

6821 a&b
6822 a&b

ORIGINAL

Form 504
Rev. April 1935

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Topographic }
~~Hydrographic~~ } Sheet No. A, B, C, & D.

U. S. COAST & GEODETIC SURVEY

LIBRARY AND ARCHIVES

JUN 11 1941

Acc. No.

State Florida

LOCALITY

Indian River

Northern part

193 1941

CHIEF OF PARTY

F. L. Gallen

DESCRIPTIVE REPORT

To Accompany Topographic Sheets Nos. A, B, C, & D.

Indian River, Florida

INSTRUCTIONS

These surveys were made in accordance with the Director's Instructions dated October 16, 1939 for Project HT-243.

LIMITS AND GENERAL STATEMENT

^{T-6821a, T-6826, T-6822a} Sheets A, ^{T-6822b} B, C, and D embody the immediate shoreline area on both sides of the Indian River from its head at approximately Lat. 28° 48.3' down to Lat. 28° 39.3'. The southern limits of sheet D ^{T-6826} joins the northern limits of sheet E of this project.

These sheets were originally intended as graphic control sheets for locating hydrographic signals but sufficient differences in shoreline from that shown on the Air Photographic Compilations for this area were noted, as the signals were being located, to deem it necessary to re-run the shoreline practically throughout. There are a few stretches along the west shore of Indian River where little or no difference in shoreline was noted. Here, the original shoreline ~~(black)~~, as obtained from the 1928 compilations, is considered to be sufficiently accurate for charting purposes (see Director's letter dated December 17, 1940, Ref. 22-AB, 1995 MO 4). These places are indicated on the graphic control sheets by penciled notes.

See letter of
Nov. 27, 1941
with report of
T-6825

No description of the surrounding terrain is considered necessary in this report as this can be readily determined from an examination of the Air Photographic Compilation of this area and of Chart 1245.

LANDMARKS

Form 567, Landmarks for Charts, has been prepared and submitted for the area covered by these sheets. These landmarks consist entirely of fixed aids to navigation of the Intracoastal Waterway. There are no other natural objects of enough prominence to warrant charting. However, in as much as buildings in this area are very sparse, those buildings which predominate are listed on Form 567 for charting purposes.

Chart letter
342 (1941)

CONTROL

Ample second order triangulation, executed in 1940, was available to control these sheets.

SURVEY METHODS

Standard planetable survey methods were used. Practically all hydrographic and topographic stations were located by three or more cuts from occupied triangulation stations. Only about a mile of traversing was necessary on these sheets. This occurred in the Haulover

Canal at Allenhurst, on Sheet C, where it was necessary to traverse out to the northeast end of the canal. All revised shoreline was rodded-in from previously located signals or triangulation stations. Special stadia rods, 14 feet long, were made up for the particular alidade used and proved very satisfactory for taking shots over the marshy terrain encountered.

DEVIATION FROM GENERAL PRACTICE

The projections for these sheets were made and inked by the ruling machine and the shoreline (as shown on Air Photographic Compilation Sheets No. T-4440B and 4531) was projected on to these sheets in pencil in the Washington Office. All shoreline obtained from this source was inked in black by the field party prior to the sheets going in to the field to prevent it from being obliterated during the field work. All re-surveyed shoreline is indicated in blue and should be used for charting purposes instead of the black except as noted on the sheets.

Blue shoreline eliminated in Washington Office. Shoreline of present survey and shoreline of T-4440B and T-4531 not revised are shown in black.

The shoreline on these sheets is shown by the standard weight solid line which would seem to be in disagreement with the instructions contained in Field Memorandum No. 1 (1938) for this type of shoreline. This was done because, in practically every instance, except for a short distance near signal "Dub" on sheet A, the marsh makes a definite line with the water, principally due to the small amount of tide and the type of marsh, and should be used for charting purposes as the mean high water line.

The portions of the Florida East Coast Railroad shown in ~~blue~~ ^{black} on sheets B and D were indicated as a check on the Air Photographic Compilation and are only shown where it was convenient to get rod shots and positions of the track from planetable set-ups.

RECOVERABLE PLANETABLE POSITIONS

A list of recoverable planetable positions for these sheets is appended and have been described on Form 524.

Filed with Reviewers.

COMPARISON WITH PREVIOUS SURVEYS

In as much as the shoreline from the Air Photographic Compilations of the area covered by these sheets is indicated in black thereon, a direct comparison can be made with the shoreline obtained from the present survey. In a few cases the original shoreline had to be removed from the sheets in order to clearly depict the new. This is the case around the vicinity of the Haulover Canal, where considerable change is to be noted.

See note above concerning elimination of shoreline of Air photographic survey.

The west shoreline of Indian River was found to be in better agreement with the Air Photographic Compilation than the eastern shoreline. The eastern shoreline appears to be out in an easterly direction in practically every instance. The difference appears to be a displacement rather than any shoreline change because the shoreline and general conditions are such that there is very little change to be expected in this general area. The difference could be accounted for by the sparsity of control at the time the photographic compilation was made.

The small islands extending in a southwesterly direction from Haulover Canal are spoil areas thrown up in dredging the Intracoastal Waterway in this area.

While this revision survey was being made, particular care was taken to compare the actual ground conditions back of the shoreline with the information shown on the air photographic prints. These conditions appeared to be in good agreement. In the area between Signal Sam and Black Pt., U.S.E. 1940, on Sheet c, where no photographic detail exists, the ground conditions back of the shoreline are similar to those shown on Chart 1245 for that area and are suitable for charting purposes.

MAGNETIC MERIDIANS

Magnetic meridians were obtained with the declinoire at the following triangulation stations and their amounts scaled: Scott, 1940, 0° 39' E; Extra, 1940, 0° 40' E; Bush, 1940, 1° 10' E; Hood, 1875, 0° 40' E; Canal, U.S.E. 1940, 1° 08' E; Black Pt. U.S.E., 1940 1° 08' E; N.U., U.S.E., 1940 0° 55' E; Black Pt. 1875, 0° 56' E; and Nels, 1940, 0° 54' E.

GEOGRAPHIC NAMES

Geographic names for the area covered by these sheets are included under a separate report entitled "Report on Geographic Names Project HT-243, Season of 1941." Names falling within the limits of a particular sheet have been indicated in pencil on the sheet.

*See page 5
of Desc. Rpt.*

STATISTICS

Statute Miles of shoreline, Sheet A	34.0
" " " " " B	16.0
" " " " " C	36.0
" " " " " D	14.0

Submitted by,

Ross A. Gilmore
Ross A. Gilmore
Jr. H. & G. Engr.

Approved,

I. E. Rittenburg
I. E. Rittenburg
H. & G. Engineer
Chief of Party

RECOVERABLE PLANETABLE POSITIONS

Object & Description	Lat.	D.M.	Long.	D.P.	Ht.above M.H.W.	Remarks
Sheet A						
Tra-R.R.Block Signal	28 45	590m	80 50	1326m.	20	W.side of track
Sheet B						Fla.E.C.Ry.
Peg-R.R.Block Signal	28 44	351	80 50	817	20	" " " " " "
Gab-W.Gab.Bldg.	28 44	1638	80 46	411	20	Small Bldg.near outer
Sheet C						end of small pier.
For-Day Mark "54"	28 44	1109	80 44	1427	12	Red tri.board with
Intracoastal Waterway						number 54 on it.
Rip-daymark "55" I.W.	28 44	1041	80 44	1398	12	Black square board w
						with number 55.
Zev-N.E.Gab.Bldg.	28 44	540	80 45	40	20	Galv.bldg.on end of
						pier.
Hot-S.E.Gab.Bldg.	28 44	667	80 45	274	45	Allenhurst Hotel
Ism-S.E.Gab.Bldg.	28 44	599	80 45	262	30	Galv.metal Bldg.on
						end Haulover Canal.
Poe-Chim.yel.Bldg.	28 44	308	80 45	555	50	2 story frame house,
						P.O. Allenhurst.
Ank-Cen.S.E.face Bldg.	28 44	295	80 45	523	20	Small,yel.br.tender's
						house at bridge.
Rid-Lt.,S.E.end of Bridge	28 44	271	80 45	502	20	Small Wh.Lt. Haulover
						Canal Bridge
Pyr-Cent.small bldg.	28 44	232	80 45	497	28	Red Pyramidal roof
						building.
Abe-N.W.peak of bldg.	28 44	84	80 45	652	16	Small Galv.met.bldg.
						on edge of canal.
Tin-S.W.Gab.Bldg.	28 44	44	80 45	653	18	Galv.metal bldg.
Tar-Daymark "56" I.W.	28 43	1471	80 45	1146	12	Red tri. board with
						No. 56.
Pas-Daymark "57" I.W.	28 43	1410	80 45	1114	13	Black sq.board with
						No. 57.
Cen-Cent.small bldg.	28 42	815	80 43	1376	18	Pyrad.roof bldg.
Sheet D						
Jug-R.R.Block Signal	28 41	1307	80 49	1334	20	W.side F.E.C.Ry.
Dom-E.dormer window bldg.	28 40	1266	80 49	995	30	Large yel.section
						foreman's house.
Wop-R.R.Block Signal	28 40	935	80 49	1004	20	W.side F.E.C.Ry.

(5)

REPORT ON GEOGRAPHIC NAMES, PROJ. HT-243, SEASON OF 1941

This report and the appended section of Chart 1245 covers that portion of the Indian River surveyed during the season of 1941, for Project HT-243, and is in lieu of individual reports on geographic names for topographic sheets A, B, C, D, E, F, G, H, and I, and also hydrographic sheets field Nos. 1001, 1002 and 1003.

All existing names underlined in blue on the chart section are recommended for continued use as they are shown on chart 1245.

Dummit Creek, circled in green, is properly spelled with two t's and is shown in blue with the recommended spelling. This is the way the name is spelled on the original records at the county court house, Titusville, Florida.

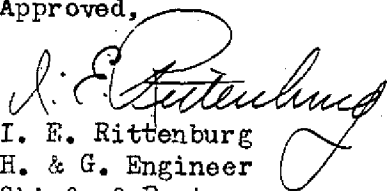
Names shown in red are names not appearing on chart 1245 or Intracoastal Waterway Chart 844, which are recommended for charting purposes as they are well established locally.

The following authorities and maps were interviewed or examined, as the case may be, in the field, and the alphabetical letters refer to those shown under the geographic names on the section of chart 1245 appended:

- A - W. H. Teague, Allenhurst; Haulover Canal bridge tender and local resident for 28 years.
- B - L. R. Paxton, Titusville; Brevard County Engineer, local resident and surveyor for over 30 years.
- C - "Map of Brevard County, Florida."
- D - P. Conway, Titusville; Deputy County Clerk, local resident 21 years
- E - L. M. Carpenter, Titusville; clerk and local resident 20 years
- F - G. W. Scobie, Jr., Titusville; merchant and local resident 40 years
- G - "Post Office Route Map of the State of Florida."
- H - J. B. Griffin, Titusville; service station owner and local resident 15 years.
- I - Intracoastal Waterway Map 844
- J - U. S. Geological Survey Map of Florida.

Submitted by,

Approved,


I. E. Rittenburg
H. & G. Engineer
Chief of Party

Ross A. Gilmore
Jr. H. & G. Engr.

DIVISION OF CHARTS

SURVEYS SECTION

REVIEW OF TOPOGRAPHIC SURVEY

REGISTER NOS. 6821a&b
6822a&b

Field Nos. A, B, C, & D

Florida, Indian River, Black
Point to North End of Indian River
Surveyed January - March 1941; Scale 1:10,000
Instructions dated October 16, 1939

Plane Table Survey

Aluminum Mounted

Chief of Party - F. L. Gallen
Surveyed by - R. A. Gilmore
Inked by - R. A. Gilmore
Reviewed by - R. H. Carstens
Inspected by - H. R. Edmonston, November 6, 1942

1. Adjoining Surveys

T-6821b (1941) joins T-6821a (1941) on the north
and T-6822a&b (1941) on the south; T-6822b (1941)
joins T-6822a (1941) on the north and T-6823a (1941)
on the south.

2. Comparison with Prior Surveys

a. T-1415a (1875) 1:20,000
T-1415b (1875) 1: 5,000
T-1422 (1875-76) 1:20,000

These surveys cover the entire area of the
present survey. There are differences of 20
to 75 meters in the position of the high-water
line on the marshy eastern shore of the river.
These differences are probably due to natural
changes and to the interpretation of the high-
water line. The present survey should super-
sede these earlier surveys.

b. T-4440b (1928) 1:20,000
T-4531 (1928) 1:20,000

The shoreline from these surveys was furnished the field party in pencil on the present survey sheets, but because of differences found in the field the shoreline was almost completely rerun. These differences amount to 20-40 meters and are confined largely to the eastern shore of Indian River. The Descriptive Reports for T-4440b and T-4531 state that these surveys were adjusted to the shoreline of earlier topographic surveys of 1875-76 and that the photographs contained considerable distortion and tilt. These factors probably account for a large part of the differences with the present survey. Piling remains of wharfs are found on the west side of the river and changes have been made in Haulover Canal subsequent to the date of these earlier surveys.

The shoreline of the present survey is considered to be more accurately located than the shoreline from the earlier surveys and should supersede it.

3. Comparison with Chart 844 (Latest print date 5-20-42)
1245 (" " " " 7-23-42)

a. Topography

The charted shoreline originates with the present surveys and is correctly shown except that on chart 1245 two small islets in Dummit Creek have been omitted and the mouth of the old canal in Lat. $28^{\circ}43.5'$, Long. $80^{\circ}44.8'$ should be shown closed. That part of the spoil bank lying at MLW northwest of the dredged channel, chart 844, is charted as being more extensive than it is found on either the present survey or contemporary hydrographic surveys of the area.

b. Aids to Navigation

The charted positions of fixed aids to navigation agree with their survey positions except that Lt. 59 is charted 50 meters east of the survey position.

c. Magnetic Meridians

The magnetic meridians determined by the present survey agree closely with the charted value of 1° E.

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. A & B

REGISTER NO. **T6821** a & b

State Florida

General locality Indian River

Locality North end of Indian River

Scale 1:10,000 Date of survey Jan. 24 - March 5, 19 41

Vessel Launches MITCHELL & OGDEN

Chief of party F. L. Gallen

Surveyed by Ross A. Gilmore

Inked by " " "

Heights in feet above M.H.W. to ground ~~to tops of trees~~

Contour, Approximate contour, Form line interval — feet

Instructions dated Oct. 16, 19 39

Remarks: one aluminum mounted sheet - both sides used.

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. C & D

REGISTER NO. **T6822** a & b

State Florida

General locality Indian River

Locality Alpenhurst ^{to} and Black Point - ~~Upper Indian River~~

Scale 1:10,000 Date of survey Jan. 24 - March 5, 19 41

Vessel Launches MITCHELL & OGDEN

Chief of party F. L. Gallen

Surveyed by Ross A. Gilmore

Inked by " " "

Heights in feet above M.H.W. to ground ~~to tops of trees~~

Contour, Approximate contour, Form line interval feet

Instructions dated Oct. 16, 19 39

Remarks: One aluminum mounted sheet - both sides used

Remarks

Decisions

1		271801
2		287803
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		

GEOGRAPHIC NAMES

Survey No. **T6821a**

Name on Survey	A. On Chart No.	B. On previous survey No.	C. On U. S. quadrangle Maps	D. From local information	E. On local Maps	F. P. O. Guide or Map	G. Rand McNally Atlas	H. U. S. Light List	K.
<u>Indian River</u>									1
<u>Shiloh</u>									2
									3
									4
									5
									6
									7
									8
									9
									10
									11
									12
									13
									14
									15
									16
									17
									18
									19
									20
									21
									22
									23
									24
									25
									26
									27

Remarks

Decisions

1		271801
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		

GEOGRAPHIC NAMES

Survey No. **T6821 b**

Name on Survey	A, On Chart No.	B, On previous survey No.	C, On U. S. quadrangle Maps	D, From local information	E, On local Maps	F, P. O. Guide or Map	G, Rand McNally Atlas	H, U. S. Light List	K	
<u>Indian River</u>										1
										2
										3
										4
										5
										6
										7
										8
										9
										10
										11
										12
										13
										14
										15
										16
										17
										18
										19
										20
										21
										22
										23
										24
										25
										26
										27

Remarks

Decisions

1		287807
2		286807
3		287807
4		
5		
6		271801
7		287807
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		

GEOGRAPHIC NAMES

Survey No. **TC9992**

GEOGRAPHIC NAMES		Survey No. TC8222									
Name on Survey	On Chart No.										
	A,	B,	C,	D	E	F	G	H	K		
<u>Allenhurst</u>											1
<u>Black Point</u> ✓											2
<u>Duckroost Cove</u> ✓											3
<u>Dummitt Creek</u> ✓											4
<u>Haulover Canal</u> ✓											5
<u>Indian River</u>											6
<u>Mosquito Lagoon</u> ✓											7
											8
											9
											10
											11
											12
											13
											14
											15
											16
											17
											18
											19
											20
											21
											22
											23
											24
											25
											26
											27

L. Heck

07/12/13/41

M 234

L. Hect 07/12/13/4/1

Remarks

Decisions

1		286807
2		271801
3		U-S.G.B
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		

GEOGRAPHIC NAMES
Survey No. **T6822 b**

GEOGRAPHIC NAMES											
Survey No. T6822 b											
Name on Survey											
	A,	B,	C,	D	E	F	G	H	K		
<u>Black Point</u>											1
<u>Indian River</u>											2
<u>Intraconstal Waterway</u>											3
											4
											5
											6
											7
											8
											9
											10
											11
											12
											13
											14
											15
											16
											17
											18
											19
											20
											21
											22
											23
											24
											25
											26
											27

M 234

Names underlined in red approved
by L. Heck on 12/13/47



MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
DESCRIPTIVE REPORT
~~PHOTOGRAPHIC~~

~~No. H~~

No. T 6821 a&b

received June 11, 1941
registered July 1, 1941
verified
reviewed
approved

This is forwarded in order that your attention may be directed to the matters as indicated below. Please initial in column 3 as an acknowledgement that your attention has been thus directed. The complete original records are available if desired. If you cannot give this your immediate attention, please initial, note, and forward to the next section marked, calling for the records at your convenience.

ROUTE		Initial	Attention called to
20			
22			
24			
25			
26			
30			
40			
62			
63			
82			
83			
88			
90			

RETURN TO

82	T. B. Reed
----	------------

✓ JAS

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
DESCRIPTIVE REPORT
~~PHOTOSTAT OF~~

~~No. 11~~

No. T 6822 a&b

received June 11, 1941
registered July 1, 1941
verified
reviewed
approved

This is forwarded in order that your attention may be directed to the matters as indicated below. Please initial in column 3 as an acknowledgement that your attention has been thus directed. The complete original records are available if desired. If you cannot give this your immediate attention, please initial, note, and forward to the next section marked, calling for the records at your convenience.

ROUTE		Initial	Attention called to
20			
22			
24			
25			
26			
30			
40			
62			
63			
82			
83			
88			
90			

RETURN TO

82	T. B. Reed
----	------------

V. J. Reed