

Graphic Control  
4132 ✓  
Graphic Control  
4133 ✓

Graphic Control

Graphic Control

2133  
4133  
4133

Department of Commerce and Labor  
COAST AND GEODETIC SURVEY

E. LESTER JONES

*Superintendent.*

*State:* FLORIDA

DESCRIPTIVE REPORT.

4132

TOPOGRAPHIC

Sheet No. 4133

LOCALITY:

EAST COAST FLORIDA

DAYTONA BEACH TO SOUTH

OF NEW SMYRNA BEACH

1905

CHIEF OF PARTY:

F. G. ENGLE.

## Graphic Control

### DESCRIPTIVE REPORT

TO ACCOMPANY TOPOGRAPHIC  
SHEETS NOS.

SCALE -- -- 1:20,000

EAST COAST OF FLORIDA

Daytona Beach to South of New Smyrna Beach.

SURVEYED: March and April, 1925.

F. G. Engle, H. & G. Engineer, Chief of Party.

H. C. Warwick, Jr. H. & G. Engineer, Topographer.

### LIMITS

The work on these sheets covers the ocean beach from  $\Delta$  SOUTH at Daytona Beach to  $\Delta$  ALDEN, 4 miles southeast of New Smyrna Beach, and the east shore of the Halifax River from the bridge at Daytona Beach to a point 1 mile northwest of Mosquito Inlet Light House.

### CONTROL

The control consists of various main scheme and supplementary stations in the scheme of triangulation along the east coast of Florida. (Appendix No. 6 -- Report for 1911)

### METHODS

The traverse method of survey was employed throughout, traversing between triangulation control points.

The small signals erected for inshore hydrographic purposes were built in advance of the plane table party and located by rod readings and check rod readings.

The high water line was rodded in and also the low water line where practicable, at other times the low water line was estimated and sketched. The limits of the developed areas was rodded in and also the sheet intersections. Where possible the local engineers at towns along the beach were consulted and city or town plans procured from them. A number of these maps are forwarded with the sheets, and on each the approximate location of two or more signals marked.

The majority of signals located on the sheets were erected by the topographic party, and consist of a tripod signal whitewashed with a cloth banner, built on the top of high sand dunes. Due to the scarcity of drift wood on the beach, lumber was bought locally and hauled to the site of the signal. Around the towns prominent objects were used on shore for signals.

### TRAVERSE CLOSURES

The traverse along the ocean beach from  $\Delta$  WEISER 2 to  $\Delta$  SOUTH a distance of 5.5 statute miles, closed to 20 meters. This discrepancy was adjusted proportionally.

The traverse along the east shore of the Halifax River from  $\Delta$  WEISER 2 to  $\Delta$  McJARENS Wind Mill and Water Tower a distance of 5.0 miles closed to 30 meters. This discrepancy was adjusted proportionally.

The traverse from  $\Delta$  WEISER 2 to  $\Delta$  Mosquito Inlet Light House a distance of 5.5 statute miles, closed to 15 meters. This discrepancy was adjusted proportionally.

The traverse from  $\Delta$  ALDEN to  $\Delta$  PALO NEGRO, a distance of 2.2 statute miles, closed to zero.

The traverse from  $\Delta$  PALO NEGRO to  $\Delta$  DRESS, a distance of 6.1 statute miles, closed to 36 meters. This discrepancy was adjusted proportionally.

### GENERAL DESCRIPTION OF LOCALITY

Practically the whole area from the ocean to the river consists of sand dunes covered with a rank growth of palmetto and cactus. Along the river side it is slightly wooded with a marshy shore. Towns are growing up along the ocean beach with surprising rapidity. The construction of the streets to date of survey is shown on the sheets.

Daytona Beach is the largest town within the area of these sheets and streets are still under construction.

Halifax Estates is just in its beginning. The streets are constructed as are shown on the sheet. No building has begun to date of survey.

Wilbur by the Sea is still in the state of construction and the streets are being extended to the southward, buildings are about as shown on the sheet.

Ponce Park is not progressing much in construction and building.

Coronado Beach is in the process of growth. Street construction and building is going on rapidly and constantly.

New Smyrna Beach is a new development recently opened. Streets are under construction, but up to the date of the survey no buildings have been erected, with the exception of one large entertainment hall, the south gable of which was located for hydrographic purposes and called "Ida."

An aerial survey is being made of this entire area and the prints are to be produced by Underwood and Underwood. It is probable a set of these prints could be procured through some of the real-estate companies of Daytona or Daytona Beach. The topographer consulted the aerial photographer concerning this possibility, and the methods of this survey.

### LAND MARKS

Daytona Beach Ocean pier with its large amusement casino.

Two tall water towers at New Smyrna, located by triangulation by the topographer, (see description of triangulation stations).  
Large entertainment hall at New Smyrna Beach.

Wreck of 80 foot hull on the beach about midway between  $\Delta$  ALDEN and  $\Delta$  PALO NEGRO.

GEOGRAPHIC NAMES

The names of the following towns were ascertained by local residents and town officials:

"Halifax Estates,"

"Wilbur by the Sea,"

"New Smyrna Beach".

These names do not appear on the present charts.

PROGRESS

Work was begun on these sheets on March 9 and ended on April 3. The work was not continuous.

STATISTICS

STATISTICS

Statute miles of high water line	27.5
" " " low " "	28.0
Area square statute miles	6.5
Working days	9.5
Men on party	3 to 4
Transportation used	Ford Car

LIST OF RECOVERABLE PLANE TABLE POSITIONS

<u>Name</u>	<u>Lat.</u>	<u>DM</u>	<u>LONG.</u>	<u>DP</u>	<u>REMARKS</u>
Wind	29-02	1012M	80-53	1490M	
Coats	29-02	740M	80-53	1261M	
Ida	29-01	360M	80-53	193M	(See Descriptions)
Smyrna	29-01	248M	80-53	117M	" "
Gat	29-00	931M	80-52	1114M	" "
Fop	29-00	298M	80-52	761M	" "
Fit	28-59	1540M	80-52	421M	" "
Bun	28-58	1023M	80-51	660M	" "
Ado	28-58	498M	80-51	347M	" "

Respectfully submitted,

*H. C. Warwick*

H. C. Warwick,  
Jr. H. & G. Engr. C. & G. S.

Approved:

*E. W. Engle, Jr.*

E. G. Engle, Jr.  
H. & G. Engr. C. & G. S.  
Chief of Party.

*Geographic names approved.*  
*J. W. McQuinn,*  
*11-9-25. for U.S.S.B.*

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

WASHINGTON

November 9, 1925.

SECTION OF FIELD RECORDS

Report on Topographic Sheet No. 4132

Daytona Beach to Port Orange

Surveyed in 1925.

Instructions dated November 29, 1925.

Chief of Party, F. G. Engle.

Surveyed and inked by H. C. Warwick.

1. The records conform to the requirements of the General Instructions.
2. The plan and character of the work conform to the requirements of the General Instructions except for the failure to check the projection and triangulation points.  $\Delta$  Yel was plotted 19 meters in error.
3. The plan and extent of the survey satisfy the specific instructions.
4. The usual field drafting was done by the field party. The lettering is faulty in that all names of topographic features are in inconspicuous slanting letters and vertical letters were used for hydrographic names.
5. The junctions with the adjoining sheets are satisfactory and no further surveying is required.
6. The character and scope of the surveying are excellent and the field drafting is good.
7. Reviewed by E. P. Ellis, November, 1925.

AND REFER TO No. 4-DRM

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

WASHINGTON November 9, 1925.

SECTION OF FIELD RECORDS

Report on Topographic Sheet No. 4133

Vicinity of Mosquito Inlet, Florida.

Surveyed in 1925

Instructions dated November 29, 1924.

Chief of Party, F. G. Engle.

Surveyed and inked by W. C. Warwick.

1. The records conform to the requirements of the General Instructions.
2. The plan and character of the work conform to the requirements of the General Instructions except for the omission of the magnetic meridian and the failure to check the projection and plotting of triangulation points.
3. The plan and extent of the survey satisfy the specific instructions.
4. The usual field drafting was done by the field party. It was defective in that the Coast and Geodetic Survey practice of lettering topographic names with vertical and hydrographic names with slanting letters was not followed. The projection was not well constructed -- numerous projection lines being 10 to 15 meters out of position.
5. The junctions with the adjoining sheets are satisfactory and no further surveying is required.
6. The character and scope of the surveying are satisfactory and the field drafting is good.
7. Reviewed by E. P. Ellis, November, 1925.

*ACD*

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET

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. 4132

State . . . . . FLORIDA . . . . .  
General locality . . . . . EAST COAST OF FLORIDA  
Locality . . . . . DAYTONA BEACH TO ~~MOSQUITO INLET~~ Port Orange  
Chief of party . . . . . F. G. ENGLE,  
Surveyed by . . . . . H. C. WARWICK,  
Date of survey . . . . . MARCH 9 TO MARCH 19, 1925.  
Scale . . . . . 1:20,000  
Heights in feet above .....  
Contour interval ..... feet.  
Inked by H. C. WARWICK . . . . . Lettered by H. C. WARWICK, . . . . .  
Records accompanying sheet (check those forwarded): Photographs,  
Descriptive report, ☒ Horizontal angle books, Field computations,  
Data from other sources affecting sheet Blue print of Daytona, and  
map of Daytona, Daytona Beach and Seabreeze.  
Remarks:

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

TOPOGRAPHIC TITLE SHEET

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. 4133

State . . . . . FLORIDA,

General locality . . . . . EAST COAST OF FLORIDA,

Locality (Port Orange to Cedar Creek) VICINITY MOSQUITO INLET

Chief of party . . . . . F. G. ENGLE,

Surveyed by . . . . . H. C. WARWICK,

Date of survey . . . . . MARCH 23, to April 3

Scale . . . . . 1:20,000

Heights in feet above . . . . . 7 7 7 7 7

Contour interval 7 7 7 7 feet.

Inked by H. C. WARWICK . . Lettered by H. C. WARWICK . . . . .

☒ Records accompanying sheet (check those forwarded): Photographs,

☒ Descriptive report, Horizontal angle books, Field computations,

Data from other sources affecting sheet . . . . .

2 Prints, Map of Coronado Beach, *Description of Stations*  
1 print " " New Smyrna " *Map of New Smyrna and vicinity*  
Remarks: