# <u>9390</u>

# Diag. Cht. Nos. 1257-2 & 1114

NOAA FORM 76\_35A

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

# **DESCRIPTIVE REPORT**

(HYDROGRAPHIC)

Type of Survey HXDROGRAPHIC.  Field No HSL-20-2-73  Office No H-9390
LOCALITY
State Florida
General Locality Northwest Coast.
Clearwater Pass
1973
CHIEF OF PARTY Fidel T. Smith, Lt. Cdr., NOAA
LIBRARY & ARCHIVES
DATE 5/3/77

☆U.S. GOVERNMENT PRINTING OFFICE: 1974-763-098

area 4

Charts 858

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NOAA	FORM	77-28
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# U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

REGISTER NO.

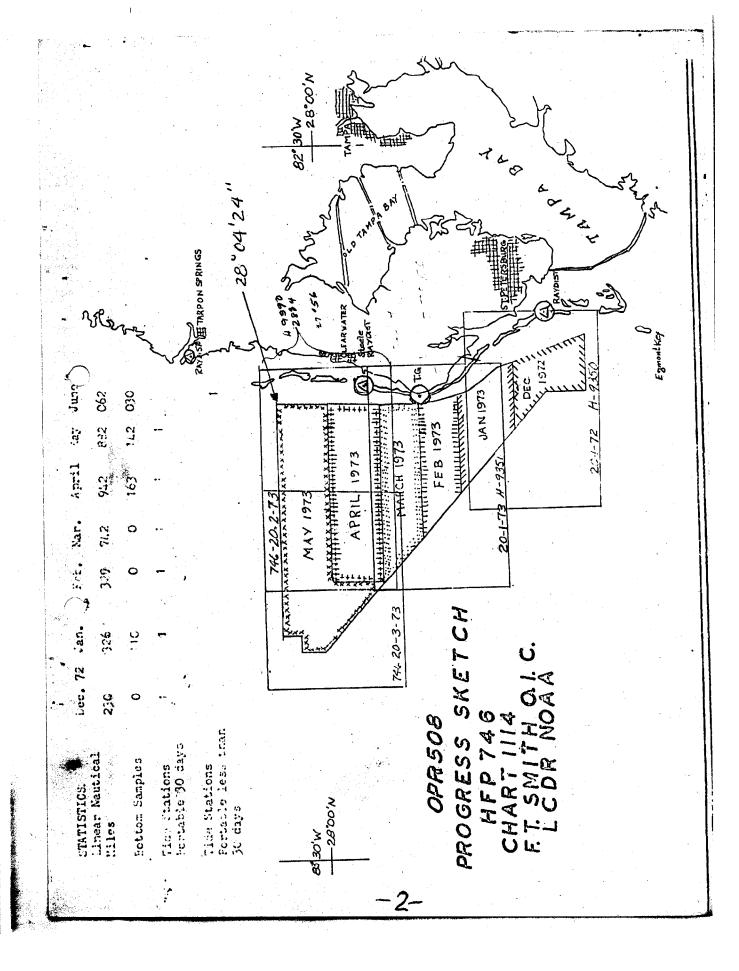
# HYDROGRAPHIC TITLE SHEET

H-9390

INSTRUCTIONS - The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

FIELD NO.

filled in as completely as possible, when the sheet is forwarded to the Office.	HSL-20-2-73
State Florida	
General locality Northwest Coast	
Off Locality Clearwater Page	
Scale 1:20,000 Date of sur	rey April 1973 - June 1973
Instructions dated September 11, 1972 Project No.	OPR 508-HSL-72
ressel NOAA Launch 1257	
Chief of party F. T. Smith, Lt. Cdr., NOAA	
Surveyed by F. T. Smith, W. Adams, F. Saunders, D. Mass	on
Soundings taken by echo sounder, hand lead, pole Raytheon DE 723	BD echo sounder
Graphic record scaled by <u>Digitizer</u>	
Graphic record checked by Launch Personnel	Verification Branch (AMC)
Protracted by Hydroplot CAI COMP 618 (Assc) Automa	ted plot by LALCOMP GIB (AMC)
Verification by Hydroplot L. G. Cram	
Soundings in Mathema feet at MLW Mathema	
REMARKS: Raydist DRS used for position, Hydroplot	survey equipment used for
logging and plotting. Changes in red	and Arman and the first
	wase Ouring Very fration
by L. C. Cram	ر با
Cat   survey v	ng to be done.
further processin	on to be done.
and the	11/77
applied to stas 5.	AND .



#### DESCRIPTIVE REPORT

FOR

#### HYDROGRAPHIC SURVEY H-9390

HSL-20-2-73

# A. Project

This survey was completed as a part of OPR 508 in accordance with the Project Instructions OPR-508-HSL-72, Gulf Coast of Florida, dated September 11, 1972.

#### B. Area Surveyed

This survey covers an area offshore of Clearwater Beach, Florida. The area surveyed is shown on the preceding page. The limits of hydrography are from latitude  $27^\circ$  56' 00" to latitude  $28^\circ$  04 24" and from longitude  $82^\circ$  52 00" to longitude  $83^\circ$  07 00".

# C. Sounding Vessel

NOAA Launch 1257 of HFP 746 was the only vessel used to obtain soundings on this boatsheet.

# D. Sounding Equipment

Two Raytheon DE 723D's were used as sounding units

Model Number	Serial Number
723-40	1904
723-40	37024

Also used with the above units were the following:

- TRACOR Model number 20 Precision Frequency Square Wave -Power Module.
- Electronic Gabinet Unit(ECU) Model number 723-42 Serial Number 1910.
- Raytheon Digital Depth Monitor Model 723-41 Serial Number 37016.

Soundings were taken from 12 to 65 feet.

Echo sounding corrections were determined from barchecks. A season report on correction to echo soundings is included with this report. It is titled Report on Corrections to Echo Soundings for OPR 508-1972-1973.

#### E. Smooth Sheet

The smooth sheet will be plotted by the Processing Division at the Atlantic Marine Center in Norfolk, Virginia.

This boatsheet was "smooth" plotted in the field. The ballpoint pens on the plotter gave very poor results. Two colors of ink were used and many of the soundings are so faint that they are barely readable. The field "smooth" plot is being turned in as is because a replot would require an extensive amount of time. There are two plotter sheets covering the survey area. Sheet A is the southern half and sheet B is the northern half. Overlay sheets were constructed for some crosslines, developments and bottom samples. A 1:10,000 overlay was done of the area of the developments so as to better show the soundings.

# F. Control

Raydist equipment operated in the range-range mode was used for control on this survey. The shore sites were located by Mr. Jim Shea from Operations (AMC). The stations were located at the following positions:

Station	Latitude	Longitude
Tarpon	28° 09' 49.805"	82° 47' 24.737'
Steele Raydist	27° 56' 32.724"	82° 50' 13.464''

Calibration was by three point sextant fix. The calibration signals were located by traverse and are listed in the appendix. An abstract of the corrections is included in the appendix. See the Report on Corrections to Electronic Control OPR 508-1972-1973 for the daily calibrations.

The following electronic equipment was used in conjunction with the DEC PDP/81 hydroplot system.

<u>Equipment</u>	Model	Serial Number	Frequency		
Raydist DRS System Navigator	ZA-673	67	3296.495 kHz		

C&GS Hydroplot (Marine Digital Navigational Systems Inc) C&GS Hydroplot (DEC) Controller

## G. Shoreline

There is no shoreline on this sheet. The inshore area will be completed at a later date.

## H. Crosslines

There was approximately 103 n.m. of crosslines compared to approximately 1350 nautical miles of regular sounding lines for 8.2% crosslines.

In general all crossings agree to within 1 foot. There are several cases where the crossings are 3 feet off. No particular reason is known except that sea conditions were rough (2-3 feet). These disagreements were noted on the offshore end of "A" sheet in 50 feet of water. They are isolated and do not apply to all lines crossed.

#### I. Junctions

# - HSL-20-1-73

This survey junctions with H-9351 (1973) on the south and junctions with H-9391 (1973) on the west. The agreement at the junctions is good and there are no holidays. H5L-20-3-73

On the east this survey junctions with prior surveys H-7877 and H-7905 (1949-1950). Agreement is good with the maximum difference being 2 feet in isolated cases. A shoal has formed at the junction of H-9390 (1973) and H-7905 at latitude 28° 04'. A depth of 15° feet in an area charted as 17 feet. It is recommended that this area be delineated and developed at a later date. See H-95/0 for additional hydrography in this area.

## J. Comparison with Prior Surveys

This survey was compared to the survey of 1925-1927 by R. P. Eyman. This survey (Reg. No. 4581) was a 1:40,000 scale with line spacing of 400 meters and was used to compile the existing NOS chart 1257 for the area between latitude 27 54 to 28 12 and between longitude 82 52 and 83 02. In general the depths on H-9390 are shoaler. The bottom topography west of longitude 82 55 has remained the same. The survey H-9390 has more soundings and the controlling depths are less than the 1925-1927 survey.

To the east of longitude  $82^{\circ}$  55' the area has changed in some places. A new shoal has formed outside of Clearwater Pass. Shoals charted in 1925-1927 have increased in size and their least depths are less than charted by as much as 2 feet.

In general the area is sloping to seaward and is a sandy bottom with shells. Overall the depths from this survey are shoaler. It is not known if the new depths are shoaler due to silting in the area or just better methods of obtaining depths.

No soundings from this prior survey were placed on the boatsheet since they are a duplication of the soundings from NOS chart 1257.

# K. Comparison with the Chart

The following charts were used for comparison:

Chart	Scale	Compared with Chart 11412 (cqus 1257) during verification Innl. 1975 20th Ed.
NOS 1257	1:80,000	February 5, 1972 17th Edition
NOS 1114	1:456,394	See Pos# 5000-5018

This survey differs significantly from chart 1257 on the inshore area near Clearwater Pass (Lat. 27° 56.8', Long. 82',4 52.6') where the previously charted depths of 18 ft. have shoaled to 15 ft. and the shoal has extended to the north and west. A shoal has formed near lat. 27 56'.0, los 4927-long. 82° 54.5' and extends to the north and northwest. The area shoals to 15 ft. in what was previously charted as 24 to 25 feet. Agreement is better away from the Clearwater Pass entrance. Most of the charted soundings were verified. This area of the chart apparently comes from the 1925-1927 survey Register No. 4581 which was discussed in section J.

The sounding line spacing on that survey was insufficient to fully depict the bottom and as a result this survey (H-9390) shows many shoaler depths that do not show on the chart. To rephrase this; the charted soundings west of longitude 82° 55! are generally correct. However; they are not the controlling depths for this area. The area to the east of longitude 82° 55! has numerous changes from the chart due to shoals building from beach erosion and the discharge from Clearwater Pass and Dunedin Pass. In general the inshore end of this survey is 1 to 3 feet shoaler than the charted soundings. Larger differences do occur but they are isolated.

A comparison with chart 1114 is difficult due to the scale. The offshore end has controlling depths that are 6 feet shoaler than those charted. Most of these differences are not critical since there is little or no deep draft traffic in this area.

The Pre-Survey Review listed one item 2A.

"2A the fish haven obstruction charted in lat. 28° 00.5' long. 82° 53.1' originates with Chart Letter No. 852 of 1964. The obstructions 2600 yards long and 300 yards wide consists of automobile bodies and other metal objects. The authorized minimum depth over the reef is 20 feet."

This area was sounded at 100 meter spacing on a 45° angle with the haven. The minimum depth found was 20 feet (reduced for predicted tide and draft.). There are six privately maintained buoys marking the northern end of the haven.

The haven was being "filled" by local private groups who have loads of trash such as old tires, small metal objects, etc. to the buoyed area and dump whenever they have a barge load. The high speed launch sounding at 20 knots did not show anything unusual in this area.

at 20 knots did not show anything unusual in this area.

Lat. 27° 56' 47.39" Long 82° 55" 18.12"

A dashed circled sounding (20 feet) was investigated and a least depth

A dashed circled sounding (20 feet) was investigated and a least depth of (17) foot (reduced for predicted tides and draft) was founded. Applying settlement and squat and velocity correction the depth reduces to 187 feet. Smooth tides have not been applied. Day 156  $P_{0s} \pm 4964 + 4984 + 100$ 

L. Adequacy of Survey

in ps P/O Pos \$5064-5084

This survey is considered complete and adequate to supersede prior surveys for charting.

# M. Aids to Navigation

Seven

There are me landmarks or fixed aids to navigation on this boatsheet. There are eix private maintained buoys marking the northern end of the fish haven. They are orange-white buoys lettered A,B,C,D,E, and G. They were located on day 121 with positions 2926-2931.

150 Pos# 4777

#### N. Statistics

1973 Day	Time GMT From	Time	From Pos.	Last Pos.	N.M. of Sdgn. Line	B.S.	Remarks
103	1756	2243	0001	289	85.9	<b></b>	·
104	1333	2020	290	639	100.9		
106	1334	2232	640	1078	127.0		
109	1417	2005	1079	1389	93.1		
110	1406	1852	1390	1654	78.5		
113	1359	1909	1655	1945	87.0		
114	1436	1956	1946	2302	103.0		•
115	1514	2104	2204	2479	80.0		Dup. pos. 2204-2302
116	1534	1727	2480	2593	33.5	Kai	بلاحميما ا
120	1436	1926	2594	2784	57.1		led 100 to Pos ss
121	1338	1919	2785	3071	82.9	٢	n 2204 to end
122	1258	1937	3072	3433	104.8	Tron	1 2204 40 ENVA
123	1317	1953	3433	3794	109.6	0 t 3	Dupa posa
				*			
127	1451	1916	3795	4019	87.2		Added an "A" after this Pos.
130	1513	2010	4020	4059		40	Hoteld an n
131	1329	21 53	4060	4148	27.0	, -	N -1 -1
133	1339	2134	4149	4238	27.0		after mis los.
134	1349	1819	4239	4485	74.7		
135	1313	1359	4486	4531	14.3		
137	1409	1646	4532	4616	25.5		
144	1346	1604	4617	4646	1.5	19	
149	1428	1736	4647	4676	1.5	30	
150	1338	2004	4677	4771	12.8	51	
	1336	1858	4077 4772	5021		)T	
156					57.0		
158	1300	1432	5022	<b>50</b> 65	5.0		

Lineal N. miles of sounding lines Square n. miles of survey Total number of bottom samples Tide stations 1475.3 n.m. 86.0 s. n.m. 140

# O. Miscellaneous

Clearwater Pass is used extensively by pleasure craft and charter boat fisherman. There is deep draft traffic in the area.

P. Recommendations A  $P_{05}$  #4327 Day 134 (\*\*\* 4427 in Pos. P/O) There is a shoal at 128° 04.0', 82° 52'.5' which needs to be developed. A least depth of 33 feet was observed in an area where 17 feet was charted. This item has been referred back to the AHP launch on this project. Add' Jags here from H-4510(1975

# Q. References to Reports

Reports not included in the Descriptive Report which have been submitted seperately include:

- 1. Report on Corrections to Echo Soundings OPR 508 1972-1973.
- 2. Report on Corrections to Electronic Control OPR 508 1972-1973.
- 3. Report on Horizontal Control OPR 508 1972-1973.

# APPROVAL SHEET

All records and data for this survey has been collected under my supervision and examined by me daily for completeness and adequacy.

Respectfully submitted,

Fidel T., Smith Cdr., NOAA Chief, AHP

# ATLANTIC MARINE CENTER

# PROJECTION PARAMETERS

# POLYCONIC OR MODIFIED TRANSVERSE MERCATOR

1.	Project No. OPR-508 4. Requested By F.T. Smith
2.	Reg. No. H-9390 5. Ship or Office AHP
3.	Field No. AHP-20-2-73 6. Date Required
7.	Polyconic X Modified Transverse Mercator
8.	Central Meridian of Projection 83 ° 00 ' 00 "
9.	Survey Scale: 1: 20,000 V
10.	Size of Sheet (check one):
	36 x 54
11.	Sheet Orientation (check one):
	NYX = 1
	N .
	CMER
12.	Plotter Origin: S.W. Corner of Sheet (not necessarily a grid intersection)  Latitude 27 ° 55 ' 00 "  Longitude 83 ° 08 ' 66 "
13.	G.P.'s of triangulation and/or signals attached
	Material Desired: Tracing Paper Mylar
	Smooth Sheet Other Specify
15.	Remarks:

# ATLANTIC MARINE CENTER

# ELECTRONIC CONTROL PARAMETERS

1.	Project # OPR- 508	_ 2. Reg. # <u>H-</u>	9390 3. Field	d # <u>AHP-20-2-7</u>	3
4.	Type of Control: _	Raydist	(Hi-Fix,	Raydist, EPI,	etc.)
5.	Frequency <u>3296.495</u>	(for conv	ersion of electro	onic lanes to	meters)
6.	Mode of Operation	(check one):	. •		
	Range-Range X		Range-Visua	1	
	Range One (R <sub>1</sub> ) Station I.D. Range Two (R <sub>2</sub> ) Station I.D.		Lat. 28 Long. 82 Lat. 27 Long. 82	<u>47</u> 56	49.805 " 24.737 " 32.724 " 13.464 "
	Hyperbolic (3-st	ation)	Hyper-Visua	1	
	Slave One Station I.D. Master Station I.D. Slave Two Station I.D.		Lat. Long. Long. Lat. Long. Lat. Long.	0 1	" " " " " " " " " " " " " " " " " " "
7.	Location of Survey	•			
	Range-Range		eserver is standi ctly at R <sub>2</sub> (check		ion and
		Survey area i	s to observer's	Right X	A=Ø
		Survey area i	s to observer's	Left	A=1
,	Hyperbolic	Looking from	survey area towa	rd Master Sta	tion:
		Slave One mus	st be to observer	's <u>Left</u> ;	
		Slave Two mus	st be to observer	's <u>Right</u> .	
8.	This form is s	submitted as an	aid in preparing	a boat sheet	•
	This form appl	ies to all data.	a on this survey.		
	This form appl	ies to part of	the data on this	survey.	
	Vessel EDP # Tin	From ne Day	To Time Day	Position Nu (inclusiv	
	1257 17566	00 103	180000 158	0001 to to to to	5065
9.	Remarks:			· · · · · · · · · · · · · · · · · · ·	

# Abstract of Corrections to Electronic Control

		A	HP-S	20-2-	73 H	- 9390			
	~		to		Pat II				
<del></del>	DAY	From	C S	144	7A				
	103	175615	224224	- 45					
,	104	1333.58	201937	<u>- 4</u> හ්	+ 40	ļ			
	106		223109	- 60	+ 55	<del> </del> +			
	109		200418	- 45' - 55'	+ 50°	<del>}                                    </del>			
	1119		185128	- 55 <i>°</i>		1			
	113	142620		- 60	4 45-	1			
	115		910432	- 55	14 451	1			
	116		172730	- 65	+ 45				
	120	133608		- 60	+ 50	,			
1	121	133857	160522	- 501					
	121		191820	- 50	, .				
	122		193606	- 60°					
	123		195351	- 50.		t1			
	127		191510	- 40					
	130	151320	200955		+ 35				
	131	132922		- 55					
	13)	211045		- 55/					<del></del>
	133	/33945	142506	- 60		<del> </del>			
	133	205123	181924		+ 40	1			
	135	131334	135815		+ 30				
	137	140937	164504	- 65	1+ 50	1			
	156	133613	185753	- 60					
	158	130050	143149	- 50	1+ 50	7			
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	1/1/	12/./55	160406	- 50	+ 40	<del></del>			
	144	142045	173534	- 50	V + 45	<b>:</b>			
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# SIGNAL NAME LISTING

- 100 EGMONT KEY LIGHTHOUSE (REAR RANGE) 1873
- 105 FINK HOTEL (DON CESAR'S)
- 107 SW CORNER HAPPY DL PHIN
- 128 PENTHOUSE ELEV. SHAFT
- 110 CROSS ATOP ST. JOHN'S CATHOJIC CHURCH
- 111 BLIND PASS TANK
- 122 U S VETERANS HOSPITAL (NORTHWEST OF ST) FETERSBURGO SQUAT WHITE TANK 1934
- 133 MADELRA BEACH TANK
- 135 LIGHT, 17408 GULF BLVD
- 144 BELLEAIR BEACH TANK
- 137 FUBLIC FISHING FIER (SOUTH)
- 139 PUBLIC FISHING PLER(NORTH)
- 155 BELLEAIR SILVER MUNICIPAL TANK 1926
- 156 CLEARWATER, BELLEVIEW HO TEL, WHI TE BR ICI STAC . 1925
- 166 CLEARWATER BEACH TANK
- 176 MANDALAY SHORES
- 171 MI CRO WAVE TO WER
- 172 DUNELIN MUNICIPAL TANK
- 173 TRI FO EC FINK)
- 180 TARFON SPRINGS MUN TANK (TAR 1929)
- 196 TARFON SPRINGS MUN TANK (FON 1925)
- 200 ANCLO TE KEYS LIGHTHOUSE

100	27	36	6174	Ø8 2	45	39 03
165	27	42	3236	<b>63</b> 2	44	1477
167	27	43	1759	Ø3 2	44	2986
103	27	44	1153	<b>232</b>	45	1218
110	27	44	5249	282	45	1686
111	27	45	2323	£3 2	45	3342
122	27	48	3659	Ø8 2	46	2173
133	27	43	Ø6 Ø5	88 2	47	59 18
135	27	49	2066	Ø3 2	49	429 5
137	27	51	1315	Ø3 2	50	5626
139 _	27	53	4417	Ø3 2	51	1076
144	27	55	0060	<b>282</b>	50	29 5 5
155	27	56	0214	83 S	43	0332
156	27	56	3764	<b>68 5</b>	43	3773
166	27	59	Ø316	<b>63</b> 2	49	38 43
17 Ø	27	59	5043	Ø3 2	49	39 43
171	23	Ø1	5267	032	49	1574
172	23	02	536€	മ്മ 2	46	39 52
173	23	Ø5	3114	63 5	50	1657
18 Ø	28	<b>£</b> 3	4236	682	45	1649
19 Ø	23	<b>09</b>	1569	<b>632</b>	45	4206
200	23	10	6613	Ø3 2	50	4149
500	27	42	2383	<b>6</b> 8 2	44	1657
505	27	56	3272	<b>632</b>	50	1346

# VELOCITY TABLE Z

```
000047 0 0000 0002 000 125700 009390
000094 0 0002
000141 0 0004
000188 0 0006
000235 0 0008
000282 0 0010
000329 0 0012
000376 0 0014
000422 0 0016
000470 0 0018
  0515 Ø 0020
⊾∟0562 € 0022
000609 0 0024
000656 0 0026
000702 0 0028
000749 0 0030
```

# TC/TI

-000000 0 0000 0002 103 125700 009390

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

# TIDE NOTE FOR HYDROGRAPHIC SHEET

Processing Division: Atlantic Marine Center:

Hourly heights are approved for Form 362

Tide Station Used (NOAA Form 77-12): Indian Rocks Beach

Period: January-May, 1973

HYDROGRAPHIC SHEET: H-9390

OPR: 508

Locality: Off the west coast of Florida

Plane of reference (mean \*\*Dower\* low water): 1.3 ft. diurnal

Height of Mean High Water above Plane of Reference:
2.1 ft.

Remarks: Zone direct

Joint Hull



# U.S. DEPARTMENT OF COMMERCE **National Oceanic and Atmospheric Administration**

NATIONAL OCEAN SURVEY Rockville, Md. 20852

FEB 5 1976

CAW 31 youtelook

TO:

Alfred C. Holmes

Director, Atlantic Marine Center Attention: Chief, Processing Division

FROM:

Robert C. Munson

Associate Director

Office of Marine Surveys and Maps

Omission of High Water Line SUBJECT:

In accordance with telephone communication with Mr. William L. Jonns on January 29, 1976, hydrographic surveys H-9390, H-9350, and H-9351 of Project OPR-508, Offshore, Florida West Coast, may be considered complete and forwarded to this Office without the application of the mean high water line. Future surveys inshore from these should have the high water line shown.





# ATLANTIC MARINE CENTER APPROVAL SHEET FOR AUTOMATED SURVEY H-9390

A. All revisions and additions made on the smooth sheet during verification have been entered in the magnetic tape records for this survey. A new final position printout has/NAMENTALL been made. A new final sounding printout has/NAMENTALL been made.

Date: April 20, 1477

Signed: Mulling

Title:

Chief, Verification Branch

B. The verified smooth sheet has been inspected, is complete, and meets the requirements of the Hydrographic and AMC Manuals. Exceptions are listed in the verifier's report.

Date: 4-22.77

Signed:

Title: Chief, Processing Division

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	GEOGRAP							9390		
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NOAA FORM 77-27 (9-72) (PRESC BY HYDROGRAPHIC MANUAL 20-2.

# HYDROGRAPHIC SURVEY STATISTICS HYDROGRAPHIC SURVEY NO. $\frac{H-9390}{2}$

RECORDS ACCOMPANYING SURVEY: To be completed when survey is registered.

RECORD DESCRIPTION  with smooth PNO & smooth sheet excess overlay		AMO	MOUNT		RECORD DESCR	RIPTION	AMOUNT	
		1		BOAT SHEETS(5 parts 3-mylar)			1 - <i>CoPy</i> - <del>C</del> pa	
DESCRIPTIVE RE	EPORT			1	OVERL	AYS (prelimi	nary)	<sup>5</sup> %
DESCRIPTION	DEPTH RECORDS	HORIZ.			TOUTS	TAPE ROLLS	PUNCHED CARDS	ABSTRACTS/ SOURCE DOCUMENTS
Accordion Envelopes	2				22′			1
CAHIERS	2-with P/O a sawtooth re-	ž		Y				
VOLUMES	1							
BOXES				1-smo	oth			

T-SHEET PRINTS (List)

1-Chart markup 11412

SPECIAL REPORTS (List)

# OFFICE PROCESSING ACTIVITIES The following statistics will be submitted with the cartographer's report on the survey

	AMOUNTS						
PROCESSING ACTIVITY	PRE- VERIFICATION	VERIFICATION	REVIÉW	TQTALS			
POSITIONS ON SHEET				5166			
POSITIONS CHECKED		240	15				
POSITIONS REVISED		52	0				
DEPTH SOUNDINGS REVISED		600	• 60				
DEPTH SOUNDINGS ERRONEOUSLY SPACED		0	0				
SIGNALS ERRONEOUSLY PLOTTED OR TRANSFERRED		0	0				
		TIME (MA	NHOURS)				
TOPOGRAPHIC DETAILS		0	0				
JUNCTIONS		8	4	·			
VERIFICATION OF SOUNDINGS FROM GRAPHIC RECORDS		19	8				
SPECIAL ADJUSTMENTS		3	0				
ALL OTHER WORK		190	8				
TOTALS		220	20				
PRE-VERIFICATION BY		BEGINNING DATE	E	NDING DATE			
J. Murphy and R. Hill		03/18/	75	02/24/76			
VERIFICATION BY		BEGINNING DATE	E	NDING DATE			
L. G. Cram		06/16/	76	06/20/76			
REVIEW BY L. G. Cram		BEGINNING DATE	E	14/19/77			

(2-72) (PRES. BY HYDROGRAPHIC MANUAL, 6-94)

# VERIFIER'S REPORT HYDROGRAPHIC SURVEY, H\_- 9390

U.S. DEPARTMENT OF COMMERCE

INSTRUCTIONS - This form serves to identify items of a check list in verification together with items which are separately reported to the Reviewer. The form is not to be forwarded to the Reviewer. A report, which is prepared for the Reviewer, should identify items by number and letter and will be filed in the Descriptive Report until the survey is reviewed.

- CL Check List Items: should be checked as having been completed during the verification processes.
- R Report Item: This column refers to those items reported to the reviewer and is used to indicate the items discussed.

CL	R	Part III - JUNCTIONS (Continued)	CL	R
x		Remarks Required: Consider conditions after adjustments have been made; note adjustments made. Make special notes of Butt junctions and areas which are SUPERSEDED.	х	
х		Port IV - VOLUMES  11. All items affecting the plotting of the survey which are entered in the remarks columns of the sounding records were noted and check marked. In all cases appropriate action was taken and exceptions noted in the volumes.	Х	
х				
NA		Remarks Required: Mention deficiencies in completeness of notes or actions for the follow- ing:  (a) rocks  (b) line turns		
NA		(e) position values of beginning and ending of lines  (d) bar check or velocity correctors  (e) time recording  (f) notes or markings on fathograms	х	·
		(g) was reduction of soundings accurately done?  (h) was scanning accurate?  (i) were peaks at uneven intervals missed?		
Х		(i) were stamps completed? (k) references to adjacent features		
NA		13. All positions verified instrumentally were check marked in color in the sounding records, and verifier initialed the processing stamp.  Remarks Required: None	х	
		14. The plotting of all unsatisfactory crossings was verified.	х	
X		Remarks Required: None  15. All detached positions locating critical sound-		_
х		ings, rocks, buoys, breakers, obstructions, kelp, etc., were verified and the position num- bers are legible.	х	
	X X NA NA X	X X X NA NA X X X	10. Junctions with contemporary surveys were satisfactory except as follows:  Remarks Required: Consider conditions after adjustments have been made; note adjustments made. Make special notes of Butt junctions and areas which are SUPERSEDED.  Port IV - VOLUMES  11. All items affecting the plotting of the survey which are entered in the remarks columns of the sounding records were noted and check marked. In all cases appropriate action was taken and exceptions noted in the volumes.  Remarks Required: None  X  12. Condition of sounding records was satisfactory except as follows:  Remarks Required: Mention deficiencies in completeness of notes or actions for the following:  (a) tocks  (b) line turns  (c) position values of beginning and ending of lines  (d) bar check or velocity correctors  (e) time recording  (f) notes or markings on fathograms  (g) was reduction of soundings accurately done?  (h) was scanning accurate?  (i) were peaks at uneven intervals missed?  (j) were stamps completed?  (k) references to adjacent features  Port Y - MACHINE PLOTTING  13. All positions verified instrumentally were check marked in color in the sounding records, and verifier initialed the processing stamp.  Remarks Required: None  14. The plotting of all unsatisfactory crossings was verified.  X Remarks Required: None  15. All detached positions locating critical soundings, rocks, buoys, breakers, obstructions, kelp, etc., were verified and the position numbers are legible.	10. Junctions with contemporary surveys were satisfactory except as follows: Remarks Required: Consider conditions after adjustments have been made; note adjustments made. Make special notes of Burt junctions and areas which are SUPERSEDED.  Port IY - VOLUMES  11. All items affecting the plotting of the survey which are entered in the remarks columns of the sounding records were noted and check marked. In all cases appropriate action was taken and exceptions noted in the volumes.  Remarks Required: None  12. Condition of sounding records was satisfactory except as follows:  Remarks Required: Mention deficiencies in completeness of notes or actions for the following:  (a) rocks (b) line turns (c) position values of beginning and ending of lines (d) bar check or velocity correctors (e) time recording (f) notes or markings on fathograms (g) was reduction of soundings accurately done?  (h) was scanning accurate? (i) were peaks at uneven intervals missed? (j) were stamps completed? (k) references to adjacent features  Port Y - MACHINE PLOTTING  13. All positions verified instrumentally were check marked in color in the sounding records, and verifier initialed the processing stamp.  Remarks Required: None  14. The plotting of all unsatisfactory crossings was verified.  X Remarks Required: None  15. All detached positions locating critical soundings, rocks, buoys, breakers, obstructions, kelp, etc., were verified and the position numbers are legible.

Part V - PROTRACTING (Continued)  16. The protracting was satisfactory except as	CL	R	Part VIII - AIDS TO NAVIGATION  26. All fixed aids located together with those on	CL	R
follows:  Remarks Required: Refers to protracting in general except for specific faults repeated often, or faults in control information, which required considerable replotting or adjustments.	NĄ	-	the contemporary topographic sheets, have been shown on the survey.  Remarks Required: Conflicts of any nature listed.	NA	
7. The protractor has been checked within the last three months.  Remarks Required: Date of check, type of protractor and number.	NA		27. All floating aids listed in the Descriptive Report should be verified and checked in soft black pencil, including latitude and longitude and position identification. Remarks Required; None	<b>x</b>	
Part VI - SOUNDINGS  8. All soundings are clear and legible, and critical soundings are a little larger than adjacent soundings.  Remarks Required: None	Х		Part 1X - BOAT SHEET  28. The boat sheet was constantly compared with the smooth sheet with reference to notes, position of sounding lines and supplemental information.	x	
19. Sounding line crossings were satisfactory except as follows:			Remarks Required: None		
Remarks Required: Discuss adjustments.	Х		29. Heights of rocks awash were correctly reduced and compared with topographic information.		
20. The spacing of soundings as recorded in the records was closely followed;  Remarks Required: None	x		Remarks Required: Note excessive con- flicts with topographic information.	NA	
21. The scanning, reduction, spacing, plotting of questionable soundings have been verified.  Remarks Required: None	X	3	Part X - GENERAL  30. All information on the sheet is shown in accordance with figures 82 and 83 in the Hydrographic Manual (Pub. 20-2).  Remarks Required: None	х	
22. The smooth plotting of soundings was satisfactory except as follows:					
Remarks Required: — Refer to legibility, errors in spacing, and errors in numbers - but not to errors in scanning.	х		31. Unnecessary pencil notes have been removed from the sheet.  Remarks Required: None	x	
Part VII - CURVES  23. The depth curves have been inspected before inking.  Remarks Required: By whom was the penciled curves inspected. GFT	х		32 Degree, minute values and symbols have been checked; also electronic distance arcs have been properly identified and checked on the smooth sheet.	х	
24. The low-water line and delineation of shoal areas have been properly shown in accordance with the following:			Remarks Required: None		
<ul> <li>a. From T-Sheet in dotted black lines</li> <li>b. From soundings in orange</li> <li>c. Approximate position of sketched curve is dashed orange</li> </ul>	NA		33. The bottom characteristics are adequately shown.  Remarks Required: None	х	
d. Approximate position of shoal area not sounded in black dashed  Remarks Required: None			Part XI • NOTES TO THE REVIEWER  34. Unresolved discrepancies and questionable soundings.	x	
25. Depth curves were satisfactory except as follows:  (This statement should not refer to the manner in which the curves were drawn).  Remarks Required: Indicate areas where curves could not be drawn completely because of lack of soundings. For some inshore areas a general statement is sufficient.			35. Notation of discrepancies with photogram- metric survey inserted in report of unreviewed photogrammetric survey or on copy.	ı x	
			36. Supplemental information.	Х	
a general statement is sufficient.	1	1		1	1 '

# Verification Note Category II Survey H-9390

This appears to be an excellent basic survey. Soundings are in good agreement at crossings and the depth curves adequately delineate the features in this area of irregular bottom. The supplementary 36 foot curve was drawn to better show the irregularities at this depth.

It is recommended that this survey be used for charting. (Refer to Section K of the Descriptive Report.)

This survey appears to be well done and adequately defines the survey area. No additional work is recommended.

Norfolk, Virginia April 20, 1977 William L. Johns

Chief, Verification Branch

AMC

#### NAUTICAL CHART DIVISION

# **RECORD OF APPLICATION TO CHARTS**

9390 FILE WITH DESCRIPTIVE REPORT OF SURVEY NO.

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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.

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FORM CAGS-8352 SUPERSEDES ALL EDITIONS OF FORM CAGS-978.

USCOMM-DC 8558-P63