original

TP-00106

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-6716..... *Map No.* TP-00106..

Classification No. *Edition No.* ....1.....

Field Edited Map

LOCALITY

State ....Florida.....

General Locality ..Brevard County.....

Locality Hulover Canal to Cowpen Creek..

1967 TO 1970

REGISTRY IN ARCHIVES

DATE MAY 16 1974

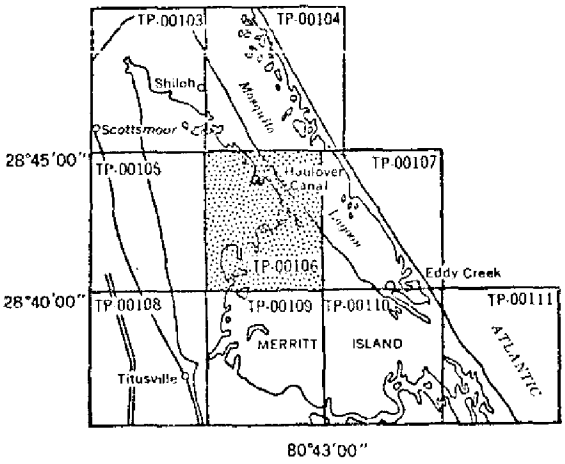
☆ U.S. GOVERNMENT PRINTING OFFICE: 1972-760-593

TP-00106

SUPPLEMENTAL CONTROL DATA FOR COASTAL ZONE MAP

TP-00106

INDEX TO ADJOINING SHEETS



Florida

Brevard County

Cowpen Creek to Haulover Canal

2/28/73

FLORIDA I

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

TIDAL BENCH MARKS

Allenhurst, Mosquito Lagoon
Lat. 28° 44'.2; Long. 80° 45'.0

BENCH MARK W215 (1966) is a standard disk, stamped "W215 (1966)", set in the top of a concrete post flush with the ground, 24 feet north of the centerline of Wilson Street where it dead ends at a house on the shore of Mosquito Lagoon, 90 feet northwest of the northwest corner of the house, 3.5 feet southwest of a power pole and transformer, and two feet west of the witness post. Elevation: 3.73 feet above mean water level.

BENCH MARK NO. 1 (1970) is a standard disk, stamped "No. 1 1970", set flush in a drill hole in the northeast corner of a concrete boat ramp, 72.3 feet east of BENCH MARK NO. 2, 36.3 feet southeast of the southeast corner of a house, and 1.2 feet west of the east edge of the boat ramp. Elevation: 3.86 feet above mean water level.

BENCH MARK NO. 2 (1970) is a standard disk, stamped "No. 2 1970", set flush in a drill hole in the northeast corner of a concrete patio, 72.3 feet west of BENCH MARK NO. 1, 17 feet southeast of the northeast edge of a nearby house, and 1.4 feet southwest of the northwest corner of the patio. Elevation: 4.53 above mean water level.

BENCH MARK NO. 3 (1970) is a standard disk, stamped "No. 3 1970", set flush in a concrete post, 58 feet east of BENCH MARK W215, 25 feet south of a power pole, 24 feet southwest of a cabbage palm tree, and 37 feet northwest of the northwest corner of a nearby house. Elevation: 4.22 feet above mean water level.

BENCH MARK NO. 4 (1970) is a standard disk, stamped "No. 4 1970", set flush in a concrete post, about 100 feet northeast of a road junction, 24 feet north of the centerline

(OVER)

of the road, 14 feet east of a power line pole, and two feet west of a witness post. Elevation: 3.35 feet above mean water level.

Mean water level at Allenhurst, Mosquito Lagoon is based on 17 months of record, April 1966 - August 1970, reduced to mean values. The periodic tide is small and is masked by nontidal effects.

5/22/73

FLORIDA I

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

TIDAL BENCH MARKS

Allenhurst, Haulover Canal
Lat. 28°44'.0; Long. 80°45'.4

BENCH MARK IWBV USE 106 (1966) is a standard disk, stamped "IWBV 106," set in the top of a cement post, flush with the ground, along the south bank of the Haulover Canal about 190 feet southwest of the south end of the new drawbridge over the canal, 45.5 feet west of the centerline of State Highway AIA, 58.5 feet west of and across the highway from a large power pole supporting a power line, and 21.5 feet north of the centerline of a sand road leading southwest. Elevation: 7.72 feet above mean water level.

BENCH MARK 318 USE (1962) is a standard USE disk, stamped "318 JLR 1962," set in the top of a concrete post projecting ten inches above the level of the ground. The mark is 28.5 feet west of the centerline of the highway, 57.5 feet southeast of a cabbage palm, midway between two white witness posts, and two feet above the level of the highway. Elevation: 8.33 feet above mean water level.

BENCH MARK 1 (1972) is a standard disk, stamped "No. 1 1972," set flush in the northwest end of the concrete bulkhead, located under the north end, 34.4 feet west of the west side of the bridge. Elevation: 4.66 feet above mean water level.

BENCH MARK 2 (1972) is a standard disk, stamped "No. 2 1972," set flush in the southwest end of the concrete bulkhead located under the south end of the bridge. Elevation: 4.68 feet above mean water level.

BENCH MARK 3 (1941) is a standard disk, stamped "No. 3 1941," set in a drill hole near the north end of the third concrete step from the bottom leading to the terrace on the south side of the Allenhurst Post Office and general store. It is seven feet southwest of the southeast corner of the building and 32 feet west of the centerline of the highway. Elevation: 9.43 feet above mean water level.

Mean water level at Allenhurst, Haulover Canal is based on 17 months of record, March 1966 through September 1968, reduced to mean values. The periodic tide is small and is masked by nontidal effects.

Geodetic Bench Mark	Elevations (feet) SLD 1929	Condensed Description
309 (USE)	3.766	USE disk stamped 309 JLR 1962; 58.4 ft. W centerline highway, 131 ft. N palm with painted blaze, 37 ft. NW of R/W marker.
F 190	3.970	C&GS disk stamped F 190 1959; 50 ft. W centerline highway, 2 ft. N witness post, in concrete post projecting 3 inches.
DUMMIT	3.996	C&GS disk stamped DUMMIT 1934; 58 ft. W centerline highway. A Bilby tower is over mark.
DUMMIT RM4	3.763	C&GS disk stamped DUMMIT NO. 4 1934; 129.3 ft. N of DUMMIT, 53 ft. W centerline highway.
311 (USE)	2.487	USE disk stamped 311 JLR 1962; 55 ft. W centerline highway, near white witness post, in concrete post projecting 4 inches.
312 (USE)	4.272	USE disk stamped 312 JLR 1962; 52 ft. E centerline highway, 32 ft. SW pole H575, in concrete post flush with ground.
313 (USE)	3.412	USE disk stamped 313 JLR 1962; 36 ft. E centerline road, 41 ft. S centerline road, 91 ft. NW of NW corner of building.
G 190	6.339	C&GS disk stamped G 190 1959; 27 ft. W centerline highway, 52 ft. NE centerline road, in concrete post flush with ground.
D 211	8.045	C&GS disk stamped D 211 1963; 63 ft. W centerline highway, 11 ft. E oak tree, disk on steel rod projecting 3 inches, and in tile.

Geodetic Bench Mark	Elevations (feet) SLD 1929	Condensed Description
E 211	8.104	C&GS disk stamped E 211 1963; 231 ft. SE centerline highway, 55 ft. S centerline dirt road, on top steel rod in tile.
K 214	4.616	C&GS disk stamped K 214 1964; 80 ft. SW centerline road, 21 ft. W canal bank, 2 ft. E witness post.
P 214	4.905	C&GS disk stamped P 214 1964; 12 ft. W centerline road, 16 ft. E canal bank, 2 ft. S witness post, 8 inches underground.
Q 214	3.550	C&GS disk stamped Q 214 1964; 11 ft. E centerline road, 3 ft. W canal bank, 18 in. S. witness post.
ALLENHURST, MOSQUITO LAGOON TIDAL 4	3.593	(*)
W 215	3.970	(*)
ALLENHURST, MOSQUITO LAGOON TIDAL 3	4.462	(*)
ALLENHURST, MOSQUITO LAGOON TIDAL 2	4.774	(*)
ALLENHURST, MOSQUITO LAGOON TIDAL 1	4.104	(*)

* Description given under Tidal Bench Marks.

Geodetic Bench Mark	Elevations (feet) SLD 1929	Condensed Description
IWBV 106 (USE)	8.012	(*)
318 (USE)	8.625	(*)
TIDAL 3 (1941)	4.462	(*)

* Description given under Tidal Bench Marks.

FLORIDA– NOAA Coastal Boundary Mapping Program

Horizontal Control Map TP– 00106

Station	NOS Geodetic Data Reference for Description, Positions, Coordinates and Azimuths
BLACK POINT, 1875	Book 418, P. 24, 25, 34, 53, G.P.-Fla. Vol.1, P. 147, P.C. Fla. E. Zone, P. 16.
DUMMIT, 1934	Book 418, P. 24, 34, G.P.-Fla. Vol.1, P. 125, P.C. Fla. E. Zone, P. 3.
MOSQUITO LAGOON SOUTHEAST BASE, 1875	Book 418, P. 25, 34, 50, 52, 56, G.P.-Fla. Vol.1, P. 148, P.C. Fla. E. Zone, P. 17.
WHYNOT, 1963	Distribution of data is restricted. Write the Director, National Geodetic Survey, for information.

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. 00106

MAP EDITION NO. (1)

MAP CLASS Final

JOB PH-6716

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, June 19, 1973 OFFICE-Supplement I, August 19,1973 Note: Office and Field Edit instructions (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: [ ] MEAN HIGH-WATER [ ] MEAN LOW-WATER [ ] MEAN LOWER LOW-WATER [ ] MEAN SEA LEVEL — OTHER (Specify): Mean water level (see record of decisions bound with this report).

3. MAP PROJECTION: Transverse Mercator

4. GRID(S):

STATE	ZONE
Florida	East

5. SCALE: 1:10,000

III. HISTORY OF OFFICE OPERATIONS

OPERATIONS		NAME	DATE
1. AEROTRIANGULATION METHOD: Analytic	BY	J.D. Perrow	9/69
	LANDMARKS AND AIDS BY	inapplicable	
2. CONTROL AND BRIDGE POINTS METHOD: Coradomat	PLOTTED BY	P.J. Dempsey	2/70
	CHECKED BY	inapplicable	
3. STEREOSCOPIC INSTRUMENT COMPILATION Wild B-8	PLANIMETRY BY	J.C. Richter	3/70
	CHECKED BY	J.P. Battley	3/70
INSTRUMENT: SCALE: 1:10,000	CONTOURS BY	Inapplicable	
	CHECKED BY		
4. MANUSCRIPT DELINEATION Shoreline:Graphic	PLANIMETRY BY	J.C. Richter	3/70
	CHECKED BY	J.P. Battley	3/70
METHOD: Interior:Orthophoto mosaic	CONTOURS BY	Inapplicable	
	CHECKED BY		
SCALE: 1:10,000	[illegible] BY	J. Taylor	4/70
	CHECKED BY	J.P. Battley	4/70
5. OFFICE INSPECTION PRIOR TO FIELD EDIT	BY	J.P. Battley	5/70
6. APPLICATION OF FIELD EDIT DATA	BY	J.C. Richter	9/70
	CHECKED BY	J.P. Battley	10/70
7. COMPILATION SECTION REVIEW	BY	J.P. Battley,	11/70
8. FINAL REVIEW	BY	J.P. Battley	12/70
9. DATA FORWARDED TO PHOTOGRAMMETRIC BRANCH	BY		
10. DATA EXAMINED IN PHOTOGRAMMETRIC BRANCH	BY	D.M. Brant*	9/73
11. MAP REGISTERED - COASTAL SURVEY SECTION	BY	R.J. Lalor	5/74

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

* See review report

* 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-00106

COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

CAMERA(S) Wild RC-8
S&L Camera 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 ☒ DAYLIGHT

NUMBER AND TYPE	DATE	TIME	SCALE	STAGE OF TIDE
67S(C)5867 - 5870	10/3/67	11:11	1:40,000	The stage of tide is inapplicable for the color photography.
69L3713R-3716R	8/27/69	8:34	1:30,000	+0.13 MWL
69L3496R-3498R	8/26/69	9:55	1:30,000	-0.01 MWL
69L3721R	8/27/69	8:40	1:30,000	+0.13 MWL

REMARKS The Titusville, Indian River Tide Station was used to insure that the water level was not significantly above or below the MWL Datum in Mosquito Lagoon.

2. SOURCE OF MEAN HIGH-WATER LINE:

The mean water-level line was mapped in lieu of the mean high-water line (refer to the Record of Decisions bound with this report). The source of the mean water-level line is the 1969 tide-coordinated black-and white infrared photography listed in Item 1. This map was field edited July 1970.

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

There is no mean low-water line shown on this map.

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-00104	TP-00107	TP-00109	TP-00108

REMARKS
Final Junctions were made in the Coastal Mapping Section.

NOAA FORM 76-36B
(3-72)

* U.S. G.P.O. 1972-769381/568 REG.#6

NOAA FORM 76-36C
(3-72)

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

TP-00106

HISTORY OF FIELD OPERATIONS

I. [x] FIELD INSPECTION OPERATION [x] FIELD EDIT OPERATION July 1970
*See below

OPERATION		NAME	DATE
1. CHIEF OF FIELD PARTY		W.H. Shearouse	7/70
2. HORIZONTAL CONTROL	RECOVERED BY	W.H. Shearouse	7/70
	ESTABLISHED BY	None	
	PRE-MARKED OR IDENTIFIED BY	None	
3. VERTICAL CONTROL	RECOVERED BY	W.H. Shearouse	7/70
	ESTABLISHED BY	None	
	~~PRE-MARKED~~ IDENTIFIED BY	W.H.Shearouse	7/70
4. LANDMARKS AND AIDS TO NAVIGATION	RECOVERED (*Triangulation Stations*) BY	W.H. Shearouse	7/70
	LOCATED (*Field Methods*) BY	W.H. Shearouse	7/70
	IDENTIFIED BY	W.H. Shearouse	7/70
5. GEOGRAPHIC NAMES INVESTIGATION	TYPE OF INVESTIGATION: [ ] COMPLETE [x] SPECIFIC NAMES ONLY [ ] NO INVESTIGATION — BY	W.H. Shearouse	7/70
6. PHOTO INSPECTION	CLARIFICATION OF DETAILS BY	W.H. Shearouse	7/70
7. BOUNDARIES AND LIMITS	SURVEYED OR IDENTIFIED BY	Inapplicable	

II. SOURCE DATA

1. HORIZONTAL CONTROL IDENTIFIED

2. VERTICAL CONTROL IDENTIFIED

PHOTO NUMBER	STATION NAME	PHOTO NUMBER	STATION DESIGNATION
	See item 8 below	69L3721R	309(USE),311(USE)312(USE) 313(USE),F190,G190
		69L3716R	D211,K214,W215
		69L3496R	E211
		69L3713R	P214,Q214
		DAMMIT 1934	is also a B.M.

3. PHOTO NUMBERS (*Clarification of details*)
Transparencies 69E4234 thru 4237; 69L3496R,3497R,3713R,3714R,3716R 3721R.

4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED
One landmark is recommended. Nonfloating aids to navigation were verified or located by sextant fix.

PHOTO NUMBER	OBJECT NAME	PHOTO NUMBER	OBJECT NAME
69L3714R	Tower (WHYNOT,1963)		

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 page 9 of this report.for data concerning field inspection.

NOAA FORM 76-36C
(3-72)

* U.S. G.P.O. 1972-769381/567 REG.#6

NOAA FORM 76-36D
(3-72)

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

RECORD OF SURVEY USE

I. MANUSCRIPT COPIES

COMPILATION STAGES			DATE MANUSCRIPT FORWARDED	
DATA COMPILED	DATE	REMARKS	MARINE CHARTS	HYDRO SUPPORT
No map copies furnished to Nautical Charts 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
	1303	Oct. 1, 1973	Only one report was submitted

2. ☑ REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: October 1, 1973
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: 5/16/74 RJ.6

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 ☐ II. ☐ III. ☐ IV. ☐ V. ☐ FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	
THIRD EDITION	TP - _____ (3)	PH- _____	☐ REVISED ☐ RESURVEY ☐ II. ☐ III. ☐ IV. ☐ V. ☐ FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	
FOURTH EDITION	TP - _____ (4)	PH - _____	☐ REVISED ☐ RESURVEY ☐ II. ☐ III. ☐ IV. ☐ V. ☐ FINAL
	DATE OF PHOTOGRAPHY	DATE OF FIELD EDIT	

* U.S. G.P.O. 1972-769380/548 REG.#6

Record of Decisions
Pertaining to Symbolization of the MWL Datums
TP-00106

Shoreline Delineation

This map does not extend to the Atlantic Ocean. The water areas it covers are portions of Mosquito Lagoon and Indian River. These two bodies of water are connected by Haulover Canal. The datum in Mosquito Lagoon was established by observations at the Allenhurst, Mosquito Lagoon Tide Station, siutated in Mosquito Lagoon just south of the eastern entrance to the canal. The datum in Indian River was established by observations at the Allenhurst, Haulover Canal Tide Station, situated near the western end of the canal; and, at the Titusville Tide Station.

At the three stations, the periodic tide was masked by non-tidal forces and the mean range was substantially less than two-tenths of a foot. In this situation, the mean high/low-water datums converge and, for mapping purposes, the mean high and mean low-water lines are indistinguishable. As a consequence, special treatment was given to the portrayal of the shoreline on this map; the mean water-level line was mapped in lieu of the mean high-water line and shown by a distinctive symbol, except in areas where there are manmade features such as bulk-heads which were portrayed by a solid line, or where vegetation such as mangrove obscures the shoreline and then the apparent shoreline symbol was used.

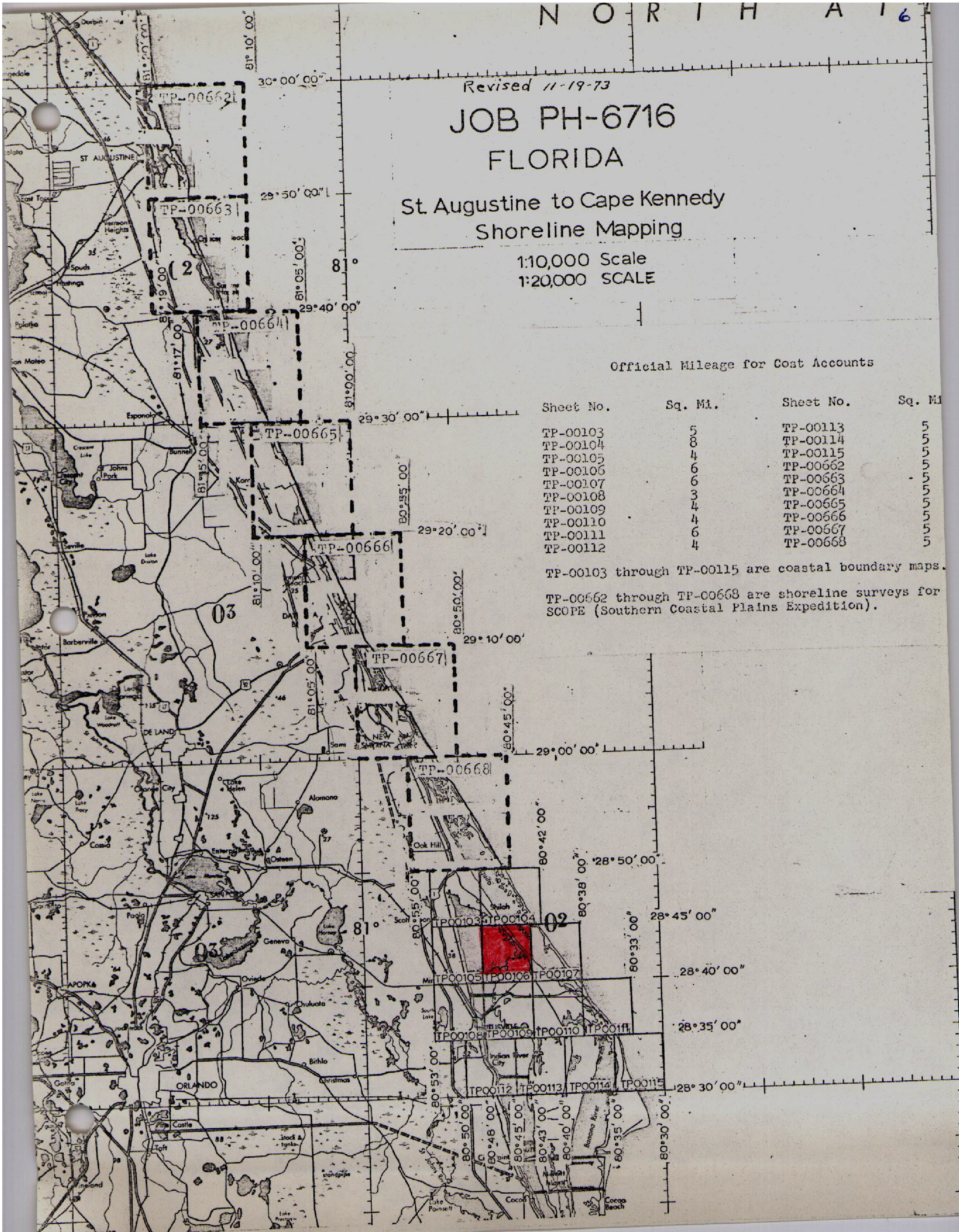
* Decision Responsibility for Shoreline Symbolization

Specific decisions as to where the symbolization for mapping the mean water-level line, apparent shoreline, and solid lines for the along-shore manmade features were made November 1972 in Rockville, Maryland, by competent technical and legal officials of NOS and NOAA. NOS was officially represented by Cdr. Wesley V. Hull, Chief, Coastal Mapping Division, and Mr. Carroll I. Thurlow, Chief, Tidal Datum Planes Section of the Oceanographic Division. The official NOAA representative was Mr. Hugh J. Dolan, Staff Attorney, Office of General Counsel. They based their decisions on an examination and evaluation of tide station records, aerial photographs, and field edit records and reports.

Archiving

A copy of this report shall be included in Descriptive Report TP-00106 which will be permanently filed in the Bureau Archives.

* See Review Report for clarification of date.



Revised 11-19-73

JOB PH-6716

FLORIDA

St. Augustine to Cape Kennedy
Shoreline Mapping

1:10,000 Scale
1:20,000 SCALE

Official Mileage for Cost Accounts

Sheet No.	Sq. Mi.	Sheet No.	Sq. Mi
TP-00103	5	TP-00113	5
TP-00104	8	TP-00114	5
TP-00105	4	TP-00115	5
TP-00106	6	TP-00662	5
TP-00107	6	TP-00663	5
TP-00108	3	TP-00664	5
TP-00109	4	TP-00665	5
TP-00110	4	TP-00666	5
TP-00111	6	TP-00667	5
TP-00112	4	TP-00668	5

TP-00103 through TP-00115 are coastal boundary maps.

TP-00662 through TP-00668 are shoreline surveys for SCOPE (Southern Coastal Plains Expedition).

SUMMARY
TP-00103 thru TP-00115

Coastal Zone Map TP-00106 is one of thirteen (13) similar maps in project PH-6716. The layout of sheets (page 6 of this report) will show its location. These maps are intented 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 1967 and 1969 on regular color and black and white infrared film. The black and white 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 the tide-coordinated black and white infrared photography using a stereoplotter 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 three 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 Inspection

Field operations performed prior to compilation were limited to recovery of horizontal control required for compilation, placing targets on selected horizontal control stations in advance of aerial photography, and photoidentification of supplemental control stations after photography. A Field Inspection Report was not considered appropriate and was not prepared.

Photogrammetric Plot Report
Cape Kennedy, Florida
Job PH-6716
October, 1970

21. Area Covered

This report covers the area immediately north of Cape Kennedy, Florida, from Latitude 28° 30' to 28° 50'. The job consists of thirteen (13) 1:10,000 scale sheets, TP-00103 thru TP-00115.

22. Method

Five (5) strips of photographs were bridged using analytical aerotriangulation methods. Strips 1 thru 4A were bridged using 1:40,000 scale color photography. Strip 50 was bridged using 1:25,000 scale panchromatic photography. Compilation was done concurrently with the bridging. No difficulty was encountered in the bridging or compiling strip 1. However, because of weak control, ties between strips 2, 3 and 4A were poor and subsequently these three strips were adjusted as a block. However, we still felt that the block was not as adequate as we would like. Therefore, a 1:25,000 scale strip flown at a later date was taken advantage of and bridged, using additional control. With this additional strip, the aerotriangulation proved adequate.

23. Adequacy of Control

Some of the horizontal control was premarked. All the control used in bridging strip 50 was office identified prior to the field work. That is, sub points were picked in the office, identified on the contact prints to be located by ground methods by the field party. This was done in order to save time by not holding up the aerotriangulation. The results proved very satisfactory. The horizontal control was adequate for bridging.

24. Photography

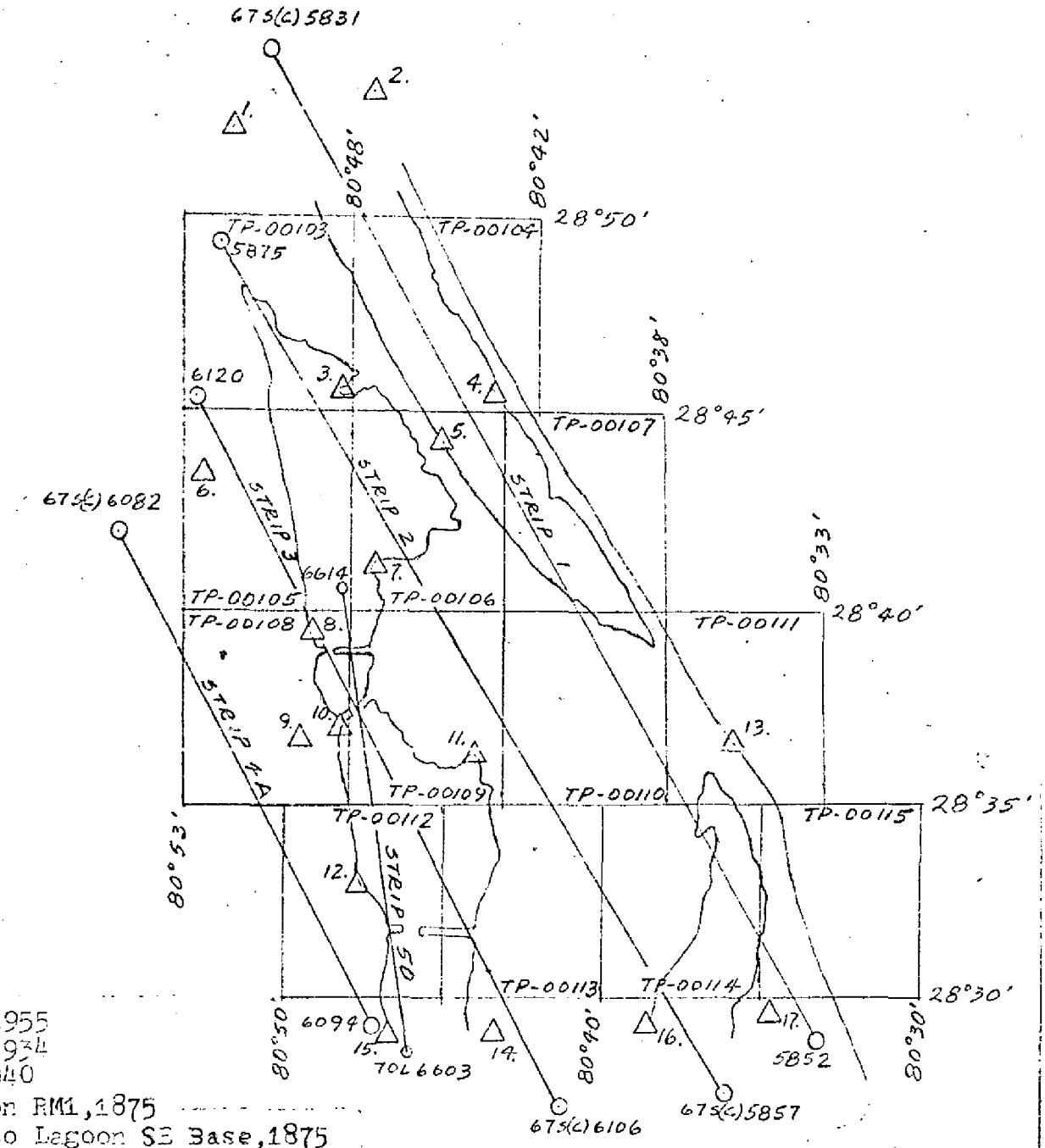
The definition and quality of the photography from the RC-8 "S" and "L" cameras were good.

Respectfully submitted:

I. I. Sapeystein

Approved and forwarded:

Henry P. Eichert, Chief
Aerotriangulation Section



1. Oak 2,1955
2. Mount,1934
3. Bush,1940
4. Scorpion RM1,1875
5. Mosquito Lagoon SE Base,1875
6. Titusville NW Base,1934
7. Whynot,1963
8. NS(USE)1940
9. Titusville New Munic. WT,1960
10. Titusville Water Tank,1934
11. Stayout,1963
12. Indian River City Microwave Mast,1960
13. Chester 3,1964
14. Courtenay,1953
15. Frontenac Fla. Power & Light Co. Smokestack,1964
16. Paxton,1960
17. Central,1950

AEROTRIANGULATION SKETCH
CAPE KENNEDY, FLORIDA
JOB PH-6716
October, 1970

△ Horizontal Control
○ 1:40,000 scale color photos
○ 1:25,000 scale pan. photos

FLORIDA– NOAA Coastal Boundary Mapping Program

Horizontal Control Map TP– 00106

Station	NOS Geodetic Data Reference for Description, Positions, Coordinates and Azimuths
BLACK POINT, 1875	Book 418, P. 24, 25, 34, 53, G.P.-Fla. Vol.1, P. 147, P.C. Fla. E. Zone, P. 16.
DUMMIT, 1934	Book 418, P. 24, 34, G.P.-Fla. Vol.1, P. 125, P.C. Fla. E. Zone, P. 3.
MOSQUITO LAGOON SOUTHEAST BASE, 1875	Book 418, P. 25, 34, 50, 52, 56, G.P.-Fla. Vol.1, P. 148, P.C. Fla. E. Zone, P. 17.
WHYNOT, 1963	Distribution of data is restricted. Write the Director, National Geodetic Survey, for information.

COMPILATION REPORT
TP-00106

31. Delineation

The interior features on TP-00106 are depicted by an orthophoto mosaic using rectified black and white prints of the color photography. Control for rectifying the color photography was furnished by the analytic bridge.

The shoreline on this map was compiled graphically from tide-coordinated black and white infrared photography. The color photography was used as an aid in interpreting culture and alongshore features.

The control for the graphic compilation consisted of planimetric features and map points compiled from models of the color photography set on the Wild B-8 stereoplotter.

32. Horizontal Control

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

33. Supplemental Data

Vertical control from USGS quadrangles was used for leveling the B-8 stereo models.

34. Contours and Drainage

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

35. Shoreline and Alongshore Details

The photography was adequate for the interpretation and delineation of the shoreline and alongshore features.

The mean water-level line was mapped in lieu of the mean-high-water line (refer to the Record of Decisions bound with this report).

36. Offshore Details

No unusual problems were encountered.

Offshore spoil areas were delineated from office interpretation of the photography.

37. Landmarks and Aids to Navigation

Landmarks and aids to navigation that were office identified and located will be verified by the field editor and those not visible on the photography will be located by the field editor.

38. Control for Future Surveys

Tidal bench marks located 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 quads Mims, Florida, and Wilson, Florida, Edition of 1952, scale 1:24,000, contours 5 ft. intervals. None of the newly dredged ditches are shown on the quads.

47. Comparison with Nautical Charts

Comparison has been made with Nautical Chart No. 843-SC, Side B, 7th Edition, dated September 1969. Many new ditches have been dredged behind the MHW line and the spoil has closed off some of the small bays and intles.

Items to be Applied to Nautical Charts Immediately: The MHW Line has changed in a few areas due to the dredging of ditches and should be shown on the chart.

Items to be Carried Forward: None.

Respectfully submitted:

John C. Richter (JB)

John C. Richter
Cartographer

Approved and Forwarded:

K.N. Maki (JB)

K.N. Maki
Chief, Compilation Section

Field Edit Report, Map TP-00106, Job PH-6716

51. METHODS

Visual comparison of the shoreline as compiled was made by riding close to shore in a small boat. Notes regarding shoreline structures, etc., will be found on the Field Edit Sheet with cross-referencing to the photo. transparencies or ratioed infrared photos.

In some areas notes regarding vegetation classification will be found on the ratio photographs. This was done before it was learned that the ortho-photo ~~mosaic type~~ map base would be published.

Nonfloating aids were verified, if compiled, or located by sextant. This work is shown on Field Edit Sheet No. 2. Form 567 is submitted.

The Bilby steel tower which is permanently in place over triangulation station WHYNOT 1963 is recommended for a landmark. Form 567 is submitted.

24 geodetic bench marks were searched for, 17 recovered and 14 photo-identified. An ozalid showing their approximate locations is part of the data transmitted. Forms 685A are submitted.

The tide gage just southeast of Haulover Canal was reactivated the last of July by Lt. Knecht. Its location is shown on the Field Edit Sheet.

Violet ink was used for field edit notes.

52. ADEQUACY OF COMPILATION

After application of field edit information, compilation will be adequate.

53. MAP ACCURACY

No tests were specified.

54. RECOMMENDATIONS

None.

55. EXAMINATION OF PROOF COPY

Not required.

56. GEOGRAPHIC NAMES

A complete investigation was not required and no conflicts came to light during field work.

A question regarding which of two small points is BLACK POINT was asked on the Preliminary Name Sheet, MIMS quad. map. This area is part of the Merritt Island National Wildlife Refuge and the question was discussed with the assistant manager. He was firm in his opinion that the entire land mass is BLACK POINT. It is recommended that the name be shown as placed on the Preliminary Name Sheet and the Field Edit Sheet.

Submitted 8/7/70

William H. Shearouse

William H. Shearouse
Chief, Photo Party 60

Review Report TP-00106
Coastal Zone Map
September 1973

A detailed review of TP-00106 and its related records was made in the Coastal Mapping Section prior to its publication. The following major parts in the preparation of this map have been examined in the Quality Control Group and are adequate:

1. Field operations
2. Extension of control
3. Compilation

The following two questionable areas on this map were noted during examination by the Quality Control Group:

1. The elevations of the "steel piling in ruins" (Latitude 28°43.5' and longitude 80°47.2') are shown without reference to any datum. Later maps will show this information under the legend of the map.

2. The spoil area at the entrance to Duckroast Cove is poorly depicted on this map.

These questionable areas do not affect the accruacy of this map.

Comparison was made with the following USGS quadrangles and Nautical Chart:

Mims and Wilson, Florida, 1949, photorevised 1970
Nautical Chart 843-SC, 10th Edition, August 12, 1972

The Wilson quadrangle and Nautical Chart 843-SC show a row of piling or a pier in ruins on the west coast of Mosquito Lagoon (Latitude 28°42.1' and longitude 80°43'). No reference was made to this culture feature by the field editor.

The color photography dated October 1967 was used for bridging and the photomosaic. This photography was supplemented by ~~additional~~ photography dated August 1970. (Refer to photogrammetric plot report.) The infrared photography dated August 23 and 27, 1969, was used for the compilation of the mean water-level line. The note on published map does not mention the August 1969 photography.

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.

This map complies with project instructions for NOS Cooperative Coastal Boundary 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

TP-00106

48. Geographic Name List

Allenhurst
Black Point
Black Point Creek
Cow Pen Creek
Duckroost Cove
Duckroost Point
Dummit Cove
Dummit Creek
Granny Cove
Haulover Canal
Indian River
Marsh Bay
Marsh Bay Creek
Marsh Bay Point
Merritt Island National Wildlife Refuge
Mosquito Lagoon
~~Intracoastal Waterway~~

PREPARED BY
Frank W. Pickett
CARTOGRAPHIC TECHNICIAN

APPROVED BY
A. J. Wright
CHIEF GEOGRAPHER
by F.W.P.

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: 9/73

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

JOB NUMBER: PH-6716
STATE: Florida
SURVEY NUMBER: T - TP-00106
DATUM: NA 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
	Mosquito Lagoon-Eau Gallie Indian River(North Section)								
LIGHT	Light 1	28 43	24.7 760.0	80 46	2.8 75.0		67S(C) 5869	P-4 7/70 Verif.	843-SC
DYBN	Daybeacon 2	28 43	26.1 803.0	80 46	4.5 122.0		67S(C) 5869	P-4 7/70 Verif.	843-SC
DYBN	Daybeacon 3	28 43	3.5 109.0	80 46	28.6 776.0		67S(C) 5869	P-4 7/70 Verif.	843-SC
LIGHT	Light 4	28 42	42.1 1295.0	80 46	58.2 1579.0		67S(C) 5869	P-4 7/70 Verif.	843-SC
DYBN	Daybeacon 5	28 42	40.5 1246.0	80 46	56.8 1542.0		67S(C) 5869	P-4 7/70 Verif.	843-SC
DYBN	Daybeacon 6	28 42	18.7 576.0	80 47	26.2 710.0		67S(C) 5869	P-4 7/70 Verif.	843-SC
LIGHT	Light 7	28 41	55.1 1696.0	80 47	51.3 1393.0		67S(C) 5869	P-4 7/70 Verif.	843-SC
DYBN	Daybeacon 8	28 41	57.1 1757.0	80 47	52.5 1425.0		67S(C) 5869	P-4 7/70 Verif.	843-SC

RESPONSIBLE PERSONNEL		
TYPE OF ACTION	NAME	TITLE
1. Objects inspected from seaward		☐ FIELD INSPECTOR ☒ FIELD EDITOR
2. Positions determined and/or verified		FIELD INSPECTOR
	William H. Shearouse	FIELD EDITOR
	John C. Richter	COMPILER
3. Forms originated by Quality Control and Review Group and final review activities	* See below	☐ 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 *NOTE: Positions listed and typed on 76-40-Form. Copy checked after typing in Quality Control.	1. New Position Determined–Enter the applicable data by symbols as indicated below: F – Field: 1. Triangulation; 2. Traverse; 3. Intersection; 4. Resection (a. Theodolite, b. Planetable, c. Sextant) P – Photogrammetric: 1. Field identified; 2. Theodolite; 3. Planetable; 4. Sextant EXAMPLES: F.3.c; P.2 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.'

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
- [x] QUALITY CONTROL AND REVIEW

(See reverse for responsible personnel)

- [x] TO BE CHARTED
- [ ] TO BE DELETED

ORIGINATING LOCATION: Rockville, Maryland

DATE: Sept 1973

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

JOB NUMBER: PH- 6716

STATE: Florida

SURVEY NUMBER: T - TP-00106

DATUM: NA 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
	Mosquito Lagoon - Eau Gallie								
LIGHT	Light 38	28 45	00.0 1847.0	80 45	18.1 490.0		67L(C) 5870	P-4 7/70 Verif.	843-SC
LIGHT	Light 43	28 44	42.1 1297.0	80 44	43.7 1186.0		67L(C) 5870	P-4 7/70 Verif.	843-SC
									2

RESPONSIBLE PERSONNEL		
TYPE OF ACTION	NAME	TITLE
1. Objects inspected from seaward		☐ FIELD INSPECTOR ☒ FIELD EDITOR
2. Positions determined and/or verified		FIELD INSPECTOR
	William H. Shearouse	FIELD EDITOR
	John C. Richter	COMPILER
3. Forms originated by Quality Control and Review Group and final review activities	* See below	☐ 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 identifted 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
1. Triangulation
2. Traverse
3. Intersection
4. Resection
   a. Theodolite
   b. Planetable
   c. Sextant

P – Photogrammetric
1. Field identified
2. Theodolite
3. Planetable
4. Sextant

EXAMPLES:
F. 3.c
P.2

NOTE: Positions listed nd typed on 76-40 Form. opy checked after typing n Quality Control.

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.'

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 REVIE

(See reverse for responsible personne.

☒ TO BE CHARTED
☐ TO BE DELETED

ORIGINATING LOCATION: Rockville, Maryland

DATE: Sept. 1973

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

JOB NUMBER: PH- 6716

STATE: Florida

SURVEY NUMBER: T - TP-00106

DATUM: NA 1927

POSITION

METHOD AND DATE OF LOCATION
(See instructions on reverse of this form)

CHARTING NAME	DESCRIPTION	LATITUDE ° ′	LATITUDE ″ D.M.METERS	LONGITUDE ° ′	LONGITUDE ″ D.P.METERS	FIELD INSPECTION	COMPILATION	FIELD EDIT	CHARTS AFFECTED
TOWER	Bilby Steel Tower (WHYNOT,1963)ht=76(78)	28 41	24.0 738.8	80 47	05.3 143.9			Triang. Rec. 7/70	843-SC

22

RESPONSIBLE PERSONNEL		
TYPE OF ACTION	NAME	TITLE
1. Objects inspected from seaward		☐ FIELD INSPECTOR ☒ FIELD EDITOR
2. Positions determined and/or verified		FIELD INSPECTOR
	William H. Shearouse	FIELD EDITOR
	John C. Richter	COMPILER
3. Forms originated by Quality Control and Review Group and final review activities	* See below	☐ 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:

*NOTE: Positions listed and typed on 76-40-Form. Copy checked after typing in Quality Control.

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.'

TP-00106
Data Forwarded to Federal Records Center

Field edit sheets Numbers 1 and 2

1 Discrepancy Print

1 Ozalid copy showing location of bench marks.

Photographs

69L3496R thru 3498R
69L3713R thru 3716 and 3721R
69E4231 thru 4237 (transparencies)