# 6727

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#### Form 504 Rev. April 1985

DEPARTMENT OF COMMERCE U. S. COAST AND GEODETIC SURVEY

# DESCRIPTIVE REPORT

Topographic | Hydrographic

Sheet No. 1002

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MAR 21 1942

les. No

State Florida

LOCALITY

Indian River

Vicinity of Titusville

**103--** 1941

CHIEF OF PARTY

F. L. Gallen

U. S. GOVERNMENT PRINTING OFFICE 10222

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### DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

### HYDROGRAPHIC TITLE SHEET

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

Field No. 1002

### REGISTER NO.

State Florida
General locality Indian River
Locality Vicinity of Titusville
Scale 1:10,000 Date of survey FebMarch, 1941
Vessel Launches MITCHELL & OGDEN
Chief of Party F. L. Gallen
Surveyed by Charles A. Schanck
Protracted by H.J. Bozzo
Soundings penciled by H.J.B.
Soundings in fathous feet
Plane of reference M.L.W.
Subdivision of wire dragged areas by
Inked by
Verified by
Instructions datedOct. 16 , 19 39
Remarks: This sheet was completed at the Norfolk Processing Office under the supervision of the Officer in Charge.

U. S. GOVERNMENT PRINTING OFFICE

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#### DESCRIPTIVE REPORT

To Accompany Hydrographic Sheet Field Number 1002

### INSTRUCTIONS

The instructions for the work covered by this report are dated  $\sim$  October 16, 1939, project HT-243, Florida.

### SURVEY METHODS

The control stations on this sheet were located by triangulation or by graphic triangulation on aluminum topographic sheets. All soundings were taken with hand lead, taken from a 25 foot skiff propelled by outboard motors. All sounding lines were controlled by sextant fixes.

### DISCREPANCIES

No known discrepancies exist on this sheet.

### LIMITS

The northern limit of this sheet is approximately along parallel 28° 39.6. The southern limit is along the parallel 28° 31.6. The eastern and western limits are defined by the respective shores of Indian River. Any streams or indentations along the eastern shore that could be entered were sounded as far inland as the boat being used could be run.

### CHANNELS

The Intracoastal Waterway channel extends the entire length of this sheet. It is a dredged channel throughout the greater part of its length, though dredging was unnecessary for a distance of about a mile on either side of the Titusville bridge and for about one half mile at the southern end of the sheet. The controlling depth of the channel, within the limits of this sheet is 82 feet.

A channel of 7 feet minimum depth has been dredged into the Titusville boat basin. This channel entrance is marked by 6 finger-board markers (3 on each side) as shown on the sheet.

There is a channel of 2 feet into the mouth of Banana Creek. A deep channel on the south side of the fill for the new Titusville bridge was made when the fill was dredged into place from the river bottom.

### DANGERS

The chief danger on this sheet is the spoil bank which is located from 300 to 400 meters west of the Intracoastal Waterway channel in all areas where dredging for the channel was necessary. This spoil bank consists chiefly of a series of sand mounds with relatively deep water between them, indicating that the outlet end of the dredging pipe had been moored and moved appreciable distances between moorings.

In general the least water on the spoil bank is about half of that in the immediate vicinity on either side of the bank. In the vicinity of Lat. 28 35.5, Long. 80 47.6, the top of the bank is only slightly over a foot below the water surface. Near the northern limits of the sheet numerous soundings of a foot or less were found on the spoil bank.

The wreck on the north side of the Titusville bridge near the west shore is clearly visible and too close inshore to be considered a serious danger to navigation.

### COMPARISON WITH CHART AND PREVIOUS SURVEYS

In general the soundings on this sheet compare very closely with the soundings shown on the old survey, registry number 1292. Where discrepancies occur, the present survey almost invariably shows slightly less depth than the old survey. The area in the vicinity of the channel and spoil bank while differing greatly from the original survey was found approximately as shown on chart 1245. However, the chart does not show soundings as shoal as were found on the spoil bank in the vicinity of Lat. 28° 35.5 and along the bank near the northern limits of the sheet.

A satisfactory junction was made with the survey of the U. S. Engineering Department at the entrance to Banana Creek.

### GEOGRAPHIC NAMES

A separate report on geographic names in the area covered by this sheet is being submitted.

### RECOVERABLE HYDROGRAPHIC STATIONS

No stations were located by hydrographic methods on this sheet.

Submitted by,

Approved by,

I. E. Rittenburg. H. & G. Engineer

Chief of Purty

Charles A. Schanck Jr. H. & G. Engineer

Charles & Schane 6.

### STATISTICS

Daţe	Day	Statute Miles	Soundings	Pos <b>i</b> tions
Feb. 26	a	3.5	162	22
27	ъ	6.6	264	34
March 3	c	0.0	9	9
4	d	6.6	<b>3</b> 06	46
5	. е	24.1	1124	159
6	f	27.8	1200	165
7	g	32.4	1346	185
10	g h	36.2	1330	184
11	j	28.9	1155	164
12	k	22.7	1236	160
13	1	33.3	1217	162
17	m	32.6	1304	171
19	n	31.7	1283	169
20	p	30.3	1225	168
21	q	18.2	<b>92</b> 6	123
24	r	33.6	1279	179
25	8	35.2	1336	177
26	t	20.3	825	108
27	u	39.1	1451	186
28	v	. 32.1	1265	164
31	W	30.1	1216	176
April 1	x	17.8	765	103
		543.1	22224	3014

### ADDENDUM

Buoy R.N. #108, Lat. 28 32.2° and Long. 80 46.1°, position 13 r (red). This buyy is plotted as located by position 13 r (red) on March 24, 1941. However, on March 31, 1941, (See note page 52, vol. 10) when the hydro party was in this vicinity, it was noticed that the buoy was missing. 60 replaced

<u>Crossings</u>: The crossings in general are in good agreement.

This sheet was completed by one of the draftsmen of the party of I.E. Rittenberg under the supervision of the Officer in Charge of the Norfolk Processing Office. The projection, shoreline and signals were drafted before the sheet was received at this office.

I.M. 29skind,

Asso, Cartographic Engr.

March 17, 1942. Norfolk Processing Office, Norfolk, Va.

Approved and forwarded.

H.C. Warwick, Officer in Charge. Remarks Decisions

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	GEOGRAPHIC NAMES Survey No. 11672	7	<u>,                                    </u>	A CO CU	D D	de star	Traco Mods	O. Guide d	Mod Merolin	Prop. Par.	<i>ž</i> /
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# Surveys Section (Chart Division)

# HYDROGRAPHIC SURVEY NO. H6727

Records accompanying survey:
Boat sheets; sounding vols. (11).; wire drag vols;
bomb vols; graphic recorder rolls;
special reports, etc. 6.forms.# 524
The following statistics will be submitted with the cartog- rapher's report on the sheet:
Number of positions on sheet .30!4
Number of positions checked8.7
Number of positions revised ?.
Number of soundings recorded 27.224
Number of soundings revised (refers to depth only)
Number of soundings erroneously spaced?!.
Number of signals erroneously plotted or transferredQ.
Topographic details Time . 5. hrs.
Junctions Time .8
Verification of soundings from graphic record Time
Verification by . J.K. Hartsock Total time .237. Date .12/.9/42
Review by R.H. Cartens. Time 16.2. Date 12/22/42

### TIDE NOTE FOR HYDROGRAPHIC SHEET

April 7, 1942.

Division of Hydrography and Topography:

Division of Charts: Attention: Mr. H. R. Edmonston.

Plane of reference approved in 11 volumes of sounding records for

HYDROGRAPHIC SHEET 6727

Locality Vicinity of Titusville, Indian River, Florida.

Chief of Party: F. L. Gallen in 1941
Plane of reference is mean low water reading 2.6ft. on tide staff at Titusville 4.6ft. below B. M. "TITUS"

There is no periodic tide in this portion of Indian River. The plane of reference for soundings approximates that used by the U. S. Engineer Department.

Condition of records satisfactory except as noted below:

Chief, Division of Tides and Currents.

TION 15432

# MEMORANDUM IMMEDIATE ATTENTION

SURVEY DESCRIPTIVE REPORT ************************************	No. H xhtxxxx⊽x	H6727		registered April verified reviewed approved	•	
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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.

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### DIVISION OF CHARTS

### SURVEYS BRANCH

### REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. 6727 Field No. 1002

Florida, Indian River, Vicinity of Titusville Surveyed in February - March 1941; Scale 1:10,000 Instructions dated October 16, 1939

Soundings: Handlead Control: Sextant Fixes on Shore Signals

Chief of Party - F. L. Gallen
Surveyed by - C. A. Schanck
Protracted by - H. J. Bozzo
Verified and inked by - J. K. Hartsock
Reviewed by - R. H. Carstens
Inspected by - H. R. Edmonston

### 1. Shoreline and Signals

The shoreline and signals originate with T-6822, T-6823 and T-6824 of 1941.

### 2. Sounding Line Crossings

Satisfactory.

### 3. Depth Curves

Satisfactory.

# 4. Junctions with Contemporary Surveys

A satisfactory junction was made with H-6664 (1941) on the south and H-6676 (1941) on the north.

### 5. Comparison with Prior Surveys

H-1292 (1875-76) 1:20,000 H-1293 (1876) 1:20,000

Little change in depth has taken place since these surveys were made except in areas where dredging was done. In general the agreement is within 1 foot. The present survey is entirely adequate to supersede these earlier surveys within the common area.

# 6. Comparison with Chart 844 (latest print date 5-20-42) 1245 ( " " 7-23-42)

### a. Hydrography

The charted hydrography originates largely with the previously mentioned surveys which need no further consideration. Soundings showing the results of dredging operations are charted from blueprints 24978-81. The present survey adequately covers the dredged channel and spoil banks and should supersede the blueprints for charting purposes.

### b. Controlling Depths

The present survey depths are in agreement with the charted controlling depths of the dredged channel.

### c. Aids to Navigation

The survey positions of the floating aids to navigation are not, in general, in agreement with their charted positions. Differences in position amount to as much as 500 meters as, for example, in the position of C.103. Apparently the buoys have been moved without a report of the change being received by this Bureau.

The survey positions of the <u>fixed aids</u> to navigation are in agreement with their charted positions and notations and satisfactorily mark the features intended.

### 7. Condition of Survey

Satisfactory.

## 8. Compliance with Instructions for the Project

Satisfactory.

### 9. Additional Field Work Recommended

None.

### 10. Superseded Surveys

H-1292 (1875-76) in part

H-1293 (1876) in part

## H-6727 (1941) - 3

Examined and approved:

Chief, Surveys Branch

Chief, Division of Charts

Chief, Section of Hydrography

Chief, Division of Coastal Surveys

applied to Char 844