

Graphic Control

4345

Form 504

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

....., Director

State: Florida

DESCRIPTIVE REPORT

Topographic  
Hydrographic

Sheet No.

<sup>A</sup>

4345

LOCALITY

E Coast-South of Mosquito Inlet

Mosquito Lagoon

1928

CHIEF OF PARTY

K.T. Adams

GOVERNMENT PRINTING OFFICE

Graphic Control

4345

DEPARTMENT OF THE ARMY  
GENERAL INVESTIGATIVE DIVISION  
Graphic Control

State FLORIDA.

DESCRIPTIVE REPORT

Topographic Sheet No. "A" 4345

Locality

From 7 1/2 miles north of to 7 1/2  
miles south of Mosquito  
Lagoon Coast Guard Station.

U.S.C. & G.S.S. LYDONIA  
1928.

Chief of Party.

K. T. Adams.

## DESCRIPTIVE REPORT

to accompany

Topographic Sheet No. "A".

### LOCALITY AND LIMITS:

The area covered by this sheet is on the east coast of Florida between Mosquito Inlet and Cape Canaveral. It extends from a point 7 1/2 miles south of Mosquito Inlet to a point 7 1/2 miles south of Mosquito Lagoon Coast Guard Station. The survey on this sheet covers the ocean beach along the above area and a part of the shoreline on the sound near the Coast Guard Station. No more of the sound shoreline was rodged in because both shorelines could not be seen from the same setup and because due to the thick palmettos on the ridge between the beach and sound making it difficult to go between them. The strip of land between the ocean and the sound is fast ground and in no place does storm waters go across. The shore line on the sound side compares closely to that on the chart and it is believed there has been no change since the previous survey.

### CONTROL:

The control for the work on this sheet consists of the following third order triangulation stations established in 1874: Alden, Turtle Mound, Bear and Deer. Also the following stations established in 1928 by the Lydonia party: Third order triangulation, Flag and Chim; fourth order triangulation, Last.

Signal Flag was located by a distance and direction from  $\Delta$  Bear early in the season. When the topography was in progress signal Flag was found to be in error. It was re-located by triangulation from signals Bear and Ross point.

### METHODS:

A chain and plane-table traverse, checked by stadia was run between successive triangulation stations along the high water line. A hundred meter wire was used for a chain. At each nine hundred meters between stations set-ups were made with the planetable and stadia efforts were taken to locate the hydrographic signals. North of Mosquito Lagoon Coast Guard Station the signals were a single banner nailed on the nearest telephone pole of the telephone line that ran along the beach. South of the Coast Guard Station 4-foot square cross targets were placed on 16 foot 2 x 4's and secured upright with three guys. The launch signals were built by a party following the topographic party.

The distance to the low water line was estimated.

### ORGANIZATION OF PARTY:

The work on this sheet was accomplished by Lt. (j.g.) George L. Anderson and D. O. Harold J. Oliver and 5 men while in camp at Mosquito Lagoon Coast Guard Station. Mr. Oliver was to take charge of the party after 2 or 3 days but the sea was too rough on the beach for a boat to land. The traverse from  $\Delta$  Bear to  $\Delta$  Alden was run by Mr. Anderson. Mr. Oliver completed the remainder of the sheet while Mr. Anderson was at work on triangulation and signal building.

The material for the building of signals was landed with the party by the ship. The material and party was transported along the beach with a Ford truck. A short time at high tide was the only time the beach was impassable for the truck. North of the Coast Guard Station where the beach is hard and wide the truck was very useful. South of the Station the beach gradually narrows and softens and considerable difficulty was experienced in getting through at anything but low tide.

#### TRAVERSE CLOSURES AND ADJUSTMENT:

TRAVERSE CLOSURES.			
FROM	TO	DISTANCE	CLOSURE ERROR.
△ Alden	Tel (an old launch signal on previous work).	.6 mi	0.0 meters.
△ Alden	Turtle Mound	2.5 mi.	2.0 meters.
△ Turtle Mound	△ Flag (C.G. Station)	5.8 mi.	2.0 meters.
△ Flag	△ Deer	6.0 mi.	9.0 meters.
△ Deer	○ Last	3.0 mi.	3.0 meters.

When the party went into camp it was foggy and hazy for several days and signals Turtle Mound and Deer could not be seen from the top of the Coast Guard Flag tower. While awaiting the arrival of the Ford truck the work was begun at signal Flag running a traverse to △ Bear and another traverse from Flag toward Turtle Mound by orienting on △ Bear which is the only signal that could be seen. On arriving at Turtle Mound it was discovered there was a large discrepancy. The entire traverse from Flag to Turtle Mound was run independently of Turtle Mound. While waiting for a clear day to check up on the location of these signals the traverse was run from Bear to Deer. This traverse started at Bear by orienting on Flag. On arriving at Deer there was a discrepancy about equal that at Turtle Mound only in the opposite direction. △ Flag was then re-located by triangulation and found to be about 80 meters to the Westward. With the correct plotting of this signal the entire traverse from Turtle Mound to Deer was carefully corrected and adjusted, accordingly and the resulting error was well within the allowable error. After the final adjustment a theodolite cut was taken from the flag tower to ~~the~~ Scrap and Unis which are about the middle of each traverse. The cut to Unis checked to within 2 meters and the cut to Scrap checked to within 9 meters. \*

The other closures stated above were small.

#### GENERAL DESCRIPTION OF LOCALITY:

This sheet covers the ocean beach along the outside of what is known as Mosquito Lagoon. North of the Coast Guard Station the beach is of white sand and hard and firm, averaging about 40 or 50 meters between the high

\* This was referred to Hutchiffe who states that Flag is a new station and will undoubtedly be included in the new  $\Delta^m$  which has not yet been received in the office. E.P.S.

July 9, 1928

and low water lines. South of the station the distance between high and low water lines gradually narrows to about 30 meters and the white sand is largely replaced with soft sand and broken shells. The storm water line rises abruptly to a height of 4 to 15 feet averaging about 10 feet. The ridge that separates the ocean from the lagoon varies in width from a mile to 100 to 200 meters and in height from high ridges to a low storm water line of 6 or 7 feet. Along the beach this ridge is closely matted with 4-foot palmettos, cactus, brush, and a few palms.

The only house on the beach is the Coast Guard Station. A road is being graded along the ridge back of the beach as far south as the station.

#### STATISTICS:

Statute miles of high water line -	17.9
Statute miles of low water line -	17.9
Launch signals located -	27
Launch signals built -	29
Working days -	6
Men on party -	5
Transportation -	Ford truck.

#### List of Permanent Objects.

Name	Lat.	D.M.	Long.	D.P.	Remarks.
House	28-54	+1606	80-49	+133	Chimney on small house.
Tank	28-54	+1084	80-49	+274	Small white water tank.
Windmill	28-54	+1043	80-49	+284	Small windmill.
Unis	28-53	+1704	80-48	+335	Std. topographic station mark.
Flag.	28-51	+ 888	80-46	+ 981	Flag tower at Mosquito Lagoon Coast Guard Station.
Chim	28-51	+869.5	80-46	+979.7	Chimney on house at Mosquito Lagoon Coast Guard Station.
Eta	28-44	+1648	80-44	+1547	$\frac{1}{2}$ " brass tube set in 4" concrete filled drain tile.
Iota	28-45	+915	80-42	+ 915	Standard topographic brass disc station mark.

Respectfully submitted,

*Harold J. Oliver*

Harold J. Oliver,  
Deck Officer,  
U.S.C. & G. Survey.  
Assistant Topographer.

Approved:

*K.T. Adams*  
K. T. Adams,  
H. & G. Engineer,  
Chief of Party.

IN REPLY ADDRESS THE DIRECTOR  
U. S. COAST AND GEODETIC SURVEY  
AND NOT THE SIGNER OF THIS LETTER

AND REFER TO No. 11-DRM

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

WASHINGTON

August 1, 1928.

SECTION OF FIELD RECORDS

Report on Topographic Sheet No. 4345

Vicinity of Mosquito Lagoon, East Coast of Florida

Surveyed in 1928

Instructions dated November 17, 1927

Chief of Party, K. T. Adams.


Surveyed by G. O. Anderson and H. T. Oliver.

Inked by H. T. Oliver.

1. The records as well as the plan and character of the survey conform to the requirements of the General Instructions and the plan and extent of the survey satisfy the specific instructions.
2. Within the overlap of T. 4345 and T. 4133 there is a signal Tel on each sheet, but differing in location by 600 meters.  
    ⊙ Tel on 4345 is identical in location with ⊙ Ado on 4133.  
    As these signals were located for use on the hydrographic surveys, confusion is likely to result.
3. The junction with the previous work on the north is good, and there is no recent survey on the south.
4. No additional surveying is required.
5. The character and scope of the surveying and field drafting are good.
6. Reviewed by E. P. Ellis, June, 1928.

Approved:

  
Chief, Section of Field Records (Charts)

  
Chief, Section of Field Work (H. & T.)

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET

4345

The finished Topographic Sheet is to be accompanied by the following title sheet, filled in as completely as possible, when the sheet is forwarded to the Office.

U. S. Coast and Geodetic Survey.

Register No. <sup>A</sup> 4345

State . . . . . Florida. . . . .  
General locality ~~East Coast of Florida.~~ South of Mosquito Inlet  
Locality . . . . . East Coast at Mosquito Lagoon  
~~From 7 1/2 miles north of to 7 1/2 miles south of~~  
~~Mosquito Lagoon Coast Guard Station.~~  
Chief of party . K. T. Adams, . . . . .  
Surveyed by . . Lt. (j.g.) George L. Anderson and D.O. Harold J. Oliver.  
Date of survey . February 10th to February 17th, 1928. . . . .  
Scale . . . . . 1:20,000. . . . .  
Heights in feet above . . . . .  
Contour interval . . . . . feet.  
Inked by H. J. O. . . . . Lettered by H. J. OL. . . . .  
Records accompanying sheet (check those forwarded): Photographs,  
Descriptive report, ~~Horizontal angle books~~, ~~Field computations~~,  
~~Sketches from notes~~, ~~Sketches of interesting places~~ . . . . .

Remarks: