13113

13113

Form 504

U. S. DEPARTMENT OF COMMERCE

COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey Shoreline

Field No. *Office No.* T-13113

LOCALITY

State Florida

General locality Florida Coast

Locality Hutchinson Island

19 66-67-69

CHIEF OF PARTY

LIBRARY & ARCHIVES

DATE

USCOMM-DC 5087

(1)

FORM C&GS-181a
(12-67)

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT - DATA RECORD

T -13113

PROJECT NO. (II):

PH-6710

FIELD OFFICE (II):	CHIEF OF PARTY
PHOTOGRAMMETRIC OFFICE (III):	OFFICER-IN-CHARGE
Washington Science Center	V. Ralph Sobieralski

INSTRUCTIONS DATED (II) (III):

Office: April 6, 1967; April 27, 1967

METHOD OF COMPILATION (III):

Stereoscopic - B-8 stereoplotter

MANUSCRIPT SCALE (III):	STEREOSCOPIC PLOTTING INSTRUMENT SCALE (III):
1:10,000	20,000
DATE RECEIVED IN WASHINGTON OFFICE (IV):	DATE REPORTED TO NAUTICAL CHART BRANCH (IV):

APPLIED TO CHART NO.	DATE:	DATE REGISTERED (IV):

TOPOGRAPHIC DATUM (III):	VERTICAL DATUM (III):
N.A. 1927	MEAN SEA LEVEL EXCEPT AS FOLLOWS: *Elevations shown as (25) refer to mean high water* *Elevations shown as (5) refer to sounding datum* *i.e., mean low water or mean lower low water*

REFERENCE STATION (III):

REFUGE 2, 1934

LAT.:	LONG.:	☐ ADJUSTED ☐ UNADJUSTED
27°11'59.338"	80°09'58.121"	

PLANE COORDINATES (IV):		STATE	ZONE
Y = 1,042,663.97	X = 771,048.72	Florida	East

ROMAN NUMERALS INDICATE WHETHER THE ITEM IS TO BE ENTERED BY (II) FIELD PARTY, (III) PHOTOGRAMMETRIC OFFICE, OR (IV) WASHINGTON OFFICE.
WHEN ENTERING NAMES OF PERSONNEL ON THIS RECORD GIVE THE SURNAME AND INITIALS, NOT INITIALS ONLY.

USCOMM-DC 16276A-P61

FORM C&GS-181b
(3-66)

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT - DATA RECORD

FIELD INSPECTION BY (II):	DATE:
None (See remarks below)	

MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION):

Office interpretation: Nov. 1966-Feb. 1967
Refer to heading 31 (page 11, paragraph 1) and heading 51 (page 14)

PROJECTION AND GRIDS RULED BY (IV): A. E. Roundtree	DATE 11-3-66
PROJECTION AND GRIDS CHECKED BY (IV): R. Glaser	DATE 11-15-66
CONTROL PLOTTED BY (III): J. B. Phillips	DATE 5-23-67
CONTROL CHECKED BY (III): R. A. Youngblood	DATE 5-23-67
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III): R. B. Kelly	DATE May-Oct. 1967
STEREOSCOPIC INSTRUMENT COMPILATION (III): J. B. Phillips — PLANIMETRY	DATE June 6, 1967
CONTOURS	DATE
MANUSCRIPT DELINEATED BY (III): J. B. Phillips	DATE June 13, 1967
SCRIBING BY (III):	DATE
PHOTOGRAMMETRIC OFFICE REVIEW BY (III): J. P. Battley, Jr.	DATE May 1969

REMARKS:

Field Edit by:

E. W. Hartford - March 1969

FORM C&GS-181c
(3-66)

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT - DATA RECORD

T-13113

CAMERA (KIND OR SOURCE) (III):

"L" 6" focal length camera (color); "S" RC-8 camera (infrared)

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
66-L(C)-8698-8700	11-25-66	11:31	1:30,000	.6' above MLW *
67-S-8266-8269	2-24-67	9:13	1:40,000	2.1' above MLW *

* Predicted tides

TIDE (III)

	RATIO OF RANGES	MEAN RANGE	SPRING RANGE
REFERENCE STATION: Miami Harbor Entrance		2.5	3.0
SUBORDINATE STATION: St. Lucie Inlet (jetty)		2.6	3.0
SUBORDINATE STATION:			

WASHINGTON OFFICE REVIEW BY (IV): J. P. Battley — DATE: May 1969

PROOF EDIT BY (IV): — DATE:

NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II): — RECOVERED: 2 — IDENTIFIED:

NUMBER OF BM(S) SEARCHED FOR (II): — RECOVERED: — IDENTIFIED

NUMBER OF RECOVERABLE PHOTO STATIONS ESTABLISHED (III):

NUMBER OF TEMPORARY PHOTO HYDRO STATIONS ESTABLISHED (III):

REMARKS:

Summary to Accompany Descriptive Report
T-13100 through T-13117, T-13141 and
T-13218

PH-6710
December 1969

This project is comprised of thirteen shoreline manuscripts compiled at 1:20,000 scale, (T-13100 through T-13112), four manuscripts compiled at 1:10,000 scale, (T-13113 through T-13115) and three 1:5,000 scale manuscripts, (T-13116 through T-13117). The area covered is the east coast of Florida from Cape Kennedy to just south of Jupiter Inlet. The maps were compiled as a base for hydrographic survey operations and to update marine charts of the area. Two manuscripts, (T-13218 and T-13141) were added to the project after hydro operations were begun and are discussed in this summary.

Field inspection was accomplished during Sept.-Oct. 1966 and was limited to the recovery and premarking of control.

The project area was flown in November 1966. Infrared and color photography was taken.

Stereoplanigraph bridging of the color photography was begun in April 1967 and continued through October 1967. To support hydrographic survey operations, the bridging data was supplied the Washington compilation section as each of nine strips were bridged. Strips #2 through #8 were bridged by stereoplanigraph methods. Strip #1 was bridged analytically. All bridging photography was 1:40,000 scale. Some difficulty was experienced in bridging the project area - (see the Plot Report for details).

The manuscripts were compiled as bridging was received from April 1967 through February 1968. Ratio photographs were prepared in the usual manner for photo-hydro support use. The photographs prepared were both infrared and color. The field ratio prints, cronaflex copies of the manuscripts and discrepancy ozalids were sent to the field, as completed, to expedite hydro activities. Two new manuscripts were added to the project after hydro operations were begun to develop

more of the Loxahatchee River which empties into Jupiter Inlet (T-13141, 1:10,000 scale), and T-13218, 1:5,000 scale to further develop the Ft. Pierce harbor area. This accounts for compilation activities extending to June 1968. In the area of the 1:10,000 scale manuscripts - 1967 1:30,000 scale color and infrared photography was available for compilation. In the area of the two 1:5,000 scale manuscripts (T-13116 and T-13117), 1:15,000 scale color photographs were available. T-13218 (1:5,000 scale) was compiled at 1:10,000 scale on the B-8 stereoplotter from 1:40,000 scale photography and then enlarged to 1:5,000 for a hydro support manuscript. This manuscript is thus considered somewhat substandard in accuracy. All compilation was achieved on the B-8 stereoplotter.

Field edit operations were begun in November 1967 and were completed in 1968. To resolve some landmark and aid problems, provide hydro support, and to further clarify differences in compiled features for Marine Charts, additional field work was accomplished in February 1969. Field edit operations required the location of most of the daybeacons throughout the project area and verification of compiled features.

The application of field edit corrections and/or additions was accomplished in the Washington compilation office as received from the field with some interruption for higher priority projects. Field edit application and final review was completed in November 1969. As field edit corrections were applied to each T-sheet and checked for completeness, a cronaflex copy was ordered for the Marine Chart Division. Hydro verification was being accomplished at the same time of final review and close liaison was maintained between sections.

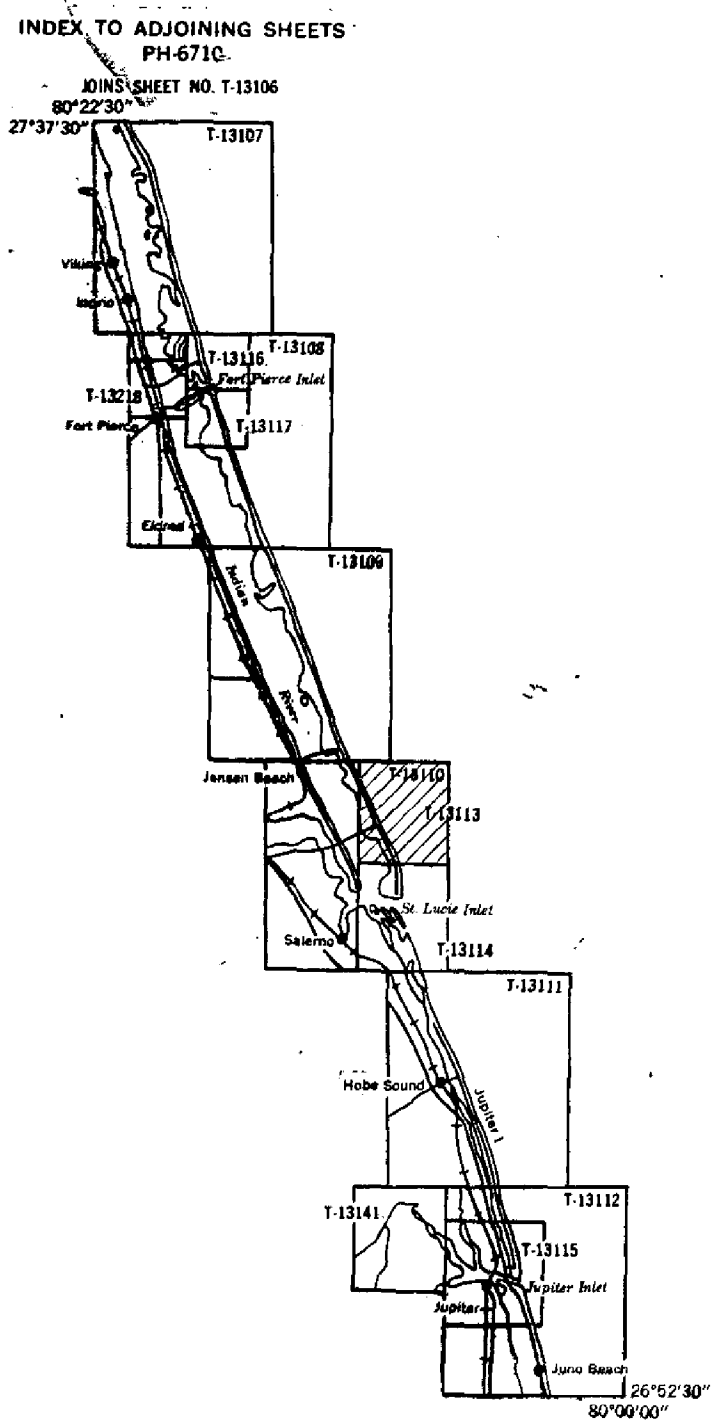
~~A~~ Registration Manuscript Copy ies will be registered in the Bureau Archives under their respective T-numbers.

Submitted by,

Peter P. Battley Jr

J. P. Battley, Jr.

PROJECT DIAGRAM



PHOTOGRAMMETRIC PLOT REPORT
Job PH-6710
Cape Kennedy to Jupiter Inlet, Florida

October 27, 1967

21. Area Covered

This report covers the bridging of the Florida east coast from Cape Kennedy to Jupiter Inlet. Included in this area are T-sheets T-13100 thru T-13112 at 1:20,000 scale, T-13113 thru T-13115 and T-13141 at 1:10,000 scale and T-13116, T-13117 and T-13218 at 1:5,000 scale.

22. Method

Eight strips were bridged by stereoplanigraph methods and one strip (Strip #1) by STK methods. All were adjusted by the IBM 1620 method. Strip #1 (66-L(C)-8716 thru 8731) was bridged holding six stations as control and three stations plus tie points as checks. Strip #1-C (66-L(C)-8708 thru 8716) was adjusted holding five control stations with two stations as checks. Strip #2 (66-L-8822 thru 8832) was adjusted on four stations. Strip #3 (66-L(C)-8696 thru 8702) was adjusted on four stations with tie points as checks. Strip #4 (66-L(C)-8738 thru 8748) was adjusted on four stations with tie points as checks. Strip #5 (66-L(C)-8768 thru 8799) was adjusted on five stations with two stations and tie points as checks. Strip #6 (66-L(C)-8782 thru 8797) was adjusted on five control stations with tie points as checks. Strip #7 (66-L(C)-8773 thru 8779) was adjusted on three stations. Strip #8 (66-L(C)-8804 thru 8821) was adjusted on three stations with tie points as checks.

All plates were drilled by the PUG method. Tie points between strips were averaged.

23. Adequacy of Control

Horizontal control complied with project instructions. Most of the control stations were premarked with additional sub-stations selected on color photos taken with a hand-held camera. These photos were used before the strip photography was available. Many of the images selected on the hand-held photographs could not be determined on the strip photography. In some cases the premarked stations could not be seen clearly in the strip photography.

Stations which could not be held within National Map Accuracy Standards and the probable reasons for the source of error are as follows:

STRIP #1

BET, 1967, SS "A" and SS "B" - Could not be clearly seen on the 1:40,000 scale photography.

POLE (TEMP), BASE PT. "C", 1967, Panel, SS "A" and SS "B" - The positions of this station and its substations were determined by a short baseline method. With the small angle involved and the evidence of bridging residuals, this station was treated as a passpoint between Strips #1 and #8.

PIERCE 2, 1963 - Only the 1:40,000 scale target was considered as a good point in Strip #1. All other substations were dropped from the adjustment.

STRIP #2

RADAR, 1955, SS "A" was a very poor image point on this strip and was dropped from the adjustment.

STRIP #5

VALKARIA, 1960 (Target) and TURKEY CREEK, 1877 (Target) gave large residuals in the adjustment phase and were dropped. The substations for these stations were used in place of the targets and showed good residuals in the adjustment.

STRIP #6

TRIPOD 3, 1963, SS "A" - No reason could be determined for this substation not holding in the adjustment. It was dropped from the bridge.

STRIP #7

ARTESIA, 1953, SS "A" - No reason could be determined for the error in this station. Since two companion points held, the substation was dropped.

STRIP #8

POLE (TEMP), BASE PT. "C", 1967 - See note under Strip #1.

24. Supplemental Data

Local USGS quads were used for elevations during bridging operations.

25. Photography

Photography was adequate as to coverage, overlap, definition and quality.

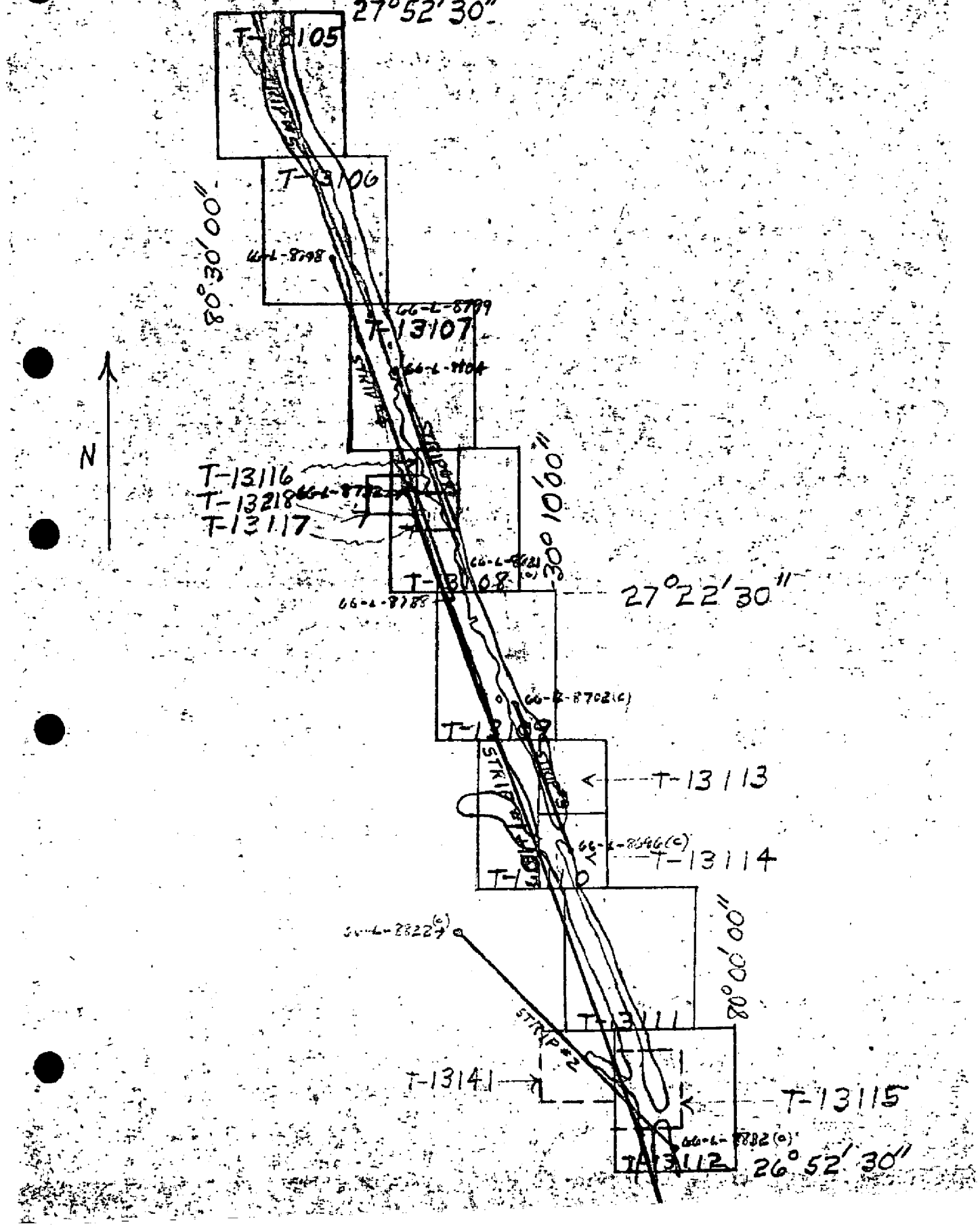
Submitted by:

Robert B. Kelly

Approved by:

John D Perrow Jr

PH-6710
FLORIDA COAST



Compilation Report
Project PH-6710
T-13113
June 1967

31. Delineation

This manuscript was compiled on the B-8 stereoplotter at a scale of 1:10,000 using 1:30,000 scale color plates. Infrared photographs ratioed to manuscript scale were used for a graphic refinement of the MHWL. The manuscript was reduced to 1:20,000 on cronaflex and made part of sheet T-13110.

Points were positioned along the shoreline to facilitate hydrographic signal location and cronapaque ratio prints of the photography were resected to the manuscript in the standard manner for photo hydro support.

This manuscript was also delineated according to Marine Chart specifications to provide a new base for Chart 845-SC.

32. Control

Identification, density and placement of control was adequate.

33. Supplemental Data

Small-craft chart #845-SC at 1:40,000 scale, dated August 1966 was used as an aid in locating Lts., daybeacons and landmarks in the area. Geological Survey Quad., St. Lucie Inlet, Florida, scale 1:24,000 dated 1950 used for Geographic Names Standard.

34. Contours and Drainage

Inapplicable

35. Shoreline and Alongshore Details

Delineation of the shoreline and alongshore details was accomplished by office interpretation of the photographs.

36. Offshore Details

No comment.

37. Landmarks and Aids

One light, one daybeacon and one lookout tower have been photoidentified and shown on the manuscript.

38. Control for Future Surveys

No comment.

39. Junctions

Junction has been made and is in agreement to the North with T-13109 (1:20,000), to the South with T-13114 (1:10,000) and to the West with T-13110 (1:20,000).

40. Horizontal and Vertical Accuracy

No comment.

41.-45. - Inapplicable

46. Comparison with Existing Maps

Comparison has been made with Geological Survey Quad., St. Lucie Inlet, Florida, scale 1:24,000 dated 1950.

47. Comparison with Nautical Charts

Comparison has been made with Nautical Chart #1247, scale 1:80,000, revised to 3-6-67 also Chart 845-SC, scale 1:40,000, dated 8-20-66.

Submitted by,

J. B. Phillips

J. B. Phillips

Approved by,

K. N. Maki

K. N. Maki
Chief, Compilation Section

(13)

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-6710 (Cape Kennedy to Jupiter Inlet)

T-13113

Atlantic Ocean

Baker Point

Gilbert Shoal

Hutchinson Island

Indian River

Intracoastal Waterway

Joes Cove

Negro Cove

Approved by:

A. J. Wraight
Chief Geographer

Prepared by:

Frank W. Pickett
Cartographic Technician

(14)

FIELD EDIT REPORT

PH-6710
St. Lucie Inlet
T-13110

GENERAL NOTES

This report is submitted for one T-sheet, field edited February 13 thru March 12, 1969.

All notations on the discrepancy sheet and on the photographs are made in violet ink. The notations were made either directly on the discrepancy print or referenced to photos.

51 METHODS

Field edit was accomplished by the following methods, by truck and skiff travel. Several areas were inspected for compliation of the MHWL and found to be adequate.

All discrepancies on the field edit sheet have been verified directly on the sheet or referenced to a photograph.

Notations are on the following photographs.

Ratio black and white prints.
66L8721, 22 23.

Color contact transparents.
66L8695, 96, 97, 8700, 8720, 21, 22.

52 ADEQUACY OF COMPILATION

The Comilation of MHWL as a whole appeared to be adequate.

Compilation of piers, streets, buildings on the MHWL, and along shore features was found to be adequate.

54 RECOMMENDATIONS

None

56 ROCKS

Several small rock cliffs were inspected along the east shore of Hutchinsons Island, these cliffs are on the MHWL and are noted on Photo 66L8722 (Mattie ratio print).

57 NAUTICAL LANDMARKS AND FIXED AIDS

All nautical landmarks and fixed aids were inspected, and either verified or located on the photos or cronaflex print and submitted on form 567.

(15)

58 LANDMARK BUILDING

Several buildings along the water front are recommended for charting or deletion, these are noted on the discrepancy print or referenced to a photo.

One public building show on Photo 66L8721 matte print.

59 STREETS

All street deletions and classification are noted directly on the discrepancy print, all addition are noted on the discrepancy and referenced to a photo.

Submitted by
E. W. Hartford
E. W. Hartford

14 March, 1969

Review Report T-13113
Shoreline Mapping
March 1970

61. General Statement

(See Summary) T-13113 is a 1:10,000 scale manuscript compiled to provide a base for hydrography at a larger scale in St. Lucie Inlet. The area was covered by T-13110 at a scale of 1:20,000. All field edit was resolved on T-13110. Review was accomplished on T-13110 and a close comparison was made to see that the two surveys were identical for compiled features. Refer to paragraph 31 of the Compilation Report and the Project Diagram.

Reviewed by,
Peter P. Battley Jr

Approved by,
Charles Theurer DHB
Chief, Photogrammetric Branch

R H Houlder
Chief, Photogrammetry Division

~~Chief, Marine Chart Division~~

FORM C&GS-164
(4-68)
SCOMM-DC
0318-P68

U.S. DEPARTMENT OF COMMERCE
ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT CONTROL RECORD

MAP T- 13113 PROJECT NO. 6710 SCALE OF MAP 1:10,000 SCALE FACTOR

STATION	SOURCE OF INFORMATION (INDEX)	DATUM	LATITUDE OR Y COORDINATE LONGITUDE OR X COORDINATE	N.A. 1927 - DATUM DISTANCE FROM GRID OR PROJECTION LINE IN METERS *(1 Ft. = 3048006 meter)* FORWARD (BACK)
REFUGE 2, 1934			1,042,663.97 771,048.72	
BET, 1967			1,053,237.67 765,592.23	

COMPUTED BY DATE CHECKED BY DATE

ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

NONFLOATING AIDS ~~OR LANDMARKS~~ FOR CHARTS

TO BE CHARTED
~~TO BE REVISED~~
~~TO BE DELETED~~ } STRIKE OUT TWO

St. Lucie Inlet, March, 19 69

I recommend that the following objects which have ~~have not~~ been inspected from seaward to determine their value as landmarks be charted on ~~deleted from~~ the charts indicated.

The positions given have been checked after listing by E. W. Hartford

J. K. Wilson
Chief of Party.

STATE: Florida

CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION LATITUDE* ° ′	LATITUDE* ″ D.M. METERS	LONGITUDE* ° ′	LONGITUDE* ″ D.P. METERS	DATUM	METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
	Indian River (South Section)							T-13113					
	Daybeacon "232"		27 11	25.0 768.0	80 11	08.6 237.0	NA 1927	Photo T-13110	2-19- 69		x		845-855SC
	Light "231"		27 11	25.8 795.0	80 11	06.3 173	"	"	2-20- 69		x		"

This form shall be prepared in accordance with Hydrographic Manual, Publication 20.2, Sec. 1-55, 2-39, 6-36, 7-18 to 22 inclusive, and Fig. 79. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. Revisions shall show both the old and new positions. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

* TABULATE SECONDS AND METERS

USCOMM-DC 36485-P66

(5-66)

ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION
COAST AND GEODETIC SURVEY

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

TO BE CHARTED
~~TO BE REVISED~~
~~TO BE DELETED~~
} STRIKE OUT TWO

St. Lucie Inlet — Feb. , 19 69

I recommend that the following objects which ~~have~~ *(have not)* been inspected from seaward to determine their value as landmarks be charted on *(deleted from)* the charts indicated.

The positions given have been checked after listing by E. W. Hartford

J. K. Wilson
Chief of Party.

STATE Florida

CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION LATITUDE* ° ′	LATITUDE* ″ D.M. METERS	LONGITUDE* ° ′	LONGITUDE* ″ D.P. METERS	DATUM	METHOD OF LOCATION AND SURVEY No.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
Lookout Tower	Wood, white ht = 40(50) ft		27 11	57.6 1774.0	80 09	57.0 1568.2		Photo 66L822 T13113	2-20-69		x	x	845SC 855SC1247

This form shall be prepared in accordance with Hydrographic Manual, Publication 20.2, Sec. 1-55, 2-39, 6-36, 7-18 to 22 inclusive, and Fig. 79. Positions of charted landmarks and *nonfloating aids* to navigation, if redetermined, shall be reported on this form. Revisions shall show both the old and new positions. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

* TABULATE SECONDS AND METERS

USCOMM-DC 36485-P66

FORM C&GS-8352
(3-25-63)

NAUTICAL CHART DIVISION

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. ____________

INSTRUCTIONS

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

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

CHART	DATE	CARTOGRAPHER	REMARKS
1247	1-14-72	G. Moore	Full ~~Part Before~~ After ~~Verification~~ Review In~~spection~~ Signed Via
			Drawing No.
855-SC	5-28-75	D. CORDTS	Full ~~Part Before~~ After ~~Verification~~ Review ~~Inspection~~ Signed Via
			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
			Drawing No.
			Full Part Before After Verification Review Inspection Signed Via
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			Full Part Before After Verification Review Inspection Signed Via
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