control Sheets. Additional Landmarks of the areas already covered by these surveys and the areas not previously covered will be reported on Form 567 and copies of the form will be attached to the reports on the various sheets in the project.

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

Miami, Florida.  
November 13, 1936.

*An excellent and complete  
report --  
CKG*



SKETCH SHOWING  
LAY-OUT OF SHEETS  
AND  
FLIGHT LINES  
FLORIDA BAY & CAPE SABLE

(JOINS CHART 1113)

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-5538**

**T5538**

State Florida

General locality Florida Bay

Locality Key Largo

\* Scale 1:20,000 Date of <sup>photographs</sup> ~~survey~~ Jan., 17, 22 & 26, 1935

Vessel Shore party No., 14, Atlantic Coast.

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 aerial photographs at a scale of 1:20,280  
for reproduction by the photo-lithographic process at a scale of  
1:20,000

\* *Blue print on scale 1:20,280*

1249

# DATA SHEET

Sheet Register No. T-5538

Portion of work	Done by	Date completed
Projection made by:	Washington Office	- - - -
Projection checked by:	M. B. Gill	May 13, 1936
Control plotted by:	M. B. Gill	May 18, 1936
Control checked by:	John C. Mathisson	May 20, 1936
Radial Plot developed by:	John C. Mathisson	June 12, 1936
Radial Plot checked by:	M. B. Gill	June 26, 1936
Compiled in pencil by:	M. B. Gill	July 21, 1936
Shoreline inked by:	H. D. McMillan and M. B. Gill	October 13, 1936
Symbols inked by:	John C. Mathisson	November 9, 1936

\* \* \* \* \*

## STATISTICS

Statute miles of shoreline, mainland	15.8
" " " " , keys	104.8
" " " " , lakes and ponds	<u>36.1</u>

TOTAL STATUTE MILES OF SHORELINE 156.7

Statute miles of creeks and canals	27.3
------------------------------------	------

Area, square statute miles, mainland	15.3
" " " " , keys	<u>22.2</u>

TOTAL AREA, SQUARE STATUTE MILES 37.5



DESCRIPTIVE REPORT  
to accompany  
PHOTO TOPOGRAPHIC SHEET  
REGISTER NO. T-5538  
KEY LARGO  
FLORIDA BAY  
FLORIDA  
1936

Scale of Compilation 1:20,280

PROJECT INFORMATION:

Project information of a general nature applying to the project as a whole is contained in the General Descriptive Report. This report is attached to and made a part of the descriptive report for this sheet.

DESCRIPTION OF AREA:

This sheet covers a portion of the Florida Keys lying between Barnes Sound on the north and Florida Bay on the west. Included in this area is a large portion of Key Largo on the southeast. Approximately three miles of the Florida mainland lying north of Long Sound is also shown on this sheet. This area is over a portion of the Everglades.

The tracks of the Florida East Coast's Oversea Railroad enters the area of this sheet at the north and traverses the area across Cross Key to the area of Key Largo and then southwestward on Key Largo to the southern limits of the sheet. Due to damage to the tracks of this railroad caused by the hurricane of September 2, 1935 south of Tavernier, the tracks have been abandoned by the company. The tracks are in good condition in the area of this sheet and a weekly freight train is run over them but they are not maintained by the railroad company. This railroad has been shown on the compilation and marked abandoned on the name sheet.

The section of the Florida mainland shown on this compilation is part of the extensive Everglades. The land in this area is inundated during all seasons of the year and covered with a tall growth of saw grass which is dotted with small groups of detached hammocks. These hammocks are little above the water surface covering the saw grass area and owe their additional elevation to the decayed vegetable matter from the growths on them. The water height in the glade area is, of course, higher during periods of heavy rainfall over the Everglades.

South of the area of saw grass, along the shores of Long Sound and Manatee Bay, there is a growth of mangrove that grades from thick tall trees in some localities to low scattered red mangrove in others. This mangrove extends northward into the glades area in localities where drainage streams are found. The mangrove grows along the banks of these streams and also in areas lower than the surrounding terrain where no drainage pattern is discernible on the photographs.

The keys in the area of this sheet, with the exception of Key Largo, are apparently the result of mangrove growing on the shoals in the area. It is certain that the formation of Porjoe Key and the Cormorant Rookeries are due to this process for these keys are not shown on the present charts of the area and questioning local inhabitants has substantiated the fact. All of the keys in this area are low and the ground ordinarily exposed at average water is covered during time of high tide in combination with winds from the west or southwest. Winds from these directions cause the water in the bay to be much higher than normal or than it would have been with the absence of the wind. A large number of the keys are partly given over to areas of mud flats. These mud flat areas are generally bare of vegetation but occasionally they have growths of scattered mangrove or pickle weed.

Key Largo, the key forming the eastern limits of the topography shown on this compilation, is the only inhabited key on this sheet. The land through the center of this key is comparatively high and covered with a dense growth of tropical or semi-tropical trees and vines. In areas the key is fringed with extensive areas of mangrove on both the bay side and the ocean side. Occasionally in this mangrove area there is found an area of semi-hammock which contains a growth of mangrove and buttonwood and other deciduous trees able to grow on land occasionally inundated by the tide.

The principal industry of the inhabitants of Key Largo is lime culture. They also engage in fishing but very seldom on a commercial basis. During the winter season or tourist season they cater to the tourist trade in furnishing boats and equipment for fishing parties to the Gulf Stream.

Rock Harbor is the largest settlement in the area of this sheet. Here are found a school and postoffice furnishing the needs for some 25 or 30 residents. Garden Cove, located near the north limits of the sheet, has few residents. It is the site of a boom time real estate development known as Key Largo City during 1926. The name has since lost its identity. Key Largo, just south of Garden Cove, is the location of the railroad station of that name and of little importance otherwise. Anglers Park, located on Largo Sound, is also a sub-division which was developed during the land boom in Florida. The street in this area were originally only clearings and they have since grown over with trees and difficult to identify on the ground but visible in the photographs.

#### GENERAL INFORMATION:

The area of this sheet is covered by portions of three flights of five lense photographs. Photograph Nos. 339 to 349 inclusive, centering near the north neat line, were obtained at 9:15 A. M. on January 22, 1935. The photographs in the flight through the center of Florida Bay, Nos. 197 to 210 inclusive, were obtained at 2:15 P. M. on January 17, 1935. The flight strip centering on or near Key Largo and containing photographs Nos. 483 to 503 in-

The statement that the usual radial line plot was not necessary is misleading. The compiler means that due to ample control no picture travers was necessary. Radial points were elevated in the usual way for controlling the tracing of detail.

clusive, were obtained on January 26, 1935 at 2:00 P. M.

An index of photographs, drawn on a section of published chart, is appended to the General Descriptive Report for the project. This report is attached to the report for this sheet.

#### CONTROL:

For a discussion of the control used in the compilation of this sheet, see the General Descriptive Report.

There is appended hereto a list of the triangulation stations appearing on this sheet. This list shows the plotting distances used for the scale of the compilation, 1:20,280.

#### COMPILATION METHODS:

The usual radial line methods, as described in the "Notes on the Compilation of Planimetric Line Maps", were used in the compilation of this sheet. Due to the abundance of control over the area of this sheet the usual radial plot was not necessary. Most of the photographs were fixed with triangulation stations and the compilation point locations were determined without difficulty. *See note on opposite page.*

The coverage of the photographs in the vicinity of Glades Canal and northwestward to the limits of the topography shown on this compilation is a little weak for satisfactory compiling. This was due to the flight line being broken before enough photographs were obtained to make a satisfactory junction with the older compilation, Sheet Register No. T-4577, on the west shore of Barnes Sound. The detail shown on the sheet in this area, is, however, adequately controlled. In order to show the topography joining these two sheets, a separate projection was made on a small piece of celluloid. This was done because the methods used to obtain this detail were not the usual conventional methods and it was thought undesirable to place detail even on an insert that does not approach the usual accuracy obtained in these compilations.

In the area in question a photograph, No. 340, was found to have a very good scale over the topography necessary to join these two sheets. With the aid of the points etc. shown on Sheet Register No. T-4577, the topography was drawn in without the aid of radial locations. The resulting topography is not accurate but shows the detail better than any other survey available in the area. No definite claim for accuracy will be made but it is believed that it is very close and depends on the accuracy of Sheet Register No. T-4577 and this sheet showed very good agreement in the case of the location of Main Key.

#### INTERPRETATION OF PHOTOGRAPHS:

Generally, the photographs in the area of this sheet were clear and adequate for charting. The three flights of photographs, converging at the railroad on Cross Key, furnished better than ordinary coverage over the bay area.

#### INFORMATION FROM OTHER SOURCES:

All topographic detail appearing on this sheet was obtained from the photographs. There are few surveys of other agencies executed in the area covered by this compilation.

Little damage was done by the hurricane of September 2, 1935 in the locality. The three small piers and a breakwater just north of triangulation station Mac were washed out and these have been replaced by the one pier shown on the sheet. The position was obtained from measurements obtained during a field inspection trip.

#### COMPARISON WITH CONTEMPORARY SURVEYS:

Little topographic detail is shown on the contemporary control sheets covering the area of this sheet. The recoverable topographic stations that were recovered without difficulty on the photographs were located and verified on the compilation. The location of two of the first order benchmarks were not verified when located from the photographs. These are Benchmark Numbers U-68 and V-68. These benchmarks were described on Form 524 by the topographic control party and the positions given in error. Form 524 is being re-submitted for these two marks as well as the benchmarks to the north which were not shown on the control sheets. The positions as given on the re-submitted form and as they appear on the compilation were checked in the field by measurements taken to nearby triangulation stations and are correct as they are shown.

The compilation was compared, with the use of the projector, with the three hydrographic sheets covering the area of this sheet. These surveys are Register Numbers 5542, 5878a and 5595. As a whole the comparisons show very good agreement with few soundings plotting on the land areas or shoals. Difference is noted in the sounding line run into the lake at the northeast end of Long Sound. There is a definite bend in this creek where the soundings show it straight. The two detached shoal areas, one about one mile southeast of Duck Key and the other about three quarters of a mile north of Porjoe Key, were verified on the photographs and are shown on the compilation. The soundings through Upper Sound Creek and Lower Sound Creek, north and south of Largo Sound, do not exactly fall into the creeks as delineated on the compilation. It is believed that this is due to the old compilation being used to spot signals and that there was no topography accomplished to independently control the survey. A comparison of the three channels that appear in this area show very good agreement.

#### COMPARISON WITH PREVIOUS SURVEYS:

The area of this sheet is covered by two air photo compilations made during 1928. These are Register Numbers 4577 and 4601.

Only a small area of this compilation is common to Register No. 4577. This area is in the vicinity of Main Key and Division Point. The delineation of Main Key on the old compilation shows almost perfect register but Divis-

ion Point does not show good agreement due, it is believed, to faulty interpretation in the original survey.

A comparison with Sheet Register No. 4601 shows the detail uniformly ~~15~~ off by about 15 meters near the north neat line and increasing to about 50 or 60 meters near the south neat line. The detail is generally good but some errors are noted that were probably due to faulty interpretation in the original survey.

There is appended to this report a section of Chart 1249 covering the area of this sheet with an over-lay reduced to the scale of the chart from the compilation. This chart section graphically illustrates the comparison between the previous surveys in the area and the compilation. This over-lay tracing was made on the projector and required two reductions to reduce from the scale of the compilation to the scale of the chart. *May 29*

#### LANDMARKS

Landmarks for charts were previously submitted for the area covered by this sheet. Duplicate copies of these lists are to be found in the descriptive report for Sheet Register Nos., 6361 and 6359. A supplemental list is being submitted and a duplicate copy is attached to this report. The permanent (non floating) aid to navigation have not been submitted to the Office on the regular Landmark form and these appearing on this sheet are also being submitted. A copy of this list is also attached to this report.

#### GEOGRAPHIC NAMES:

The geographic names of only the most important bodies of water and keys appear on the present published chart of the area covered by this compilation. A great many additional names appear on the name sheet which accompanies this compilation which have not been previously shown on the charts of the area. Local information has been obtained in the case of these names and in checking the names that do appear on the present chart, reference has been made to the Report of 1911, Appendix 6, Triangulation in Florida. A few conflicts exist in the case of some of these names and in the following discussions these conflicts in names are dealt with. The discussions roughly follow the order of the geographic names as they appear on the sheet from north to south, first dealing with the land features and the water features next.

The name GLADES has not previously appeared on the published chart of the area. This is the name of the railroad siding and water station assigned by the railroad company and in local use.

FLAT POINT appears on the present published chart of the area but the name could not be verified by local inhabitants. There is no local name in use for this point.

MAIN KEY and CROSS KEY are both charted name that find local use. These names were verified. They also appear in Appendix 6 of the Report of 1911.

BAY POINT and DIVISION POINT are two geographic names that are in local use and have been previously charted.

CORMORANT ROOKERIES is the local name given to the group of three keys between Main Key and Division Point. These keys are the nesting place of a large number of cormorants. It is interesting to note that these keys have appeared, according to local residents, within the past thirty years. The present chart shows one half foot sounding on the area of the two northern keys of the group.

CHANNEL POINT, appearing on the present published chart, does not find local usage. This point does not have a name that is in local use. The same is true in the case of LARGO POINT at the east entrance to Jewfish Creek.

There is a conflict in the name of SNIPE POINT. One local inhabitant was found who knows the point as Madeira Point. Verification could not be found for this and the name in most local use is as it now appears on the published chart.

SHELL KEY, mentioned in Appendix 6 of the Report of 1911, is not in local use. The local inhabitants have no name for this key.

/ DUCK KEY, appearing on the published chart, is in local use.

GARDEN COVE in addition to being the name of the cove and anchorage is also the name of the small settlement inshore. This area was developed as Key Largo City during the Florida land boom but it has been abandoned and the name no longer finds local usage.

SNAKE POINT, just south of Jewfish Creek, is a name appearing on the present chart that is not used by the local inhabitants.

The name suggested for the point just south of Snake Point is STILL-WRIGHT POINT. This is from the name of a resident who kept bee hives on the point during past years. The resident is now deceased.

KEY LARGO is the name of the small settlement and railroad station just south of the points where the railroad enters Key Largo.

UPPER SOUND POINT and LOWER SOUND POINT are also known as Big Sound Point and Little Sound Point respectively. The former is in more universal use and is recommended for charting. Lower Sound Point is often referred to as being the extreme southern tip of land about one mile to the southwest. The same is true in the case of POINT CHARLES to the south. The names as they appear on the name sheet are placed on the points as they appear prominently in coasting.

POPOINT WILLIE is a prominent point and the name was obtained from Appendix 6, Report of 1911 and assigned by the field party.

ANGLERS PARK, on the west shore of Largo Sound, is a name in local use.

The strip of land forming the east shore of Largo Sound and extending between Upper and Lower Sound Point is known by several names. Sound Point Land and Rattlesnake Ridge are two of the names in local use. In Appendix 6, Report of 1911, the land is referred to as Julia Island. The name that is most descriptive and in equal local use is SOUND POINT LAND and this name is recommended for charting.

The rather long key lying between The Boggies and Dusenberry Creek is known as Boggy Land. This key is referred to in the Report of 1911, Appendix 6 as Key Largo but it is believed that this land has never been a part of Key Largo. It is recommended that this key be charted as BOGGY KEY.

A key that has come into existence within the past thirty years is PORJOE KEY. Porjoe is the local name of a small blue heron that frequents the area. The name is recommended. The present chart shows a one foot sounding at the location of this key.

The key to the southwest of Porjoe Key, which is at present charted as Whaleback Key, is known locally as LITTLE TERN KEY.

The group of five keys lying between Baker Cut and Little Tern Key are known locally as THE SWASHES. The local inhabitants have reference to the bars connecting these keys in applying the name. These keys, being unusually low and worthless, are well named. The name is recommended.

Similar to the case of Garden Cove, the name ROCK HARBOR is applied to the cove in this locality as well as the settlement on shore.

PELICAN KEY is a name in local use by the residents of Rock Harbor.

#### Water Features.

The canal dredged into the glades area in order to obtain fresh water during the construction of the railroad is known as GLADES CANAL. This name is in local use and recommended.

MANATEE BAY and LITTLE MANATEE BAY as well as MANATEE CREEK are names in well established local use. Little Manatee Bay is also known as Little Barnes Sound but this name is not recommended as the former name is in much more local use. Before the railroad fill obstructed the passage, Manatee Creek was an important pass much used by fishermen.

LONG SOUND, appearing on the present published chart, is also known as Long Lake.

The body of water just south of Long Sound has not been named on past editions of the chart of the area. The name in most local use is BUTTONWOOD SOUND. This body of water is also known as Round Lake but the name is not recommended.

The pass between Long Sound and Buttonwood Sound is known locally as LONG SOUND PASS while the pass between Buttonwood Sound and Blackwater



Sound is known as BUTTONWOOD PASS. Both of these names are in local use and are recommended.

In addition to ROCKY CREEK this stream is also known as Shell Creek. The latter name is not used as often as the former and for this reason the name Rocky Creek is recommended for charting.

The authority for the name SIMMONS LAKE is the 1928 air photo compilation sheet of the area. Few local residents of the keys know of the existence of this body of water. The name was not verified.

THE BOGGIES is the name in local use for the pass at the west of Blackwater Sound. This pass is very shoal and the soft mud on the bottom is covered with a thick growth of grass making it difficult for boats to drag over. Other names in local use are Boggy Pass or Boggy Cut but these are not recommended.

The creeks at the north and at the south of Largo Sound are known as NORTH SOUND CREEK and SOUTH SOUND CREEK respectively. The north creek is also known as Upper Sound Point Creek, Upper Sound Creek, North Pass and Northern Creek while the creek at the south in like manner is known as Lower Sound Point Creek, Lower Sound Creek, South Pass and Southern Creek. The name generally accepted in the locality is as first given.

SEXTON COVE is a name recommended by the photo party. This is the name of the person that made the dredging operations in the locality. The local inhabitants know the vicinity by this defunct development.

Two small anchorage areas on the outside shore of Sound Point Land are known locally as WHITMORE BIGHT (or Whitmore Bight) and CASTADIVA BIGHT. These are anchorages used by sponger during a northwester when working the grounds offshore.

DUSENBERRY CREEK (or Dusenbury Creek) and GROUPER CREEK are names in universal local usage.

There are several names for the body of water to the northwest of Tarpon Basin. Among these are Little Buttonwood Sound, Black Sound, Back Sound and GROUPER CREEK SOUND. The latter is recommended as it is the name used by the inhabitants in the immediate vicinity and appropriate because of the well established Grouper Creek nearby.

JOHNSON CREEK is the local name of the creek affording passage for a skiff between Largo Sound and Newport.

The recommended name for the large body of water between Grouper Creek and Baker Cut and favored in local usage is BIG BUTTONWOOD SOUND. Other names, finding less local usage in the area, for this feature are Little Largo Sound and Johnson Sound.

BAKER CUT is the name of the dredged channel made by the Florida East Coast Railroad. This name is in universal local use.

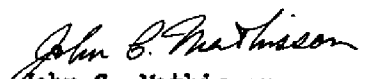
SUNSET COVE is the name given to the small cove on the south of Big Buttonwood Sound and on the bay side of Rock Harbor. This name is known

only to the residents of Rock Harbor but is well established there.

A name which is little used in the area is NEWPORT. This is the name which is loosely applied to the cove lying between Lower Sound Point and Point Charles. It is probably derived from the town, now abandoned, located on shore and known as Newport. Reference is made to this town in Appendix 6, Report of 1911.

RECOMMENDATION FOR FURTHER SURVEYS:

It is believed that this compilation 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.

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

Miami, Florida.  
November 24, 1936.

OVER-LAY SHEET  
SHOWING  
TOPOGRAPHY REDUCED FROM  
PHOTO TOPOGRAPHIC SHEET No. 5538  
TO SCALE OF CHART No. 1249. . .

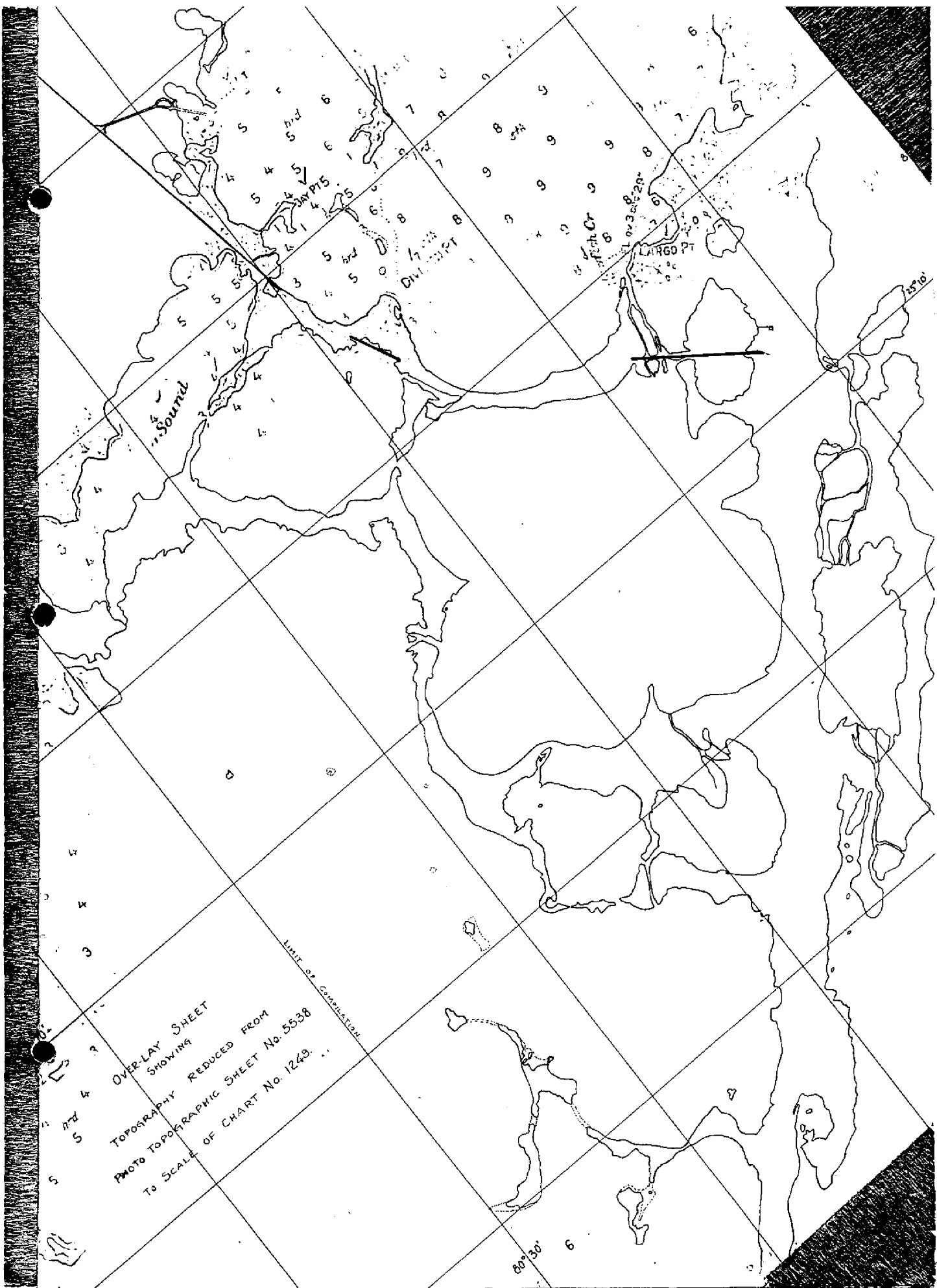
LIMIT OF COASTLINE

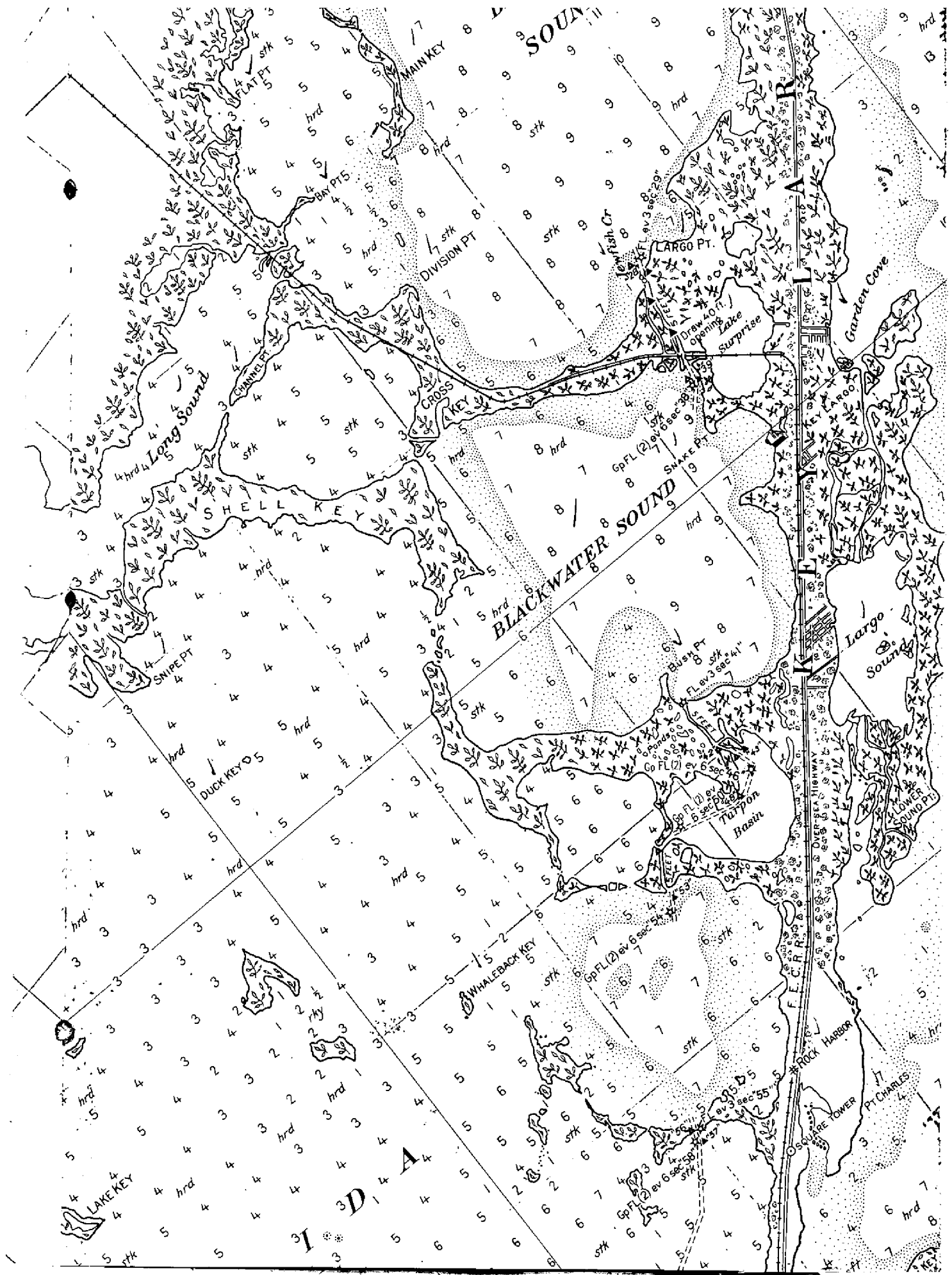
Sound

CH 1860 PT

80° 30'

125° 10'





## SHEET REGISTER NO. T-5538

## TABLE OF TRIANGULATION CONTROL

STATION	POSITION	PLOTING DISTANCES.			
Tony, 1860	Lat. 25° 07' 1691.0 { 155.3 } Long. 80° 27' 1206.6 { 474.0 }	1667.7 { 153.1 }	1189.9 { 467.4 }		
Tarpon, 1934	Lat. 25° 07' 1085.9 { 760.2 } Long. 80° 26' 620.8 { 1060.2 }	1070.9 { 749.6 }	612.2 { 1045.6 }		
Bn. 40, 1934	Lat. 25° 07' 1079.2 { 767.1 } Long. 80° 25' 898.0 { 782.6 }	1064.3 { 756.5 }	885.7 { 771.8 }		
Elba, 1852	Lat. 25° 07' 938.6 { 907.6 } Long. 80° 24' 156.9 { 1523.8 }	925.7 { 895.1 }	154.7 { 1502.8 }		
Basin, 1934	Lat. 25° 07' 85.6 { 1760.4 } Long. 80° 25' 631.2 { 1049.8 }	84.4 { 1736.1 }	622.5 { 1035.3 }		
Sever 2, 1934	Lat. 25° 06' 996.7 { 849.5 } Long. 80° 29' 523.0 { 1158.1 }	983.0 { 837.8 }	515.8 { 1142.1 }		
Baker, 1934 (inside)	Lat. 25° 06' 211.7 { 1634.6 } Long. 80° 28' 1066.9 { 614.3 }	208.8 { 1612.0 }	1052.2 { 605.8 }		
Bruin, 1860	Lat. 25° 06' 487.8 { 1358.5 } Long. 80° 26' 388.7 { 1292.5 }	481.1 { 1339.8 }	383.4 { 1274.7 }		
Lower Sound Point, 1853	Lat. 25° 06' 660.5 { 1185.7 } Long. 80° 24' 2.7 { 1678.5 }	651.4 { 1169.3 }	2.7 { 1655.3 }		
Square Tower, 1934	Lat. 25° 04' 1394.9 { 451.3 } Long. 80° 27' 663.1 { 1018.3 }	1375.7 { 445.1 }	654.0 { 1004.3 }		
Road, 1860	Lat. 25° 04' 797.5 { 1048.7 } Long. 80° 27' 1629.5 { 51.9 }	786.5 { 1034.2 }	1607.0 { 51.2 }		
Mac, 1934	Lat. 25° 04' 722.2 { 1124.0 } Long. 80° 27' 1093.2 { 588.4 }	712.2 { 1108.4 }	1078.2 { 580.3 }		
Point Charles 2, 1934	Lat. 25° 04' 1036.1 { 810.0 } Long. 80° 26' 1014.9 { 666.5 }	1021.8 { 798.9 }	1000.9 { 657.3 }		
Mosquito Bank Lt., 1934	Lat. 25° 04' 677.7 { 1168.5 } Long. 80° 23' 983.4 { 698.2 }	668.3 { 1152.1 }	969.9 { 688.6 }		
Knowlson, 1935	Lat. 25° 12' 118.2 { 1728.0 } Long. 80° 20' 1477.8 { 201.9 }	116.6 { 1704.1 }	1457.4 { 199.1 }		
Rock Harbor, 1935	Lat. 25° 06' 1072.3 { 773.9 } Long. 80° 25' 930.5 { 750.7 }	1057.5 { 763.2 }	917.8 { 740.3 }		
Mosquito Creek, 1854	Lat. 25° 16' 1277.9 { 568.3 } Long. 80° 21' 605.0 { 1073.6 }	1260.2 { 560.5 }	596.6 { 1058.8 }		
Julia Island No. 5, 1852	Lat. 25° 07' 492.5 { 1353.7 } Long. 80° 23' 213.5 { 1467.5 }	485.8 { 1335.1 }	210.6 { 1447.3 }		

## SHEET REGISTER NO. T-5538

## TABLE OF TRIANGULATION CONTROL

STATION	POSITION	PLOTTING DISTANCES
Glades Water Tank, 1934	Lat. 25° 16' 47.2 (1799.0) Long. 80° 26' 723.6 ( 955.2)	46.5 (1744.2) 713.6 ( 942.0)
Hydro Signal, 1930	Lat. 25° 15' 1538.2 ( 308.0) Long. 80° 20' 731.6 ( 947.3)	1517.0 ( 303.8) 721.5 ( 934.2)
And, 1930	Lat. 25° 15' 890.5 ( 955.7) Long. 80° 25' 578.5 (1100.4)	878.3 ( 942.5) 570.5 (1085.2)
Main Key 2, 1930	Lat. 25° 14' 1489.6 ( 356.6) Long. 80° 23' 1333.2 ( 345.9)	1469.0 ( 351.7) 1314.9 ( 340.8)
Hot, 1930	Lat. 25° 14' 1553.0 ( 293.2) Long. 80° 20' 192.2 (1487.1)	1531.5 ( 289.2) 189.6 (1466.6)
Sound, 1934	Lat. 25° 14' 669.7 (1176.6) Long. 80° 26' 689.2 ( 990.1)	660.5 (1160.3) 679.7 ( 976.5)
Long, 1930	Lat. 25° 13' 858.8 ( 987.4) Long. 80° 28' 1625.4 ( 54.0)	847.0 ( 973.8) 1602.9 ( 53.2)
Channel, 1934	Lat. 25° 13' 849.0 ( 997.3) Long. 80° 27' 362.8 (1316.7)	837.3 ( 983.6) 357.9 (1298.6)
Largo North 3, 1930	Lat. 25° 14' 241.7 (1604.4) Long. 80° 20' 360.5 (1318.8)	238.3 (1582.2) 355.6 (1300.7)
Bar, 1930	Lat. 25° 13' 320.8 (1525.4) Long. 80° 25' 216.5 (1463.1)	316.4 (1504.3) 213.5 (1443.0)
Snipe Point, 1934	Lat. 25° 11' 1806.3 ( 40.0) Long. 80° 29' 1481.8 ( 197.9)	1781.4 ( 39.4) 1461.4 ( 195.2)
Blackwater, 1934	Lat. 25° 11' 1690.0 ( 156.2) Long. 80° 26' 207.8 (1472.2)	1666.7 ( 154.0) 204.9 (1451.9)
Barnes, 1934	Lat. 25° 12' 901.6 ( 944.6) Long. 80° 31' 675.6 (1004.2)	889.2 ( 931.5) 666.2 ( 990.3)
Mary, 1934	Lat. 25° 12' 681.5 (1164.7) Long. 80° 20' 448.2 (1231.6)	672.1 (1148.6) 441.9 (1214.6)
Nes, 1930	Lat. 25° 12' 671.5 (1174.7) Long. 80° 22' 495.6 (1184.2)	662.2 (1158.2) 488.8 (1167.8)
Crab Point, 1854	Lat. 25° 11' 910.9 ( 935.6) Long. 80° 23' 1125.9 ( 554.1)	898.4 ( 922.4) 1110.3 ( 546.4)
Cross Key, 1934	Lat. 25° 11' 547.1 (1299.1) Long. 80° 24' 398.3 (1281.7)	539.5 (1281.2) 392.9 (1264.0)

## SHEET REGISTER NO. T-5538

## TABLE OF TRIANGULATION CONTROL

STATION	POSITION	PLOTTING DISTANCES
West Tower, 1930	Lat. 25° 11' - 116.1 - (1730.0) - Long. 80° 23' - 543.2 - (1136.8) -	114.4 - (1706.2) - 535.7 - (1121.1) -
East Tower, 1930	Lat. 25° 11' - 65.4 - (1780.8) - Long. 80° 23' - 477.0 - (1203.0) -	64.5 - (1756.2) - 470.4 - (1183.7) -
Jewfish Creek, 1934	Lat. 25° 10' - 1820.6 - ( 25.6) - Long. 80° 23' - 451.4 - (1228.6) -	1795.5 - ( 25.2) - 445.2 - (1211.6) -
Duck Key, 1855	Lat. 25° 10' - 1433.6 - ( 412.7) - Long. 80° 29' - 564.8 - (1115.2) -	1413.9 - ( 407.1) - 557.0 - (1099.8) -
Shell Key, 1854	Lat. 25° 10' - 1269.9 - ( 576.3) - Long. 80° 26' - 406.0 - (1274.0) -	1252.4 - ( 568.3) - 400.4 - (1256.3) -
Baker, 1934 (outside)	Lat. 25° 10' - 1731.6 - ( 114.6) - Long. 80° 21' - 379.8 - (1300.2) -	1707.7 - ( 113.0) - 374.6 - (1282.3) -
Upper Sound Point, 1853	Lat. 25° 10' - 232.4 - (1613.8) - Long. 80° 21' - 1.8 - (1678.4) -	229.2 - (1591.6) - 1.8 - (1655.2) -
Batti, 1860	Lat. 25° 09' - 1151.2 - ( 695.1) - Long. 80° 27' - 1236.5 - ( 443.8) -	1135.3 - ( 685.5) - 1219.4 - ( 437.7) -
Point, 1934	Lat. 25° 09' - 1213.0 - ( 633.2) - Long. 80° 23' - 1290.9 - ( 389.4) -	1196.5 - ( 624.5) - 1273.1 - ( 384.1) -
Ailu, 1934	Lat. 25° 09' - 344.4 - (1501.8) - Long. 80° 21' - 860.5 - ( 820.0) -	339.6 - (1481.1) - 848.7 - ( 808.7) -
Bush, 1934	Lat. 25° 08' - 1610.2 - ( 236.0) - Long. 80° 25' - 745.0 - ( 935.5) -	1588.0 - ( 232.7) - 734.6 - ( 922.6) -
Bush, U.S.E.D., 1934	Lat. 25° 08' - 1630.6 - ( 215.7) - Long. 80° 25' - 727.7 - ( 952.8) -	1608.1 - ( 212.7) - 717.6 - ( 939.7) -
Hull Key, 1852	Lat. 25° 08' - 977.3 - ( 868.9) - Long. 80° 23' - 312.5 - (1368.0) -	963.8 - ( 857.0) - 308.3 - (1349.4) -
Point Willie, 1853	Lat. 25° 08' - 401.9 - (1444.4) - Long. 80° 22' - 478.4 - (1202.3) -	396.4 - (1424.4) - 471.8 - (1185.7) -
Will, 1934	Lat. 25° 08' - 404.2 - (1442.0) - Long. 80° 22' - 488.7 - (1192.0) -	398.6 - (1422.1) - 482.0 - (1173.8) -
Hawk Channel - Bn. 33, 1934	Lat. 25° 08' - 307.4 - (1538.8) - Long. 80° 20' - 241.9 - (1438.8) -	303.2 - (1517.6) - 238.5 - (1419.0) -
Largo Sound, 1852	Lat. 25° 07' - 1843.4 - ( 2.8) - Long. 80° 23' - 1485.8 - ( 194.9) -	1817.9 - ( 2.8) - 1465.3 - ( 192.2) -

1

# Remarks

# Decisions

1		
2		
3	<i>Also known locally by other names (see D.R. pg. 7)</i>	
4		
5		<i>GN 4-1937</i>
6		
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8	<i>Also called "Witmore Dight" locally</i>	
9		
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11		
12	<i>Field Recommendation (see D.R. pg. 6)</i>	
13	<i>Field Recommendation (see D.R. pg. 8)</i>	
14		
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18	<i>Refer to D.R. for T-4601 pg. 2</i>	<i>Insufficient Investigation GN 4-1937</i>
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# GEOGRAPHIC NAMES

Survey No.

T-5538

Name on Survey

	A	B	C	D	E	F	G	H	K	
	On Chart No. 1249	On previous survey No. T-154	On U. S. Quadrangle Energy Maps	From local information	General Land Office On local maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List		
HAWK CHANNEL ✓	✓				✓					1
CASTADIVA BIGHT				(D.R.)						2
SOUND POINT LAND				(D.R.) ?						3
LARGO SOUND ✓	✓		✓	✓	✓					4
POINT WILLIE ✓		T-1154 Δ								5
ANDERS PARK ✓										6
KEY LARGO ✓ & settle- ment	✓			(D.R.)	✓	✓	Key Largo (settlement)			7
WHITMORE BIGHT				(D.R.)						8
NORTH SOUND CREEK				(D.R.)						9
GARDEN COVE ✓	✓		✓	(D.R.)	✓					10
UPPER SOUND POINT	✓			(D.R.)						11
STILLWRIGHT POINT ✓										12
SEXTON COVE ✓										13
SNAKE POINT	✓		✓		✓					14
LAKE SURPRISE	✓		✓		✓					15
JEWELISH CREEK	✓				✓					16
LARGO POINT ✓	✓	T-1154 Δ			✓					17
LAKE SIMMONS ✓										18
BARNES SOUND	✓		✓		✓					19
MAIN KEY	✓		✓	(D.R.)	✓					20
SOUTH SOUND CREEK	✓			(D.R.)						21
LOWER SOUND POINT	✓		✓	(D.R.)	✓					22
POINT CHARLES	✓		✓	(D.R.)	✓					23
SUNSET COVE				(D.R.)						24
ROCK HARBOR ✓	✓		Rock- harbor		Rock- Harbor					25
NEWPORT										26
JOHNSON CREEK				✓ (D.R.)						27

✓

	Remarks	Decisions
1		
2		
3	Also recommended "Little Buttonwood Isd."	see GN 4-1937
4	Also spelled "Dusenbury"	Question only of spelling (GN4-1937)
5		
6	Field Recommendation	
7		
8		
9		
10		
11		
12	called "Shell Key" in Report of 1911, Trans. of Florida pg. 543	
13		GN4-1937
14		
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22		
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24		
25	Also called "Shell Cr." Better known as "Rocky Cr."	
26		
27		See GN4-1937

# GEOGRAPHIC NAMES

Survey No.

T-5538

Name on Survey

	A	B	C	D	E	F	G	H	K	
	On Chart No. 1249	On previous survey No. T-1154	On U.S. S. quadrangle Maps 240000	From local information	General Land Off. Map	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List		
TARPON BASIN ✓	✓		✓		✓					1
GROUPEE CREEK ✓	✓			(D.R.)						2
not checked LITTLE BUTTWOOD ✓	✓	Little Buttwood sd.		(D.R.)						3
GROUPEE CREEK SOUND ✓	✓			(Sp.R.I.)						4
DUSENBERRY CREEK ✓	✓			(D.R.)						5
BUSH POINT ✓	✓		✓	(Sp.R.I.)	✓					6
BOGGY KEY ✓				Boggy Land (D.R.)						7
PELICAN KEY				(D.R.)						8
BLACKWATER SOUND ✓	✓	Black-water Bay	✓		✓					9
THE BOGGIES ✓	✓			(D.R.)						10
CROSS KEY ✓	✓		✓	(D.R.)	✓					11
LITTLE MANATEE BAY										12
SHELL KEY ✓	✓			(Sp.R.I.)	✓					13
LITTLE BLACKWATER ✓	✓	Little black-water sd.								14
BUTTONWOOD SOUND ✓	✓	T-1154 Δ	✓		✓					15
CHANNEL POINT ✓	✓		✓	(D.R.)	✓					16
LONG SOUND ✓	✓			(D.R.)						17
MANATEE BAY ✓	✓		✓	(D.R.)	✓					18
BAY POINT ✓	✓			(D.R.)						19
MANATEE CREEK ✓	✓			(D.R.)						20
FLAT POINT ✓	✓	T-1154 Δ	✓		✓					21
GLADES CANAL ✓	✓		✓	(D.R.)						22
SNIPE POINT ✓	✓			(D.R.)	✓					23
DUCK KEY ✓	✓			(D.R.)	✓					24
FLORIDA BAY ✓	✓				✓					25
WHALEBACK ✓	✓	Whale-back K.	✓	Whale-back K.	✓					26
LITTLE LERN KEY ✓	✓			(D.R.)						27
ROCKY CREEK ✓	✓			(D.R.)						28
LONG SOUND PASS ✓	✓			(D.R.)						29
Blackwater ✓	✓			(D.R.)						30
BUTTONWOOD PASS ✓	✓									31

	Remarks	Decisions
1	See D.R. pg. 7 - Field Recommendation	
2		
3		GN 4-1937
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# GEOGRAPHIC NAMES

Survey No.

T-5538

Name on Survey

	A	B	C	D	E	F	G	H	K	
	On Chart No. 1249	On previous survey No.	On U.S. quadrangle	From local information	General Land Off. Map.	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List		
<u>PORTOE KEY</u>										1
<del>THE SWASHES KEYS</del>				✓ (D.R.)						2
<del>RIG BUTTWOOD SOUND</del>										3
<u>BAKER CUT</u>				✓ (D.R.)						4
<del>NATURAL CHANNEL</del>										5
<u>DIVISION POINT</u>	✓		✓	✓ (D.R.)	✓					6
<u>Cormorant Rookeries</u>				✓ (D.R.)						7
<u>Glades</u>							✓			8
<u>Garden Cove</u> (settlement)				✓ (D.R.)						9
										10
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Names underlined in red approved

by MAE on 12/24/36



DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEYPage ~~one~~ of twoTO BE CHARTED  
~~TO BE DELETED~~

STRIKE OUT ONE

## LANDMARKS FOR CHARTS

Mand, Florida.

November 25, 1936

I recommend that the following objects which have ~~(have not)~~ been inspected from seaward to determine their value as landmarks, be charted on ~~(deleted from)~~ the charts indicated.  
The positions given have been checked after listing.

## EXCLUDED (DUE FLAGGING) AND TO INVESTIGATION

O. H. McCarthy

Chief of Party.

GENERAL LOCALITY	NAME AND DESCRIPTION	POSITION						METHOD OF LOCATION	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
		LATITUDE		LONGITUDE		DATUM							
		°	'	D. M. METERS	°		'						
Intracoastal Waterway Florida Bay, Florida.	Beacon 20	25	11	1013.7	00	23	155.0	N. A.	Topo. Control	1934			1219 3241
	Light 29	25	11	1002.2	00	23	90.0	"	"	"			1219 3241
	Beacon 31	25	11	1653.0	00	23	155.0	"	"	"			0
	" 32	25	11	1121.4	00	23	597.0	"	"	"			0
	" 33	25	11	579.2	00	23	122.0	"	"	"			0
	" 34	25	10	1325.0	00	23	627.0	"	"	"			0
	Light 39	25	10	1430.0	00	23	648.0	"	"	"			0
	Beacon 37	25	10	1447.0	00	23	635.3	"	"	"			0
	Light 41	25	09	1072.2	00	23	749.4	"	"	"			0
	Beacon 42	25	09	120.0	00	23	653.0	"	"	"			0
	" 43	25	07	1642.0	00	23	602.6	"	"	"			0
	" 44	25	07	1630.5	00	23	626.7	"	"	"			0
	Light 46	25	07	1510.0 <del>1509.0</del>	00	23	527.7	"	"	"			0

This form shall be prepared in accordance with 1934 Field Memorandum, "LANDMARKS FOR CHARTS." The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.





## REVIEW OF AIR PHOTO COMPILATION T-5538

Scale 1:20,000

Refer to the General Report attached at front of this Descriptive Report T-5538, for a detailed discussion of this area, and conditions and methods of field inspection and compilation.

### Comparison with Graphic Control Surveys

T-6359a and T-6359b (1935) (1:20,000)  
T-6361 (1934) (1:20,000)  
H-5542 (1934) (1:20,000) (Hydrographic Control Sheet)

These surveys are in agreement with the compilation except for location of B.M. U68 and B.M. V68, as discussed on Page 4, Par. 3 of the Descriptive Report T-5538. The compilation positions are accepted. The duplicate card 524 descriptions from T-6359a have been destroyed and a note made on the sheet T-6359a.

All detail shown on the above listed graphic control surveys within this area is shown on the compilation, except for temporary planetable stations, the magnetic meridian and the temporary tide gage location at Garden Cove.

### Comparison with Contemporary Hydrographic Surveys

H-5878a (1934-35) (1:20,000)  
H-5595 (1934-35) (1:20,000)  
H-5542 (1934) (1:20,000)

Comparison was made with the above contemporary hydrographic surveys and found to be in good agreement.

### Comparison with Previous Topographic Surveys

This compilation is complete and adequate to supersede the sections of the following previous topographic surveys which it covers. For a discussion and illustrative comparison of this compilation with the previous surveys, see Pages 4, 5 and 10 of the Descriptive Report T-5538.

T-574	(1855)	(1:20,000)
T-747	(1859)	(1:20,000)
T-758	(1859)	(1:20,000)
T-857	(1859)	(1:20,000)
T-4562	(1930)	(1:20,000)
T-4577	(1928)	(1:20,000) Air Photo Compilation
T-4601	(1928)	(1:20,000) " " "

When published this compilation will entirely supersede compilation T-4601 (1928) and copies of T-4601 will be withdrawn from sales.

The small section of T-4601 at latitude 25° 12' which is not covered by this compilation will be transferred to compilation T-4577.

Compilation T-4577 has been revised to join this compilation. The revision of T-4577 is shown in red on a supplemental copy of T-4577 filed in the tube with the original T-4577.

Revised copies of T-4577 will be printed for sale.

The 1936 photographs did not extend far enough north for replotting across the junction of T-4577 with the usual standards of accuracy. It has been necessary to join the detail at the west side of the junction by plotting from a single photograph. See next to last Par. page 3, of the General Report attached at front of Descriptive Report T-5538. The detail so plotted is that shown in red on the supplement T-4577. It is accepted as of sufficient accuracy for charting.

In making the junction at the eastern edge of T-4577, the photographs did not extend far enough north to plot up to agreement of detail and it has been necessary to swing the detail on 4577 from a point of latitude 25°13' in to agreement at the junction line. This detail is shown in red on the supplement T-4577. It is accepted as of sufficient accuracy for charting.

The errors in the previous compilations T-4577 and T-4601, are due largely to inferior photographs, lack of control, and lack of proper field inspection particularly as regards the replotting of control points.

#### Comparison with Chart 1249.

See Par. 3 and 4, page 5, illustrative drawing page 10, and the list of landmarks in the Descriptive Report T-5538.

The illustrative sheet on page 10, shows in detail the shoreline corrections resulting from this survey.

#### General

This compilation has adequate control. The Descriptive Report and compilation are detailed and complete. The drafting is excellent except for some detail that is too congested for photo lithographic reproduction. A printed copy of the compilation will be forwarded to the field to illustrate this condition.

*is excellent*  
Chas. R. Bush Jr.

REVIEW OF AIR PHOTO COMPILATION NO. T-5538

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) No maps transmitted.
- ✓ 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.
- ✓ 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:

Reviewed in office by: C. R. Bush.

Examined and approved:

E. H. Green.  
Chief, Section of Field Records  
L. O. Lobert  
Chief, Division of Charts

Frank L. Pearce  
Chief, Section of Field Work  
G. Wade  
Chief, Division of Hydrography  
and Topography.

DESCRIPTIVE REPORT FOR SUPPLEMENTAL T-5538

JANUARY 8, 1941

Numerous corrections to shoal lines and topographic station names shown in red on the supplemental were applied July 15, 1937, by authority of chart letter 80 <sup>1937</sup> ~~MCW~~.

The addition of a wreck shown on the supplemental in blue, was added March 25, 1938. This wreck was added from plane table and hydrographic surveys.

*B. J. G.*

Applied to chart 848 Jan 1937 H.R.C.  
" " " 1249 May 1937 H.S.S.  
Applied to chart 849 March 28 H.R.C.