

original

TP-00109

TP-00109

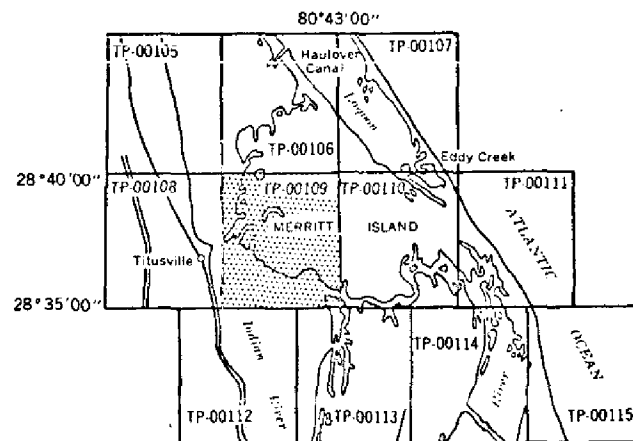
| | |
|---|-----------------------|
| NOAA FORM 76-35 | |
| U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION NATIONAL OCEAN SURVEY | |
| DESCRIPTIVE REPORT | |
| Type of Survey ..Coastal..Boundary..... | |
| Job No. PH-6716..... | Map No. TP-00109.. |
| Classification No. Final | Edition No. ...1..... |
| Field Edited Map | |
| LOCALITY | |
| StateFlorida..... | |
| General Locality ..Brevard..County..... | |
| Locality Boggy..Pond..to..Banana..Creek..... | |
| | |
| <hr/> 1967 TO 19 70 <hr/> | |
| REGISTRY IN ARCHIVES | |
| DATE | MAY 16 1974 |

| | | | | | | | |
|--|--|---|--|--|--|---|--|
| NOAA FORM 76-36A (3-72) | | U. S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMIN. | | TYPE OF SURVEY <input checked="" type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED | | SURVEY TP00109 MAP EDITION NO. 1 MAP CLASS Final JOB PH-6716 | |
| DESCRIPTIVE REPORT - DATA RECORD | | | | LAST PRECEDING MAP EDITION TYPE OF SURVEY <input type="checkbox"/> ORIGINAL <input type="checkbox"/> RESURVEY <input type="checkbox"/> REVISED | | | |
| PHOTOGRAMMETRIC OFFICE Rockville, Maryland | | | | JOB PH- MAP CLASS SURVEY DATES: 19__ TO 19__ | | | |
| OFFICER-IN-CHARGE Commander Wesely V. Hull | | | | | | | |
| I. INSTRUCTIONS DATED | | | | | | | |
| 1. OFFICE General Instructions - OFFICE-NOS Cooperative Coastal Boundary Mapping, Job PH-7000, June 19, 1973 OFFICE-Supplement I, August 6, 1973 Note: Office and Field Edit instructions (1973) incorporate applicable prior operational instructions. | | | | 2. FIELD Aerial Photography 9/2/69 Supplement I, 1/28/69 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: <input checked="" type="checkbox"/> 1927 NORTH AMERICAN | | | | OTHER (Specify) | | | |
| 2. VERTICAL: <input type="checkbox"/> MEAN HIGH-WATER <input type="checkbox"/> MEAN LOW-WATER <input type="checkbox"/> MEAN LOWER LOW-WATER <input type="checkbox"/> MEAN SEA LEVEL | | | | OTHER (Specify) Mean water-level (refer to Record of Decisions) | | | |
| 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 | | | | J.D. Perrow | | 9/69 | |
| METHOD: Analytic LANDMARKS AND AIDS BY | | | | inapplicable | | | |
| 2. CONTROL AND BRIDGE POINTS PLOTTED BY | | | | P.J. Dempsey | | 1/70 | |
| METHOD: Coradomat CHECKED BY | | | | inapplicable | | | |
| 3. STEREOSCOPIC INSTRUMENT PLANIMETRY BY | | | | J.C. Richter | | 2/70 | |
| COMPILATION CHECKED BY | | | | J.P. Battley, Jr. | | 2/70 | |
| INSTRUMENT: Wild B-8 | | | | CONTOURS BY | | Inapplicable | |
| SCALE: 1:10,000 | | | | CHECKED BY | | | |
| 4. MANUSCRIPT DELINEATION PLANIMETRY BY | | | | J.C. Richter | | 2/70 | |
| Shoreline: Graphic CHECKED BY | | | | J.P. Battley, Jr. | | 2/70 | |
| METHOD: Interior: Orthophoto mosaic | | | | CONTOURS BY | | Inapplicable | |
| SCALE: 1:10,000 | | | | CHECKED BY | | | |
| HYDRO SUPPORT DATA BY | | | | J. Taylor | | 3/70 | |
| CHECKED BY | | | | J.P. Battley, Jr. | | 3/70 | |
| 5. OFFICE INSPECTION PRIOR TO FIELD EDIT BY | | | | J.P. Battley, Jr. | | 4/70 | |
| 6. APPLICATION OF FIELD EDIT DATA BY | | | | J.C. Richter, Jr. | | 8/70 | |
| CHECKED BY | | | | J.P. Battley, Jr. | | 9/70 | |
| 7. COMPILATION SECTION REVIEW BY | | | | J.P. Battley, Jr. | | 10/70 | |
| 8. FINAL REVIEW BY | | | | J.P. Battley, Jr. | | 11/70 | |
| 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. Eaton | | 5/74 | |

SUPPLEMENTAL CONTROL DATA FOR COASTAL ZONE MAP

TP-00109

INDEX TO ADJOINING SHEETS



Florida
Brevard County
Banana Creek to Boggy Pond
February 1973

FLORIDA - NOAA Coastal Boundary Mapping Program

Vertical Control - Geodetic

Map TP - 00109

| Geodetic Bench Mark | Elevations (feet) | Condensed Description |
|------------------------|-------------------|---|
| | SLD 1929 | |
| 9.35 (FLA SRD) | 9.245 | State Rd. Dept. disk stamped 9.35; in top NW end of NE concrete abutment, 19 ft. NW centerline highway. |
| P 131 RESET | 4.911 | C&GS disk stamped P 131 RESET 1955; 14 ft. S centerline aband. road, 76 ft. SE centerline highway, 2 ft. SE witness post. |
| M 214 | 4.364 | C&GS disk stamped M 214 1964; 13 ft. S of rail, 12 ft. N of canal bank, 2 ft. E of witness post. |
| N 214 | 4.072 | C&GS disk stamped N 214 1964; 16 ft. E centerline road, 16 ft. E of SE corner bridge, 5 ft. W canal bank. |
| R 214 | 5.413 | C&GS disk stamped R 214 1964; 29 ft. W centerline track road, 13 ft. NE centerline track road, 2 ft. W of witness post. |
| S 214 | 4.170 | C&GS disk stamped S 214 1964; 20 ft. S track road center, 10 ft. E track road center, 14 inches N witness post. |
| T 214 | 4.239 | C&GS disk stamped T 214 1964; 44 ft. SW of SE corner bridge, 24 ft. W of track road center, 4 ft. N canal bank. |
| STAYOUT | 2.162 | C&GS disk stamped STAYOUT 1963; a Bilby tower is over mark. |

FLORIDA— NOAA Coastal Boundary Mapping Program

Horizontal Control

Map TP— 00109

| Station | NOS Geodetic Data Reference for Description, Positions, Coordinates and Azimuths |
|---------------|--|
| NANA, 1940 | Book 419, pp. 7, 29, 53 G.P.-Fla. Vol. 1, p. 552, P.C. Fla E. Zone, p. 143 |
| TOAD, 1940 | Book 418, pp. 30, 36, 60 G.P.-Fla. Vol. 1, p. 553, P.C. Fla: E. Zone, p. 143 |
| NELS, 1940 | Book 418, pp. 29, 36, 57 G.P.-Fla. Vol. 1, p. 553, P.C. Fla. E. Zone, p. 143 |
| TIT, 1940 | Book 419, pp. 7, 29, 30, 55 G.P.-Fla. Vol. 1, p. 553, P.C. Fla E. Zone, p. 143 |
| ONEWAY, 1963 | Distribution of data is restricted. Write the Director, National Geodetic Survey, for information. |
| STAYOUT, 1963 | " |

NOAA FORM 76-36B
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

TP-00109

COMPILATION SOURCES

1. COMPILATION PHOTOGRAPHY

| | | | | | |
|---|----------|---|----------|--|--|
| CAMERA(S) Wild RC-8 S&L Cameras 6" focal length | | TYPES OF PHOTOGRAPHY LEGEND | | TIME REFERENCE | |
| TIDE STAGE REFERENCE | | (C) COLOR (P) PANCHROMATIC (I) INFRARED B&W | | ZONE | <input type="checkbox"/> STANDARD |
| <input type="checkbox"/> PREDICTED TIDES <input type="checkbox"/> REFERENCE STATION RECORDS <input checked="" type="checkbox"/> TIDE CONTROLLED PHOTOGRAPHY | | | | Eastern | <input checked="" type="checkbox"/> DAYLIGHT |
| | | | | MERIDIAN | 60th |
| NUMBER AND TYPE | DATE | TIME | SCALE | STAGE OF TIDE | |
| 67S(C)6113-6114 | 10/11/67 | 11:35 | 1:40,000 | The stage of tide is inapplicable for the color photography. | |
| 67S(C)5865 & 5866 | 10/3/67 | 11:09 | 1:40,000 | | |
| 69L3711R and 3712R | 8/27/69 | 8:32 | 1:30,000 | *+0.13 MWL | |
| 69L3724R - 3726R | 8/27/69 | 8:40 | 1:30,000 | *+0.13MWL | |

REMARKS

*Titusville, Indian River Tide Station.

2. SOURCE OF MEAN HIGH-WATER LINE:

The mean water-level line was mapped in lieu of the mean high-water line (see Record of Decisions). The source of the mean water-level line is the 1969 black and white infrared photography listed in item 1. The shoreline was field edited in 1970.

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

There is no mean low-water line 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-00106 | TP-00110 | TP-00112 TP-00113 | TP-00108 |

REMARKS

Final junctions were checked in the Coastal Mapping Sections.

NOAA FORM 76-36C
(3-72)U. S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

TP-00109

HISTORY OF FIELD OPERATIONS

I. ☒ FIELD INSPECTION OPERATION
*see item 8 below☒ FIELD EDIT OPERATION June 1970

| OPERATION | | NAME | DATE |
|---|--------------|--|-------------------------|
| 1. CHIEF OF FIELD PARTY | | W.H. Shearouse | 6/70 |
| 2. HORIZONTAL CONTROL | | W.H. Shearouse | 6/70 |
| RECOVERED BY | | W.H. Shearouse | 6/70 |
| ESTABLISHED BY | | inapplicable | |
| PRE-MARKED OR IDENTIFIED BY | | inapplicable | |
| 3. VERTICAL CONTROL | | W.H. Shearouse | 6/70 |
| RECOVERED BY | | W.H. Shearouse | 6/70 |
| ESTABLISHED BY | | inapplicable | |
| REMARKS IDENTIFIED BY | | W.H. Shearouse | 6/70 |
| 4. LANDMARKS AND AIDS TO NAVIGATION | | W.H. Shearouse | 6/70 |
| RECOVERED (Triangulation Stations) BY | | W.H. Shearouse | 6/70 |
| LOCATED (Field Methods) BY | | W.H. Shearouse | 6/70 |
| IDENTIFIED BY | | W.H. Shearouse | 6/70 |
| 5. GEOGRAPHIC NAMES INVESTIGATION | | W.H. Shearouse | 5/70 |
| TYPE OF INVESTIGATION | | | |
| <input type="checkbox"/> COMPLETE | | | |
| <input checked="" type="checkbox"/> SPECIFIC NAMES ONLY | | | |
| <input type="checkbox"/> NO INVESTIGATION | | | |
| 6. PHOTO INSPECTION | | W.H. Shearouse | 5/70 |
| CLARIFICATION OF DETAILS BY | | W.H. Shearouse | 5/70 |
| 7. BOUNDARIES AND LIMITS | | N.A. | |
| SURVEYED OR IDENTIFIED BY | | N.A. | |
| II. SOURCE DATA | | | |
| 1. HORIZONTAL CONTROL IDENTIFIED | | 2. VERTICAL CONTROL IDENTIFIED | |
| None | | | |
| PHOTO NUMBER | STATION NAME | PHOTO NUMBER | STATION DESIGNATION |
| | | 69L3712R | P131 Reset, M214, N214, |
| | | 69L3884R | R214, S214, T214 |
| | | | 9.35 (Fla. S.R.O.) |
| 3. PHOTO NUMBERS (Clarification of details) | | | |
| 69L3484R, 3711R, 3712R | | | |
| 4. LANDMARKS AND AIDS TO NAVIGATION IDENTIFIED RADIO TOWER, 1970, and Bilby Tower (over station STAYOUT, 1963) Aids to navigation located or verified by sextant fix were submitted with data for Map TP-00109. | | | |
| PHOTO NUMBER | OBJECT NAME | PHOTO NUMBER | OBJECT NAME |
| | | | |
| 5. GEOGRAPHIC NAMES: <input type="checkbox"/> REPORT <input checked="" type="checkbox"/> NONE | | 6. BOUNDARY AND LIMITS: <input type="checkbox"/> REPORT <input checked="" type="checkbox"/> 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 concerning field inspection operations and data. | | | |

NOAA FORM 76-36C
(3-72)

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 |
|--------|---------------------------------|-------------------|--------------------------|
| | 1388 | Oct. 12, 1973 | One report was submitted |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

2. ☒ REPORT TO MARINE CHART DIVISION, COAST PILOT BRANCH. DATE FORWARDED: October 12, 19733. ☐ 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 R.J.B.

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

| | | | |
|-------------------|---------------------------------|--------------------------|---|
| SECOND EDITION | SURVEY NUMBER TP - _____ (2) | JOB NUMBER PH - _____ | TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY |
| | DATE OF PHOTOGRAPHY | DATE OF FIELD EDIT | MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL |
| THIRD EDITION | SURVEY NUMBER TP - _____ (3) | JOB NUMBER PH - _____ | TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY |
| | DATE OF PHOTOGRAPHY | DATE OF FIELD EDIT | MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL |
| FOURTH EDITION | SURVEY NUMBER TP - _____ (4) | JOB NUMBER PH - _____ | TYPE OF SURVEY <input type="checkbox"/> REVISED <input type="checkbox"/> RESURVEY |
| | DATE OF PHOTOGRAPHY | DATE OF FIELD EDIT | MAP CLASS <input type="checkbox"/> II. <input type="checkbox"/> III. <input type="checkbox"/> IV. <input type="checkbox"/> V. <input type="checkbox"/> FINAL |

5

Record of Decisions
Pertaining to Symbolization of the MWL Datum
Map TP-00109

Shoreline Delineation

This map does not extend to the Atlantic Ocean. The water areas it covers are portions of Indian River and Banana Creek. The datum was established by observations at the Titusville Tide Station, situated on the west bank of Indian River directly west of this map.

In this reach of the river, 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 bulkheads 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

Decisions as to 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.

Decisions Pertaining to Specific Creeks and Drainages

NOAA-NOS officials also examined data and records pertaining to the inland extensions of the shoreline symbolizations up creeks and drainages that empty into the Indian River. Decisions made and approved for those specific drainages follow:

1. Commencing at the north, near bench mark N214, the apparent shoreline symbol outlining the drainage into Boggy Pond terminates at road on levee and was verified by an examination of the photographs.

* See Review Report for clarification of date.

2. The natural drainage in the upper reaches of Puckett Creek passes through a culvert under the levee and, consequently, the apparent shoreline symbol is closed off on the map.

3. The apparent shoreline symbolization in the upper reaches of Gator Creek is left open and indicates the inland limits of the field inspection of the shoreline.

Archiving

A copy of this report shall be included in Descriptive Report TP-00109 which will be permanently filed in the Bureau Archives.

Revised 11-19-73

JOB PH-6716

FLORIDA

St. Augustine to Cape Kennedy Shoreline Mapping

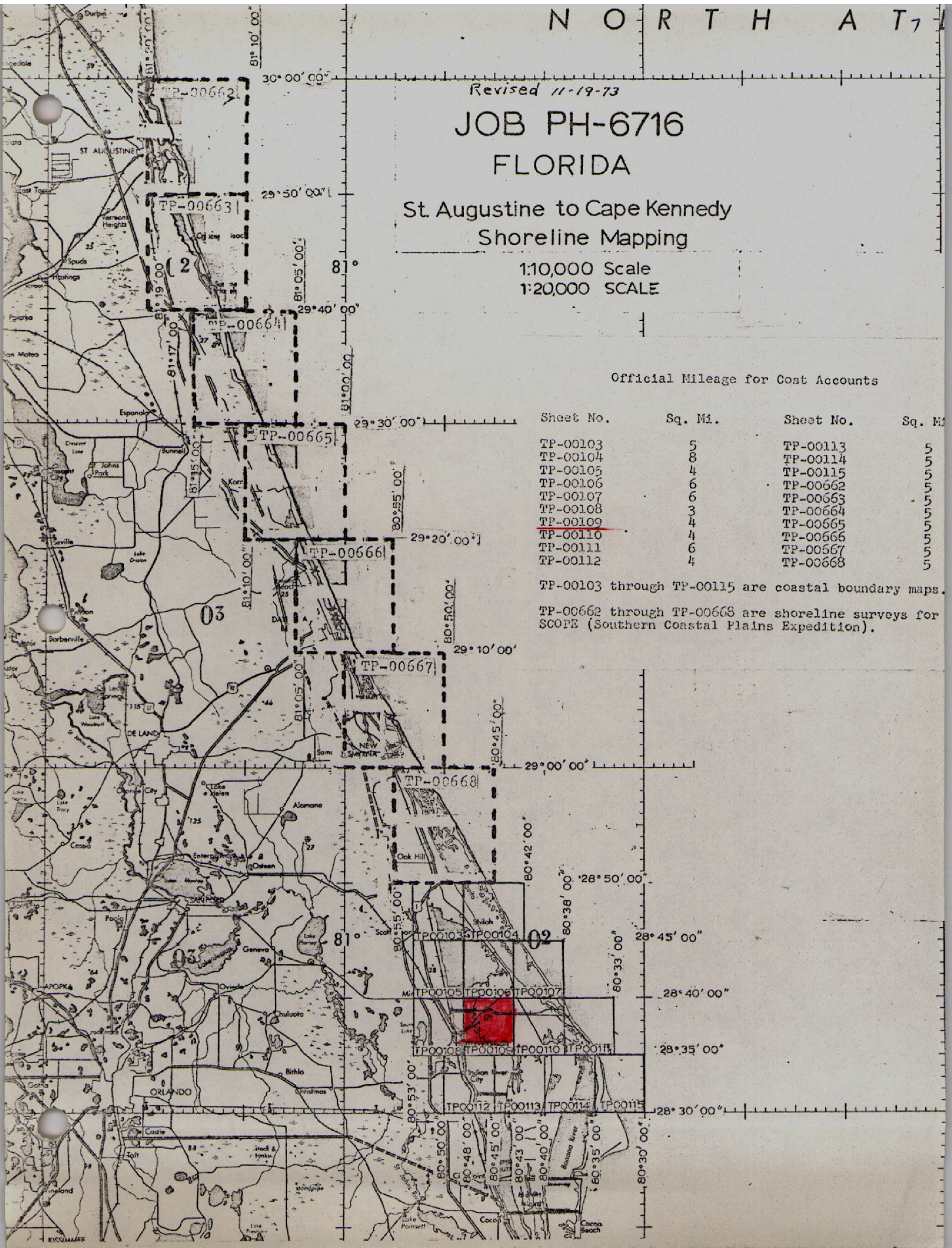
1:10,000 Scale
1:20,000 SCALE

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-00109 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 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 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 $28^{\circ} 30'$ to $28^{\circ} 50'$. 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.

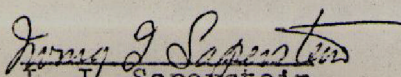
23. Adequacy of Control

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.

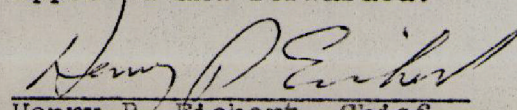
24. Photography

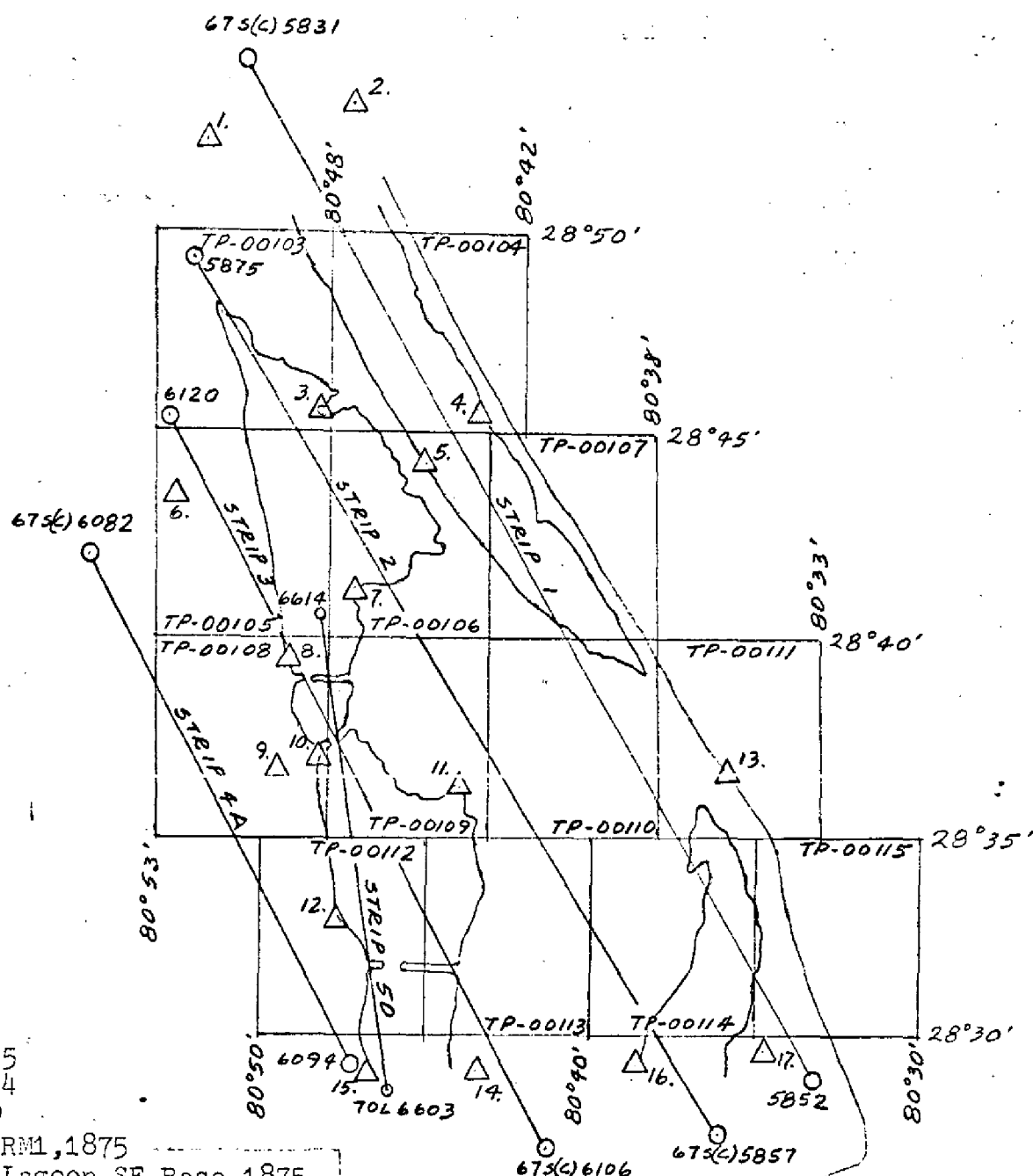
The definition and quality of ^{the photography from} the RC-8 "5" and "L" cameras were good.

Respectfully submitted:


I. I. Sapevstein

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

Horizontal Control

Map TP- 00109

| Station | NOS Geodetic Data Reference for Description, Positions, Coordinates and Azimuths |
|---------------|--|
| NANA, 1940 | Book 419, pp. 7, 29, 53 G.P.-Fla. Vol. 1, p. 552, P.C. Fla E. Zone, p. 143 |
| TOAD, 1940 | Book 418, pp. 30, 36, 60 G.P.-Fla. Vol. 1, p. 553, P.C. Fla. E. Zone, p. 143 |
| NELS, 1940 | Book 418, pp. 29, 36, 57 G.P.-Fla. Vol. 1, p. 553, P.C. Fla. E. Zone, p. 143 |
| TIT, 1940 | Book 419, pp. 7, 29, 30, 55 G.P.-Fla. Vol. 1, p. 553, P.C. Fla E. Zone, p. 143 |
| ONEWAY, 1963 | Distribution of data is restricted. Write the Director, National Geodetic Survey, for information. |
| STAYOUT, 1963 | " |

COMPILATION REPORT
TP-00109

31. Delineation

The interior features on TP-00109 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: None.

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 shoreline is mostly spoil from the construction of a levee and is delineated as apparent shoreline. The datum for the shoreline is mean water-level (Refer to the Record of Decisions).

36. Offshore Details

The offshore spoil areas are from office interpretation of the photography and will be verified by field edit. These spoil areas are subject to change in size and position.

37. Landmarks and Aids to Navigation

There are two charted landmarks that will be identified or located during field edit.

The charted aids to navigation visible on the photography were located during compilation and will be verified by the field editor. Those not visible on the photography will be located by the field editor.

38. Control for Future Surveys

None.

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 has been made with USGS Quadrangles Titusville, Fla., Mims, Fla., Edition of 1952, and Orsino, Fla., Edition of 1949, scale 1:24,000, contours 5 ft. intervals.

The major change is the construction of the railroad causeway and bridge at Lat. $28^{\circ}39'$ across the Indian River to Merrit Island.

None of the newly dredged ditches along the shoreline are on the Quads.

47. Comparison with Nautical Charts

Comparison has been made with Nautical Chart No. 843-SC, Side B, Seventh Edition, Sept. 1969.

Items to be applied to Nautical Chart Immediately: None.

Items to be carried Forward: None.

Respectfully submitted:

J. C. Richter (JB)
J. C. Richter
Carto (Photo)

Approved and forwarded:

K. N. Maki (JB)
K. N. Maki
Chief, Compilation Section

Field Edit Report, Map TP-00109, Job PH-6716

51. METHODS

Visual comparison of shoreline delineation was made at close range from a small boat or while riding the levees. Field edit notes will be found on the ratio photos and the FIELD EDIT SHEET.

Questions raised during compilation have been answered on the Discrepancy Print provided for that purpose.

Two landmarks are recommended for charting. Form 567 is submitted.

Refer to the first paragraph of Field Edit Report for TP-00108 for information regarding aids to navigation. Form 567 for aids in this map (TP-00109) is submitted herewith.

Violet ink was used for field edit notes.

52. ADEQUACY OF COMPILATION

After application of field edit corrections, 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 nor did the Preliminary Name Sheets show any conflicts that called for investigation.

Comparison was made with NASA Master Plans and no conflicts were evident.

Submitted 6/19/70

William H. Shearouse
William H. Shearouse
Chief, Photo Party 60

Applicable to Maps TP-00108/109 and TP-00112

Rockville Compilation Section:

Please investigate the difference I am getting at the junction of Maps TP-00108/109 (which are taped together) and TP-00112. While attempting to hold map details--such as piers, boathouses, bulkheads and streets--I find that there seems to be a discrepancy or difference of something like 1.5 mm in the position of Photo Pt. 112-J--when holding map details in TP-00108 and pricking 112-J, then holding detail in TP-00112 and pricking 112-J. Without benefit of pass points I am unable to resolve the difference. It appears that a good junction may not have been made, as there is one street omitted from both sheets (108 and 112). See this by laying the map manuscripts on Photo 69L3481R.

This matter came to light when plotting sextant fixes for the aids to navigation. Daybeacon 36 was thought to be in Map TP-00112 and a fix (see page 16, sketchbook 1) was taken using control (Photo) points in that map. It was plotted satisfactorily on 112 although across the North limit in TP-00109. Later a fix was taken at Daybeacon 34 (Map TP-00109) using Photo Pt. 112-J in the fix (see page 1, sketchbook 2). A cut was made ahead to Daybeacon 33 at the same time. However, when the fix made at Daybn 33 was plotted it did not plot on the cut (from Daybn 34). Investigation revealed that Photo Pt. 112-J had 2 positions, as stated in paragraph 1. When using the other position for 112-J (the one determined from TP-00108 details) the cut to Daybn 33

was satisfactory. Subsequently another fix was taken at Daybeacon 36 (see page 9, sketchbook 2) using Photo Pts. in TP-00108/109 only. This fix, including a cut to Daybeacon 34, was laid out graphically on a large sheet of paper and the point pricked (graphic fix submitted).

Perhaps all this can be ironed out without too much trouble with the use of pass points and other control, and the correct positions of the daybeacons determined--and I thank you.

Bill Shearouse
William H. Shearouse

Cocoa, Fla.

April 23, 1970

Review Report TP-00109
Coastal Zone Map
October 1973

A detailed review of TP-00109 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 by the Quality Control Group and are adequate:

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

The report by the field editor dated April 23, 1970, concerning the differences in junctions between this map and adjoining maps TP-00108 and TP-00112 were resolved in the Coastal Mapping Section. These differences were resolved by assembling a new mosaic from the color photography rectified to the points determined by the bridge. ^{black and white} The shoreline and alongshore details were compiled from the ~~infrared~~ ^{black and white} photography. ~~The infrared photography was~~ controlled by holding photo images common to the rectified photography.

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

Mims, Titusville, and Orsino, Florida, 1949, photorevised 1970
Nautical Chart 843-SC, 10th edition, August 12, 1972

The name of the railroad, Seaboard Coast Line RR, crossing the Indian River at Latitude 28°59' is incorrect. The name should be Florida East Coast RR. The Mims quadrangle shows the name as U.S. Government RR. The name of the railroad is not included in the Geographic Name List.

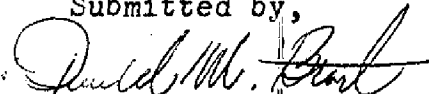
The color photography dated October 1967 was used for bridging and the photomosaic. This photography was supplemented by additional photography dated August 1970. (Refer to photogrammetric plot report.) ^{black and white} The ~~infrared~~ ^{black and white} photography taken in August 1969 was used for the compilation of the shoreline. The note on the published map does not mention the August 1969 photography.

The "Index to adjoining sheets" shows Merritt Island on TP-00109 and TP-00110. According to the Staff Geographer, Merritt Island is south of Banana Creek.

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,

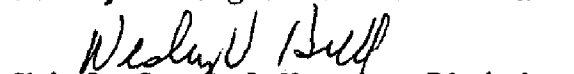


Donald M. Brant

Approved:



Chief, Photogrammetric Branch



Chief, Coastal Mapping Division

TP-00109

48. Geographic Name List

Banana Creek
Beach Road
Boggy Pond
Brock Creek
Brock Flats
Catfish Creek
Gator Creek
Green Bush Pt.
Indian River
Peacocks Pocket
Puckett Creek
Skunk Island
Stoney Island

PREPARED BY

Frank W. Puckett
CARTOGRAPHIC TECHNICIAN

APPROVED BY

A. V. Wright
CHIEF GEOGRAPHER
by JWF

| RESPONSIBLE PERSONNEL | | | |
|---|----------------|--|--|
| TYPE OF ACTION | NAME | TITLE | |
| 1. Objects inspected from seaward | W.H. Shearouse | <input type="checkbox"/> FIELD INSPECTOR <input checked="" type="checkbox"/> FIELD EDITOR | |
| 2. Positions determined and/or verified | W.H. Shearouse | FIELD INSPECTOR | |
| | J.C. Richter | FIELD EDITOR | |
| 3. Forms originated by Quality Control and Review Group and final review activities | * See below | COMPILER <input type="checkbox"/> REVIEWER <input checked="" type="checkbox"/> 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

COMPLATION

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 were transposed from Office Form 567. Copy checked after typing in Quality Control Group.

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.'

* U.S. GOVERNMENT PRINTING OFFICE: 1971-7687445 REG.#

| RESPONSIBLE PERSONNEL | | TITLE | |
|---|----------------|--|---|
| TYPE OF ACTION | NAME | TITLE | |
| 1. Objects inspected from seaward | W.H. Shearouse | <input type="checkbox"/> FIELD INSPECTOR | <input checked="" type="checkbox"/> FIELD EDITOR |
| 2. Positions determined and/or verified | | FIELD INSPECTOR | |
| | W.H. Shearouse | FIELD EDITOR | |
| | J.C. Richter | COMPILER | |
| 3. Forms originated by Quality Control and Review Group and final review activities | * See below | <input type="checkbox"/> REVIEWER | <input checked="" type="checkbox"/> QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE |

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AND

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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

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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: 1971-76874/445 REG. #1

| 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 <input type="checkbox"/> FIELD INSPECTION <input type="checkbox"/> FIELD EDIT <input type="checkbox"/> COMPILATION <input type="checkbox"/> FINAL REVIEW <input checked="" type="checkbox"/> QUALITY CONTROL AND REVIEW (See reverse for responsible personnel) | |
|--|--|---|--|-------------|------|--|--------|-----------|--------|--|-----------------------|
| <input checked="" type="checkbox"/> TO BE CHARTED <input type="checkbox"/> 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: | | SURVEY NUMBER: T-TP-00109 | | | | DATUM N.A. 1927 | | | | METHOD AND DATE OF LOCATION (See instructions on reverse of this form) | |
| JOB NUMBER PH-6716 | | STATE: Florida | | DESCRIPTION | | LATITUDE | | LONGITUDE | | FIELD INSPECTION | |
| CHARTING NAME | | | | | | D.M. METERS | | S. METERS | | COMPILATION | |
| | | Indian River (North Section) | | | | | | | | | |
| LIGHT | | Light 29 | | 28 37 | 4.1 | 126.0 | -80 47 | 42.7 | 1160.0 | 67S(C) 6114 | P-4 Verif. 4/16/70 |
| DYBN | | Daybeacon 31 | | 28 36 | 22.4 | 689.0 | 80 47 | 37.4 | 1015.0 | | P-1 4/16/70 |
| LIGHT | | Light 32 | | 28 36 | 21.7 | 669.0 | 80 47 | 40.0 | 1088.0 | 67S(C) 6114 | P-4 Verif. 4/16/70 |
| DYBN | | Daybeacon 33 | | 28 35 | 25.4 | 1681.0 | 80 47 | 29.4 | 798.0 | | P-1 4/16/70 |
| DYBN | | Daybeacon 34 | | 28 35 | 28.1 | 865.0 | 80 47 | 25.8 | 700.0 | | P-4 4/16/70 |
| LIGHT | | Light 35 | | 28 35 | 28.8 | 886.0 | 80 47 | 23.1 | 629.0 | 67S(C) 6113 | P-4 Verif. 4/16/70 |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |

| RESPONSIBLE PERSONNEL | | TITLE |
|---|----------------|--|
| TYPE OF ACTION | NAME | |
| 1. Objects inspected from seaward | W.H. Shearouse | <input type="checkbox"/> FIELD INSPECTOR <input checked="" type="checkbox"/> FIELD EDITOR |
| 2. Positions determined and/or verified | W.H. Shearouse | FIELD INSPECTOR |
| | W.H. Shearouse | FIELD EDITOR |
| | J.C. Richter | COMPILER |
| 3. Forms originated by Quality Control and Review Group and final review activities | * See below | <input type="checkbox"/> REVIEWER <input checked="" type="checkbox"/> QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE |

INSTRUCTIONS FOR 'METHOD AND DATE OF LOCATION' SECTION

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'Field Positions' are determined by field observations based entirely upon ground control.

COLUMN TITLE

TYPE OF ENTRIES

COMPILATION

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2. Traverse
3. Intersection
4. Resection
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 - b. Planetable
 - c. Sextant

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1. Field identified
2. Theodolite
3. Planetable
4. Sextant

EXAMPLES:

F. 3.c

P.2

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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-00109
Data Forwarded to the Federal Records Center

- 1 Discrepancy Print
- 2 Field Edit Sheets (TP-00109 June 1970) and Field Edit Sheet
for Aids to Navigation Maps TP-00108/109

Photographs

69L3711R
69L3712R
69L3481RR - Filed with TP-00108
69L3484R -- Filed with TP-00108

2 Forms 567

- 1 Sketch book for TP-00109, TP-00111, TP-00112, and TP-00114.
(Vol. 1)