

13115

13115

Form 504 U. S. DEPARTMENT OF COMMERCE COAST AND GEODETIC SURVEY	
DESCRIPTIVE REPORT	
Type of Survey	Shoreline
Field No.	Office No. T-13115
LOCALITY	
State	Florida
General locality	Jupiter Island
Locality	Jupiter Inlet
<u>1966-67-69</u>	
CHIEF OF PARTY	
LIBRARY & ARCHIVES	
DATE	

DESCRIPTIVE REPORT - DATA RECORD

T -13115

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):
HORIZONTAL DATUM (III):		VERTICAL DATUM (III):	
N.A. 1927		MEAN SEA LEVEL EXCEPT AS FOLLOWS: <i>Elevations shown as (25) refer to mean high water</i> <i>Elevations shown as (5) refer to sounding datum</i> <i>i.e., mean low water or mean lower low water</i>	
REFERENCE STATION (III):			
Jupiter Inlet Lighthouse, Ecc., 1934			
LAT.:	LONG.:	<input type="checkbox"/> ADJUSTED	
26°56'53.798"	80°04'56.260"	<input type="checkbox"/> UNADJUSTED	
PLANE COORDINATES (IV):		STATE	ZONE
y = 951,414.26	x = 798,972.62	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.			

DESCRIPTIVE REPORT - DATA RECORD
T-13115

FIELD INSPECTION BY (II): None (see remarks below)		DATE:
MEAN HIGH WATER LOCATION (III) (STATE DATE AND METHOD OF LOCATION): Office interpretation Nov., 1966 - Feb., 1967 <i>Field Edit - Aug. 1967 & Feb. 1969</i>		
PROJECTION AND GRIDS RULED BY (IV): A. E. Roundtree		DATE 11-4-66
PROJECTION AND GRIDS CHECKED BY (IV): R. Glaser		DATE 11-15-66
CONTROL PLOTTED BY (III): H. Lucas		DATE 5-1967
CONTROL CHECKED BY (III): J. Taylor		DATE 5-1967
RADIAL PLOT OR STEREOSCOPIC CONTROL EXTENSION BY (III): R. B. Kelly		DATE May-Oct. 1967
STEREOSCOPIC INSTRUMENT COMPILATION (III): J. B. Phillips	PLANIMETRY	DATE May, 1967
	CONTOURS	DATE
MANUSCRIPT DELINEATED BY (III): J. B. Phillips		DATE May, 1967
SCRIBING BY (III):		DATE
PHOTOGRAMMETRIC OFFICE REVIEW BY (III): J. P. Battley Jr.		DATE May 1969

REMARKS:

Field Edit by:

E. W. Hartford - Feb. 1969
W. H. Shearouse - Aug. 1967

DESCRIPTIVE REPORT - DATA RECORD

T-13115

CAMERA (KIND OR SOURCE) (III):

"L" 6" focal 1. camera (color) "S" RC-8 camera (infrared)

PHOTOGRAPHS (III)

NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
66-L(C)-8712-8715	11-26-66	9:29	1:40,000	1.3 above MLW
67-S-8296R	2-24-67	9:45	1:30,000	1.25 above MLW

** based on predicted tides*

TIDE (III)

	RATIO OF RANGES	MEAN RANGE	SPRING RANGE
REFERENCE STATION: Miami Harbor Entrance		2.5	3.0
SUBORDINATE STATION: Jupiter Inlet	.52	1.3	1.5
SUBORDINATE STATION:			

WASHINGTON OFFICE REVIEW BY (IV):

J. P. BATTLE

DATE:

MAR. 1969

PROOF EDIT BY (IV):

DATE:

NUMBER OF TRIANGULATION STATIONS SEARCHED FOR (II):

RECOVERED:

4

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,

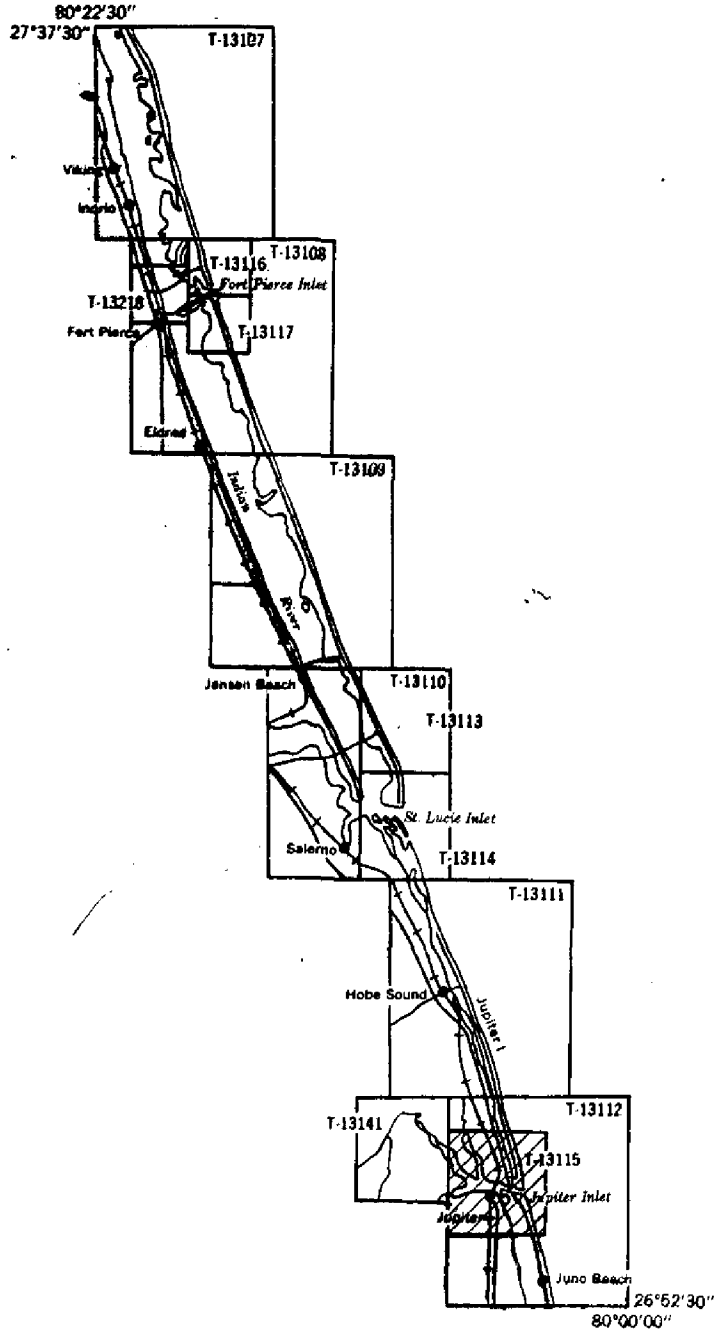
Jeter P. Battley, Jr.

J. P. Battley, Jr.

PROJECT DIAGRAM

INDEX TO ADJOINING SHEETS PH-6710

JOINS SHEET NO. T-13106



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 substations 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.

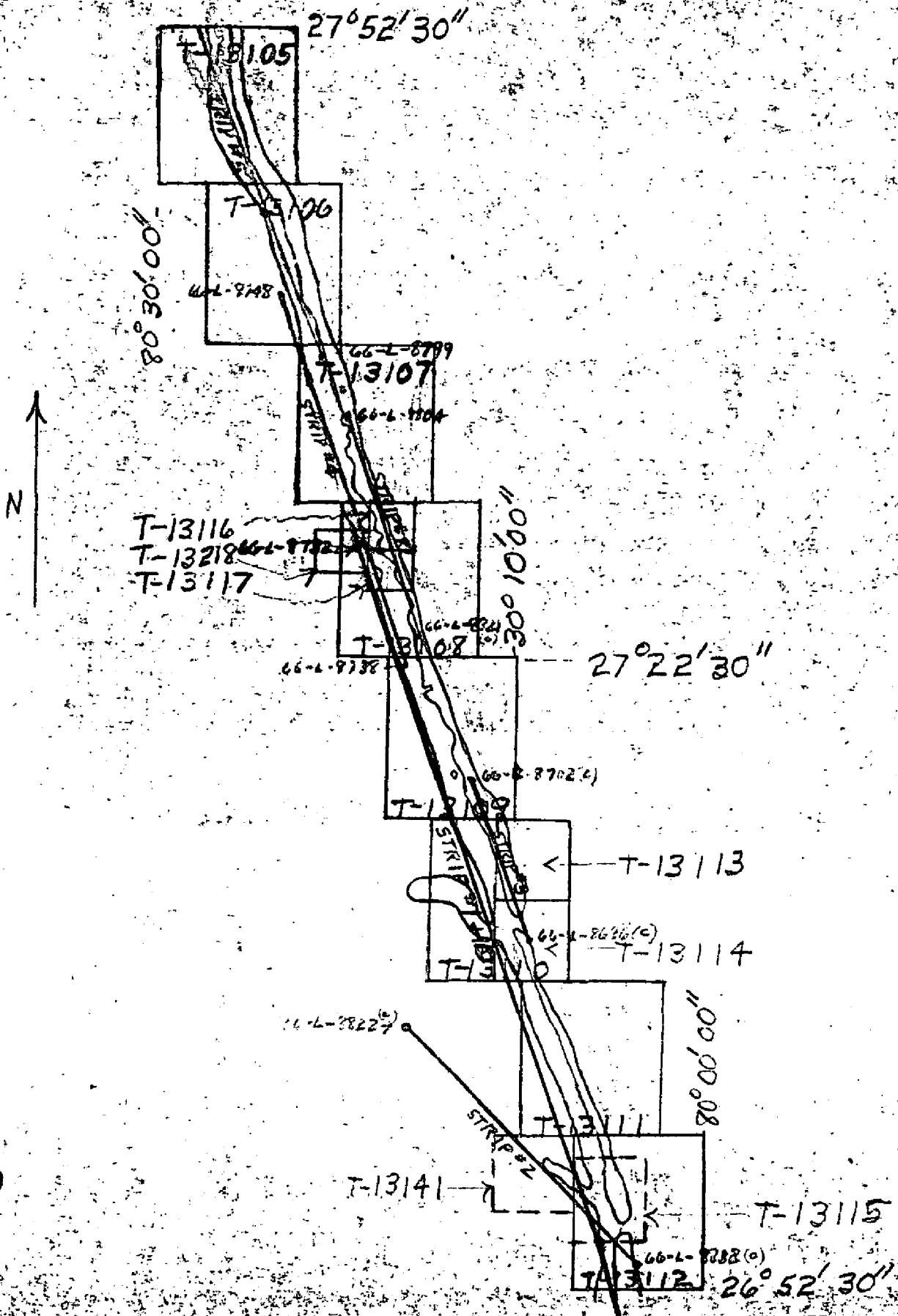
Submitted by:

Robert C. Kelly

Approved by:

John D. Perraw Jr.

PH-6710
FLORIDA COAST



Compilation Report
Project PH-6710
T-13115
May 1967

31. Delineation

This manuscript was compiled at a scale of 1:10,000 on the B-8 stereoplotter using 1:40,000 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-13112.

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

Control was adequate as to identification, density and placement.

33. Supplemental Data

Small-craft chart 845-SC at 1:40,000 dated August 1966 was used as an aid in locating Lts, Daybeacons, and landmarks in the area. Geological Survey Quad., Jupiter, 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

Sixteen aids to navigation and three landmarks have been shown on the manuscript.

38. Control for Future Surveys

No comment.

39. Junctions

Junction has been made and is in agreement with survey T-13115 at 1:20,000.

40. Horizontal and Vertical Accuracy

No comment.

41.-45. Not Applicable

46. Comparison with Existing Maps

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

47. Comparison with Nautical Charts

Comparison has been made with Nautical Charts #1247, scale 1:80,000, revised to 3-6-67 also 845-SC, scale 1:40,000 dated August 20, 1966.

Submitted by,

J. B. Phillips

J. B. Phillips

Approved by,

K. N. Maki

K. N. Maki
Chief, Compilation Section

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-6710 (Cape Kennedy to Jupiter Inlet)

T-13115

Atlantic Ocean

Blowing Rocks

Hell Gate

Intracoastal Waterway

Jupiter

Jupiter Inlet

Jupiter Island

Jupiter Sound

Jupiter State Park

Lake Worth Creek

Loxahatchee River

North Fork (Loxahatchee River)

Southwest Fork (Loxahatchee River)

Approved by:

A. J. Wraight

A. J. Wraight
Chief Geographer

Prepared by:

Frank W. Pickett

Frank W. Pickett
Cartographic Technician

SHEET T-13115

previously

T-sheet was^{field} edited in 1967. Several new concrete piles and a few pipes were located directly on the cronaflex print and transferred to the ozalid print. These are marking shallow areas and extend from two to four feet above MHW.

Several new piers and piers with piling near the ends were located directly on the ozalid print by scaled distances.

A new road and bridge (under construction) across the Intracoastal Waterway was located on the ozalid print by scaled distances from the centerline of the present road. This will be a Bascule type bridge when finished.

Two radio towers for LDMKs were located by intersection method on the cronaflex print and transferred to the ozalid print.

Positions for form 567 were scaled from the cronaflex print.
Form 567 submitted for two LDMKs.

February 12, 1969

Submitted by:

E. W. Hartford
Surveying Technician

Review Report T-13115
Shoreline Mapping
March 1970

61. General Statement

(See Summary)

T-13115 was compiled in May 1967 and originally field edited in August 1967. A decision was made to develop hydrography on the Loxahatchee River and a new T-survey (T-13141) was added as a junction sheet to the west. In 1967 a coastal hydrographic survey was accomplished and extended into the entrance of Jupiter Inlet to the mouth of the river. This covered approximately the eastern portion of T-13115. In early 1969 hydrography was accomplished for the Loxahatchee River utilizing the western half of T-13115 and T-13141. A photogrammetrist was assigned to this project and additional field edit was received in March 1969 reflecting changes and/or additional features.

62. Comparison with Registered Topographic Surveys

Comparison was made with survey T-8414, scale 1:20,000 dated December 1946. This survey is superseded for nautical charting by the new survey. The area along the Loxahatchee River and Jupiter Inlet has been further developed making the prior survey obsolete for shoreline mapping.

63. Comparison with Maps of Other Agencies

Comparison was made with U. S. Geological Survey quadrangle, Jupiter, Florida, dated 1950, scale 1:24,000.

64. Comparison with Contemporary Hydrographic Surveys

T-13115 was used as a base for new hydrography. The new hydrographic surveys H-9007, dated 1969 and H-8953, scale 1:10,000 dated 1967 were used for comparison.

65. Comparison with Nautical Charts

Comparison was made with Chart 1247, 4th Edition, 1:80,000 scale, revised to February 17, 1969, Chart 1248, 10th Edition, August 2, 1969, scale 1:80,000 and 845-SC, scale 1:40,000, 8th Edition, dated August 30, 1969. All differences

noted on the discrepancy print between the published charts and the new survey were resolved in field edit. The discrepancy print was prepared in 1967 and was compared with the latest editions of the above charts at that time. T-13115 was used as a base in updating the present editions of charts 1247, 1248 and 845-SC.

A copy of Forms 567 have been submitted to Nautical Charts with the exception of additional field edit accomplished in February 1969.

66. Adequacy of Results and Future Surveys

T-13115 complies with the project instructions and is within the National Standards of Accuracy.

Reviewed by,

Jeter P. Battley, Jr

Approved by,

R. H. Houlster

Chief, Photogrammetry Division

Charles J. ...

Chief, ~~Marine Charts~~ Division *135*
Photogrammetric Bench

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

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

Rockville, Md. Oct. 29, 19 68

I recommend that the following objects which have ~~been~~ been inspected from seaward to determine their value as landmarks be charted on ~~charts~~ the charts indicated.

The positions given have been checked after listing by R. A. Youngblood

V. Ralph Sobieralski
Chief of Party

CHARTING NAME	STATE	DESCRIPTION	SIGNAL NAME	POSITION				METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED	
				LATITUDE*		LONGITUDE*								DATUM
				D. M. METERS	"	"	D. P. METERS							
Lt 53	Florida	Intracoastal Waterway		26 58	41.9	80 05	08.4	NA	Photo Plot					
Dybn 54	"	St. Lucie Inlet-Jupiter Inlet		26 58	1289.5	80 05	231.6	1927	T-13112 8-29-	X			845-SC	
Dybn 56	"	"		26 58	1000.2	80 05	07.4	"	T-13115 67	X			"	
Dybn 57	"	"		26 58	366.2	80 05	30.3	"	"	X			"	
Dybn 58	"	"		26 57	1646.5	80 04	52.5	"	"	X			"	
Lt 59	"	"		26 57	27.2	80 04	48.1	"	"	X			"	
Dybn 60	"	"		26 57	837.1	80 04	132.6	"	"	X			"	
		Jupiter Inlet-Lake Worth Inlet		26 57	25.5	80 04	44.1	"	"	X			"	
Lt 1		Jupiter Inlet		26 57	784.8	80 04	1216.4	"	"	X			"	
Lt 4		"		26 57	20.6	80 04	45.3	"	"	X			"	
Dybn 7		Lake Worth Creek		26 57	634.0	80 04	1249.5	"	"	X			"	
Lt 8		"		26 56	48.1	80 04	46.7	"	"	X			"	
Dybn 10		"		26 56	1480.3	80 04	1288.5	"	8-22-67	X			"	
		"		26 56	51.1	80 05	19.4	"	"	X			"	
		"		26 56	1572.7	80 05	535.2	"	"	X			"	
		"		26 56	44.4	80 05	22.4	"	"	X			"	
		"		26 56	1366.4	80 05	618.0	"	"	X			"	
		"		26 56	44.1	80 05	25.3	"	"	X			"	
		"		26 56	1265.2	80 05	697.9	"	"	X			"	
		"		26 56	29.8	80 05	16.2	"	"	X			"	
		"		26 56	917.1	80 05	446.9	"	"	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

