

10071

Diagram No. 1245-2

NOAA FORM 76-35A

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

DESCRIPTIVE REPORT

Type of Survey Hydrographic
Field No. HSB-10-1-83
Office No..... H-10071

LOCALITY

State Florida
General Locality Indian River
Locality Black Point to Duckroost
..... Point.....

1983

CHIEF OF PARTY
LCDR R.W. Jones

LIBRARY & ARCHIVES

DATE August 8, 1986

☆U.S. GOV. PRINTING OFFICE: 1980-766-230

10071

ACPS

CAT

11485B - to sign off see
Record of Application

HYDROGRAPHIC TITLE SHEET

H-10071

INSTRUCTIONS - 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.

HSB-10-1-83

State Florida

General locality Indian River

Locality Black Point to Georges Flats Duckroost Point

Scale 1:10,000 Date of survey 16 Feb - 21 May 1983

Instructions dated 07 September 1982 Project No. OPR-G207-HSB-82

Vessel Hydrographic Field Party 4 - Launches 0520 and 1283.

Chief of party Lt. Cdr. Ronald W. Jones

Surveyed by Lt. Greenawalt, E. Martin, D. Bryant, L. Biscorner, R. Adams, R. Lacy, Lt(jg) Rossmann, D. Elliott, C. Bush, M. McMann, J. Oswald

Soundings taken by echo sounder, ~~MANOMETER~~, pole Raytheon DE-719 B Echo Sounder

Graphic record scaled by party personnel

Graphic record checked by party personnel

Protracted by PDP8/e computer Automated plot by Kynetics 1201 (AMC) PDP8/e computer

Verification by AMC J.B. Wilson

Soundings in ~~FATHOMS~~ feet at ~~MLW~~ ~~XXXX~~ LWD

REMARKS: Change No. 1 dated 17 September 1982

Project included reconnaissance (on Sheet "L") north of latitude 28°45'00"N. (Data for this recon will be submitted separately.)

Notes in red in The Descriptive Report were made during office processing.

Miscellaneous pages have been removed and filed with the survey records.

AWOIS/SURF MAM 11/13/86

DESCRIPTIVE REPORT
TO ACCOMPANY
HYDROGRAPHIC SURVEY H-10071
HFP-10-1-83

Scale: 1:10,000
Chief-of-Party: Lt. Cdr. Ronald W. Jones
Officer-in-Charge: Lt. C. Brian Greenawalt
Hydrographic Field Parties Section: Hydrographic Field Party 3 & 4
Launches: 0520 & 1283

A. PROJECT

This survey was accomplished under Project Instructions OPR-G207-HSB-82 dated 07 September 1982, as amended by Change No. 1 dated 17 September 1982.

This project was conducted in response to requests to update the existing chart coverage.

B. AREA SURVEYED

The area surveyed was the Indian River from Black Point to ^{Duckroost Point} Georges Flats. The geographic bounds of this survey are:

North 28°45'00" East 80°50'31" ↗
South 28°41'25" West 80°44'30" ↙

This survey was conducted from 16 February 1983 through 21 May 1983.

C. SOUNDING VESSELS

All soundings on this survey were collected from one of these two vessels:

NOAA Launch 0520 (EDP 0520) - 22 foot MonArk
NOAA Launch 1283 (EDP 1283) - 17 foot MonArk

Launch 0520 was the primary sounding vessel. Launch 1283 was used for the hydrography north of the Intracoastal Waterway and east of longitude 80°48'45" (approximately).

Junctions between the two vessels agree well. All differences were one foot or less. No problems were encountered.

D. SOUNDING EQUIPMENT AND CORRECTIONS TO ECHO SOUNDINGS

All soundings except those taken with a sounding pole were measured and recorded with a Model DE719B Raytheon Fathometer.

<u>VESNO</u>	<u>DE719B Serial No.</u>
0520	9221
1283	9947

These fathometers were used in depths from one foot to 2¹/₈ feet.

All fathograms were scanned and checked for peaks and deeps. The appropriate changes were made to the data tapes.

The instrument initial, tide and draft, and speed of sound settings were monitored continuously. Adjustments were made either on-line or when the fathograms were scanned.

Several rolls of marginal quality fathometer paper was used by fathometer S/N 9221 during this survey. The bottom trace on this paper was interrupted at the 5-foot depth, ie, the fathometer paper would not burn at the 5-foot depths. No other problems were encountered.

When weather and sea conditions permitted, barchecks were taken at the beginning and end of each days hydrography. The velocity of sound corrections for this survey were computed from the mean of the daily barchecks. No TDC casts were taken.

Settlement and squat for vessel 0520 and 1283 were measured using the level method. (Settlement and squat data for Launch 0520 are recorded in Volume 5 of Survey H-10067.) The results for Launches 0520 and 1283 are included in the appendix.

Velocity corrector tapes were made and the correctors applied to the soundings on the final field sheets. TC/TI tapes were generated and these correctors will be applied to the soundings on the final smooth sheet plotted at the Atlantic Marine Center. These tapes and tape listings are included with the project data.

E. HYDROGRAPHIC SHEETS

Field sheets used during this survey were prepared in the field using a PDP8/e computer and a DP-3 Complot Plotter. Worksheets, preliminary plotter sheets, final field sheets, and overlay sheets, are included with this survey. Mainscheme soundings, developments, and crosslines are plotted on the final field sheet. Bottom samples, detached positions, charted soundings, junction soundings and prior survey soundings are plotted on the various overlay sheets.

The projection parameter tapes are included with the project data. Parameter tape listings are included in the appendix.

All records will be forwarded to the Hydrographic Surveys Branch at the Atlantic Marine Center for verification and smooth plotting.

F. CONTROL STATIONS

Control stations used during this survey were either existing geodetic control published by the National Geodetic Survey or control established by the Hydrographic Field Parties Support Group. All stations meet a minimum of third-order, class I standards. All positions are based on the North American 1927 Datum.

A listing of control stations used during this survey is included in the appendix.

G. HYDROGRAPHIC POSITION CONTROL

The Del Norte Trisponder system, operated in the non-automated range-range mode, provided position control for most of this survey. "See Boat-sheet" was used for Haulover Canal and a small area just south of the western entrance to Haulover Canal.

The following Del Norte equipment was used:

<u>LAUNCH 0520</u>		
<u>UNIT</u>	<u>S/N</u>	<u>JULIAN DAYS USED</u>
DMU	429	047
	192	049,053,055,056,067,068,069,082,091,095,097,098,108,110,111,112,116,117,118,122
Master	620	047
	277	049,053,055,056,067,068,069,082,091,095,097,098,108,110,111,112,116,117,118,122
Remotes (Used ashore)	245	047
	256	047
	218	110,111, 112,116,117,118,122,123,132
	244	049,053,055,056,066,067,068,069,110,111,112,116,117,118,122,132
	1063	049,053,055,056,066,067,068,069,122,123,132
<u>LAUNCH 1283</u>		
<u>UNIT</u>	<u>S/N</u>	<u>JULIAN DAYS USED</u>
DMU	180	108,109,110,111,118,119,123,125,129
Master	162	108,109,110,111,118,119,123,125,129
Remotes (Used ashore)	218	108,109,110,111,118,119,123,125,129
	244	108,109
	1313	111
	1063	110,118,119,123,125,129,

The master unit aboard Launch 0520 and 1283 were mounted atop 3-inch diameter pipe-masts about 2.5 meters and 2 meters (respectively) above the waterline. The remote units were mounted atop Wild Tripods.

Except where otherwise noted in the position abstracts, ~~all~~^{both} ~~two~~ launches were steered along arcs.

On Launches 0520 and 1283, static system checks of the Del Norte equipment were performed at fixed aids-to-navigation which were positioned to third-order, class I control accuracy. These static system checks were performed at least twice daily in accordance with AMC Operations Order 79, dated 25 February 1982 and superseded 25 January 1983.

The Del Norte equipment was baseline calibrated before the survey began, after the survey was completed, and at approximately 2 to 3 week intervals during the course of the survey. The baseline calibrations were performed in accordance with AMC Operations Order 79. The baseline distance was 2,367 meters: Station NO USE 1940 to Station CROW 1976 (both are published third-order, class I stations). Results of the baseline calibrations are included with Survey H-10067.

Electronic correctors applied on the corrector tapes are mean correctors determined by the baseline calibrations for the respective periods of hydrography. These correctors are shown in the Electronic Corrector Abstract included in the appendix. Original baseline calibration data were submitted with Survey H-10067. Copies of these are included with this survey, H-10071.

H. SHORELINE

Shoreline details for this survey were transferred to the final field sheets from stable-base film copies of coastal zone orthophoto maps TP-00103, TP-00104, TP-00105, and TP-00106. The aerial photography was taken in 1967 and 1970. The field edit on these maps was performed in 1970. The shoreline details have already been applied to Chart 11485.

The shoreline details north of Latitude 28°45'00"N were not verified and are shown on the final field sheet in blue. All shoreline details south of Latitude 28°45'00"N were verified visually and with hydrographic positions. Changes to the shoreline are shown on the final field sheet in red. Data for the recon survey north of Lat. 28°45'00" was transmitted separately.

The following change to the shoreline was found:

Spoil island Lat 28°41'29"N, Lon 80°48'⁴⁵14"W
Delete this island from the chart.

I. CROSSLINES

Crosslines totalled 26 miles or 9.6% of the hydrography. Ninety-nine percent (99%) of all crossline soundings agreed within one foot of the mainscheme soundings. No soundings disagreed by more than two feet.

J. JUNCTIONS

This survey junctions well with Survey H-10067 (1982), 1:10,000 scale, to the south. The junction soundings are in excellent agreement. No soundings disagreed by more than one foot.

K. COMPARISON WITH PRIOR SURVEYS

The survey area was covered by prior survey H-6676 (1941), 1:10,000 scale. Most depths agreed within one foot; Survey H-10071 being shoaler.

The greatest discrepancy between these two surveys is the area just north of the Intracoastal Waterway. Many of the spoil islands shown on Survey H-6676 have changed by erosion, silting, and spoils from later dredging operations. All the fixed and floating aids have been changed.

Dummit Creek and the small creeks at Latitude 28°41'00"N, Longitude 80°45'15"W and Latitude 28°41'00"N, Longitude 80°46'45"W were too shallow and foul with grass to permit the launch to survey these creeks.

L. COMPARISON WITH THE CHART

Chart 11485, 20th Edition, 17 July 1982, scale 1:40,000, was compared to this survey and the two agreed well. Ninety-nine percent (99%) of the charted depths agreed within one foot of the soundings taken during this survey. The remainder of the soundings agreed within two feet.

The two most significant discrepancies in depth are a two-foot depth from a misc. source, charted at Latitude 28°41'57"N, Longitude 80°49'48"W, and a four-foot depth charted at Latitude 28°45'30"N, Longitude 80°46'27"W, outside survey limits.]
RECOMMENDATION: Supersede the charted soundings (respectively) found during this survey. concur

Other discrepancies are as follows: All features addressed are from misc. sources unless noted otherwise.

✓ Feature: sign PA ^{Relocate}
Charted at: Lat 28°43'24"N, Lon 80°46'25"W
Reference: Position 2372
RECOMMENDATION: Chart the sign at Lat 28°43'21.2"N, Lon 80°46'25.4"W concur

✓ Feature: sign PA ^{Relocate}
Charted at: Lat 28°43'26"N, Lon 80°46'15"W
Reference: Position 2370
RECOMMENDATION: Chart the sign at Lat 28°43'26.7"N, Lon 80°46'13.2"W concur

✓ Feature: sign PA ^{Delete}
Charted at: Lat 28°43'19"N, Lon 80°46'00"W
Reference: No sign was found within 100-meters of this location.
RECOMMENDATION: Delete "sign PA" from the chart. ^{signs} as shown on present survey

✓ Feature: sign PA ^{Delete}
Charted at: Lat 28°43'38"N, Lon 80°46'05"W
Reference: No sign was found at this location.
RECOMMENDATION: Delete "sign PA" from the chart. signs as shown on present survey.

Feature: pile [from T-9167(1948-49)]
Charted at: Lat 28°43'38.1"N, Lon 80°47'11.8"W
Reference: See positions 8066-8067 and 8068-8069. These positions were taken on two ^{platform} steel ruins. (steel piles) as shown on the present survey.
RECOMMENDATIONS: Change the charted pile to ruins at the above location.
Chart the second set of ruins at Latitude 28°43'38.5"N, Longitude 80°47'07.3"W. as shown on the present survey.

Feature: Building symbols
Charted: Along the southern side of Haulover Canal
RECOMMENDATION: These buildings do not exist. Delete the buildings from the chart. *concur*

Feature: Geographic name "Allenhurst"
Charted: Along northern side of Haulover Canal. The town of Allenhurst no longer exists.
RECOMMENDATION: Remove the name from the chart. See letter to NOS Chief, Geographer appended to this report.

Feature: "Markers (at 1/4 mile intervals) PA" *General note 12L-5875-05*
These markers are piles with signs that mark the boundary of the Merritt Island Wildlife Refuge.
RECOMMENDATION: Chart the location of the boundary of the Refuge as shown on the ~~overlay to the final field sheets.~~ *present survey* *Ref. L 58(78) NOS source*

Feature: Pier
Charted: Lat 28°44'58"N, Lon 80°46'08"W
Reference: This pier originated with Survey H=6676 (1941). No evidence of this pier was found during this survey.
RECOMMENDATION: Delete this pier from the chart. *concur*

*Charted note:
No pier charted
@ 28°44'58" 80°46'08"
deleted pier @ 28°44'58"
80°46'16"
Kathy*

M. ADEQUACY OF SURVEY

This survey is complete and adequate to supersede all prior surveys for charting.

N. AIDS TO NAVIGATION

All fixed aids to navigation in the survey area were located and their positions and descriptions were compared with those listed in Light List Volume II, the FFAIDS listing, and as shown on Chart 11485, 20th Edition, 17 July 1982. These aids adequately serve the apparent purpose for which they were established.

The daybeacons were located by hydrographic positions instead of third-order horizontal control because the daybeacons were single pile structures that are frequently struck by vessels traveling the Intracoastal Waterway. All the daybeacons are leaning.

No landmarks exist in the survey area. The tower on Black Point has collapsed and has no landmark value.

Copies of NOAA Form 76-40 are included in the appendix.

No overhead cables exist in the survey area. One submarine cable exists under the bridge at Haulover Canal (latitude 28°44'10"N, longitude 80°45'17"W). *See Eval. Rpt. sec 7.2.*

Horizontal and vertical clearances for the bridge over Haulover Canal were measured on JD 137. See volume 11 *pg 65*

Horizontal: 90 ft. Vertical 27 ft.

O. STATISTICS

Total number of positions -----	3,797
Lineal nautical miles of mainscheme hydrography -----	258
Lineal nautical miles of crosslines -----	26
Lineal nautical miles of developments -----	36
Total lineal nautical miles of hydrography -----	333
Total square nautical miles of hydrography -----	15
Number of detached positions -----	70
Number of stations installed -----	2
Number of barchecks -----	47
Number of bottom samples* -----	94

*Oceanographic Log Sheet "M" are included in the appendix.

P. MISCELLANEOUS

No tide staffs were installed at the head of Dummit Creek or any of the other small creeks that feed into the Indian River. The mouths of these creeks are foul with weeds and grass or are too shoal to allow the launches access.

Q. RECOMMENDATIONS

No additional field work is necessary. See Sections H, K and L for additional recommendations.

R. AUTOMATED DATA PROCESSING

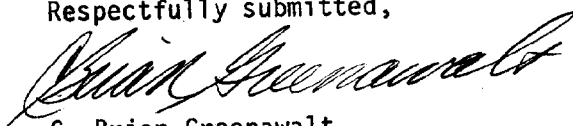
The following hydroplot system programs were used during this survey:

<u>PROGRAM</u>	<u>VERSION</u>	<u>DATE</u>
RK201	Grid, Signal and Lattice Plot	5/18/76
RK211	Range-Range Non-Real Time Plot	1/15/76
RK212	Visual Station Table Load	4/01/74
RK216	Range Azimuth Non-Real Time Plot	2/05/76
RK300	Utility Computations	2/05/76
RK330	Data Reformat and Check	5/04/76
AM602	Extended Line Oriented Editor	5/20/75
AM602	Extended Line Oriented Editor	12/08/82
RK407	Geodetic Direct and Inverse	9/25/78

S. REFERENCE TO REPORTS

Field Tide Note (filed with Survey H-10067).
Horizontal Control Report, OPR-G207-HSB-82.
Descriptive Report accompanying Survey H-10067

Respectfully submitted,



C. Brian Greenawalt
Lt, NOAA
OIC, HFP-4

ATLANTIC MARINE CENTER
Hydrographic Field Parties Section

August 31, 1983

N/MOA233:CBG

TO: H/CG2X5 - Charles E. Harrington

FROM: HFP-4 - Charles B. Greenawalt

SUBJECT: Removal of ALLENHURST from Chart 11485

During Surveys H-10067 and H-10071, HFP-4 investigated the charted geographic names within the survey area. All names were correct except ALLENHURST.

The town of Allenhurst, charted at Latitude 28°44.2'N, Longitude 80°45.3'W no longer exists. All buildings were razed and the remaining foundations are overgrown. The roads remain but are in poor condition. These roads provide access for non-commercial fishermen to the banks of Haulover Canal.

All local boaters interviewed know the area as Haulover Canal, not Allenhurst. I therefore recommend the removal of the name ALLENHURST from Chart 11485.

CLEARANCE:

N/MOA233:RWJones

Signature & Date

Robert W Jones 15 Sept 83

APPROVAL SHEET
SURVEY H-10071
HFP-10-1-83

The hydrographic records transmitted with this report are complete and adequate to supersede prior surveys for charting with no additional field work recommended.

I did not give direct daily supervision during the field work.

Approved and forwarded,



Ronald W. Jones
Lt. Cdr., NOAA
Chief, Hydrographic Field Parties Section

SIGNAL TAPE LISTING
 OPR-6207-HSB-82
 HFP-10-1-83
 H-10071
 1:10000

009	7	28	40	30059	080	48	33320	250	0000	000000	BRYANT 1982 *
010	1	28	40	38801	080	49	29029	250	0000	000000	AESCH 1982 *
011	6	28	41	59384	080	49	48887	250	0000	000000	THE END 1982 *
012	2	28	42	28745	080	47	29178	250	0000	000000	GREYARD 1982 *
013	4	28	41	57618	080	45	47685	250	0010	000000	RAY USE 1940 RP2. ** 1982
204	2	28	40	29520	080	49	30602	139	0000	000000	MING N SQUAT TANK **
101	1	28	43	24782	080	46	02695	250	0000	000000	INDIAN RIVER N SEC LT 1 1982 *
102		28	42	42112	80	46	58012	139			Indian River N. Sec Lt 4, 1982 Indian River N. Sec Lt 7, 1982
103		28	41	55135	80	47	51234	139			

*Control located by HFPS Support Group.
 **NGS published.

NOAA FORM 76-40
(8-74)

Replaces C&GS Form 567.

TO BE CHARTED
 TO BE REVISED
 TO BE DELETED

REPORTING UNIT
(Field Party, Ship or Office)

HFP-4

STATE
Florida

LOCALITY
Indian River

DATE
25 May 83

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NONFLOATING AIDS TO NAVIGATION FOR CHARTS

ORIGINATING ACTIVITY

- HYDROGRAPHIC PARTY
 - GEODETIC PARTY
 - PHOTO FIELD PARTY
 - COMPILATION ACTIVITY
 - FINAL REVIEWER
 - QUALITY CONTROL & REVIEW GRP.
 - COAST PILOT BRANCH
- (See reverse for responsible personnel)

OPR PROJECT NO.
G207-HSB-82

THE following objects HAVE HAVE NOT been inspected from seaward to determine their value as landmarks.

JOB NUMBER
HFP-10-1-83

STATE
Florida

DATUM
1927 North American

LONGITUDE
D.P. Meters

OFFICE

METHOD AND DATE OF LOCATION
(See instructions on reverse side)

CHARTS
AFFECTED

DESCRIPTION
(Record reason for deletion of landmark or aid to navigation.
Show triangulation station names, where applicable, in parentheses.)

LONGITUDE
D.M. Meters

LONGITUDE
D.P. Meters

FIELD

CHARTS
AFFECTED

DAYBEACON

Indian River N. Sec DBCN 2

28 43

26.19

80 46

04.35

F-2-L
May 12, 1983

11485

DAYBEACON

Indian River N. Sec DBCN 3

28 43

03.29

80 46

29.09

F-2-L
May 12, 1983

11485

LIGHT

(Indian River N. Sec Lt. 4)
LL # 3992, Fl. R., 4 Sec

28 42

42.112

80 46

58.012

F-2-6-L
Dec 82

11485

DAYBEACON

Indian River N. Sec DBCN 5

28 42

39.76

80 46

57.07

F-2-L
May 12, 1983

11485

DAYBEACON

Indian River N. Sec DBCN 6

28 42

19.34³

80 47

26.78

F-2-L
May 12, 1983

11485

LIGHT

(Indian River N. Sec Lt 7)
LL # 3993 Fl. G., 4 Sec

28 41

55.135

80 47

51.234

F-2-6L
Dec 82

11485

DAYBEACON

Indian River N. Sec DBCN 8

28 41

57.24

80 47

52.28

F-2-L
May 12, 1983

11485

DAYBEACON

Indian River N. Sec DBCN 9

28 41

33.15

80 48

18.31

F-2-L
May 12, 1983

11485

LIGHT

(Indian River N. Sec Lt 1)
LL # 3991, Fl. G., 4Sec

28 43

24.782

80 46

02.695

F-2-6-L
Dec 82

11485

RESPONSIBLE PERSONNEL	
TYPE OF ACTION	NAME
OBJECTS INSPECTED FROM SEAWARD	Lt. C. B. Greenawalt, OIC, HFR-4
POSITIONS DETERMINED AND/OR VERIFIED	Lt. C. B. Greenawalt, OIC, HFR-4
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES	

INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'
(Consult Photogrammetric Instructions No. 64.)

OFFICE	FIELD (Cont'd)
<p>I. OFFICE IDENTIFIED AND LOCATED OBJECTS Enter the number and date (including month, day, and year) of the photograph used to identify and locate the object. EXAMPLE: 75E(C)6042 8-12-75</p>	<p>B. Photogrammetric field positions** require entry of method of location or verification, date of field work and number of the photograph used to locate or identify the object. EXAMPLE: P-8-V 8-12-75 74L(C)2982</p>
<p>FIELD</p> <p>I. NEW POSITION DETERMINED OR VERIFIED Enter the applicable data by symbols as follows: F - Field L - Located V - Verified 1 - Triangulation 2 - Traverse 3 - Intersection 4 - Resection</p> <p>A. Field positions* require entry of method of location and date of field work. EXAMPLE: F-2-6-L 8-12-75</p> <p>**FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.</p>	<p>II. TRIANGULATION STATION RECOVERED When a landmark or aid which is also a triangulation station is recovered, enter 'Triang. Rec.' with date of recovery. EXAMPLE: Triang. Rec. 8-12-75</p> <p>III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH Enter 'V-Vis.' and date: EXAMPLE: V-Vis. 8-12-75</p> <p>**PHOTOGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.</p>

NOAA FORM 76-40
(6-74)

Replaces C&GS Form 567.

- TO BE CHARTED
- TO BE REVISED
- TO BE DELETED

REPORTING UNIT
(Field Party, Ship or Office)

HFP-4

LOCALITY

Indian River

DATE

Feb 83

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NONFLOATING AIDS OR LANDMARKS FOR CHARTS

ORIGINATING ACTIVITY

- HYDROGRAPHIC PARTY
 - GEODETIC PARTY
 - PHOTO FIELD PARTY
 - COMPILATION ACTIVITY
 - FINAL REVIEWER
 - QUALITY CONTROL & REVIEW GRP.
 - COAST PILOT BRANCH
- (See reverse for responsible personnel)

The following objects HAVE **HAVE NOT** been inspected from seaward to determine their value as landmarks.

OPR PROJECT NO.

G207-HSB-82

JOB NUMBER

HSB-10-11-82

SURVEY NUMBER

H-10067

DATUM

1927 North American

POSITION

LATITUDE

° / ' // D.M. Meters

28 41

LONGITUDE

° / ' // D.P. Meters

80 47 05.357

DESCRIPTION
(Record reason for deletion of landmark or aid to navigation.
Show triangulation station names, where applicable, in parentheses)

Bilby Tower over station WHYNOT
has collapsed and is no longer of
landmark value.

CHARTING
NAME

TR

METHOD AND DATE OF LOCATION
(See instructions on reverse side)

FIELD

V-Vis

CHARTS
AFFECTED

11485

39, NC
Previously deleted

RESPONSIBLE PERSONNEL		ORIGINATOR
TYPE OF ACTION	NAME	
OBJECTS INSPECTED FROM SEAWARD	Lt. C. B. Greenawalt, OIC, HFP-4	<input type="checkbox"/> PHOTO FIELD PARTY <input checked="" type="checkbox"/> HYDROGRAPHIC PARTY <input type="checkbox"/> GEODEIC PARTY <input type="checkbox"/> OTHER (Specify)
POSITIONS DETERMINED AND/OR VERIFIED	Lt. C. B. Greenawalt, OIC, HFP-4	FIELD ACTIVITY REPRESENTATIVE
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES		<input type="checkbox"/> REVIEWER <input type="checkbox"/> QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE

INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'
 (Consult Photogrammetric Instructions No. 64.)

OFFICE
 I. OFFICE IDENTIFIED AND LOCATED OBJECTS
 Enter the number and date (including month, day, and year) of the photograph used to identify and locate the object.
 EXAMPLE: 75E(C)6042
 8-12-75

FIELD
 I. NEW POSITION DETERMINED OR VERIFIED
 Enter the applicable data by symbols as follows:
 F - Field P - Photogrammetric
 L - Located Vis - Visually
 V - Verified
 1 - Triangulation 5 - Field Identified
 2 - Traverse 6 - Theodolite
 3 - Intersection 7 - Planetable
 4 - Resection 8 - Sextant

A. Field positions* require entry of method of location and date of field work.
 EXAMPLE: F-2-6-L
 8-12-75

*FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.

FIELD (Cont'd)
 B. Photogrammetric field positions** require entry of method of location or verification, date of field work and number of the photograph used to locate or identify the object.
 EXAMPLE: P-8-V
 8-12-75
 74L(C)2982

II. TRIANGULATION STATION RECOVERED
 When a landmark or aid which is also a triangulation station is recovered, enter 'Triang. Rec.' with date of recovery.
 EXAMPLE: Triang. Rec.
 8-12-75

III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH
 Enter 'V-Vis.' and date.
 EXAMPLE: V-Vis.
 8-12-75

**PHOTOGAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.

HYDROGRAPHIC SURVEY STATISTICS
REGISTRY NO.: H-10071

Number of positions	3788
Number of soundings	14698
Number of control stations	7

	<u>TIME-HOURS</u>	<u>DATE COMPLETED</u>
Preprocessing Examination	16	05 MAR 1984
Verification of Field Data	378	24 JAN 1986
Quality Control Checks	105	
Evaluation and Analysis	31	17 MAR 1986
Final Inspection	12	17 APR 1986
TOTAL TIME	542	
Marine Center Approval		29 APR 1986

Transmittal letter of survey and survey records will be included in the Descriptive Report to identify the records accompanying the survey.

LETTER TRANSMITTING DATA

MOA 23-82-86

DATA AS LISTED BELOW WERE FORWARDED TO YOU
BY (Check):

- ORDINARY MAIL
- AIR MAIL
- REGISTERED MAIL
- EXPRESS
- GBL (Give number) _____

TO:

CHIEF, DATA CONTROL SECTION
HYDROGRAPHIC SURVEYS BRANCH, N/CG243
NATIONAL OCEAN SERVICE, NOAA
ROCKVILLE, MD 20852

DATE FORWARDED

July 30, 1986

NUMBER OF PACKAGES

2 (1 box, 1 tube)

NOTE: A separate transmittal letter is to be used for each type of data, as tidal data, seismology, geomagnetism, etc. State the number of packages and include an executed copy of the transmittal letter in each package. In addition the original and one copy of the letter should be sent under separate cover. The copy will be returned as a receipt. This form should not be used for correspondence or transmitting accounting documents.

H-10071 OPR-G207 INDIAN RIVER

PACKAGE #1 (BOX) -- ~~2~~ CAHIERS FINAL PRINTOUTS
~~1~~ ORIGINAL DESCRIPTIVE REPORT

PACKAGE #2 (TUBE) -- ~~1~~ SMOOTH SHEET -- ~~1~~ FINAL POSITION OVERLAY -- ~~2~~ EXCESS LEVELS

FROM (Signature)

David B. MacFarland
DAVID B. MAC FARLAND, CDR, NOAA

RECEIVED THE ABOVE
(Name, Division, Date)

Dwayne S. Clark
August 8, 1986
N/CG243

Return receipted copy to:

ATLANTIC MARINE CENTER
HYDROGRAPHIC SURVEYS BRANCH, N/NOA23
NOAA, NATIONAL OCEAN SERVICE
439 W. YORK STREET
NORFOLK, VA 23510

DATE: 12/3/84

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE

TIDE NOTE FOR HYDROGRAPHIC SHEET

Marine Center: Atlantic

OPR: G207

Hydrographic Sheet: H-10071

Locality: Indian River, Florida

Time Period: February 16 - May 16, 1983

Tide Station Used: 872-1374 Allenhurst, Florida

Plane of Reference (~~XXXXXXXXXXXXXXXXXXXX~~ Low Water Datum): 1.72 ft.

Height of Mean High Water Above Plane of Reference:

Remarks: Recommended Zoning

Zone Direct


Chief, Tidal Datums Section

H-10071

GEOGRAPHIC NAMES

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											
	BLACK POINT											
BLACK POINT CREEK												2
DUCKROOST COVE												3
DUCKROOST POINT												4
DUMMIT COVE												5
DUMMIT CREEK												6
FLORIDA (title)												7
GRANNY COVE												8
HAULOVER CANAL												9
INDIAN RIVER (title)												10
LITTLE FLOUNDER CREEK												11
MARSH BAY												12
MARSH BAY CREEK												13
MARSH BAY POINT												14
MOSQUITO LAGOON												15
												16
												17
									Approved:			18
												19
									<i>Charles L. Harrington</i>			20
									Chief Geographer - N/C62x5			21
												22
									MAR 13 1986			23
												24
												25

ATLANTIC MARINE CENTER
EVALUATION REPORT

REGISTRY NO.: H-10071

FIELD NO.: HSB-10-1-83

Florida, Indian River, Black Point to Duckroost Point

SURVEYED: February 16 through May 21, 1983

SCALE: 1:10,000

PROJECT NO.: OPR-G207-HSB-82

SOUNDINGS: Raytheon DE-719B Echo
Sounder, Pole

CONTROL: Range/Range - Del Norte
"See Field Sheet" Method

Chief of Party R. W. Jones
Surveyed by C. B. Greenawalt
..... E. Martin
..... D. Bryant
..... L. Biscorner
..... R. Adams
..... R. Lacy
..... F. W. Rossmann
..... D. Elliot
..... C. Bush
..... M. McMann
..... J. Oswald
Automated Plot by Xynetics 1201 Plotter (AMC)

1. INTRODUCTION

- a. No unusual problems were encountered during evaluation.
- b. The sounding datum in this area is a local vertical datum and is referred to as LOW WATER DATUM. Tidal conditions are such that Mean Lower Low Water is not definable. Most features 1 foot or more above LWD are exposed at high water stages resulting from meteorological conditions. Elevations of features seaward of the shoreline are referenced to Low Water. Their descriptive labels are shown in vertical lettering when they extend 1 foot or more above LWD.
- c. Changes in the Descriptive Report were made in red during office processing.

2. CONTROL AND SHORELINE

- a. Control is adequately discussed in sections F and G of the Descriptive Report.

b. Shoreline originates with Class I registered shoreline (orthophoto) maps TP-00105 and TP-00106 of 1967-70. Shoreline revisions in red are by the hydrographer.

3. HYDROGRAPHY

a. Depths at crossings are in good agreement.

b. The standard depth curves are adequately delineated except for portions of the 0-foot depth curve because of its proximity to shore and the existence of thick grass in nonnavigable areas of the foreshore. The 3-foot depth curve, a brown curve, and some dashed depth curves were added to emphasize shoal features.

c. The development of the bottom configuration and the determination of least depths are considered adequate.

4. CONDITION OF SURVEY

The smooth sheet and accompanying overlays, hydrographic records, and reports comply with the requirements of the Hydrographic Manual.

5. JUNCTIONS

The junction with H-10067 (1982-83) on the south is discussed in the evaluation of that survey. No contemporary survey junctions with the present survey on the north. However, present depths are in good agreement with charted depths.

6. COMPARISON WITH PRIOR SURVEYS

a. H-6676 (1941) 1:10,000

This survey covers the area common to the present survey. A comparison between present and prior depths reveals no significant differences except in the vicinity of the spoil areas located north of the Intracoastal Waterway where differences are attributed to subsequent dredging operations.

Most of the creeks and the foreshore areas on both sides of the river are now unnavigable and noted as foul because of the existence of thick grass.

The present survey is adequate to supersede the prior survey within the common area.

b. T-9167 (1948-49) 1:20,000
T-9168 (1948-49) 1:20,000

These Class I registered shoreline maps cover the area common to the present survey and are superseded by the present survey within the common area.

7. COMPARISON WITH CHART 11485 (20th Edition, July 17, 1982)

a. Hydrography

The charted hydrography originates with the previously discussed prior surveys which require no further consideration, supplemented by U.S. Army Corps of Engineers surveys and other miscellaneous sources.

The present survey is adequate to supersede the charted hydrography within the common area.

b. Controlling Depths

The controlling depth for the portion of the Intracoastal Waterway covered by the present survey originates with U.S. Army Corps of Engineers surveys of May and June 1982. Present survey depths are in agreement with the published controlling depths.

c. Aids to Navigation

The aids to navigation located on the present survey are in substantial agreement with their charted positions and adequately mark the features intended.

d. Overhead Power Cable

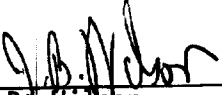
The overhead power cable (authorized clearance of 85 feet) charted at Haulover Canal Bascule Bridge at latitude 28°44.17'N, longitude 80°45.28'W was reported to no longer exist. The Nautical Data Unit has been asked to verify this information with the U.S. Army Corps of Engineers.

8. COMPLIANCE WITH INSTRUCTIONS

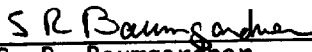
This survey adequately complies with the project instructions.

9. ADDITIONAL FIELD WORK

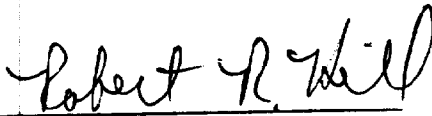
This is a very good basic survey and no additional work is recommended.



J. B. Wilson
Cartographic Technician
Verification of Field Data



S. R. Baumgardner
Cartographer
Standards Section (N/CG242)
Evaluation and Analysis



R. R. Hill
Senior Cartographic Technician
Verification Check

Inspection Report
H-10071

The completed survey has been inspected with regard to survey coverage, delineation of depth curves, development of critical depths, cartographic symbolization, and verification or disproval of charted data. The survey complies with National Ocean Service (NOS) requirements except as noted in the Evaluation Report. The survey records comply with NOS requirements except where noted in the Evaluation Report.

Inspected

for R. Q. Sauer

George K. Myers
Chief, Standards Section (N/CG242)
Hydrographic Surveys Branch

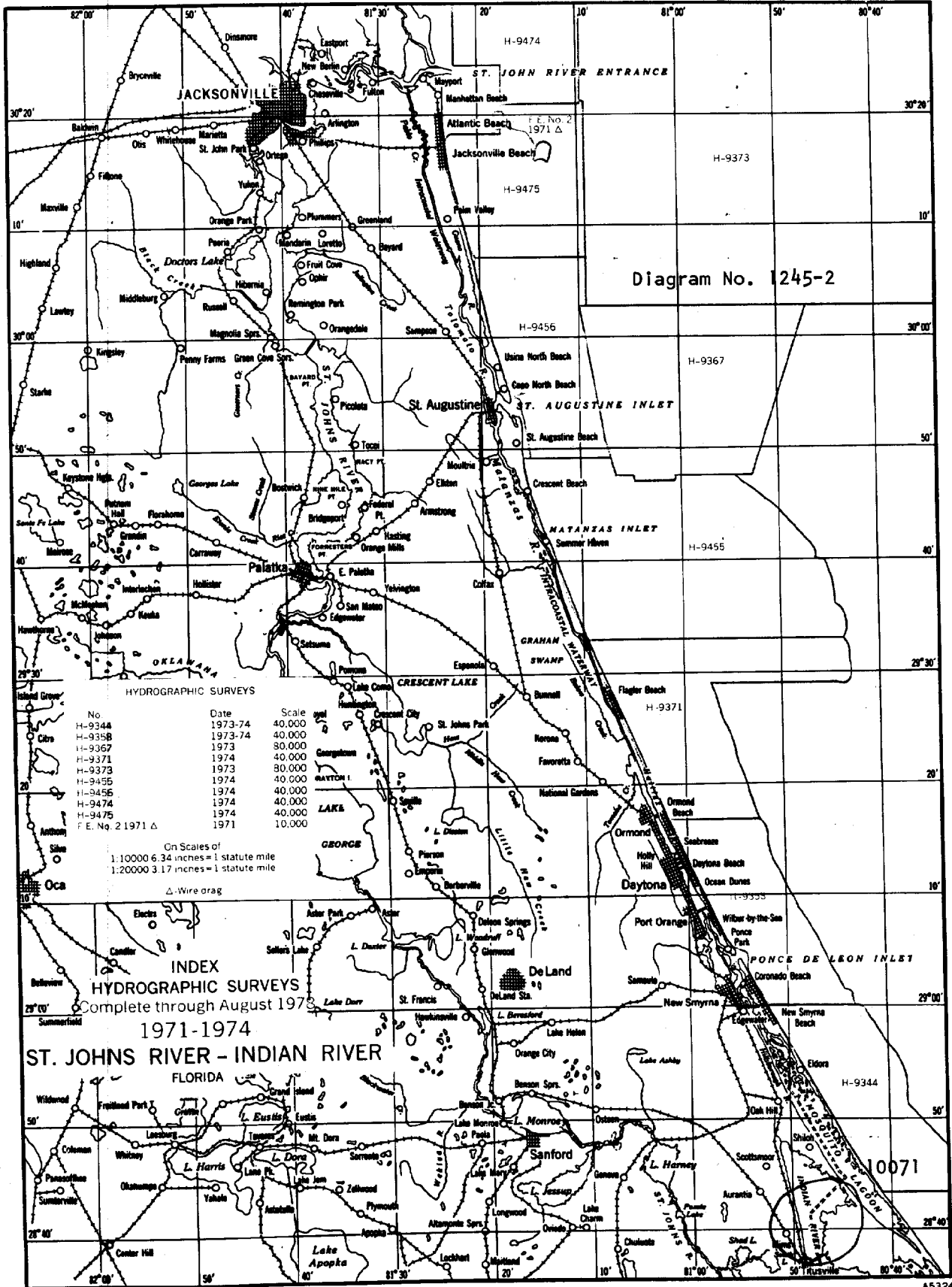
Approved

Wesley V. Hull

Wesley V. Hull, RADM, NOAA
Director, Atlantic Marine Center

DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Ocean Survey
Rockville, Maryland

Hydrographic Index No. 76 E



HYDROGRAPHIC SURVEYS

No.	Date	Scale
H-9344	1973-74	40,000
H-9358	1973-74	40,000
H-9367	1973	80,000
H-9371	1974	40,000
H-9373	1973	80,000
H-9455	1974	40,000
H-9456	1974	40,000
H-9474	1974	40,000
H-9475	1974	40,000
F. E. No. 2 1971 Δ	1971	10,000

On Scales of
1:10000 6.34 inches=1 statute mile
1:20000 3.17 inches=1 statute mile

Δ-Wire drag

INDEX
HYDROGRAPHIC SURVEYS
Complete through August 1973
1971-1974
ST. JOHNS RIVER - INDIAN RIVER
FLORIDA

10071

MARINE CHART BRANCH
RECORD OF APPLICATION TO CHARTS

H-10071

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. _____

INSTRUCTIONS

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.

1. Letter all information.
2. In "Remarks" column cross out words that do not apply.
3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

CHART	DATE	CARTOGRAPHER	REMARKS
11485	10-19-88	Eli Bedouine ²⁰¹⁸	Full Part Before After Marine Center Approval Signed Via Drawing No. 25B
			Full Part Before After Marine Center Approval Signed Via Drawing No.
			Full Part Before After Marine Center Approval Signed Via Drawing No.
			Full Part Before After Marine Center Approval Signed Via Drawing No.
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			Full Part Before After Marine Center Approval Signed Via Drawing No.

Applied To Stds 3-8-86 JSR