

FE284 WIRE DRAG

Diagram No. 1249

NOAA FORM 76-35A

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

DESCRIPTIVE REPORT

Type of Survey ... Wire Drag
Field No. R/H-80-1-74
Registry No. FE-284WD

H 10266

WD
~~DR~~ & DR
DR
DR

LOCALITY

State Florida
General Locality .. Atlantic Ocean
Sublocality Carysfort Reef

19 74

CHIEF OF PARTY
LCDR W.M. Noble

LIBRARY & ARCHIVES

DATE May 13, 1991

FE284 WIRE DRAG

CHTS

11451 'C'
11462
11450 expd 1/22 66
11460
11013 EXAM. NYC 6/15/93 JRT
411

HYDROGRAPHIC TITLE SHEET

FE-284 WD

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.

RH-80-1-74 ✓

State FLORIDA

General locality KEY LARGO ATLANTIC OCEAN

Locality CARYSFORT REEF

Scale 1:80,000 ✓ Date of survey SEPTEMBER 24, 1974 ✓

Instructions dated AUGUST 2, 1974 ✓ Project No. SP-AMC-6-R/H-74 ✓

Vessel NOAA SHIPS RUDE & HECK ✓

Chief of party LCDR W.M. NOBLE ✓

Surveyed by SHIPS PERSONNEL ✓

Soundings taken by echo sounder, ~~hand lead, pole~~ XXXXXXXX

Graphic record scaled by SHIPS PERSONNEL

Graphic record checked by SHIPS PERSONNEL

Protracted by SHIPS PERSONNEL

Soundings penciled by Reconnaissance hydrography plotted by ships personnel.

Soundings in ~~XXXXX~~ XXXXX feet at MLW ✓ XXXX

REMARKS:

AWOIS & SURF check 5/22/91 MCR

JCW/ML 5/15/91

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DESCRIPTIVE LETTER
TO ACCOMPANY FE-284WD
R/H-80-1-74
PROJECT SP-AMC-6-RU/HE-74
WIRE DRAG AND HYDROGRAPHY OPERATIONS
KEY LARGO, FLORIDA
ITEM C
1974
LCDR W.M. NOBLE

A. AUTHORITY

This project was authorized under Project Instructions SP-AMC-6-74 dated 2 August 1974 and Change #1 dated 20 August 1974. ✓

B. CHARACTER AND LIMITS OF THE WORK

The purpose of this project was to investigate an obstruction located at Latitude $25^{\circ}13'N$ and Longitude $80^{\circ}12'W$. This obstruction is listed as Item C in Project Instructions SP-AMC-6-74. The locality is covered by C&GS Charts 1249 and 1112. The limits of the survey consisted of drawing a 1 mile diameter circle around the charted position of the obstruction and investigating this area. The survey was conducted on a scale of 1:80,000 using visual control. The item is plotted in Lat. $25^{\circ}13.1'N$, Long. $80^{\circ}12.2'W$ on chart 11462. See section 7.1.a. of the Evaluation Report.

C. CONTROL

Visual control was used for this survey. We used signals which were plotted on C&GS Chart 1249. For a listing of signals see ATTACHMENT I. ✓

D. DATE OF SURVEY

Operations for SP-AMC-6-74 Sheet RU/HE-80-1-74 commenced on 24 September 1974 and terminated on the same day. ✓

E. TIDAL REDUCERS

Preliminary reduction of the data recorded on September 24, 1974 was done using predicted tides. Actual tidal data will be furnished by the Rockville Office for the standard gauge at Miami Harbor Entrance, Florida with corrections applied for Angelfish Key. Servicing and levels to this gauge were not required. See "TIDE NOTE FOR HYDROGRAPHIC SHEET" included in this report. ✓

F. GROUNDINGS AND HANGS

No groundings or hangs were discovered during this project. ✓

G. GENERAL NOTES

All our work on this project was done by plotting our position directly onto mylar overlays that were placed on Chart 1249. Visual control was used for this survey. For a listing of signals utilized see ATTACHMENT I. ✓

H. CURRENTS

This project was located on the outskirts of the Gulf Stream and its effects influenced the direction of the current in the area. We discovered a North East current and therefore planned our wire drag operations to run in this direction.

I. DISCREPANCIES WITH RECENT SURVEYS AND CHARTS

Charted depths of the area surveyed were found to be accurate. The ships ran reconnaissance hydrography immediately prior to wire dragging. We used this recon hydrography to plan our drag depth. We failed to locate an obstruction with a least depth of 19' at the charted position Latitude $25^{\circ}13'N$ and Longitude $80^{\circ}12'W$ (Chart C&GS 1249). The white and orange buoy SP"C" was located at a position different than the position indicated on Chart 1249. It was located about 3 miles west of this position. See Attachment III.

J. PERSONNEL AND EQUIPMENT

The RUDE acted as Guide Vessel, the HECK as End Vessel. The launches and skiffs were used as tenders. The echo sounder used by Ship RUDE for this survey was Raytheon Fathometer, Model DE723, serial number 1283. The HECK used the same type of fathometer, serial number 1588.

The corrections applied to the soundings taken from these fathometers were determined by bar checks and squat and settlement values.

Bearings to end buoys and to opposite vessels were made on the Sperry Gyro Repeaters. Standard wire drag equipment was utilized throughout the survey. Officers aboard during work on this survey included: LCDR W.M. Noble, LTJG K.F. VanTrain, ENS C.E. Mericas, and ENS G.M. Albertson.

K. MISCELLANEOUS

This item was described as an obstruction with a least depth of 19' and charted at a position of Lat. $25^{\circ}13'N$ and Long. $80^{\circ}12'W$ on chart 1249. According to this position the obstruction was lying in 70-80 feet of water. The area to the west of this obstruction was shoal and because of the coral bottom the depths ranged from 17' to 43'. This shoal area would have been difficult to investigate using wire drag methods therefore we developed this area with a Reconnaissance Hydrography Survey. We discovered from this Hydro Survey that the depths indicated on Chart 1249 for this area were accurate.

On the east side of this shoal area the depths dropped from 40' down to 80'. We used wire drag methods in this deeper area.

Since this obstruction had a least depth of 19' we set our up-rights down to 40 feet which was more than deep enough to locate this obstruction. The RUDE ran its towing course along the 40' ledge while the HECK was in the deeper water. The wire drag covered an area of 1/2 mile to the east of the charted position of the obstruction. The wire drag and hydrography surveys combined covered a 1 mile diameter area around this item. See Evaluation Report section 4.a.

L. SUMMARY

We failed to locate an obstruction with a least depth of 19' at the charted position of Item C. This position, Lat. 25°13'N and Long. 80°12'W, was cleared by wire drag to an effective depth of 37.5 feet.

However, our Recon Hydrography Survey which was run just to the west of the obstruction did show areas with a depth of 19' and even shoaler to 17'. These shoal areas are already indicated on Chart 1249. It's possible that the obstruction is actually 1/2 mile south west of the charted position. If this is the case, the item is a coral bed with a least depth of 19'. Concur

M. RECOMMENDATIONS

Recommend that Item C which is currently listed as an accurate position on C&GS Chart 1249 be removed from the chart. See Evaluation Report sections 4.a., 4.b., and 7.a.

LIST OF ATTACHMENTS

- I. A) VISUAL CONTROL SIGANLS
B) VISUAL CONTROL SIGNALS: SOURCE OF LOCATION
- II. ABSTRACT OF CORRECTIONS TO ECHO SOUNDER *
 - A) BAR CHECKS AND LEAD LINE CHECKS
 - B) SQUAT AND SETTLEMENT
- III. AIDS TO NAVIGATION
- IV. STATISTICS
 - A) WIRE DRAG
 - B) HYDROGRAPHY
- V. PROJECT INSTRUCTIONS *
 - A) CHANGE #1
- VI. A) TIDES, SMOOTH *
 - B) REPORT ON TIDE STATION *

* Filed with field records.

ATTACHMENT I

VISUAL CONTROL SIGNALS

OBJECT	LATITUDE	LONGITUDE	REMARKS
1. *ELBOW REEF LIGHT BUOY	25°08'38".923	80°15'30".687	Left Object
2. **TTR RADAR DOME, USA	25°16'34".169	80°18'13".799	Center Object
3.***TURKEY POINT FLORIDA POWER & LIGHT NORTH STACK	25°26'08".9026	80°19'51".0580	Right Object

* Refer to quad 25080L, station 1018 for location of ELBOW REEF LIGHT BUOY located by 3rd order triangulation.

** U.S. Army located this signal, 3rd order triangulation. See Attachment IB. This was called ARMY AM 40 control site.

*** See Attachment IB for further information on location of TURKEY POINT N. STACK.

G-14791

FIELD GEOGRAPHIC POSITIONS
INTERSECTION STATIONS

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

Class 111

21

LOCALITY Dade

NORTH AMERICAN 1927 DATUM First ORDER TRIANGULATION. STATE Florida

STATION	LATITUDE AND LONGITUDE		AZIMUTH			BACK AZIMUTH			TO STATION	DISTANCE
										METERS
Florida City Municipal Water Tank 1961 r'71' d.	25 27	09.7609	102 29	09.3	282 27	03.0	CRATER ULIS	8403.506		
	80 29	05.4040	163 40	06.7	343 39	36.5		6970.954		
Leisure City Water Tank 1961 r'71' d.	25 29	48.7250	12 15	09.3	192 14	56.4	ROBY COLEMAN	3954.019		
	80 25	12.2606	143 43	20.2	323 42	58.9		2342.300		
Homestead AFB S Tank Beacon 1961 r'71' d.	25 29	45.2660	46 40	16.0	226 39	14.7	ROBY COLEMAN	5475.167		
	80 23	19.7319	113 46	51.6	293 45	41.8		4540.306		
Homestead AFB N Tank 1961 r'71' d.	25 30	17.8292	34 25	23.3	214 24	38.1	ROBY COLEMAN	5769.594		
	80 23	45.5447	104 37	11.6	224 36	12.9		3934.834		
Homestead AFB Control Tower 1961 r'71' d.	25 29	18.4654	49 31	10.9	229 30	18.0	ROBY COLEMAN	4517.109		
	80 23	39.3099	125 18	28.5	305 17	27.1		4878.982		
South Dade Farm Labor Camp Water Tank 1961 r'71' d.	25 28	25.9419	211 42	23.8	31 42	58.9	WALDIN RM 1 SAUNDERS	4336.482		
	80 24	38.3746	276 56	52.1	96 57	39.3		3087.064		
Turkey Point Fla Pwr and Lt N Stack d.	25 26	08.9026	56 07	18.8	236 06	36.8	PAJON SAUNDERS	3292.964		
	80 19	51.0580	127 45	58.5	307 44	42.2		6276.451		
Turkey Point Fla Pwr and Lt S Stack d.	25 26	07.1120	56 55	51.7	236 55	09.7	PAJON SAUNDERS	3263.088		
	80 19	51.0361	128 09	29.7	308 03	13.4		6310.884		
Florida City AT and T Microwave KIP59 1961 r'71' d.	25 19	31.3801	253 01	15.2	73 03	05.7	MOORE SHORT	7552.791		
	80 24	16.1860	319 48	38.9	139 49	34.0		5590.861		
Homestead Rad Sta NSDB Mast 1961 r'71' d.	25 27	08.1383	46 59	49.4	226 58	20.3	LAMB CRATER	7930.345		
	80 31	00.3631	110 23	55.6	290 27	38.7		5830.306		
Florida City LOT d.	25 26	01.1514	217 38	09.1	37 38	46.2	HOMESTEAD RM 4 IDA	3947.149		
	80 30	07.4716	310 48	22.9	130 49	51.4		7616.070		

No check on this position.

Abbreviations used: d.=described; m.=marked; n.=not; r.=recovered; l.=lost; p.=probably.
(Examples: n.d.=not described; p. l.=probably lost.)

Comp. G.C.R. USCOMM-DC 30340-P63

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

HYDROGRAPHIC FIELD PARTY 745 FEB TO APRIL, 1967

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

I recommend that the following objects which have ~~been~~ 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 Kenich Lee Harris, ENS, USESSA.

J. M. Ward LT-USESSA
Chief of Party.

copy sent to - C-421

STATE	CHARTING NAME	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							
	1	W & G LT	HOMESTEAD AFB, SOUTH WATER TANK, BEACON, 1961	✓	25 29	45.200	80 23	19.717	NA '27	3 RD ORDER TRIANGULAT. G-12563	1961	X	X	141-SC, 849, 1249 1002, 1007, 1112
	2	TANK	SOUTH DADE FARM LABOR CAMP, WATER TANK, 1961	✓	25 28	25.889	80 24	38.481		"	1961	X		849, 1249 1112
	3	R. TWR. E. of 4	CAPE FLORIDA, RADIO STATION WRIZ, EAST MAST OF FOUR (163 FT.) 1550 KC	Check 1222(6)	25 38	59.70	80 09	35.52		TOPO BY THEODOLITE	1967	X	X	847-SC, 848, 1249 1002, 1007, 141-SC
	4	R. TWR. W. of 4	CAPE FLORIDA, RADIO STATION WRIZ, WEST MAST OF FOUR (163 FT.) 1550 KC	Check 1222(6)	25 39	03.16	80 09	38.95		"	1967	X	X	141-SC, 847-SC 848, 1002, 1007, 1249
	5	STACK	COCONUT GROVE, INCINERATOR STACK CONCRETE, CITY OF MIAMI 200 FT.		25 43	35.41	80 15	26.78		THEODOLITE CUTS	1967	X		141-SC, 847-SC 848, 1249, 1248
	6	TANK FR LT	LITTLE RIVER, WATER TANK		25 50.88	136.2	80 11.50	93.3		SEE LOCATION DATA FOR POSITION CHARTED ON 12487-8545			X	847-SC
	7	TANK FR LT	HOMESTEAD AFB, NORTH WATER TANK, 1961	✓	25 30	17.762	80 23	45.530		3 RD ORDER TRIANG. G-12563	1961	X		849, 1249 141-SC
	8	W. TWR FR LT	JEWFISH CREEK WEST TRANSMISSION TOWER	✓	25 11.08		80 23.36			PHOTOGRAM. RS-869	1964(7)	X		849, 1249 141-SC
	9	E. TWR FR LT	JEWFISH CREEK EAST TRANSMISSION TOWER	✓	25 11.01		80 23.22			PHOTOGRAM. RS-869	1964(7)	X		849, 1249 141-SC
	10	RAD. DOME	TTR RADAR, KEY LARGO ARMY HM-40 CONTROL SITE		25 16	34.169	80 18	13.799		U.S. ARMY 3 RD ORDER TRIANG.	1966?	X	X	849, 1249 141-SC, 1112

* THESE WILL PLOT ON OR IN THE MARGIN OF CHART 849. USE YOUR RULES OF CONVENTION TO DECIDE IF YOU WANT TO CHART THEM. THE RED & WHITE TANK IS DESIRABLE IN ORDER NOT TO CONFUSE IT WITH THE HAFB S. WATER TANK BEACON

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
AUTOMATION ATTACHED

SAJCS

4 April 1967

SUBJECT: Geodetic Position - Radar Dome - US Army
HAWK Battery "B"; Key Largo, Florida

Lt. Gerald M. Ward
Coast and Geodetic Survey
Hydrographic Field Party 745
P. O. Box 105
Coconut Grove Station
Miami, Florida

Dear Sir:

Reference your letter addressed to the District Engineer dated 20 March 1967 concerning location of Radar Dome at Key Largo, Florida.

The attached description card and data sheet contains information on location of the TTR Radar at the HM 40 Control Site on Key Largo. Information available at this office indicates that the TTR Radar is about 45' above ground level and that a second Radar Dome at the site is about 10' to 15' higher than the TTR. Coordinates are available for the TTR only.

We have been advised that this information is not restricted and that you may plot the point as a landmark on the Coast Chart, if desired.

Sincerely,

2 Incl
as

CECIL L. PARKER
Chief, Survey Branch
Engineering Division

574

MAY 3 1967

ATTACHMENT III

AIDS TO NAVIGATION

BUOY SP"C" LAT. 25°13.1' LONG. 80°10.3'

NOTE: Position determined using visual control. See Attachment I.

ATTACHMENT IV

STATISTICS

A) WIRE DRAG

DATE	DAY LETTER	STRIP NO.	VOLUME NO.	NO. OF POSITIONS	L.N.M.	S.N.M.
September 24, 1974	A	1	I	1-8	1.5	.75

B) HYDROGRAPHY

SHIP	POSITIONS	N.M. OF SOUNDING LINES	S.N.M. OF TOTAL AREA
RUDE	24	4.5	.52

2/28/75

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

Tide Station Used (NOAA Form 77-12): Miami Beach, Florida

Period: September 15-30, 1974

HYDROGRAPHIC SHEET: ~~40-5-74~~(RH-80-1-74) FE-284WD

OPR: SP-AMC-6-RU/HE-74

Locality: Off eastern coast of Key Largo, Florida

Plane of reference (mean ~~low~~ low water): 2.4 ft.

Height of Mean High Water above Plane of Reference is 2.4 ft.

Remarks: Recommended zoning:

Time Correction:

+ 20 min.

Range Ratio

Apply x 0.956 to
Miami Beach heights

for James R. Hubbard
Chief, Tides Branch

HYDROGRAPHIC SURVEY STATISTICS
REGISTRY NO.: FE-284WD

Number of positions	16
Number of soundings	N/A
Number of control stations	4

	<u>TIME-HOURS</u>	<u>DATE COMPLETED</u>
Preprocessing Examination	0	
Verification of Field Data	2	23 JUL 1986
Quality Control Checks	0	
Evaluation and Analysis	8	24 JUL 1986
Final Inspection		
TOTAL TIME		
Marine Center Approval		28 JUL 1986

Transmittal letter of survey and survey records will be included in the Descriptive Report to identify the records accompanying the survey.

N/CG244-30-91

LETTER TRANSMITTING DATA

DATA AS LISTED BELOW WERE FORWARDED TO YOU BY (Check):

- ORDINARY MAIL
- AIR MAIL
- REGISTERED MAIL
- EXPRESS
- GBL (Give number) _____

DATE FORWARDED
May 2, 1991

NUMBER OF PACKAGES
2 - envelopes

TO:

┌
Mr. George Mastrogianis
NOAA/National Ocean Service
DATA CONTROL SECTION N/CG243 WSC 2 Rm 151
ROCKVILLE, MD 20852
└

NOTE: A separate transmittal letter is to be used for each type of data, as tidal data, seismology, geomagnetism, etc. State the number of packages and include an executed copy of the transmittal letter in each package. In addition the original and one copy of the letter should be sent under separate cover. The copy will be returned as a receipt. This form should not be used for correspondence or transmitting accounting documents.

Survey FE-284WD
RH-80-1-74
SP-AMC-6-R/H-74

Envelope 1: ✓ Original Descriptive Report

Envelope 2: ✓ 1 WD volume for HECK
 ✓ 1 WD Volume for RUDE
 ✓ 1 Sounding Volume for RUDE
 ✓ 1 Accordian file containing - Field Plots, Smooth Tender REcord,
 Data removed from Descriptive Report, Smooth Tides - hourly
 heights & AMC listing, Fathogram - RUDE.

FROM: (Signature)

R. D. Sanocki, N/CG2441

RECEIVED THE ABOVE
(Name, Division, Date)

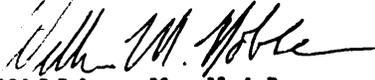
Dwayne S. Clark
5/13/91
N/CG243

Return receipted copy to:

┌
R. D. Sanocki
NOAA/National Ocean Service
Atlantic Hydrographic Section, N/CG2441
439 West York Street
Norfolk, VA 23510-1114
└

APPROVAL SHEET

All records of this survey prior to smooth plotting are hereby approved. The field work was personally supervised by the undersigned and the boat sheet and records were inspected daily.



William M. Noble
LCDR NOAA
Acting Commanding Officer
NOAA Ships RUDE & HECK

ATLANTIC MARINE CENTER
MODIFIED EVALUATION REPORT

SURVEY NO.: FE-284WD

FIELD NO.: R/H-80-1-74

Florida, Atlantic Ocean, Carysfort Reef

SURVEYED: September 24, 1974

SCALE: 1:80,000

PROJECT NO.: SP-AMC-6-74

SOUNDINGS: Wire Drag and
Raytheon DE-723
Fathometer
(Reconnaissance Hydro-
graphy)

CONTROL: Visual (Sextant
Fixes)

Chief of Party.....W. M. Noble

Surveyed by.....K. F. VanTrain
.....G. M. Albertson
.....C. E. Mericas

1. INTRODUCTION

a. The purpose of this survey is adequately defined in the Descriptive Report. Processing of this survey is modified in that only hangs, groundings, detached positions, and clearance depths over the hangs, groundings, and the assigned charted features were verified. There were no hangs or groundings obtained by this survey. A clearance depth was obtained and verified over an assigned charted feature. Data pertaining to the clearance depth has not been smooth plotted; however, a plot indicating verified effective wire drag depths based upon the field sheet and several verified positions was made on a section of Nautical Chart 11462 and is included in this report.

b. The reconnaissance hydrography conducted by the field unit has not been verified; however, the field records have been examined for any indication of an obstruction rising to a reported depth of 19 feet. No obstruction was found.

c. Corrections and notes made by the evaluator in the Descriptive Report are denoted in red ink.

2. CONTROL AND SHORELINE

a. The control used for this survey is adequately described in the Descriptive Report.

b. There was no shoreline in the survey area.

3. HYDROGRAPHY

The echo sounding obtained during this survey are of reconnaissance value only and are not considered suitable for nautical charting. An examination of these soundings based upon the field plot provided found them to be consistent with depths charted in the common area.

4. CONDITION OF SURVEY

The adequacy of the final field sheets, survey records, and reports, and the surveys' conformity to the requirements of the HYDROGRAPHIC MANUAL and the WIRE DRAG MANUAL were not considered during the modified processing of this survey. However, deficiencies of this survey relative to its adequacy to resolve the assigned item are noted where they impact charting recommendations made in this report and the Descriptive Report. The following is noted:

a. The wire drag coverage failed to meet the requirement to cover an area with a 1/2 mile radius of the charted position of the obstruction investigated. This was a requirement of section 2.3. of the Project Instructions. Approximately 65% of the required area was considered covered.

b. The hydrographer considered the reconnaissance hydrography in combination with the wire drag data is making the recommendation to remove the reported obstruction investigated from the chart. Considering the line spacing (approximately 240 meters) of the reconnaissance hydrography and the area of the bottom insonified by the echo sounder the conclusion of the recommendation in section M. of the Descriptive Report is unwarranted. The hydrographer had no knowledge of the nature of the obstruction reported other than its reported depth and position as noted in the Project Instructions. See also section 7.a. of this report.

5. JUNCTIONS

Not applicable.

6. COMPARISON WITH PRIOR SURVEYS

Not considered applicable.

7. COMPARISON WITH CHART 11462, 19th Ed., October 20, 1984

a. Hydrography

A comparison between the charted hydrography and the reconnaissance hydrography conducted by the present survey is discussed in section 3. of this report.

Item c, a dangerous obstruction reported with a depth of 19 feet in Latitude 25°13'N, Longitude 80°12'W by the Project Instructions is actually charted in Latitude 25°13.1'N, Longitude 80°12.2'W. Chart Letter 352 (1960) which is a report from the Ship SS COTTON STATE that struck bottom on March 15, 1960, states the position to be Latitude 25°13.08'N, Longitude 80°12.23'W. A copy of this letter is attached to this report. The Project Instruction's position is considered incorrect. It should be noted that the hydrographer based his investigation centered on the position provided by the Project Instructions.

The present survey cleared the positions noted above by an effective depth of 38 feet. There is no indication from the present survey of shoaling to 19 feet where the vessel reported striking the bottom. However, as noted by the hydrographer in section L. of the Descriptive Report, there is a shoal to 17 feet approximately 0.4 nautical miles to the south southwest of Carysfort Reef and another shoal to the northeast approximately 0.4 nautical miles. If the vessel was traversing the area on a southwest or northeast bearing, it is probable that it struck either of these shoals. Therefore, it is recommended that the 19-foot obstruction reported as charted be deleted from the chart.

b. Aids to Navigation

One fixed aid to navigation was used as a visual control station and is listed in Attachment I of the Descriptive Report. A floating aid to navigation was also located which is listed in Attachment III of the Descriptive Report. It should also be noted that the floating aid is not presently charted.

8. COMPLIANCE WITH INSTRUCTIONS

This survey adequately complies with Project Instructions except as noted in section 4. of this report.

9. ADDITIONAL FIELD WORK

The adequacy of this survey was not generally considered except as it served charting needs. No additional field work is recommended.



R. D. Sanocki
Chief, Hydrographic Surveys
Processing Section
Modified Evaluation and
Analysis

ATTACHMENT

352

(1960)

Handwritten initials and marks

SS COTTON STATE
90 Broad Street,
New York, N.Y.

Galveston, Texas,
March 21, 1960.

Commander House, USCG.
209 Custom House,
Galveston, Texas,

Copy to
USN Hydrographic Office,
Washington, D.C.

Sir,

As requested by the Coast Guard, Galveston, Texas, herewith
is forwarded the position in which SS Cotton State struck bottom
at 0619, 3/15, 1960.

The position was taken by radar and is 0.5 mile from Carysfort
Reef Light on a bearing of 120 degrees true - or 25-13-05 North
80-12-14 West.

Yours very truly

For captain C.T. Eason

*Ship struck aft-damaged plates
draft 19 feet*

Reported reef or sunken object

*US Coast Guard Casualty report dated
relat from CG by telephone 4/19/60*

*OK for 112
1249
1350*

Chart - 112 charts rep

Applied thru Aid perf 5/1/60 etc

San Boulder, 2. mts.

Charts

*1002 - No corr. OS 7/11/61 Scale too small
1007 - No corr. #24. Rescale to small
1112 - appl. 7/11/61
1249 - App 11/16/61 OS
1350 - appl.*

352

NM. 19/60

APR 20 1960

INSPECTION REPORT
FE-284WD

The completed survey has been inspected with regard to survey coverage, investigation of hangs and clearance depths, cartographic symbolization, and verification or disproval of charted data. The survey complies with National Ocean Service requirements except as noted in the Evaluation Report. The survey records comply with NOS requirements except where noted in the Evaluation Report.

Inspected



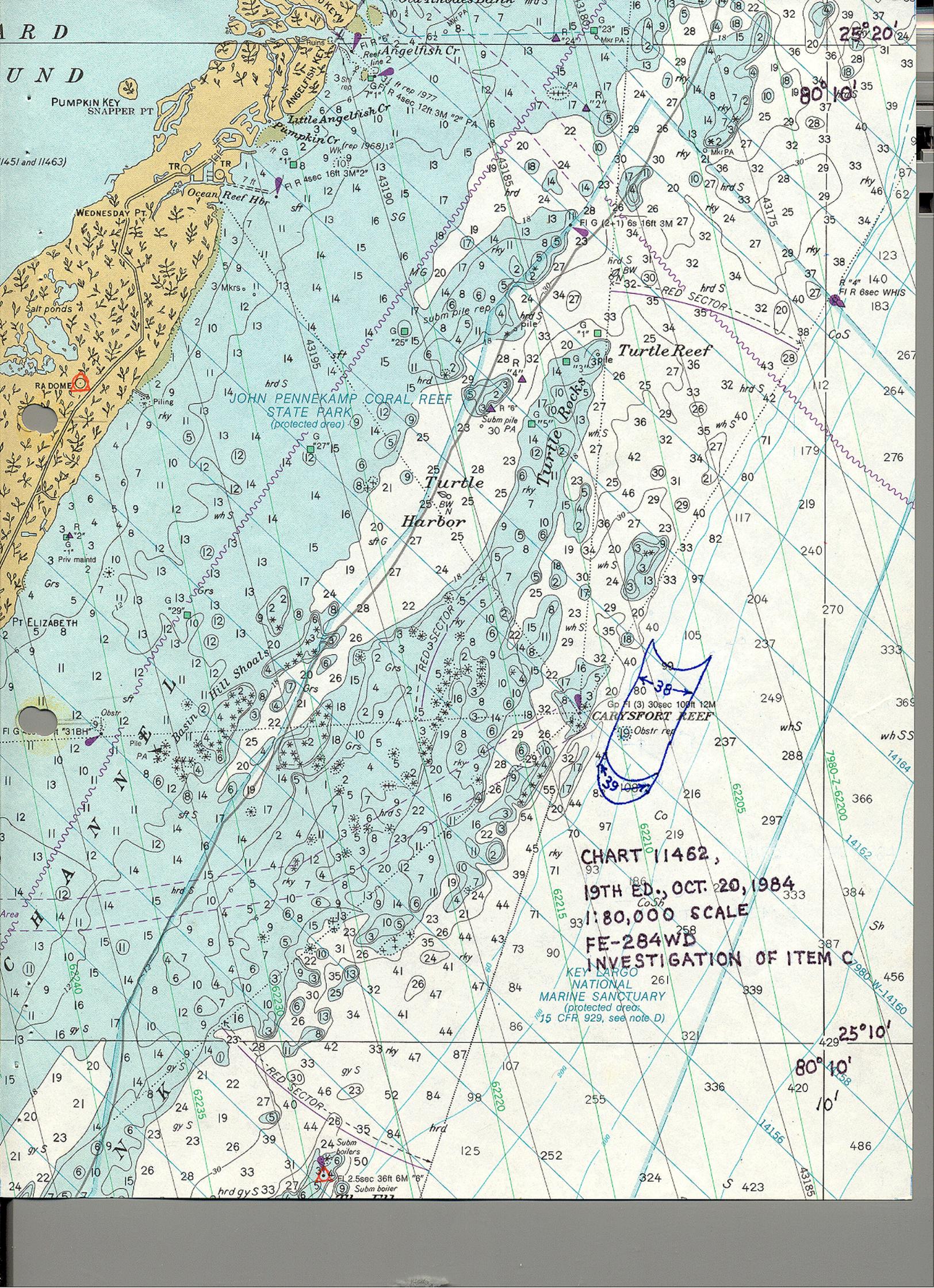
David B. MacFarland, Jr., CDR, NOAA
Chief, Hydrographic Surveys Branch

Approved July 28, 1986



Wesley V. Hull, RADM, NOAA
Director, Atlantic Marine Center

ARD
UND



PUMPKIN KEY
SNAPPER PT

(1451 and 11463)

WEDNESDAY PT

JOHN PENNEKAMP CORAL REEF
STATE PARK
(protected area)

Turtle
Harbor

Turtle Reef

CARYSFORT REEF

CHART 11462,
19TH ED., OCT. 20, 1984
1:80,000 SCALE
FE-284WD
INVESTIGATION OF ITEM C

KEY LARGO
NATIONAL
MARINE SANCTUARY
(protected area)
15 CFR 929, see note D)

Hand-drawn blue shape with arrows and numbers 38 and 39.

25° 20'

80° 10'

25° 10'

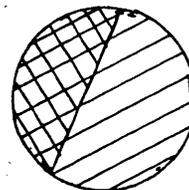
80° 10'

10'

80° 16'

80° 13'

80° 10'
25° 15'



25° 11'

OPR-SP-AMC-6-RU/HE-74

ITEM C

HYDROGRAPHIC & WIRE DRAG SURVEY
KEY LARGO (CARYSFORT REEF), FLORIDA

NOAA SHIPS: RUDE & HECK
W.M. NOBLE, CHIEF OF PARTY

SEPTEMBER 1974

SCALE 1:80,000

C&GS CHART 1249



— REPRESENTS WIRE DRAG WORK



— REPRESENTS HYDROGRAPHIC WORK

