Porm	504

U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey	Shoreline			
	Office No			
	LOCALITY			
State Flori	Lda	}		
<u> </u>	Florida Coas	it		
	. Lucie Inlet			

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CHIEF OF PARTY				
	and provide the state of the st			
LIBRARY & ARCHIVES				
DATE		\$		

USCOMM-06 5087

FORM C&GS-181a

U.S. DEPARTMENT OF COMMERCE

CHIEF OF PARTY OFFICER-IN-CHARGE V. Ralph Sobieralski
OFFICER-IN-CHARGE V. Ralph Sobieralski
V. Ralph Sobieralski
V. Ralph Sobieralski
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•
SCOPIC PLOTTING INSTRUMENT SCALE (III):
,000
EPORTED TO NAUTICAL CHART BRANCH (IV):
DATE REGISTERED (IV):
VERTICAL DATUM (III):
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
1
ADJUSTED UNADJUSTED
STATE ZONE
Florida East

FORM C&GS-181b

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

DESCRIPTIVE REPORT - DATA RECORD

T-13114

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 (p	page 11, 1sparagroph) a head	ing 51 (page 14)
PROJECTION AND GRIDS RULED BY (IV):		DATE
A. E. Roundtree		11-3-66
PROJECTION AND GRIDS CHECKED BY (IV):		DATE
R. Glaser		11-15-66
CONTROL PLOTTED BY (III):		DATE
R. A. Youngblood		5-26-67
CONTROL CHECKED BY (III):		DATE
J. B. Phillips		5-26-67
RADIAL PLOT OR STEREOSCOPIC CONTROL EXT	ENSION BY (III):	DATE
R. B. Kelly		May-Oct. 1967
STEREOSCOPIC INSTRUMENT COMPILATION (III):	PLANIMETRY	DATE
R. A. Youngblood		6-7-67
	CONTOURS	DATE
MANUSCRIPT DELINEATED BY (III):		DATE
R. A. Youngblood		6-12-67
SCRIBING BY (III):		DATE
		DATE
PHOTOGRAMMETRIC OFFICE REVIEW BY (III):		DATE
J. B. Battley, Jr.		May 1969
REMARKS:		
Field Edit by:		
E. W. Hartford - Marc	화장의 경우를 가장 그렇게 보고 있는데 되었다면 하는데 되었다면 하는데 되었다면 하는데 되었다.	
(refer to pag	(16)	

DESCRIPTIVE REPORT - DATA RECORD

CAMERA (KIND OR SOURCE) (III):

"L" 6" focal length camera (color); "S"	RC-8 camera	(infrared)
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	PH	OTOGRAPHS (III)		
NUMBER	DATE	TIME	SCALE	STAGE OF TIDE
66-L(C)-8720-8721	11-26-66	9:34	1:40,000	1.8' above MLW
67-8-8266-8269	2-24-67	9:13	1:40,000	2.1' above MLW
0	* based	on predicte	ed fides	
		TIDE (III)		

TIDE (III)				
		RATIO OF RANGES	MEAN RANGE	SPRING RANGE
REFERENCE STATION: Miami Harbor Entrance			2.5	3.0
UBORDINATE STATION: St. Lucie Inlet (jett	у)		2.6	3.0
SUBORDINATE STATION:				
WASHINGTON OFFICE REVIEW BY (IV): Jeter P. Battle	y	DATE:	ey 1969	
PROOF EDIT BY (IV):		DATE:		
MBER OF TRIANGULATION STATIONS SEARCHED FOR (II):			D:	
NUMBER OF BM(S) SEARCHED FOR (II):	RECOVERED:	IDENTIFIE	D	

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.

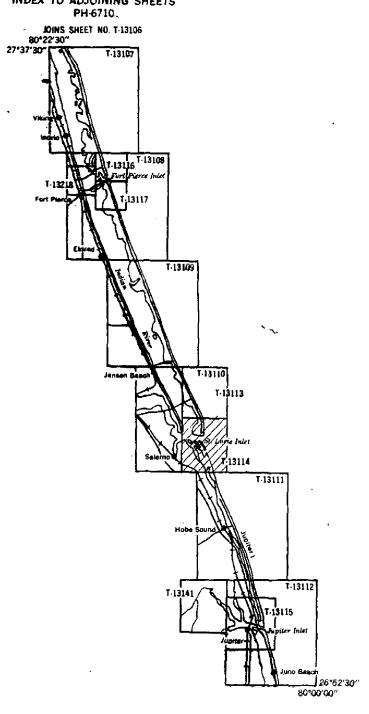
The application of field edit corrections and/or additions was accomplished in the Washington compilation office as received from the field with some interruption for higher priority projects. Field edit application and final review was completed in November 1969. As field edit corrections were applied 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.

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

Submitted by, Seter P. Battley In

J. P. Battley, Jr.

INDEX TO ADJOINING SHEETS PH-6710.



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 the 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 the 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. The 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.

8)

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), EASE 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

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

24. Supplemental Data

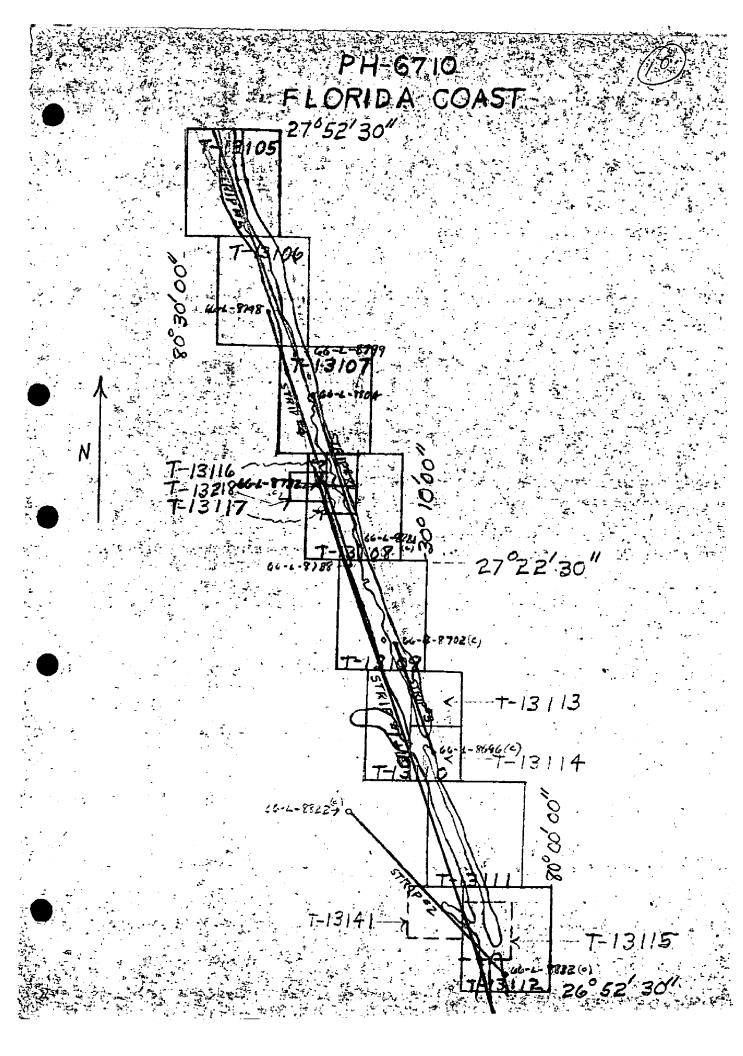
Local USGS quads were used for elevations during bridging operations.

25. Photography

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

Submitted by:

Approved by:



Compilation Report Project PH-6710 T-13114 June 1967

31. Delineation

This manuscript was compiled on the B-8 stereoplotter at a scale of 1:10,000 using 1:40,000 scale color plates. Infrared photographs ratioed to manuscript scale were used for a graphic refinement of the MHWL. This 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

Control was adequate as to identification, density and placement.

33. Supplemental Data

Small-craft chart 845-SC at a scale of 1:40,000 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 was used for the 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 landmark and 23 aids to navigation were located on this manuscript.

-2-

38. Control for Future Surveys

No comment.

39. Junctions

Junction has been made and is in agreement to the North with T-13113 (1:10,000), to the South with T-13111 (1:20,000) 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 Charts #1247, scale 1:80,000, revised to 3-6-67 also Chart 845-SC, scale 1:40,000, dated 8-20-66.

Submitted by,

R. A. Youngblood

Approved by,

K. N. Maki

Chief, Compilation Section

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-6710 (Cape Kennedy to Jupiter Inlet)

T-13114

Atlantic Ocean 5

Bessie Cove

Great Pocket

Hole in the Wall

Horseshoe Point

Hutchinson Island

Indian River

Intracoastal Waterway

Jupiter Island

Long Island

Long Point

Manatee Creek

North Jupiter Narrows

North Point

Peck Lake

Rocky Point

St. Lucie Inlet

South Point

Approved by:

A. J. Wraight

Chief Geographer

Prepared / Dy:

Frank W. Pickett Cartographic Technician

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 LANDMARES 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.

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. Hardford

14 March, 1969

Review Report T-13114 Shoreline Mapping March 1970

61. General Statement

(See Summary) T-13114 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.

Seter & Battley Ir

Approved by,

Photogrammetry Division Chief, Marine Chart Division





DESCRIPTIVE REPORT CONTROL RECORD

MAP T. 13114 PROJECT NO.	T NO. 6710	scA	SCALE OF MAP 1:10,000 SCAL	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 (8ACK)
HIGH. 1929	20 - 20	1927	1,020,902,87	
		1	1.031.457.68	
JETTY RM #1, 1930			776,030,16	
		1		
		-		
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COMPUTED BY	DATE		CHECKED BY	DATE

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XMONEKOWKENGXAIBSX@RX LANDMARKS FOR CHARTS

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St. Lucie Inlet

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

Wilson ×.

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STATE	, T			-	POSITION			METHOD			MANS	
	FIOLIUS		5	LATTICOE	LONG	LONGITUDE 4		LOCATION	DATE OF			CHARTS
CHARTING	DESCRIPTION	BIGNAL	•	" D.M.METERS	-	" D. P. METERS	DATUM	B CRVEY	LOCATION	OERAN Ohrm	H8240	
TANK	Steel, red & white		27 10	58.3 1795	80 09	38.4 1057		Pho to r-1314	2-20 - 69	×	× 887.	84580 85580 124
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resitions of charted The data should be accordance with Hydrographic Manual, Publication 20,2, Sec. 1-55, 2-59, 6-56, 1-18 to 22 inclusive, and Fig. 19. landmarks and nonflosting sids to navigation, if redetermined, shall be reported on this form. Revisions shall show both the old and new positions. considered for the chatts 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

OF COMMERCE U.S. DEPARTMENT ENVIRONMENTAL SCIENC COAST AND G

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NONFLOATING AIDS ORXLANDMARKS FOR CHARTS

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St. Lucie Inlet

March

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

Hartford `. Œ The positions given have been checked after listing by

CHARTS Chief of Party. CITENORE CHAN MEHORE CHART NARBOR CHART LOCATION DATE ò METHOD OF LOCATION AND BURVEY No. DATUM D. P. METERS LONGITUDE # POSITION • D. M. METERS LATITUDE • • SIGNAL ıþj \$utist4 DTTET-L 942 DESCRIPTION Great Pocket Peck Lake 14 Dybn 16 Dybn 13 Dybn 10 Dybn 12 Florida ω Dybn' 7 Lt 15 Dybn Lt 11 Dybn Lt 6 φ Lt T.t CHARTING STATE

51

Positions of charted The data should be 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, landmarks and nonfloating aids to navigation, if redetermined, shall be reported on this form. Revisions shall show both the old and new positions. 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

9

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

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

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

CHARTS Chief of Party. THAND BROKENTO THAND ENONE HARBOR CHART LOCATION PATE PO METHOD OF COCATION AND BURVEY No. DATUK D. P. METERS LONGITUDE # POSITION ... ۰ D.M.METERS LATITUDE * • BIGNAL Shitakid Top əəg TIBI-T 1 Indian River (South Section St. Lucie Crossover Range Lucie Crossover North e Rear Lt. 236 St. Lucie Crossover North Range Front Lt. 236 Lucie Crossover Range Entrance range Front Dybn Entrance range Rear Dybn DESCRIPTION St. Lucie Inlet Range Rear Lt. Front Lt. Dybn 235 Dybn 234 233 ന Dybn 1 Rear St. L Dybn st. CHARTING STATE

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 The data should be landmarks and nontloating atta to navigation, if redetermined, shall be reported on this form. Revisions shall show both the old and new positions. 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

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	4 Moore	Full Por Before After Verification Review Inspection Signed Via
			Drawing No.
855-x	5-28-75	D (Full Post Before After Varification Review Inspection Signed Via
033-2	3-20-13	D. CORDTS	Drawing No.
		·- <u>·</u> ·	
			Full Part Before After Verification Review Inspection Signed Via
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