Original

TP-00151

NOAA FORM 76-35

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

DESCRIPTIVE REPORT

Type of Survey Coastal Boundary

Job No. PH-6910 *Map No.* TP-00151

Classification No. Final *Edition No.* 1

Field Edited Map

LOCALITY

State Florida

General Locality Indian River County

Locality Black Point to Wabasso

19 70 TO 19 71

REGISTRY IN ARCHIVES

DATE

☆ U.S. GOVERNMENT PRINTING OFFICE: 1973-761-776

TP-00151

NOAA FORM 76-36A (3-72) — U. S. DEPARTMENT OF COMMERCE, NATIONAL OCEANIC AND ATMOSPHERIC ADMIN.

DESCRIPTIVE REPORT - DATA RECORD

TYPE OF SURVEY: [X] ORIGINAL [ ] RESURVEY [ ] REVISED

SURVEY TP-00151

MAP EDITION NO. (1)

MAP CLASS Final

JOB PH-6910

PHOTOGRAMMETRIC OFFICE: Rockville, Maryland

OFFICER-IN-CHARGE: Commander Wesley V. Hull

LAST PRECEEDING MAP EDITION — TYPE OF SURVEY: [ ] ORIGINAL [ ] RESURVEY [ ] REVISED; JOB PH-; MAP CLASS; SURVEY DATES: 19__ TO 19__

I. INSTRUCTIONS DATED

1. OFFICE	2. FIELD
General Instructions-OFFICE-NOS Cooperative Coastal Boundary Mapping, Job PH-7000, 6/19/73 OFFICE-Supplement 1, 8/10/73 NOTE:Office and Field Edit Instr. (1973) incorporate applicable, prior operational instructions.	Aerial photography 9/2/69 Supplement I, 1/28/70 Supplement II, 3/26/70 Supplement III, 8/10/72 Field Edit(PH-7000)-General Instructions for Florida Coastal Zone Mapping, 1973

II. DATUMS

1. HORIZONTAL: [X] 1927 NORTH AMERICAN — OTHER (Specify)

2. VERTICAL: [X] MEAN HIGH-WATER [X] MEAN LOW-WATER [ ] MEAN LOWER LOW-WATER [ ] MEAN SEA LEVEL — OTHER (Specify)

3. MAP PROJECTION: Transverse Mercator

4. GRID(S): STATE: Florida; ZONE: East

5. SCALE: 1:10,000 — STATE; ZONE

III. HISTORY OF OFFICE OPERATIONS

OPERATIONS		NAME	DATE
1. AEROTRIANGULATION	BY	Don Brant	12/70
METHOD: Analytic	LANDMARKS AND AIDS BY	Inapplicable	
2. CONTROL AND BRIDGE POINTS	PLOTTED BY	P.J. Dempsey	1/71
METHOD: Coradomat	CHECKED BY	Inapplicable	
3. STEREOSCOPIC INSTRUMENT COMPILATION	PLANIMETRY BY	J.C. Richter	4/71
	CHECKED BY	M.C. Webber	4/71
INSTRUMENT: B-8	CONTOURS BY	Inapplicable	
SCALE: 1:10,000	CHECKED BY	Inapplicable	
4. MANUSCRIPT DELINEATION	PLANIMETRY BY	J.C. Richter	5/71
Shoreline:Graphic	CHECKED BY	M.C. Webber	5/71
METHOD:	CONTOURS BY	Inapplicable	
Interior:Orthophoto mosaic	CHECKED BY	Inapplicable	
SCALE:	~~PHOTO SUPPORT DATA~~ BY	J. Taylor	6/71
	CHECKED BY	J.P. Battley,Jr.	6/71
5. OFFICE INSPECTION PRIOR TO FIELD EDIT	BY	J.P. Battley,Jr.	6/71
6. APPLICATION OF FIELD EDIT DATA	BY	J.C.Richter	1/72
	CHECKED BY	M.C.Webber	1/72
7. COMPILATION SECTION REVIEW	BY	J.C. Richter	2/72
8. FINAL REVIEW	BY	J.P. Battley	5/72
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH	BY		
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH	BY	D. Brant	6/74
11. MAP REGISTERED - COASTAL SURVEY SECTION	BY	R. J. Cato	8-12-74

NOAA FORM 76-36A — SUPERSEDES FORM C&GS 181 SERIES

* U.S. G.P.O. 1972-769382/582 REG.#6

NOAA FORM 76-36B
(3-72)

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

TP-00151

COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC-8
E&L 6" focal length

TIDE STAGE REFERENCE
- ☐ PREDICTED TIDES
- ☐ REFERENCE STATION RECORDS
- ☒ TIDE CONTROLLED PHOTOGRAPHY

TYPES OF PHOTOGRAPHY LEGEND
(C) COLOR
(P) PANCHROMATIC
(I) INFRARED B&W

TIME REFERENCE
ZONE: Eastern — ☒ STANDARD
MERIDIAN: 60th & 75th — ☒ DAYLIGHT

NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE
70E(C)5779-5781	2/10/70	13:39	1:40,000	The stage of tide for color photography is inapplicable.
70L6896R- 6899R	8/14/70	17:35	1:25,000	+0.02MHW(1)-0.23MHW(2)
70L6390R- 6395R	8/12/70	11:14	1:25,000	+0.07MLW(1)-0.26MLW(2)
70L8912R- 8915R	2/10/70	12:01	1:20,000	+0.15MHW(2)

REMARKS (1) Vero Beach Tide Station
(2) Sebastian Indian River Tide Station

2. SOURCE OF MEAN HIGH-WATER LINE:

The source of the mean high-water line along the Atlantic shore and portions of the east shore of the Indian River is the tide coordinated black and white infrared photography dated 8/14/70 listed in item 1. The source of the mean high-water line along the west shore of the Indian River is the tide coordinated black and white infrared photography dated 2/10/70 listed in item 1. The map was field edited in 1971.

3. SOURCE OF MEAN LOW-WATER OR MEAN LOWER LOW-WATER LINE:

The source of the mean low-water line along the Atlantic Shore is the tide coordinated black and white infrared photography dated 8/12/70 and listed in item 1. Foreshore profiles determined by the Field Edit of 1971 verified the mean low-water line on the photography. The mean low-water line was not shown on these interior waters.

4. CONTEMPORARY HYDROGRAPHIC SURVEYS *(List only those surveys that are sources for photogrammetric survey information.)*

SURVEY NUMBER	DATE(S)	SURVEY COPY USED	SURVEY NUMBER	DATE(S)	SURVEY COPY USED
Inapplicable					

5. FINAL JUNCTIONS

NORTH	EAST	SOUTH	WEST
TP-00149	No contemporary survey	TP-00152	TP-00150

REMARKS
Final junctions were made in the Coastal Mapping Section.

* U.S. GOVERNMENT PRINTING OFFICE: 1974-768-078

NOAA FORM 76-36C
(3-72)

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

TP-00151

HISTORY OF FIELD OPERATIONS

I. [X] FIELD INSPECTION OPERATION *See below [X] FIELD EDIT OPERATION. June 1971

OPERATION		NAME	DATE
1. CHIEF OF FIELD PARTY		W.H. Shearouse	11/71
2. HORIZONTAL CONTROL	RECOVERED BY	I. I. Saperstein	7/71
	ESTABLISHED BY	N.A.	
	PRE-MARKED OR IDENTIFIED BY	N.A.	
3. VERTICAL CONTROL	RECOVERED BY	I.I. Saperstein	7/71
	ESTABLISHED BY	N.A.	
	PRE-MARKED OR IDENTIFIED BY	I.I. Saperstein	7/71
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED *(Triangulation Stations)* BY	None	
	LOCATED *(Field Methods)* BY	None	
	IDENTIFIED BY	None	
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION: [ ] COMPLETE [X] SPECIFIC NAMES ONLY [ ] NO INVESTIGATION — BY	W.H. Shearouse	11/71
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY	W.H. Shearouse	10/71
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	N.A.	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED
None

2. VERTICAL CONTROL IDENTIFIED

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
	Refer to Field Report	70L6706 70L6707 70E5779	D306(SRD),E306 F306,G306, H306,F307,M306,C10(IWS), J306,E200,G200

3. PHOTO NUMBERS *(Clarification of details)*

70L6395R, 70E5779, 70E5780

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED
There are no landmarks for charts;Nonfloating aids were verified or located by sextant fix plotted on Field Edit Sheet.

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME
		70E5779	LIGHT 82, DAYBN 84, LIGHT 85, LIGHT 89

5. GEOGRAPHIC NAMES: [ ] REPORT [X] NONE

6. BOUNDARY AND LIMITS: [ ] REPORT [X] NONE

7. SUPPLEMENTAL MAPS AND PLANS
None

8. OTHER FIELD RECORDS *(Sketch books, etc. DO NOT list data submitted to the Geodesy Division)*
*Refer to Field Report bound with this report.

Sketchbook Vol. 11, showing sextant fixes, to be submitted later.

*U.S. GOVERNMENT PRINTING OFFICE: 1974 - 768-078

NOAA FORM 76-36D
(3-72)

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

TP-00151

RECORD OF SURVEY USE

I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
No map copies furnished for Nautical Chart use prior to final review.				

II. LANDMARKS AND AIDS TO NAVIGATION

1. REPORTS TO MARINE CHART DIVISION, NAUTICAL DATA BRANCH

NUMBER	CHART LETTER NUMBER ASSIGNED	DATE FORWARDED	REMARKS
1	769 74	6/28/74	Final - One report was submitted for map TP-00144

2. ☑ REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: 6/28/74
3. ☐ REPORT TO AERONAUTICAL CHART DIVISION, AERONAUTICAL DATA SECTION. DATE FORWARDED: _____

III. FEDERAL RECORDS CENTER DATA

1. ☑ BRIDGING PHOTOGRAPHS; ☑ DUPLICATE BRIDGING REPORT; ☑ COMPUTER READOUTS.
2. ☑ CONTROL STATION IDENTIFICATION CARDS; ☑ FORM NOS 567 SUBMITTED BY FIELD PARTIES.
3. ☑ SOURCE DATA *(except for Geographic Names Report)* AS LISTED IN SECTION II, NOAA FORM 76-36C. ACCOUNT FOR EXCEPTIONS:

4. ☐ DATA TO FEDERAL RECORDS CENTER. DATE FORWARDED: _____

IV. SURVEY EDITIONS *(This section shall be completed each time a new map edition is registered)*

	SURVEY NUMBER	JOB NUMBER	TYPE OF SURVEY / MAP CLASS
SECOND EDITION	TP - _____ (2)	PH - _____	☐ REVISED ☐ RESURVEY
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	☐ II. ☐ III. ☐ IV. ☐ V. ☐ FINAL
THIRD EDITION	SURVEY NUMBER	JOB NUMBER	TYPE OF SURVEY / MAP CLASS
	TP - _____ (3)	PH- _____	☐ REVISED ☐ RESURVEY
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	☐ II. ☐ III. ☐ IV. ☐ V. ☐ FINAL
FOURTH EDITION	SURVEY NUMBER	JOB NUMBER	TYPE OF SURVEY / MAP CLASS
	TP - _____ (4)	PH - _____	☐ REVISED ☐ RESURVEY
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	☐ II. ☐ III. ☐ IV. ☐ V. ☐ FINAL

NOAA FORM 76-36D

☆U. S. GOVERNMENT PRINTING OFFICE: 1973--778075/1077 REGION NO. 6

Record of Decisions
Pertaining to Symbolization of the MHW and MLW Datums
Map TP-00151

Shoreline Delineation

The mean low-water and mean high-water datums were determined along the outer coast (Atlantic Ocean) from tide observations at Canova Pier Tide Station and Vero Beach Tide station. The interior waters shown on this map are a portion of Indian River and adjacent tributaries such as Big Slough, Turtle Pen Slough, and Spratt Creek. The tidal datum for these waters was established by observations at Sebastian Indian River Tide Station (northwest of this map) and at Wabasso Tide Station (shown on this map)

For these interior waters, the mean high-water line was shown. The mean low-water line was not shown because it does not have a boundary application. Because of the small range of tide (approximately 0.3 foot), the portrayal of shallow areas has a greater application to charting than the mean low-water line, and a vault copy of the manuscript shows those features.

* Decision Responsibility for Shoreline Symbolization

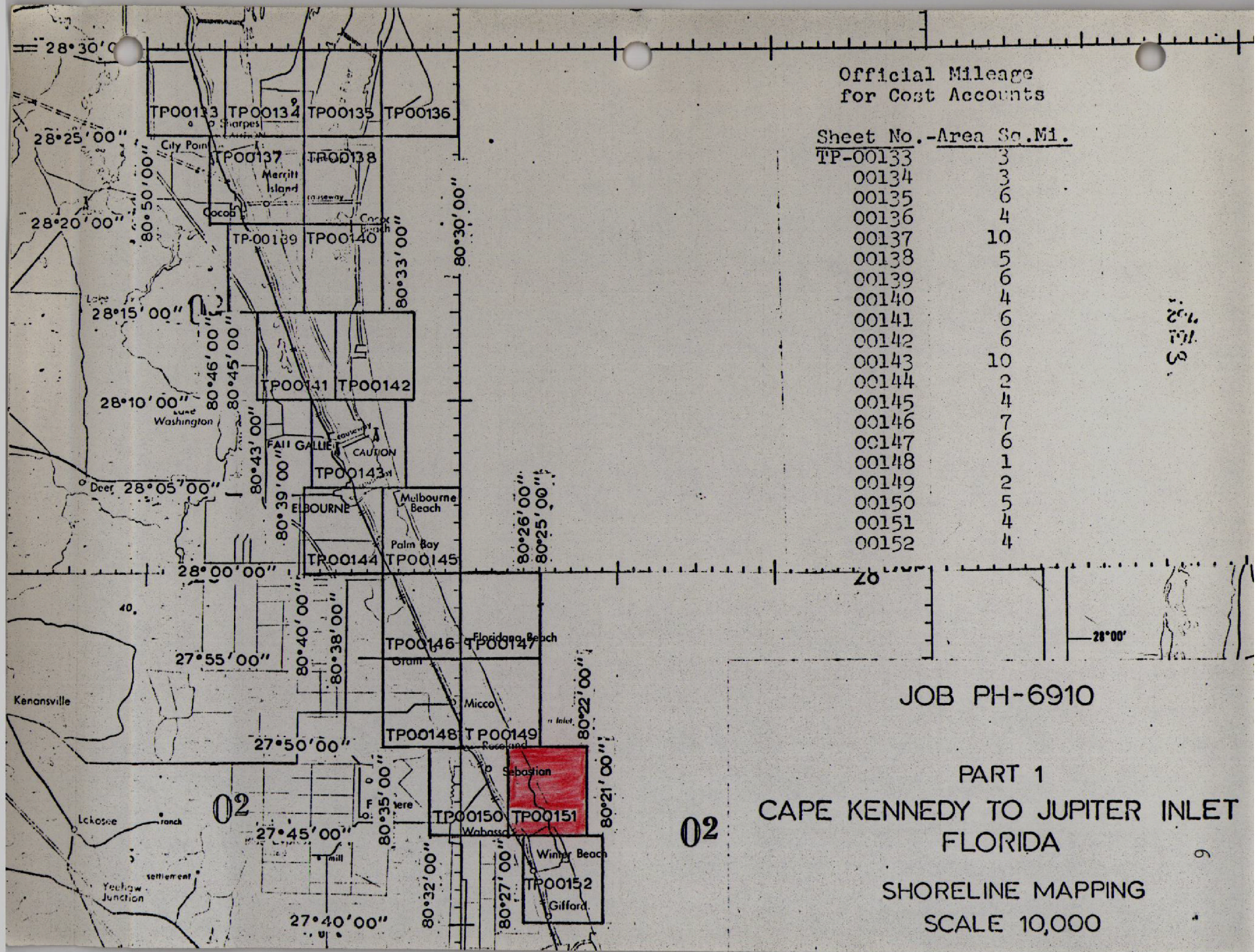
Specific decisions as to the symbolization for mapping mean high-water, apparent shoreline and solid lines for along-shore manmade features were made January 10, 1973, in Rockville, Maryland, by competent technical officials of National Ocean Survey. Cdr. Wesley V. Hull, Chief, Coastal Mapping Division, provided the technical field survey and cartographic expertise and Mr. Carroll I. Thurlow, Chief, Tidal Datum Planes Section, rendered decisions on tidal datum matters.

They also examined photographs and field edit reports with respect to inland penetration of small streams and drainages and concluded that those features were properly delineated and symbolized on the map.

Archiving

A copy of this report shall be included in Descriptive Report TP-00151 which will be permanently filed in the NOS archives.

* See Review Report for clarification of date.



Official Mileage
for Cost Accounts

Sheet No.-	Area Sq.Mi.
TP-00133	3
00134	3
00135	6
00136	4
00137	10
00138	5
00139	6
00140	4
00141	6
00142	6
00143	10
00144	2
00145	4
00146	7
00147	6
00148	1
00149	2
00150	5
00151	4
00152	4

JOB PH-6910

PART 1

CAPE KENNEDY TO JUPITER INLET
FLORIDA

SHORELINE MAPPING
SCALE 10,000

SUMMARY
TP-00133 thru TP-00152

Coastal Zone Map TP-00151 is one of twenty (20) similar maps in project PH-6910, Part I. The layout of sheets (page 6 of this report) will show its location. These maps are intended for planning purposes by the State of Florida and for the compilation of NOS Nautical Charts.

The area is covered by aerial photography taken in 1969 and 1970 on color and black and white infrared film. The infrared film was tide coordinated.

Field operations consisted of the establishment of tidal datums, control recovery, pre-marking of control, and field edit. Data for the compilation of tide stations and tidal bench marks were furnished by the Tidal Datum Planes Section. Condensed descriptions of both tidal and geodetic bench marks shown on this map were furnished by the Coastal Surveys Section.

Horizontal control was extended by analytical aerotriangulation methods using the stereo comparator. This provided control for the orthophoto mosaic and compilation.

Shoreline and alongshore features were compiled from tide-coordinated black and white infrared photography using a stereo plotter and graphic methods. The interior of the maps are depicted by an orthophoto mosaic.

All line work is scribed, approved symbols are shown in the marginal data.

Explanatory notes relating to datum determinations approved by a special ad hoc committee are shown on the reverse side of the maps.

All maps are published by the NOS and were printed in threee colors by the Reproduction Division. A special registration copy was prepared to meet the requirements for Nautical Charts. This registration copy shows additional offshore details not shown on the published map and will be noted "Registration Copy" under the title block.

The following items will be registered in the Bureau Archives:

1. A plastic copy of the published map (1:10,000 scale).

2. A stable base positive of the registration copy (1:10,000 scale).

3. The Descriptive Report.

All negatives will be filed with the Reproduction Division.

All field data such as Forms 152, field edit photographs, profiles, field edit ozalids, etc., are filed in the Federal Records Center.

FIELD REPORT
PREMARKING HORIZONTAL CONTROL
JOB PH-6910, CAPE KENNEDY TO JUPITER INLET, FLORIDA

In accordance with Instructions - FIELD - Supplement L, Job PH-6910; Coastal Boundary Mapping, Cape Kennedy to Jupiter Inlet, Florida, twenty-two horizontal control stations were recovered and paneled in accordance with practices in use at this time. All stations were premarked for 1:40,000 scale photography.

White polyethylene plastic sheeting was used for all but 2 stations. Sketches on the CSI cards show the pattern used in each instance but most stations were paneled with a 5-ft. square target placed directly over the station mark and 3 runner-type wing panels 3.5/4' X 20' approximating 120° angles around the square.

TRIPOD 3, 1963 and WHITE 2, 1966 were premarked with black plastic, the center panel being 10' X 10' and the wing panels 8' X 20'. The ground surface at these 2 locations was considered too white for the white targets to be seen, hence the use of black material.

In addition to the sketches shown on the CSI cards the station locations have been spotted on USGS Quadrangle maps which are transmitted as part of the job data.

A recap, showing the stations as numbered on the job control diagram, the TP-map number and the quadrangle map on which it falls, follows:

STATION No.	NAME		MAP NO.	USGS QUADRANGLE
1	CENTRAL	1950	TP-00136	CAPE CANAVERAL
2	ARTESIA	1953	"	" "
3	POSE	1966	TP-00138	COCOA BEACH
4	MUNSON	1940	TP-00139	"
5	PATRICK N. BASE	1960	TP-00140	" "
6	TRIPOD 3	1963	TP-00142	TROPIC
7	COLLEGE 2	1934	TP-00143	"
8	TURKEY CREEK	1934	TP-00144	MELBOURNE EAST
9	VALKARIA	1966	TP-00146	GRANT
10	SLIP 2	1934	TP-00149	SEBASTIAN NW
11	SEBASTIAN 2	1934	TP-00150	SEBASTIAN
12	SCORPION 2	1961	TP-00153	VERO BEACH
13	RICMAR 2	1960	TP-00154	INDRIO
14	PIERCE 2	1963	TP-00155	FORT PIERCE
15	WHITE 2	1966	TP-00156	" "

STATION NO.	NAME		MAP NO.	USGS QUADRANGLE
16	WALTON	1930	TP-00157	ANKONA
17	REFUGE 2 RM # 4	1967	TP-00160	ST. LUCIE INLET
18	SEWALL	1934	TP-00159	" " "
19	PINE	1929	TP-00162	GOMEZ
20	CISTERN	1956	TP-00163	HOBE SOUND
21	RADAR	1954	TP-00164	JUPITER
22	GOLF RM # 1	1934	South of TP-00164	RIVIERA BEACH

Targets were visited after photography and found to be in good condition. No center panels were damaged except GOLF RM 1 and it was only slightly torn on its north edge. Images of all targets should be visible on the photographs.

Submitted 2/24/70

William H. Shearouse

William H. Shearouse
Chief, Photo Party 60

Photogrammetric Plot Report
Cape Kennedy to Jupiter Inlet, Florida (Part 1)
Job PH-6910
April, 1971

21. Area Covered

This report covers the area south from Cape Kennedy to an area about eight miles north of Fort Pierce Inlet. The job consists of twenty one (21) 1:10,000 scale sheets, TP-00133 thru TP-00153.

22. Method

Six (6) strips of photographs were bridged using analytical aerotriangulation methods. Strip 23 proved inadequate for bridging. Strip 23A, therefore, was flown at a later date farther west in order to include more land area to strengthen the photogrammetry. A cross flight, 24, was also flown at this time to include the cape area. Ties were made between strips. Points were located to rectify the photographs for mosaics. In addition, points were located to ratio high and low water photography. The attached sketch of the strips bridged shows the placement of triangulation used in the final strip adjustment. Closures to control have been shown on the readouts. All bridge points have been plotted on the Coradimat on Florida East Zone plane coordinates.

23. Adequacy of Control

Horizontal control that fell on strips 21A, 22, 25, and 26 was premarked. Strips 23A and 24 were flown at a later date, and all control that fell on these two strips were transferred from the earlier pre-marked photography. It is noted that stations SCORPOIN 2, 1961 and RIOMAR 2, 1960 (terminal for Strip 26) do not appear on the attached sketch, as these stations are on or south of TP-00153. The control was adequate for bridging all strips.

25. Photography

All photography the subject of this report is 1:40,000 scale color as follows:

Strip 21A -- 69-E(C)-4247 thru 4261
Strip 22 -- 69-E(C)-4185 thru 4194

Strip 23A -- 70-L(C)-9991A thru 004A
Strip 24 -- 70-L(C)-007A thru 015A
Strip 25 --- 70-E(C)-5760 thru 5768
Strip 26 --- 70-E(C)-5772 thru 5794

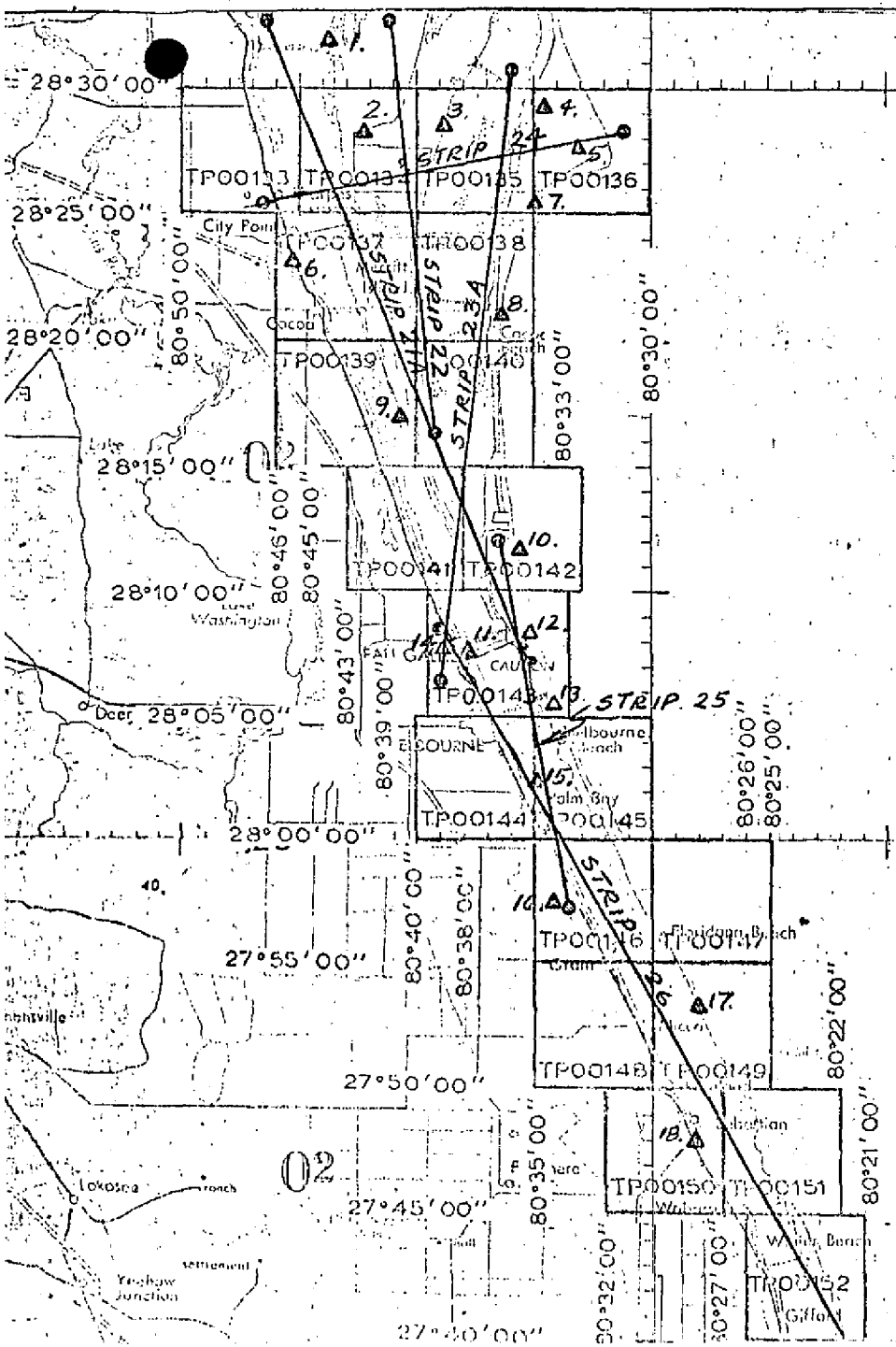
The definition and quality of the photography were good.

Respectfully submitted:

Irving I. Saperstein
I. I. Saperstein

Approved and forwarded:

Henry P. Eichert, Chief
Aerotriangulation Section



Control

1. Moore RM 3,1963
2. Courtenay,1953
3. Paxton,1960
4. Central,1950
5. Cape Canaveral L.H. Center,1934
6. Cocoa City 2,1957
7. Artesia,1953
8. Pose,1966
9. Munson,1940
10. Tripod 3,1963
11. College 2,1906
12. Canova Beach Melbourne Munic.W.T.1960
13. Indialantic Melbourne E.Munic.W.T.1960
14. Eau Gallie Munic.W.T.Center,1934
15. Turkey Creek,1934
16. Slip 2,1934
17. Sebastian 2,1934

▲ Horizontal control used in adjustment
△ Horizontal control used as check
⊙ 1:40,000 scale color photography

JOB PH-6910

PART 1

CAPE KENNEDY TO JUPITER INLET
FLORIDA

SHORELINE MAPPING

02

13

FLORIDA– NOAA Coastal Boundary Mapping Program

Horizontal Control Map TP– 00151

Station	NOS Geodetic Data Reference for Description, Positions, Coordinates and Azimuths
LAST 2, 1934	Book 420, pp. 9, 26, G.P. Fla. Vol. 1, p. 155, P.C. Fla. E. zone, p. 19
FORT, 1930	Book 420, pp. 8, 25,28, G.P. Fla. Vol. 1, p.712, P.C. Fla. E zone, p. 160

Geodetic Bench Mark	Elevations (feet) SLD 1929	Condensed Description
D 306	1.850	F.S.R.D. disk stamped D 306; on top of S end of W concrete headwall for culvert, 64 ft. W of centerline of road.
E 306	5.190	C&GS disk stamped E 306 1970; 56 ft. SW of center of road and sand driveway, 50.5 ft. W of road, 32.5 ft. S of power line pole.
F 306	5.614	C&GS disk stamped F 306 1970; 52 ft. W of centerline of road, 48 ft. N of centerline of sand road.
G 306	8.845	C&GS disk stamped G 306 1970; 51 ft. E of centerline of road, 10 ft. N of right-of-way marker, 27 ft. SW of palm tree with triangular blaze.
H 306	9.885	C&GS disk stamped H 306 1970; 80 ft. SE of center of junction of road and drive, 48 ft. SE of power line brace pole.
F 307	8.976	C&GS disk stamped F 307 1970; 49.5 ft. E of center of junction of road and sand trail, 7 ft. SE of power line brace pole.
M 306	9.501	C&GS disk stamped M 306 1970; 135 ft. NW of center of intersection, 47 ft. W of A1A, 100 ft. N of State Road 510.
C10	5.991	IWS disk stamped C 10; in top of NW end of the W of 2 stone posts.
J 306	11.463	C&GS disk stamped J 306 1970; at W end of N concrete guard rail, 17.5 ft. N of centerline of road.
E 200	16.004	C&GS disk stamped E 200 1960; 25.3 ft. W of W rail, 13 ft. SE of culvert post marked 218 - 57.

Geodetic Bench Mark	Elevations (feet) SLD 1929	Condensed Description
G 200	15.843	C&GS disk stamped G 200 1960; 115 ft. NW of center of road and W rail, 45 ft. W of W rail.
K 306	14.485	(*)

* Description given under Tidal Bench Marks.

Compilation Report
TP-00151

31. Delineation

The land area of this map is shown by an orthophoto mosaic. The orthophoto mosaic was assembled with black and white rectified prints from the color photography. The rectified prints and mosaic were controlled by points determined by aerotriangulation.

The tidal datum lines and any offshore features on this map were compiled from office interpreted tide coordinated black and white infrared photography. The rectified color photography was used as an aid for interpreting culture features and compiling the limits of shallow and shoal areas for Nautical Charts. The tide coordinated black and white infrared photography was controlled by common planimetric features and map points determined by aerotriangulation.

32. Horizontal Control

Refer to the photogrammetric plot report bound with this Descriptive Report.

33. Supplemental Data - None.

34. Contours and Drainage

Contours are inapplicable. Drainage is depicted by the orthophoto mosaic.

35. Shoreline and Alongshore Details

The mean high-water line was mapped along the Atlantic shore and in the interior waters of the Indian River. Where the shoreline was obscured by vegetation, the apparent shoreline symbol was used.

The mean low-water line was not mapped (along the Atlantic shore) because of surf conditions on the photography. Foreshore profiles are requested to verify the interpretation of the mean low-water line on the tide coordinated black and white infrared photography.

The mean low-water line was not mapped in the interior waters of the Indian River (refer to the Record of Decisions bound with this report).

The photography was adequate for the delineation of the tidal datum lines.

36. Offshore Details

No unusual problems were encountered. The spoil banks are subject to change in size and position.

37. Landmarks and Aids to Navigation

There are no charted landmarks on this map.

The images of charted objects visible on the photography were compiled during compilation. Charted objects which were not visible on the photography were called to the attention of the field editor.

38. Control for Future Surveys

Tidal bench marks established by the tide observation party.

39. Junctions

Refer to Form 76-36B(Page 2 of this Descriptive Report).

40. Horizontal Accuracy

The map complies with the accuracy requirements for the Florida Coastal Zone Mapping Program as outlined by project instructions, PH-7000.

41. thru 45. Inapplicable.

46. Comparison with Existing Maps

Comparison was made with USGS quadrangle Sebastian, Florida, scale 1:24,000, edition of 1951.

No significant differences were noted.

47. Comparison with Nautical Charts

Comparison was made with Nautical Chart 845-SC, scale 1:40,000, 9th edition, July 25, 1970, corrected to August 29, 1970.

No significant differences were noted.

Items to be Applied to Nautical Charts Immediately - None.

Items to be Carried Forward - None.

Submitted by,

M. C. Webber

M. C. Webber

Approved and forwarded:

Peter P. Battley Jr

J.P. Battley, Jr.
Chief, Coastal Mapping Section

Field Edit Report, Map TP-00151, Job PH-6910

51. METHODS

Shoreline of the Atlantic Ocean was verified visually while driving, or walking where necessary, along the beach at the proper stages of tide. The Indian River shoreline was verified visually from a small boat while cruising just offshore. No major inadequacies were found. Notes regarding apparent and "fast" shoreline in the river, piers and other shoreline structures were made on the photographs.

No landmarks are recommended.

Form 76-40 is submitted for nonfloating aids. Sextant fixes were obtained to verify the 1967 position or to show the new location if the aid has moved.

Oyster culture abounds in the north part of the map. The leases are marked by stakes. A note "stakes mark oyster leases" placed approximately where shown on photos 70L6395R and 70E5780 is recommended.

All known triangulation stations were searched for. Forms 526 are submitted herewith.

Bench marks were searched for and reported on Forms 685A. A number sufficient to satisfy the one or more a mile requirement were identified on the photographs.

State and Federal highway numbers are shown on the photographs.

Field edit notes will be found on the photographs, the Field Edit Sheet and the Discrepancy Print.

52. ADEQUACY OF COMPILATION

Adequate after application of field edit information.

53. MAP ACCURACY

No tests were required.

54. RECOMMENDATIONS

None.

55. EXAMINATION OF PROOF COPY

Not required.

56. GEOGRAPHIC NAMES

A complete investigation was not required. No conflicts or new names came to light during field edit.

Submitted 11/5/71

William H. Shearouse

William H. Shearouse
Chief, Photo Party 60

TP-00151

Remarks: Application of Field Edit

Foreshore profiles determined by the field edit of 1971 verified the tidal datum lines on the tide coordinated black and white photography.

Review Report TP-00151
Coastal Zone Map
June 1974

61. General

This map was reviewed in the Coastal Mapping Section prior to its proof stage.

The proof copy of this map was examined by the Quality Control Group. During this examination any corrections to the compilation were noted and returned to the Coastal Mapping Section for application to the map.

The following major parts in the preparation of this map have been examined by the Quality Control Group and are adequate:

1. Field operations
2. Extension of control
3. Compilation
4. Descriptive Report

The shoreline on this map was symbolized in accordance with ongoing decisions set forth by officials of the National Ocean Survey. These decisions, however, were formalized and documented at the later date reflected in the Record of Decisions.

62. Registration Copy

A special Registration Copy of this map was prepared for Marine Chart use and checked by the Coastal Mapping Section. This Registration Copy shows additional offshore information (such as "shallow" and "shoal")areas not shown on the published map.

Also, the interpretation of the tide coordinated black and white infrared photography shows some shallow areas that uncover at near mean low-water. Where this exists, the areas are labeled "tint" and when used for Nautical Chart compilation, should be shown with a "green tint" without an outline. This will represent the approximate mean low-water line. Several such areas are on map TP-00151.

63. thru 64. Inapplicable.

65. Cartographic Comparison

A comparison was made with USGS quadrangle Sebastian, Florida, 1949, photorevised 1970, 1:24,000 scale.

No significant differences were noted.

A comparison was made with Nautical Chart 845-SC, 12th edition, dated September 8, 1973, scale 1:40,000.

The following differences were noted:

Numerous differences in piers and pier ruins were noted along the shores of the Indian River. Also noted were differences in the positions and additional numbers of piling, dolphins, stakes, and signs. The information shown on the published map and Registration Copy was furnished by the Field Edit of 1971 and no mention was made about the differences between the map and Nautical Chart.

66. Adequacy of Results and Future Surveys

Coastal Zone Map TP-00151 complies with project instructions for NOS Cooperative Mapping, Job PH-7000. This map meets the National Map Accuracy Standards.

Submitted by,

Donald M. Brant

Approved:

Chief, Photogrammetric Branch

Chief, Coastal Mapping Division

June 25, 1974

GEOGRAPHIC NAMES

FINAL NAMES SHEET

PH-6910 N(Florida)

TP-00151

Atlantic Ocean
Big Slough
Black Point
Collins Hole
David Island
Duck Point
East Channel
Egret Islands
Florida East Coast RR
Green Point
Horseshoe Island
Indian River
Melba Island
Michael Creek
Michael Island
Middle Island
Nelson Island
News Cut
North Hole
North Horseshoe Island
Pauls Island
Pelican Island
Pine Island
Pine Island Bay
Plug Island
Preachers Hole
Preachers Island
Roosevelt Island
Roseate Island
South Hole
South Point
Spratt Creek
Spratt Point
Turtle Pen Slough
Wabasso
Wabasso Beach
Wabasso Island

Approved by:

C. E. Harrington

C. E. Harrington
Staff Geographer

NOAA FORM 76-40 (2-71)
PRESCRIBED BY PHOTOGRAMMETRY INSTRUCTION NO. 64.

U.S. DEPARTMENT OF COMMERCE–NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

ORIGINATING ACTIVITY
- ☐ FIELD INSPECTION
- ☐ FIELD EDIT
- ☐ COMPILATION
- ☐ FINAL REVIEW
- ☒ QUALITY CONTROL AND REVIEW

(See reverse for responsible personnel)

☒ TO BE CHARTED
☐ TO BE DELETED

ORIGINATING LOCATION: Rockville, Maryland

DATE: 6/24/74

The following objects have (have not) been inspected from seaward to determine their value as landmarks:

JOB NUMBER: PH- 6910
STATE: Florida
SURVEY NUMBER: T - TP-00151
DATUM: N.A. 1927
POSITION

CHARTING NAME	DESCRIPTION	LATITUDE ° ′	LATITUDE ″ D.M.METERS	LONGITUDE ° ′	LONGITUDE ″ D.P.METERS	METHOD AND DATE OF LOCATION (See instructions on reverse of this form) FIELD INSPECTION	COMPILATION	FIELD EDIT	CHARTS AFFECTED
	INDIAN RIVER(SOUTH SECTION) EAU GALLIE-ST LUCIE INLET								
DYBN 70		27 47	53.9 1660.0	80 26	59.4 1627.0		70E5779	P. 4 Verif. 10/21/71	845-SC
LIGHT 71		27 47	29.0 892.0	80 26	40.1 1099.0		70E5780	P.4 Verif. 10/21/71	"
DYBN 72		27 47	28.4 875.0	80 26	42.3 1157.0			P.4 10/21/71	"
DYBN 73		27 47	04.7 146.0	80 26	23.3 638.0			P.4 10/21/71	"
DYBN 74		27 46	39.3 1211.0	80 26	07.9 216.0			P.4 10/21/71	"
DYBN 75		27 46	15.7 483.3	80 25	49.2 1347.2		70E4779	P.4 Verif. 10/21/71	"
LIGHT 76		27 46	10.4 319.0	80 25	47.7 1307.0		70E5779	P.4 Verif 10/21/71	"
DYBN 77		27 46	9.3 286.3	80 25	41.3 1130.9			P.4 10/21/71	"
DYBN 78		27 45	53.8 1656.0	80 25	17.3 474.0			P.4 10/21/71	"

RESPONSIBLE PERSONNEL		
TYPE OF ACTION	NAME	TITLE
1. Objects inspected from seaward	I.I. Saperstein	☐ FIELD INSPECTOR ☒ FIELD EDITOR
2. Positions determined and/or verified	I.I. Saperstein	FIELD INSPECTOR
	W.H. Shearouse	FIELD EDITOR
	J.C. Richter	COMPILER
3. Forms originated by Quality Control and Review Group and final review activities	Copy checked after typing D. Brant	☐ REVIEWER ☒ QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE

INSTRUCTIONS FOR 'METHOD AND DATE OF LOCATION' SECTION

NOTE: 'Photogrammetric Positions' are dependent entirely, or in part, upon control established by photogrammetric methods. 'Field Positions' are determined by field observations based entirely upon ground control.

COLUMN TITLE	TYPE OF ENTRIES
COMPILATION	Applicable to office identified and located objects only. Enter the number and date of the photograph used to identify the object.
FIELD INSPECTION AND FIELD EDIT	1. New Position Determined–Enter the applicable data by symbols as indicated below:

F – Field	P – Photogrammetric	EXAMPLES:
1. Triangulation	1. Field identified	
2. Traverse	2. Theodolite	F. 3.c
3. Intersection	3. Planetable	
4. Resection	4. Sextant	P.2
a. Theodolite		
b. Planetable		
c. Sextant		

Immediately beneath the data described above, enter the following:

a. For 'Field Positions' enter the date of location,

b. For 'Photogrammetric Positions' enter the date of field work; and, if a photograph was used in locating the object or the object was identified on a photograph, enter the number of the photograph used.

2. Triangulation Station Recovered – Enter 'Triang. Rec. mo/day/yr.'

3. Position Verified – Enter 'Verif. mo/day/yr.'

* U.S. GOVERNMENT PRINTING OFFICE: 1971-769374/445 REG.#6

NOAA FORM 76-40 (2-71)
PRESCRIBED BY PHOTOGRAMMETRY INSTRUCTION NO. 64.

U.S. DEPARTMENT OF COMMERCE—NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

ORIGINATING ACTIVITY
- ☐ FIELD INSPECTION
- ☐ FIELD EDIT
- ☐ COMPILATION
- ☐ FINAL REVIEW
- ☒ QUALITY CONTROL AND REVIEW

(See reverse for responsible personnel)

☒ TO BE CHARTED
☐ TO BE DELETED

ORIGINATING LOCATION: Rockville, Maryland

DATE: 6/24/74

The following objects have (have not) been inspected from seaward to determine their value as landmarks:

JOB NUMBER: PH-6910
STATE: Florida
SURVEY NUMBER: T - TP-00151
DATUM: N.A. 1927

CHARTING NAME	DESCRIPTION	POSITION LATITUDE ° ′	LATITUDE ″ D.M.METERS	POSITION LONGITUDE ° ′	LONGITUDE ″ D.P.METERS	METHOD AND DATE OF LOCATION (See instructions on reverse of this form) FIELD INSPECTION	COMPILATION	FIELD EDIT	CHARTS AFFECTED
	INDIAN RIVER(SOUTH SECTION) EAU GALLIE-ST LUCIE INLET								
LIGHT 79		27 45	53.5 1648.0	80 25	12.4 339.0		70E5779	P.4 Verif. 10/21/71	845-SC
DYBN 80		27 45	48.4 1489.8	80 25	10.0 273.9			P.4 10/21/71	"
LIGHT 82		27 45	29.8 916.0	80 24	49.9 1368.0		70E5779	P.4 Verif. 10/21/71	"
DYBN 84		27 45	27.6 851.0	80 24	25.3 692.9		70E5779	P.4 Verif. 10/21/71	"
LIGHT 85		27 45	29.2 898.0	80 24	20.6 564.0		70E5779	P.4 Verif. 10/21/71	"
DYBN 86		27 45	25.5 784.0	80 24	19.2 526.0		"	"	"
DYBN 87		27 45	25.4 782.0	80 24	14.2 390.0		"	"	"
DYBN 88		27 45	20.6 635.0	80 24	13.9 380.7		"	"	"
LIGHT 89		27 45	18.3 563.0	80 24	9.2 251.0		"	"	"

RESPONSIBLE PERSONNEL		
TYPE OF ACTION	NAME	TITLE
1. Objects inspected from seaward	I.I. Saperstein	☐ FIELD INSPECTOR ☒ FIELD EDITOR
2. Positions determined and/or verified	I.I. Saperstein	FIELD INSPECTOR
	W.H. Shearouse	FIELD EDITOR
	J.C. Richter	COMPILER
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2. Traverse	2. Theodolite	F. 3.c
3. Intersection	3. Planetable	
4. Resection	4. Sextant	P.2
a. Theodolite		
b. Planetable		
c. Sextant.		

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NOAA FORM 76-40
(2-71)
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	INDIAN RIVER(SOUTH SECTION) EAU GALLIE-ST LUCIE INLET								
DYBN 90		27 45	12.5 386.0	80 24	11.7 321.0		70E5780	P.4 Verif. 10/21/71	845-SC
DYBN 91		27 45	00.0 00.0	80 24	09.2 251.0		"	"	"

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TP-00151
Data Forwarded to Federal Records Center

1 Field Edit Sheet

1 Discrepancy Print

1 Form 76-36C (History of Field Operations)

3 Forms 76-40 (Nonfloating Aids or Landmarks for Charts)

1 Sketchbook Vol. II for Maps TP-00149, 150, and 152

Photography:

1:10,000 scale
70E5779 and 5780
70L6395R
Contact scale
70L6706 and 6707