

8984

0119

Diag. Cht. No. 901-2,

Form 504

U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey HYDROGRAPHIC

Field No. WH 10-1-68 Office No. H-8984

LOCALITY

State Puerto Rico

General locality South Coast of Puerto Rico

Locality Isla Cueva to Punta Jarabade

1968 + 69

CHIEF OF PARTY

CDR Wayne L. Mobley, USESSA, Comdg.

LIBRARY & ARCHIVES

DATE 9-12-73

USCOMM-DC 5087

*Chart
901*

8984
8984
8984
8984

HYDROGRAPHIC TITLE SHEET

H-8984

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.

Wh 10-1-68

State Puerto Rico

General locality South Coast of Puerto Rico

Locality Southwest Coast of Puerto Rico between ~~Punta Guayan~~ ^{Isla Cueva to} and Punta Jorobado

Scale 1:10,000 Date of survey March ^{April} 1968-1969

Instructions dated 24 January 1969 Project No. OPR-423

Vessel USC&GSS WHITING

Chief of party CDR Wayne L. Mobley

Surveyed by ENS Charles Hardt, ENS Clarence Tignor

Soundings taken by echo sounder, hand lead, pole Echo sounder and pole

Graphic record scaled by Ship's personnel

Graphic record checked by Ship's personnel

Positions checked by W.L. Jonns, F. Bean Automated plot by Pacific Marine Center

~~Positions~~ checked by B.T. Davis Gerber Digital Plotter

Soundings ~~performed~~ by W.L. Jonns, B.T. Davis

Soundings in ~~XXXXXX~~ feet at MLW ~~XXXXXX~~

REMARKS: The major portion of the survey was accomplished during the 1968 Field Season (Part I). Additional work was required during the 1969 Field Season (Part II).

Applied to stb 11-16-73
COB

cht
901
920
NO SDQS
IN AREA

PART I

DESCRIPTIVE REPORT

To Accompany

HYDROGRAPHIC SURVEY

H-8984

WH 10-1-68

1:10,000

1968

USC&GSS WHITING's

LAUNCHES I & II

CDR Wayne L. Mobley, USESSA, Commanding

A. PROJECT:

This survey was conducted on project OPR-423 under the authorizations contained in instructions dated 24 January 1968.

B. AREA SURVEYED:

The area surveyed is on the south coast of Puerto Rico from longitude $66^{\circ} 57'30''W$ to longitude $67^{\circ} 05'00''W$ and from the beach southward to latitude $17^{\circ} 55'00''N$. This survey junctions with WH 10-4-68 (H-8987) and WH 10-3-68 (H-8986) on the south and on the west by WH 10-2-68 (H-8985). This survey was conducted from March 12, 1968 through April 10, 1968.

April 3, 1969

C. SOUNDING VESSEL:

Both launch I and launch II were used on this survey. Launch I work is from position #6414 through 7194 inclusive; launch II work is from position #1 through 2279 inclusive and 5000 through 6413 inclusive. All launch work is plotted in black. In addition pole soundings made by skiff are numbered from position 4000 to 4030 and 9000 to 9079 inclusive. Their soundings are plotted in blue. *whaler pos. 4300 thru 4373*

D. SOUNDING EQUIPMENT:

All soundings made by the launches were made with Raytheon DE-723 survey fathometers. Launch I used fathometer #251 and launch II used fathometers #213 and #250. Corrections were determined by daily bar checks and serial temperature observations.

E. SMOOTH SHEET:

The smooth sheet will be plotted by the Pacific Marine Center. There are two boat sheets, which when combined in the smooth plotting, will result in a 36x60 smooth sheet. The two boat sheets were necessary in order to meet the sheet size restrictions imposed by the plotter bed of the WHITING computer-plotter system. The effective plotting size is 31.4x34 inches.

Both boat sheets were constructed and plotted on board the WHITING on the computer-plotter system. With this system the position point is the middle of the left edge of the right-hand digit of the plotted sounding (i.e. 20)
↑

F. CONTROL:

Two methods of horizontal control were used on this survey. Some of the inshore areas were controlled by conventional visual methods using three-point sextant fixes to signals on the beach. Other inshore areas used visual methods of control but used the hyperbolic Hi-Fix arcs as the system of sounding lines. The areas offshore from the reef lines were controlled by hyperbolic mode Hi-Fix using the arcs as the system of sounding lines.

The three Hi-Fix stations were: 1799.6 kHz

MASTER - Lat. $17^{\circ}58'15.89''N$; long. $67^{\circ}02'44.41''W$ \odot 900

SLAVE 1 - Lat. $17^{\circ}56'07.50''N$; long. $67^{\circ}11'32.85''W$

SLAVE 2 - Lat. $17^{\circ}56'25.71''N$; long. $66^{\circ}57'20.33''W$ \odot 902

The Hi-Fix report for this project should be consulted for the reliability of the Hi-Fix control.

Signals were obtained from sheets T-13120, T-13121, and T-13122. A list of signals is appended to this report.

G. SHORELINE:

Shoreline on these boat sheets came from the photo manuscripts listed in "F.". It is believed to be representative but not exact due to the overhang of the dense mangrove which covers nearly the entire shoreline. *Reviewed manuscripts were used on the smooth sheet*

H. CROSSLINES:

Crosslines were run to the extent of approximately 8 to 10%. In certain areas they are of doubtful value because of irregularity of the bottom. In the areas where the bottom is fairly regular the crossline agreement is good.

I. JUNCTIONS:

All junctions are good with the exceptions of occasional discrepancies up to 2 feet scattered throughout. This is probably caused by the irregular coral growth on the bottom.

J. COMPARISON WITH PRIOR SURVEYS:

There were no presurvey review items on this survey. The prior survey for this area is register No. 2638, 1:20,000, 1903. Any comparison of the new survey with the prior one would be of historical interest only.

K. COMPARISON WITH CHART:

This survey compares reasonably well with chart No. 901, 9th edition, March 1, 1965, scale 1:100,000, considering that the chart is based on the 1903 survey.

L. ADEQUACY OF SURVEY:

This survey is complete and adequate to supersede prior surveys for charting. For the purpose of producing a new 1:20,000 scale chart, however, more investigations of the numerous coral reefs and shoals should be made.

M. AIDS TO NAVIGATION:

There are no aids to navigation on this survey.

N. STATISTICS:

<u>Launch I</u>	- Positions-----	2193
	Miles of sounding-----	258.1
<u>Launch II</u>	- Positions-----	2279
	Miles of sounding-----	234.5
	Skiff positions-----	110
	Area surveyed-----	19.1 sq. nautical mi.

O. MISCELLANEOUS:

The area covered by this survey is primarily a coral bottom with many reefs above the sounding datum. Many blank areas appear on the boat sheets and should not be interpreted as unsurveyed areas as soundings were made as close as possible to the reefs. Elevations on these reefs and other rocks, etc., were made by the photogrammetrist assigned to this survey, Mr. Keselering.

P. RECOMMENDATIONS:

Although the data on the boat sheets is assumed to be valid, a sounding-by-sounding examination of the final plot was not made. Since the possibility exists that erroneous data could have been plotted by the computer-plotter system, the final plot is conceivably of less than boat sheet standards.

Q. REFERENCES TO REPORTS:

Reference is made to the following reports for obtaining the pertinent data:

1. Fathomster Report
2. Hi-Fix Report
3. Computer-Plotter Report

Jeffrey S. Carlen

HI-FIX CORRECTIONS
 WH 10-1a-68
 LAUNCH #2

DAY	POS #	PAT I	PAT II	TIME
089	1348-1381	+.08	+.09	114730-12 5400
092	1382-1591	+.13	+.09	100915-151245
093	1592-1755	+.18	+.09	091900-125515
094	1756-1914	+.19	+.10	094200-145645
095	1915-2150	+.18	+.10	091130-150545
100	2153-2168	+.18	+.10	094645-100730
	2169-2200	+.15	+.09	101600-134615
	2201-2251	+.12	+.09	150545-161345
101	2252-2260	+.18	+.10	091845-093115

WH 10-1A-68
 LAUNCH #1

091	6414-6506	+.08	+.10	135930-160900
092	6507-6757	+.08	+.24	081545-160900
093	6758-6813	+.13	+.12	091130-101245
	6814-6872	+.06	+.10	104500-115115
094	6873-6918	+.08	+.24	091245-102300
095	6941-7103	+.16	+.11	091730-135645
100	7104-7172	+.12	+.12	094415-112845

WH 10-1B-68
 LAUNCH #1

087	5730-5801	+.02	-.01	150430-161845
088	5847-5905	+.03	+.07	135545-152400
	5906-5911	+.02	-.01	154500-155015
089	5912-6114	+.02	-.01	100415-155300
090	6145-6273	+.03	+.05	090115-121130
	6274-6284	+.02	-.02	121130-122230
	6285-6306	+.02	+.06	122230-141745
	6307-6314	+.02	-.02	141745-142530
	6315-6343	+.06	+.10	144315-154200
091	6344-6413	.00	+.20	092145-113115
094	6901-6905	+.13	+.24	095315-095730

NOTE

HI-FIX FREQUENCY

USC&GSS WHITING

During 1968 and 1969 Hi-Fix frequency was maintained
at 1799.6.

Wayne L Mobley
W. L. Mobley
CDR, USESSA
Commanding

OCEANOGRAPHIC LOG SHEET - M
BOTTOM SEDIMENT DATA

VESSEL	SERIAL NO.	DATE	SAMPLE POSITION		DEPTH (Fathoms)	WEIGHT OF SAM- PLER	AP. PROX. PEN- ETRA- TION	LENGTH OF CORE	COLOR OF SEDI- MENT	FIELD DESCRIPTION	REMARKS (Unusual conditions, cohesiveness, denuded cutter, stat. no., type of bottom relief i.e., slope, plain, disposition, etc.)	OBS. INIT.	
			LATITUDE	LONGITUDE									
USCGC LSC H I			PROJ. NO. OPR-423		YEAR 68	SOUTH COAST OF PUERTO RICO						CHECKED BY	DATE CHECKED
6919	4-3-68	17°56' 47.67"	67°03' 00.16"	39.2	✓					br s Co	lea.	Yes	
6920	17°57' 17.72"	67°02' 51.63"	66.4	✓						br s Co		Yes	
6921	17°57' 37.40"	67°02' 30.51"	50.6	✓						Sand & Co		Yes	
6922	17°57' 34.67"	67°01' 53.97"	49.6	✓						Sand & Co		Yes	
6923	17°57' 28.24"	67°01' 28.91"	64.0	✓						Mud		Yes	
6924	17°57' 25.61"	67°06' 53.01"	11.0	✓						Mud		Yes	
6925	17°58' 12.89"	67°01' 01.03"	11.6	✓						S & Co. Grs		Yes	
6926	17°57' 53.02"	67°06' 49.99"	44.6	✓						Mud		Yes	
6927	17°57' 48.99"	67°06' 28.00"	16.0	✓	13					Mud & S		Yes	
6928	17°57' 14.46"	67°04' 41.13"	55.0	✓						Mud		Yes	
6929	17°57' 11.40"	67°01' 16.22"	56.4	✓						Mud		Yes	
6930	17°57' 14.53"	67°01' 43.81"	46.6	✓						Co & S		Yes	
6931	17°57' 02.73"	67°01' 55.76"	58.4	✓						Mud & S		Yes	
6932	17°56' 44.05"	67°06' 15.94"	59.6	✓						S & Sh M, S, Sh		Yes	
6933	17°56' 43.75"	67°01' 41.13"	58.8	✓						S & Sh M, S, Sh		Yes	
6934	17°56' 41.49"	67°01' 10.54"	54.4	✓						S, Sh & Co		Yes	
6935	17°56' 07.88"	67°01' 13.91"	51.2	✓						S & Sh.		Yes	

Use more than one line per sample if necessary.

OCEANOGRAPHIC LOG SHEET - M
BOTTOM SEDIMENT DATA

U.S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

SERIAL NO.	DATE	SAMPLE POSITION		DEPTH (FATHOMS)	WEIGHT OF SAMPLE FLER	AP. PROX. PENETRA- TION	LENGTH OF CORE	COLOR OF SEDIMENT	FIELD DESCRIPTION	REMARKS (Unusual conditions, cohesiveness, deformed cutter, size, no., type of bottom relief, i.e., INIT. slope, plain, disposition, etc.)	OBS. INIT.	
		LATITUDE	LONGITUDE									
V VESSEL: WCH I PROJ. NO.: OPR-423 YEAR: 68 South Coast, Puerto Rico CHECKED BY: DATE CHECKED:												
6936	4-3-68	17°35' 42.5"	67°01' 16.6"	55.0		✓			S&sh	1A		
6937		17°35' 36.9"	67°01' 42.9"	29.0		✓			Co.	1A		
6938		17°35' 39.9"	67°01' 15.0"	50.6		✓			Co.	1A		
6939		17°32' 15.2"	67°02' 16.2"	66.0		✓			Mud & S	1A		
6940		17°31' 11.95"	67°01' 46.22"	58.0		✓			" " "	1A		
7173	4-9-68	17°35' 42.35"	67°00' 42.44"	65.8					S&sh	✓	1 Sample Rec Pos	
7174		17°35' 48.22"	67°00' 13.03"	37.0					Co.	✓		
7175		17°35' 41.55"	67°01' 43.25"	60.8					Mud & S	✓		
7176		17°35' 44.91"	67°03' 11.13"	49.0					S&sh	✓		
7177		17°36' 09.76"	67°00' 01.03"	49.0		N.P.			S&sh	✓		
7178		17°37' 30.67"	67°02' 45.69"	48.0		N.P.			S&sh	1P		
7179		17°35' 41.88"	66°57' 42.22"	47.0					S&sh	✓		
7180		17°36' 17.58"	66°57' 41.80"	19.4		N.P.			fine gr S & Mud			
7181		17°36' 14.12"	66°58' 10.8"	39.4					" " " "			
7182		17°36' 13.34"	66°58' 47.06"	45.8					" " " "			
7183		17°36' 11.74"	66°59' 14.97"	57.0					br S	✓		

Use more than one line per sample if necessary.

TIME AND TIDE NOTE

H-8984

H-8985

1968 Season

Prior to commencing hydro on day 100, 1968, the clocks were set to 45th meridian time zone to take advantage of early morning weather conditions.

Hydro prior to day 100 was recorded on 60th meridian. However, to eliminate confusion, survey records were referenced to 45th meridian after day 99.

Tide corrections were also logged after day 99 on the 45th meridian time zone.

Tides were referenced to standard guage located at Magueyes Island, which was centrally located in survey area.

Tide plane of reference - MLW. Staff reading at MLW = 3.5 feet.

TIME AND TIDE NOTE

H-8984

H-8985

1969 Season

Prior to start of field season, ship's clocks were set to 45th meridian time zone to take advantage of early morning weather.

However, all survey records were referenced to 60th meridian time zone (standard time). Tides were also referenced to 60th meridian time zone.

Tide plane of reference - MLW. Staff reading at MLW = 3.5 feet.

TIDE NOTE FOR HYDROGRAPHIC SHEET

February 11, 1969

~~NOV 20 11 30 AM '69~~ Pacific Marine Center

Plane of reference approved in
~~reference of sounding records for~~

HYDROGRAPHIC SHEETS 8984-89

Locality: South coast of Puerto Rico

Chief of Party: W. L. Mobley, 1968

Plane of reference is mean low water

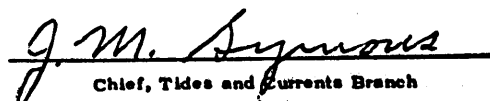
Tide Station Used (Form C&GS-681):

Magueyes Island

Height of Mean High Water above Plane of Reference is as follows:

0.6 foot

Remarks


Chief, Tides and Currents Branch

APPROVAL SHEET
H-8984 (WH 10-1-68)
1968 Field Season

Supervision was made periodically on the plotter sheets; but due to the excessive number of signals, poor signal location, and a poorly designed visual program, many replots were made and a reasonably good plot was not obtained until after the close of the Puerto Rico field season.

The final printouts were checked and approved for submission to P.M.C. for automatic plotting of the preliminary sheet. However, since there are several errors on the last sheets and poor photogrammetric compilation of the manuscripts, it is felt that the preliminary plots should be returned to the ship for additional checking.

Also it is felt that further investigation and development must be made this next season in several areas on these sheets to ascertain the reliability of the survey, as well as complete the development on questionable soundings.

The factor, other than photography and poor computer programming, that contributed to the questionable adequacy of this survey was the time limitation placed upon the ship to survey a priority area for purposes of charting. There was time for only a basic system of lines.

After verification and additional development, this survey will be adequate for charting.

Wayne M. Mobley
Wayne M. Mobley
CDR, USESSA

PART II
DESCRIPTIVE REPORT
HYDROGRAPHIC SURVEY

H-8984

WH 10-1-68

1:10,000

1968

USC&GSS WHITING

LAUNCHES I & II

Wayne L. Mobley

CDR, USESSA

Commanding

A. PROJECT

Continuation of this project was under authorization in revised instructions Project OPR-423, Puerto Rico, CFN2, 23 January 1969.

B. AREA SURVEYED

This survey was principally involved with developing shoal areas and delineating the off-shore reefs that were not satisfactorily surveyed in 1968.

C. SOUNDING VESSELS

	<u>Positions</u>	<u>Days</u>
Launch I	7201-7558 7559-7718 7719-7809 7829-8790 8791-8919	71, 74 75 76 77, 78, 79, 82, 83, 84, 85 88
Launch II	3001-3634	83, 84, 85, 86
Large Whaler	4100-4229	89
Small Whaler	9100-9214	89, 93

It should be noted that duplicate numbers had been used as the first four days of Launch I work. These were changed by adding 7200.

D. SOUNDING EQUIPMENT

Launch I used Raytheon Fathometer DE-723, serial number 250. Launch II used the digital fathometer Raytheon DE-723D, serial number 37018. Skiffs used pole and hand lead. Corrections were determined by daily bar checks and serial temperature observations (see 1969 fathometer report).

E. SMOOTH SHEET

The smooth sheet will be plotted by the Pacific Marine Center.

F. CONTROL

Control was visual. Signals were located by T-2 and electro-tape traverse. Natural objects (i.e., houses, telephone posts, etc.) that were recoverable from 1968 photogrammetric locations were used for some of the inshore development.

G. STATISTICS

Launch I:	Positions	1700
	Miles of soundings	146.5
Launch II:	Positions	634
	Miles of soundings	54.8
Skiffs:	Positions	245
Area Surveyed:	Developments over entire sheet.	

H. MISCELLANEOUS

Development lines were run over as many of the shoals indicated by WSC as time permitted. Shoal areas around reefs were developed.

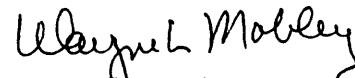
I. RECOMMENDATIONS

Additional time should have been allotted to this area since it is an important recreational, fishing, and ^{science} ~~science~~ scenic area frequented by many small boats.

J. REFERENCES TO REPORTS

1. Fathomster Report, 1969
2. Fathograms, sounding volumes and/or printouts for
 - a. Launch I - Days 71, 74, 75, 76, 77, 78, 79, 82, 83, 84, 85, and 88
 - b. Launch II - Days 83, 84, 85, and 86
 - c. Large Whaler - Day 89
 - d. Small Whaler - Days 89 and 93
3. 1969 Control OPR-423 (Traverse)

Respectfully submitted,


Wayne B. Mobley
CDR, USESSA

1969 SEASON

VISUAL SIGNAL LISTING OPR 423 H-8984

	0	'	"	0	'	"
099	017	57	2418✓	067	09	2487✓
243	017	58	3728✓	067	03	3541✓
244	017	58	3685✓	067	03	3337✓
245	017	58	3497✓	067	03	3035✓
248	017	58	3097✓	067	03	2216✓
249	017	58	3123✓	067	03	1944✓
254	017	58	3383✓	067	03	1628✓
258	017	58	3123✓	067	03	0581✓
265	017	58	1899✓	067	02	3874✓
273	017	58	2439✓	067	02	3792✓
274	017	58	2492✓	067	02	3358✓
391	017	56	1464✓	066	57	2368✓
392	017	56	1128✓	066	57	2541✓
400	017	56	3720✓	067	04	3876✓
401	017	56	3342✓	067	03	4746✓
402	017	56	2194✓	067	03	0531✓
403	017	56	2828✓	067	02	3040✓
404	017	56	2106✓	067	01	1654✓
405	017	56	4918✓	067	00	5884✓
406	017	56	5410✓	067	00	0847✓
407	017	56	5799✓	066	59	3916✓
408	017	56	5370✓	066	58	3710✓
409	017	55	5482✓	066	58	2703✓
413	017	58	1565✓	067	03	1767✓
415	017	57	4803✓	067	02	1159✓
416	017	57	4708✓	067	00	3652✓
417	017	56	4368✓	066	58	1221✓
418	017	56	3494✓	066	57	4841✓
420	017	56	2915✓	067	05	0799✓
450	017	56	2775✓	066	57	2324✓
451	017	56	0751✓	066	57	2412✓
452	017	56	1527✓	066	57	1967✓
453	017	57	2316✓	067	02	4839✓
241	-----					
242	-					
246	-					
247	-					
253	-					
256	-					
257	-					
259	-					
262	Same G.P. ^s as 1968 work					
263	-					
268	-					
269	-					
270	-					
271	-					
272	-					
276	-					
277	--					
278	-					
386	-					
387	-					
388	-					
393	-					

1969 DEVELOPMENTS
LAUNCH I
VELOCITY TABLE
H-8984 (WH-10-1-68)

000072 0 0000 0001 000 000000 000000
000122 0 0002
000172 0 0004
000218 0 0006
000264 0 0008
000308 0 0010
000350 0 0012
000389 0 0014
000426 0 0016
000458 0 0018
000486 0 0020
000512 0 0022
000534 0 0024
000565 0 0026
000599 0 0028
000634 0 0030
000670 0 0032
000742 0 0035
000815 0 0040
000878 0 0045
000960 0 0050
001046 0 0055
001134 0 0060

All work on Lch 1, 1969

0118

1969 DEVELOPMENTS
LAUNCH II
W/DIGITAL FATHOMETER
H-8984 (WH-10-1-68)
H-8985 (WH-10-2-68)

All work on Lch II, 1969

0118

000007	0	0011	0002	000	000000	000000
000025	0	0012				
000044	0	0013				
000062	0	0014				
000078	0	0015				
000095	0	0016				
000113	0	0017				
000131	0	0018				
000148	0	0019				
000167	0	0020				
000183	0	0021				
000200	0	0022				
000217	0	0023				
000236	0	0024				
000254	0	0025				
000270	0	0026				
000288	0	0027				
000306	0	0028				
000324	0	0029				
000340	0	0030				
000357	0	0031				
000375	0	0032				
000393	0	0032				
000410	0	0033				
000427	0	0034				
000445	0	0035				
000463	0	0036				
000480	0	0037				
000497	0	0038				
000515	0	0040				
000533	0	0041				
000552	0	0042				
000568	0	0043				
000587	0	0044				
000605	0	0045				
000623	0	0046				
000642	0	0047				
000658	0	0048				
000677	0	0049				
000729	0	0050				
000818	0	0055				
000907	0	0060				
000992	0	0065				
001083	0	0070				
001170	0	0075				
001257	0	0080				

NOTE: DEPTH CORRECTION INCLUDES 1.3 FEET WHICH IS D.M. BETWEEN
TRANSDUCER LOCATION AND WATER LINE.

1969 DEVELOPMENTS
LAUNCH I
TC/TI TAPE
H-8984 (WH-10-1-68)

000000 0 0002 0001 071 000000 000000

1969 DEVELOPMENT
LAUNCH II
TC/TI TAPE
H-8984 (WH-10-1-68)
H-8985 (WH-10-2-68)

000000 0 0002 0002 071 000000 000000

28 May 1970

APPROVAL SHEET

H-8984

This survey contained many reefs, coral pinnacles, and shoal areas. More time should have been allowed for this area; however, priority requirements were placed on other areas.

The additional work herewith submitted will greatly increase the quality of this survey.

Survey records were inspected by me; however, since we attempted to continue the development of the automated system, conventional boat sheets were not made. Overlays were used for verification and checking with prior plotter sheet. Delays encountered in bad angles, etc., messaging data, and plotting visual data automatically result in additional work and a severe time lag in not being able to see the boat sheet develop.

It is felt, after two seasons in attempting to develop automated visual hydro, that it cannot be accomplished satisfactorily with automation, and should henceforth be hand plotted and logged after the fact for later smooth sheet processing.

Wayne L. Mobley
Wayne L. Mobley
CDR, USESSA

ATLANTIC MARINE CENTER
VERIFICATION OF SMOOTH TIDES

SURVEY H-8984

PLANE OF REFERENCE MLW OR MHHW
TIME MERIDIAN 60 W 45W was used between days 99 & 129, 68
HEIGHT DATUM ON STAFFS 1. 3.5 2. _____ 3. _____

TIDE STATIONS	POSITION	TYPE GAGE	TIME CORR.		HEIGHT CORR. *	
			H.W.	L.W.	H.W.	L.W.

1. Magveyes Island Standard
Y

2.
Y

3.
Y

HOURLY HRIGHTS FROM ROCKVILLE OFFICE
 FROM FIELD MARIGRAMS

VERIFIED BY: Rockville Office

TIDE ZONING NOT APPLICABLE
 BY COMPUTER
 FROM TWO OR MORE GAGES

LIMITS AND DESCRIPTION OF ZONING METHODS

TIDE CORRECTIONS COMPILED BY COMPUTER
 MANUALLY

VERIFIED BY: BTD
VERIFIED BY: _____

HEIGHT OF MHW ABOVE PLANE OF REFERENCE 0.6

TIDE CORRECTIONS VERIFIED ON SOUNDING PRINTOUT BY: BTD

DATE OF VERIFICATION 3/25/72

*OR RATIO

EXAMINED & APPROVED

GEOGRAPHIC NAMES

Name on Survey	Source of Information											
	A	B	C	D	E	F	G	H	K			
	ON CHART NO.	ON PREVIOUS SURVEY NO.	ON U.S. QUADRANGLE MAPS	FROM LOCAL INFORMATION	ON LOCAL MAPS	P.O. GUIDE OR MAP	GRAND MCNALLY ATLAS	U.S. LIGHT LIST				
Arrecife Coral												1
Arrecife Enmedio												2
Arrecife Media Luna												3
Arrecife Romero												4
Bahia Esforescente												5
Bahia Mentalva												6
Caleta Parquera												7
Cayo Caracoles												8
Cayo Collado												9
Cayo Don Luis												10
Cayo Enrique												11
Cayo Mata Seca												12
Cayo Vieques												13
Celeta Salinas												14
Isla Guayacan												15
Isla Cueva												16
Isla Magueyes												17
Isla Matei												18
La Parquera												19
Mar Caribe												20
Pasa del Medio												21
Pasaje de Margarita												22
Puerto Quijano												23
Puerto Rico												24
Punta Cueva de Ayala												25

GEOGRAPHIC NAMES

Survey No.

Name on Survey

On Chart No.
 On previous survey No.
 On U. S. quadrangle Maps
 From local information
 On local Maps
 P. O. Guide or Map
 Rand McNally Atlas
 U. S. Light List

	A	B	C	D	E	F	G	H	K	
Punta del Obispo										1
Punta Jerobado										2
Punta Montalva										3
Punta Sombrero										4
Turrumote I (Roman Numeral)										5
Turrumote II										6
										7
										8
										9
										10
										11
										12
										13
										14
										15
										16
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										24
										25
										26
										27

Approved by:
 C. E. Hammett
 Staff Geographer
 Nov. 23, 1973

HYDROGRAPHIC SURVEY STATISTICS
 HYDROGRAPHIC SURVEY NO. H-8984 (WH-10-1-68)

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

RECORD DESCRIPTION		AMOUNT	RECORD DESCRIPTION		AMOUNT	
SMOOTH SHEET # 2 PNO		1	BOAT SHEETS		2	
DESCRIPTIVE REPORT		1	OVERLAYS		7 #	
DESCRIPTION	DEPTH RECORDS	HORIZ. CONT. RECORDS	PRINTOUTS	TAPE ROLLS	PUNCHED CARDS	ABSTRACTS/ SOURCE DOCUMENTS
ENVELOPES	X					
CARIERS	1		X			
VOLUMES		45				
BOXES			2			

T-SHEET PRINTS (LIST)

T-12166 & T-12118 thru T-12121

SPECIAL REPORTS (LIST)

See section 1 page 5 and section 2 page 3 of Descriptive Report

OFFICE PROCESSING ACTIVITIES

The following statistics will be submitted with the cartographer's report on the survey

PROCESSING ACTIVITY	AMOUNTS			
	PRE-VERIFICATION	VERIFICATION	REVIEW	TOTALS
POSITIONS ON SHEET				7161
POSITIONS CHECKED		800+		
POSITIONS REVISED		75+		
DEPTH SOUNDINGS REVISED	925	45		
DEPTH SOUNDINGS ERRONEOUSLY SPACED				
SIGNALS ERRONEOUSLY PLOTTED OR TRANSFERRED	7			
	TIME (MANHOURS)			
TOPOGRAPHIC DETAILS		24		
JUNCTIONS		8		
VERIFICATION OF SOUNDINGS FROM GRAPHIC RECORDS	95	35		
SPECIAL ADJUSTMENTS See Notes to EDAT		40		
ALL OTHER WORK		702		
TOTALS	95	809		
PRE-VERIFICATION BY W.L. Jonns	BEGINNING DATE 2/14/71	ENDING DATE 3/8/71		
VERIFICATION BY F. Bean, W.L. Jonns, B.T. Davis	BEGINNING DATE 4/28/70	ENDING DATE 8/17/73		
REVIEW BY	BEGINNING DATE	ENDING DATE		

VERIFIER'S REPORT
HYDROGRAPHIC SURVEY, H 8984 (WH-10-1-68)

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.

Part I - DESCRIPTIVE REPORT	CL	R	Part III - JUNCTIONS (Continued)	CL	R
<p>Note: The verifier should first read the Descriptive Report for general information and problems.</p> <p>1. The Descriptive Report was consulted, paragraphs checked if found satisfactory, and notations were made in soft black pencil regarding action taken. Remarks Required: -- None</p>	X		<p>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.</p>	X	
<p>2. Soundings originating with the survey and mentioned in the Descriptive Report have been verified and checked in soft black pencil, including latitude and longitude, together with position identification. Remarks Required: -- None</p>	X		<p>Part IV - VOLUMES</p> <p>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</p>	X	
<p>3. All reference to survey sheets mentioned in the Descriptive Report should include registry number and year. Remarks Required: -- None</p>	X		<p>12. Condition of sounding records was satisfactory except as follows: Remarks Required: -- Mention deficiencies in completeness of notes or actions for the following:</p>		
<p>Part II - SHORELINE AND SIGNALS</p> <p>4. Source of shoreline signals Remarks Required: -- List all surveys T-13120, T-13121, T-13122 - a. Give earliest and latest dates of photographs 1966 b. Field inspection date none c. Field Ed. date 1968 d. Reviewed 1968 1970</p>	X		<p>(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</p>	X	
<p>5. The transfer of contemporary topographic information was carefully examined and reconciled with the hydrography. Remarks Required: -- Discuss remaining differences.</p>	X				
<p>6. The plotting of all triangulation stations, topographic stations and hydrographic signals has been checked and noted in processing stamp No. 42 on the smooth sheet. Remarks Required: -- None</p>	X				
<p>7. Objects on which signals are located and which fall outside of the high-water line have been described on the sheet. Remarks Required: -- List those signals still under</p>	X		<p>Part V - PROTRACTING</p> <p>13. All positions verified instrumentally were check marked in color in the sounding records, and verifier initialed the processing stamp. Remarks Required: -- None</p>	X	
<p>Part III - JUNCTIONS</p> <p>Note: Make a cursory comparison preliminary to inking soundings in area of overlap.</p> <p>8. All junctions of contemporary or overlapping areas were transferred in colored ink and, where the curves were made identical. Remarks Required: -- None</p>	X		<p>14. The protracting and plotting of all unsatisfactory crossings were verified. Remarks Required: -- None</p>	X	
<p>9. The notation in slanted lettering "JOINS H--- (19)" was added in colored ink for all verified contemporary adjoining or overlapping sheets. Those not verified are shown in pencil. Remarks Required: -- None</p>	X		<p>15. All detached positions locating critical soundings, rocks, buoys, breakers, obstructions, kelp, etc., were verified and the position numbers are legible. Remarks Required: -- None</p>	X	

Fig. 20 (cont'd)
Form 946 A (back of form)

Part V - PROTRACTING (Continued)	CL	R	Part VIII - AIDS TO NAVIGATION	CL	R
16. The protracting was satisfactory except as follows: Remarks Required: -- Refer to protracting in general except for specific faults repeated often, or faults in control information, which required considerable replotting or adjustments.	X		26. All fixed aids located together with those on the contemporary topographic sheets, have been shown on the survey. Remarks Required: -- Conflicts of any nature listed.	N.A.	
17. The protractor has been checked within the last three months. Remarks Required: -- Date of check, type of protractor and number. Plastic	X		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	N.A.	
Part VI - SOUNDINGS			Part IX - BOATSHEET		
18. All soundings are clear and legible, and critical soundings are a little larger than adjacent soundings. Remarks Required: -- None	X		28. The boat sheet was constantly compared with the smooth sheet with reference to notes, position of sounding lines and supplemental information. Remarks Required: -- None	X	
19. Sounding line crossings were satisfactory except as follows: Remarks Required: -- Discuss adjustments.	X		29. Heights of rocks awash were correctly reduced and compared with topographic information. Remarks Required: -- Note excessive conflicts with topographic information.	X	
20. The spacing of soundings as recorded in the records was closely followed; Remarks Required: -- None	X		Part X - GENERAL		
21. The scanning, reduction, spacing, plotting of questionable soundings have been verified. Remarks Required: -- None	X		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	X	
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.	X		31. Unnecessary pencil notes have been removed from the sheet. Remarks Required: -- None	X	
Part VII - CURVES			32. Degree, minute values and symbols have been checked; also electronic distance arcs have been properly identified and checked on the smooth sheet. Remarks Required: -- None	X	
23. The depth curves have been inspected before linking. Remarks Required: -- By whom was the penciled curves inspected. GFT	X		33. The bottom characteristics are adequately shown. Remarks Required: -- None	X	
24. The low-water line and delineation of shoal areas have been properly shown in accordance with the following: o. From T-Sheet in dotted black lines b. From soundings in orange c. Approximate position of sketched curve is dashed orange d. Approximate position of shoal area not sounded in black dashed Remarks Required: -- None	X		Part XI - NOTES TO THE REVIEWER		
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 sounding. For some inshore areas a general statement is sufficient.	X		34. Unresolved discrepancies and questionable soundings.	X	
			35. Notation of discrepancies with photogrammetric survey inserted in report of unreviewed photogrammetric survey or on copy.	X	
			36. Supplemental information.	X	
Verified by Bernie T. Davis			Date 8/17/73		

FIG. 18.

DESCRIPTIVE REPORT DATA RECORD		
PART I SMOOTH SHEET PREPARATION		
	PREPARED BY/OPERATOR	DATE
A. PLOTTER OPERATOR	EDAT-PMC	
B. DISTORTION MARKS PLOTTED	EDAT-PMC	
C. PROJECTION INTERSECTIONS PLOTTED	EDAT-PMC	
D. POINTS OF ELECTRONIC CONTROL ARCS PLOTTED	EDP-AMC	
E. OVERLAYS PREPARED BY		
1. POSITION NUMBER	EDAT-PMC	
2. EXCESS SOUNDINGS	EDAT-PMC	
3. PRELIMINARY SMOOTH PLOT	EDAT-PMC	
4. LIST OTHERS		
A.		
B.		
F. SOUNDING SELECTION BY	EDAT-PMC	
G. PLOTTER INPUT	PREPARED	
H.	CHECKED	
I. DESCRIPTIVE REPORT ADDENDUMS		
PART II SMOOTH SHEET COMPLETION		
	CARTOGRAPHER	DATE
A. DISTORTION SCALE TICKS IDENTIFIED BY NOTE	BTD	8/8/73
B. PROJECTION INTERSECTIONS VERIFIED BY	BTD	9/6/72
C. PROJECTION LINES RULED BY	BTD	9/6/72
D. ELECTRONIC CONTROL ARCS RULED AND LOCATION VERIFIED	EDP-AMC BTD	7/23/73
E. OVERLAYS COMPLETED BY		
1. POSITION NUMBER LEADERS ADDED	BTD & EJJ	7/9/73
2. EXCESS SOUNDING OVERLAY COMPARED	BTD	7/25/73
3. PRELIMINARY SMOOTH PLOTS COMPARED	BTD	7/25/73
4. OTHERS UTILIZED		
A.		
B.		
F. DESCRIPTIVE REPORT ADDENDUM	BTD	8/13/73
G. CONTROL STATIONS VERIFIED	WLJ & FB	5/1/70
H. POSITIONS MANUALLY PLOTTED		
I. MANUAL PLOT VERIFIED		
J. SHORELINE APPLIED	BTD	8/8/72
K. BOTTOM CHARACTERISTICS ADDED	BTD	8/7/73
L. NOTES AND DEPTH CURVES ADDED	BTD	8/8/73

ATLANTIC MARINE CENTER
APPROVAL SHEET
FOR
AUTOMATED SURVEY H-8984

- 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~~/has not been made. A new final sounding printout ~~has~~/has not been made.

Survey plotted Seattle -
Mag. tape records Not
Involved.

Date: Aug. 27, 1973

Signed: W. F. Jones Acting

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: Aug. 27, 1973

Signed: C. Dale North

Title: Chief, Processing Division

VERIFICATION NOTES
SURVEY H-8984

GENERAL

A number of problems were experienced during the verification of this survey. Please refer to the enclosed "Plotter Notes to EDAT" for a listing of these problems and the methods used to resolve them.

BOAT SHEETS

Hi-Fix and visually controlled work done during the 1968 season was machine plotted on a conventional boat sheet. For the additional developments done in 1969 no boat sheet was received.

ALONGSHORE AREAS

As mentioned in paragraph 0 wide areas, alongshore and around the offshore coral reefs, were not developed. The Photogrammetric Division is presently working on a program to contour these shoaler depths from air photographs.

DETACHED POSITIONS

A great many detached positions were observed on this survey for various purposes and none of them had check angles. All positions that appeared to be questionable or were in conflict with other data were rejected. See the "Plotter Notes" for a listing of the rejected positions.

William L. Jonns
William L. Jonns
Acting Chief,
Verification Branch, AMC.

Memorandum

TO : Chief, Hydrographic Processing Branch , CFN 31

DATE: May 6, 1970

In reply refer to: CFS 32

FROM : Chief, Electronic Data Processing.

SUBJECT: Surveys H-8984 and H-8985

I am only sending the 1969 PNOs for these sheets. A problem arose with the 1969 signals on 8984. As you know, one signal tape was cut for both surveys. I separated the signals as to survey, and found the following signals (among others) do not fit on 8984: 421, 422, 423, 424, & 426. They were needed to process skiff 2's work, day 91, positions 9200-9275 on 8984.

We processed the positions using the signals; however, I am certain they are in error. The computer program calculates visual positions based on the Cartesian coordinates of the signals rather than geographic positions. If a signal lies exterior to the limits of the coordinate system, a point will be computed, but it will be in error.

I have two suggestions by which you might resolve the problem.

1. The positions in question may indeed lie on 8985, and can be easily transferred to that sheet. We will merely change the registry number and recompute the fixes using the correct signals on 8985.
2. If the positions do lie on 8984, the problem gets a bit sticky. Maybe you can align the west end grid of 8984 with the east end grid of 8985, and manually plot the positions. This will require great caution. You will have two meridians complimentary with each sheet. I realize the procedure is not quite cricket, but can't think of much else to do. Maybe you will have a better solution after looking the situation over. Let's hope for case one.

I am sending a listing of the signals. Note the Cartesian coordinates are included, and I have noted those not falling on the particular sheet.

Sincerely yours,



Larry W. Mordock
LT, USESSA



VERIFIER: W.L. Jonns

Norfolk, Va.
May 6, 1970

AMC PLOTTER NOTE TO EDAT
SURVEY H-8984
(1968 SEASON ONLY)

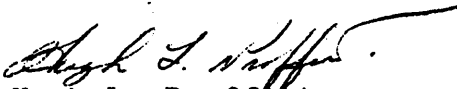
This office has completed the verification of the control overlay for this survey and we are enclosing a tape and printout for the changes needed. At the bottom of the printout 2 additional stations have been added in red pencil. These two stations are not included on the tape but they should be added to those on the overlay.

an. Signals Due to these control station errors, it is impossible for us to verify the existing visual position overlay. It is requested that we be furnished a new overlay showing the plot of visual positions after the control changes have been made.

In addition, we are returning the printout for the electronic position cards with applicable changes marked in red pencil. These changes will include some positions not logged in the field, Julian Day changes from positions 2261 thru 2267 and 6758 thru 6872, and other scattered routine changes. These changes in electronic positioning may be plotted on the overlay with the visual positions.

Since the sounding cards have been made for this survey, it will be necessary to cut new ones where Julian Day or position changes have been made. In fact, it is suggested that consideration be given to destroying the existing card deck on the visually controlled work.

Duplicated position cards exist in your card files for visual positions 5051 thru 5119. It is requested that the duplicates be removed if you do not destroy the card deck.


Hugh L. Proffitt
Chief, Hydro Branch, AMC

VERIFIER: Fred Bean

Norfolk, Va.
June 22, 1970

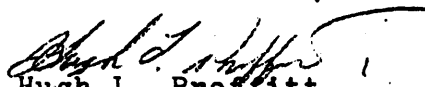
AMC PLOTTERNOTE TO EDAT
SURVEY H-8984
(1969 Visual Positions)

This office has completed the verification of the preliminary overlay for visual positions (1969 Season) and we returning the position card printout with the numerous corrections marked in red pencil.

In addition to the routine corrections, you will find where position numbers have been changed to avoid duplications, positions which should be plotted on H-8985, and some positions marked "destroy" as we could not reconcile them with the logged data and surrounding hydrography.

Due to the many control problems we are experiencing on this survey we are verifying the position overlays independently by field Season and types of control. When these phases have been completed, we will notify you to merge them and furnish a sounding overlay.

For the present, please furnish us a new position overlay for the 1969 visual work with the indicated corrections applied.


Hugh L. Proffitt
Chief, Verification Br., AMC

VERIFIER: W.L. Jonns

Norfolk, Va.
Sept. 10, 1970

AMC PLOTTER NOTE TO EDAT
SURVEY H-8984

Preliminary verification of the positions on this survey has been completed and we are returning the position card printouts for the visual and Hi-Fix work done in 1968, and for the visual work done in 1969. All applicable corrections have been marked in red.

Positions 2261 thru 2279 and 7187 are marked "destroy". They are for bottom samples which would not plot because of what EDAT termed convergence problems. (Please note that the indicator in the last column on the printout is a 3 and on other positions it is a 2). If this difference has no significance and you are unable to account for the misplots, we will transfer the bottom samples from the boat sheet. (1968 season)

On the 1968 season visual printout, change positions numbered 8000 thru 8073 to 4300 thru 4373. This is being done to avoid duplication of position numbers with those of 1969 season.

Change position numbers on the right side to agree with those on the left side of the printout on positions numbered 7102 thru 7550 and 7719 thru 7809.

Recompute positions 4104 thru 4129. The control was logged improperly.

Destroy position 3235 at time 130800 and position 3237 at time 131600. This is being done to avoid a duplication of position numbers.

Destroy positions 4118 thru 4121, 4130, 4131, 4141 thru 4144, 4152, 4161, 4162, 4168 thru 4170, 4174 thru 4176, 4181, 4182, 4187 thru 4190, 4102, 4103, 4123 and 4124. All of these positions control pole soundings which were either not recorded on were "no bottom" soundings.

Control station 234 is incorrect. The correct geographic position is as follows:

234 17-58'-26.84" 067-03'-44.41"

The two positions using this station are marked for correction on the printout.

Destroy cards for control stations numbered 098 and 187. The stations fall about six miles off the limits of the survey and are minus to point of origin. The two positions affected were computed here and plotted by G.Ps.

continued

VERIFIER: W.L. Jonns

Norfolk, Va.
Dec. 1, 1970


AMC PLOTTER NOTE TO EDAT
SURVEY H-8984

During the verification of the preliminary sounding overlay for this survey it was found that the velocity corrections were improperly applied for Launch 1 work, 1968 season, on Julian Days 90 thru 95 and 100. It was also found that the Julian Day numbers were incorrect on two (2) Days. Positions 6758 thru 6872 should be Day 093, and positions 7173 thru 7194 should be Day 100.

As this involves about 1050/positions, This office has prepared, one each, velocity and TC/TI tapes for use on the Days and positions mentioned in the preceding paragraph. For your convenience a new tide tape for these days is being forwarded.

Since these are consecutive Days and all positions are in the hyperbolic mode, it is requested that you use the enclosed corrector tapes to correct your card files. When this has been done, please furnish this office an overlay showing both the regular and excess soundings for the days mentioned above. Also, please plot all position dots.

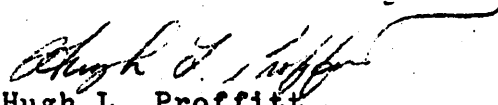
We are returning that part of the sounding printout involving these positions with required corrections marked in red pencil.


Hugh L. Proffitt
Chief, Ver. Branch, AMC

After you have made the changes itemized above, and those indicated on the printouts please furnish a sounding overlay showing depths obtained during the 1968 and 1969 field seasons. It is extremely important that position dots be plotted on the sounding overlay as this is a very congested survey.

Also, please furnish a printout of the control stations for both seasons work.

This survey has presented our verifiers with numerous problems in all phases of the work and since no boat sheet was made for the 1969 season, this sounding overlay will be our first opportunity to see a composite plot of the two seasons work. It is hoped that most of the major problems have been resolved.


Hugh L. Proffitt
Chief, Verification Br., AMC

VERIFIER: W.L. Jenns

Norfolk, Va.
March 8, 1971

AMC PLOTTER NOTE TO EDAT
SURVEY H-8984

Verification of the preliminary sounding overlay for this survey has been completed and we are returning the position and sounding card printouts for both the 1968 and 1969 Seasons. Applicable corrections have been marked in red pencil.

On the 1968 position printouts there are 3 position changes, 3 position time changes and 1 position to be destroyed.

On the 1969 position printout there is one position change, 1 position to be inserted and 3 position to be destroyed.

SNDC tapes processed 3/25/71 Jim → Because of the extremely irregular coral bottom and the generally poor quality of the field scanning, it was necessary for this office to do a large amount of rescanning of the fathograms. This has resulted in about 925 changes and insertions which, for your convenience, we have logged on 5 sounding corrector tapes. Each tape is marked for position number and year. and vessel

DESTROYED 1968 p/p/run → Please destroy signal cards for stations 0984, 1074 of the 1968 season, and for stations 421, 422, 423, 424 and 426 of the 1969 season. These stations fall on adjoining survey H-8985. Also, please furnish a final signal card printout for this survey.

TC/TI tape ref checked → On the 1968 seasons work of Launch 1, it was found that TRA corrections were incorrectly applied in scattered areas on days 072, 073, 075, 076, 078, 079, 080 and 087. The same condition exists on the work of Launch 2 on Days 077, 079, 080 and 081. Corrections were made on the printout in red pencil, however, if you wish to make these changes by computer be sure to use the TC/TI sent to you by this office around Dec. 1, 1970. A copy of our plotter note for this date is being forwarded.

Jim → Because of the large number of velocity corrections already made on the work of Launch 1, and those requested in above paragraph, it will be necessary for us to have a completely reedited sounding overlay and printout. AFTER RE-EDIT APPLY CHANGES (excess)

At Lat. 17-57'10" and Long. 67-04'27" there is a line of five apparently extraneous soundings in the range of 5 to 7 feet which fall in depths of 40 to 45 feet. We were unable to find them in the printout and they should be deleted from your card deck if they can be found.

This is a highly congested survey and all position points should be plotted on the sounding overlay.

Verifier:..B.T.DAVIS

April 12, 1972
Norfolk, Va.

PLOTTER NOTE TO EDAT

Survey H-8984 (WH-10-1-68)

This office has completed the verification of the second preliminary sounding overlay for this survey.

On the 1968 work there were approximately thirty one (31) positional changes made. Most of these were logging errors or time changes.

On the 1969 work there are two (2) positional changes and five (5) positions to be destroyed. Those positions destroyed were because the depth of the water was greater than the sounding pole.

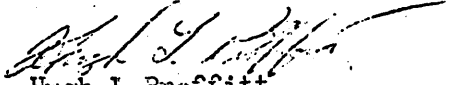
The soundings for positions 9130 thru 9213 were erroneously destroyed on the first sounding printout, the positions however, were not destroyed. These soundings are to be re-entered in your card deck. A printout of the soundings is attached in it's correct position in the sounding printout.

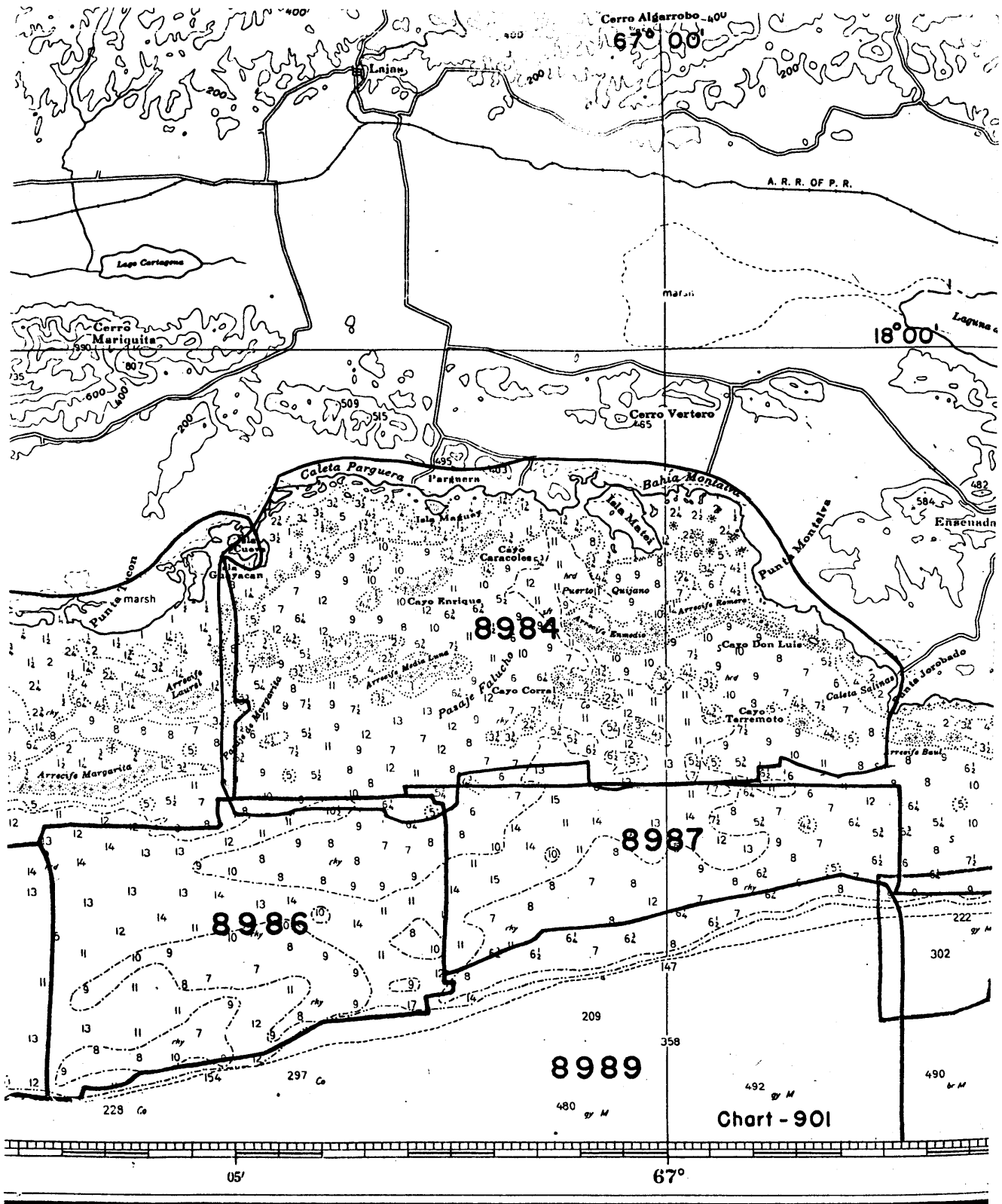
The above changes and all excess and sounding changes are shown in red pencil on the position and sounding printouts.

To avoid congestion on the position overlay, please plot the 1968 work on one mylar sheet and the 1969 work on a separate mylar sheet.

After all the above changes have been made, please furnish this office with a smooth sheet.

WLJ


Hugh L. Proffitt
Chief, Verification Br., AMG



LIGHTS, BEACONS, BUOYS, AND DANGERS CORRECTED FOR INFORMATION RECEIVED TO THE FOLLOWING DATE

(West Coast of Puerto Rico)

