8061

Diag. Cht. No. 1007-2.

FORM C&GS-504

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

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. HY-20153 *Office No.* H-8061

LOCALITY

State Alabama - Florida

General locality Gulf of Mexico

Locality South Central Gulf of Mexico

1953 & 1954

CHIEF OF PARTY

L. S. Hubbard

LIBRARY & ARCHIVES

DATE July 3, 1957

USCOMM-DC 37022-P66

8061

Form 537
(Ed. June 1946)

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

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

REGISTER No. H-8061

Field No. Hy-20153

State Alabama - FLORIDA

General locality GULF OF MEXICO

Locality SOUTH CENTRAL GULF OF MEXICO

Scale 1:2000,000 Date of survey 22 July - 26 Oct. 1953 ✓
10 July - 12 Sept. 1954

Instructions dated 20 March 1952, 9 March 1953 & 27 January 1954

Vessel HYDROGRAPHER

Chief of party L. S. HUBBARD ✓

Surveyed by R.A. Earle, I.R. Rubottom, R.M. Stone, M.T. Paulson, G.E. Morris, W.J. Chovan, J.D. Hodges, C.S. Frost, G.W. Thompson ✓

Soundings taken by fathometer, graphic recorder, hand lead, wire

Fathograms scaled by 1953 Season - Norfolk District Office
1954 Season - Ship's Personnel ✓

Fathograms checked by Same

Protracted by 1953 Season - A.G. Atwill
1954 Season - Ship's Personnel

Soundings penciled by 1953 Season - A.G. Atwill
1954 Season - Ship's Personnel

} Manual smooth sheet only. Final smooth sheet plotted by Gerber Digital Plotter.

Soundings in fathoms ~~feet~~ at MLW ~~MLLW~~

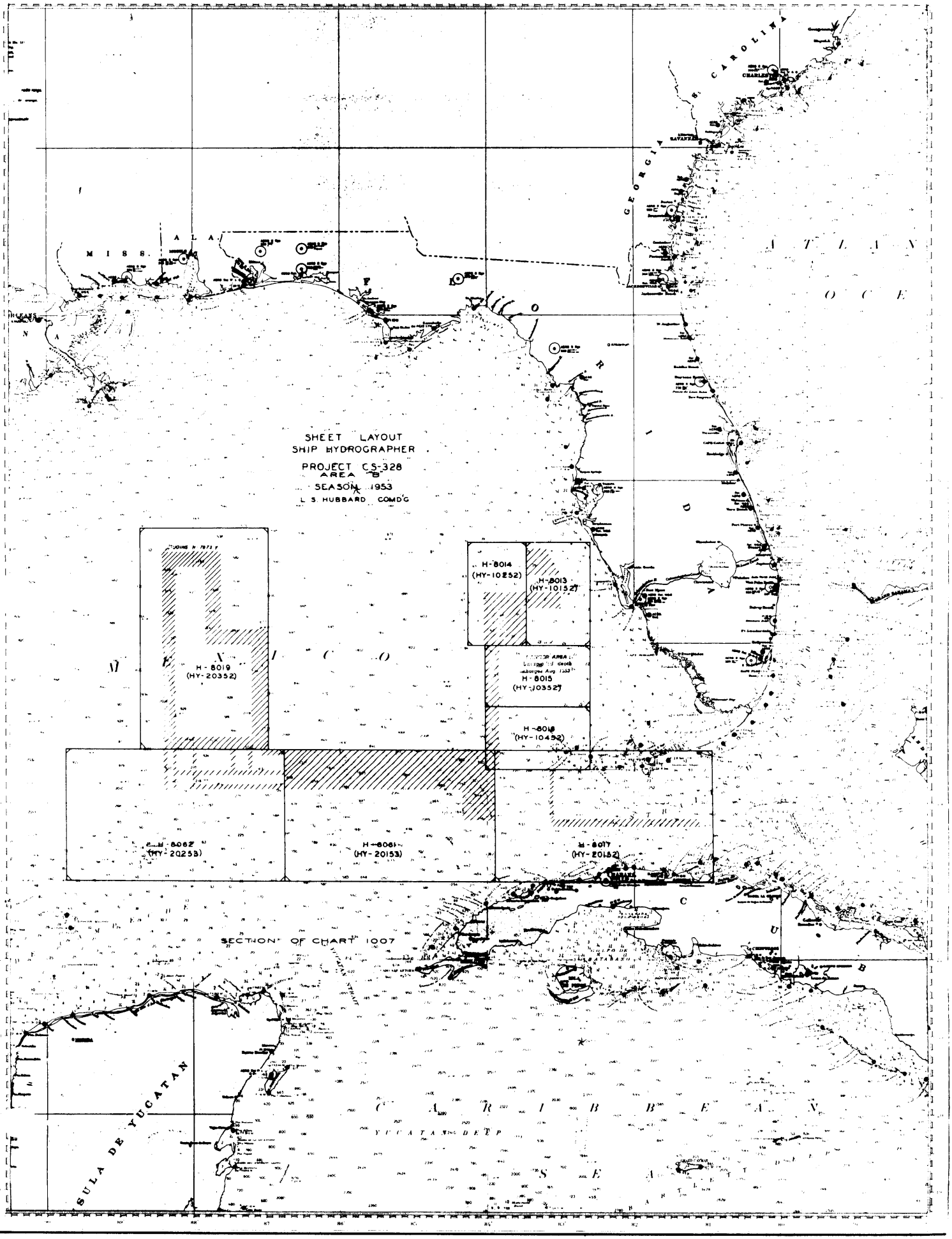
REMARKS: Offshore Survey -- Control By EPI

Note: The original records (sounding vols) for this survey were logged in digital form in 1966. The final automated smooth sheet was produced by the Gerber Digital Plotter at PMC. The manually plotted smooth sheet will be destroyed after the review is signed.
DEW

XWV 1/31/94

FBE

U. S. GOVERNMENT PRINTING OFFICE 777082



Published at Washington, D.C., July 1964 (12th Edition)

DESCRIPTIVE REPORT

To Accompany

Hydrographic Survey H-8061

22 July 1953 to 12 September 1954

Ship HYDROGRAPHER Scale 1:200,000

L. S. Hubbard
Chief of Party

A. PROJECT:

This survey was accomplished under Project CS-328, Supplemental Instructions dated 20 March 1952, 9 March 1953, and 27 January 1954. These instructions supercede all previous instructions for this project.

B. SURVEY LIMITS AND DATES:

This survey is offshore in the south central Gulf of Mexico. The northern limit is latitude 24° 41' N and the southern limit is latitude 23° 10' N. Longitude 86° 47' W provides the western limit and longitude 83° 52' W provides the eastern limit. This sheet is shown by red crosshatching on the index of sheets included with this report.

This is a basic survey joining survey H-8018 (1952) which is to the north, survey H-8062 (1953-54) which is to the west, and survey H-8017 (1952-54) which is to the east.
Also joins H-8016 (1952-54) and H-8570 (1960) on the east.
Field work was begun 22 July 1953 and completed 12 September 1954.

C. VESSEL AND EQUIPMENT:

All work on this survey was accomplished by the Ship HYDROGRAPHER. The ship has a turning radius of 80 to 120 meters depending on the wind and/or current. The "Settlement and Squat Report" forwarded 11/2/50 shows no corrections on the fathom scale in the depths encountered on this sheet and there have been no changes in the ship's trim or hull since that time.

The NMC-2, serial # 86, and the AN/UQN-1B, serial # 3, were the two fathometers that were used on this survey. The NMC-2 was used for the majority of the soundings although both machines ~~were~~ can sound the depths found on this sheet.

The fathograms are the permanent records of the depths for this sheet except on WA day, 4 August 1954, when part of a fathogram caught on fire and burned. The sounding record is being submitted as the permanent record for these lost soundings.

The gyro compass was used at all times while the survey was in progress. Bearings on charted objects were taken when proceeding in and out of port and sun azimuths were observed on the working grounds to check the operation of the compass. The error was found to be negligible.

D. TIDE AND CURRENT STATIONS:

The primary tide station at Key West, Florida was used as the reference station for the reduction of soundings on the work done in 1953. Since all depths on this sheet were greater than 150 fathoms, no tide corrections were applied to the 1954 field work. See Tide Note for 1953.

No tides entered. None required. See Tide Note.

No current stations were occupied within the limits of this sheet.

E. SMOOTH SHEET:

The 1953 field work has not been smooth plotted. The 1954 field work was plotted on a so-called "Smooth Boat Sheet" as the work was done. The projection and EPI arcs for this sheet were computed and ruled by machine in the Washington Office.

Manual plot only. Final smooth sheet by Gerber Digital Plotter

No shoreline or topographic details fall within the limits of this offshore survey.

The relative merits of the "Smooth Boat Sheet" and other information were included in a special report entitled "Combination Smooth Sheet and Boat Sheet" forwarded 11 January 1955.

F. CONTROL STATIONS:

All hydrography on this sheet was controlled by EPI. The hydrography accomplished during the 1953 field season was controlled by EPI stations located at Largo, Florida and Grassy Key, Florida called EPI F and EPI E respectively.

Station EPI E was located at Reference Mark #3 of triangulation station KEY 1935 on Grassy Key, Monroe County, Florida. Station was established for EPI in 1952 under J. C. Sammons, Chief of Party.

Station EPI F was located by triangulation in 1952 under J. C. Sammons, Chief of Party. The station is in Pinellas County, Florida on the east side of Boca Ciega Bay near triangulation station EAT 1951.

Hydrography accomplished in 1954 was controlled by EPI stations located at Largo, Florida and Key West, Florida called EPI F and EPI G respectively.

EPI F was the same as used in 1953.

Station EPI G was located on the Key West Naval Station by triangulation in 1954 under L. S. Hubbard, Chief of Party.

G. SHORELINE AND TOPOGRAPHY:

None.

H. SOUNDINGS:

All depths were measured by fathometers. The NMC-2 and the EDO were used in this survey. Refer to item C for further information.

The sounding records were kept as outlined in a letter to the Commanding Officer, Ship HYDROGRAPHER, dated 22 August 1950. The fathograms are the permanent records, and notations on the fathogram give the velocity template to be used (at the top) and the algebraic sum of all other corrections to be applied at the bottom. Refer to the Velocity Correction Report and the Fathometer Correction Report for 1953 and 1954 for information on the corrections that were applied. Although this system of keeping the sounding records is fine for flat bottom, it is not desireable in areas where rapid depth changes are experienced. It is also not satisfactory when plotting on a Smooth Boat Sheet since a record has to be kept in a sounding volume and correctors applied as the work progresses. It is to be noted here that some of the soundings that were penciled on the Smooth Boat Sheet during the course of the work are not correct and will have to be changed before being inked. Picking at random an example, we find that on position 27, MA day, 27 July 1954, a sounding of 1882 fathoms was plotted on the Sheet. Using final correctors, this sounding now scales off at 1900 fathoms or a difference of 18 fathoms, approximately 1% of the depth. This is taken from the NMC-2 fathometer and appears to be true for soundings recorded on the 0-2000 scale. The soundings on the 0-400 and 400-800 scales appear to be close enough to remain as originally plotted. However, it is anticipated that some of the EDO soundings will also be found in error due to an insufficient number of comparisons on which to base correctors as used while field plotting.

SEE H-8014 for 1953 Fm Rept
Fm Rept for 1954 filed in Library
See H-8060 for T&S Rept
Final sounding reduced for velocity corr. by historical data furnished by Mr. Starr, Oceanographic Analysis Branch

I. CONTROL OF HYDROGRAPHY:

All hydrography accomplished on this sheet was controlled by EPI as described in item F of this report.

Refer to the EPI Calibration Report for 1953 for EPI correctors to be applied to that work when smooth plotting. No report was made in 1954 but the correctors used are enclosed on abstracts for the 1954 work and also the 1953 work.

See H-8014 for 1953 EPI Rept

There was no change in the final correctors from those used in plotting on the Smooth Boat Sheet.

J. ADEQUACY OF SURVEY:

This survey is complete and adequately covers the area. Depth curves have not been drawn on this sheet. Depth curves drawn on final smooth sheet

K. CROSSLINES:

Approximately 4 per cent of crosslines were run on this sheet. This figure is a little low since additional crosslines over the deep, flat area were considered unnecessary. Most of the crosslines are in good agreement with the regular system of lines and those that are in disagreement are expected to agree when the final EPI correctors are applied.

L. COMPARISON WITH PRIOR SURVEYS:

There are no prior surveys in this area.

Disregard the following discussion. For the most recent comparison with the chart see Review Par. 7

M. COMPARISON WITH CHART:

Quite a few differences between this basic survey and the chart are to be found. First comparison will be made with C&GS Chart 1007 printed 2/2/53. This is the only chart covering the entire area of the survey.

The thousand fathom curve comes on the sheet on the western edge of the sheet near the northern corner. Here the curve is in fairly close agreement with the chart. Following the curve to the south and east, the loop shown on the chart extends too far to the south. The curve then turns north and extends slightly farther than shown on the chart but not as far east as shown on the chart.

CHART AS REVISED IN 1955 SHOWS CURVE IN GENERAL AGREEMENT WITH S.S. CHARTED SOUNDINGS VARY CONSIDERABLY FROM SS.

On the shoal side of the 1000 fathom curve there are several soundings shown on the chart that have been disproved by this survey.

(a) The 395 fm. sounding in latitude 23° 57' N, longitude 86° 18' W should be deleted. Soundings in this area are between 760 and 780 fathoms with no shoal indicated.

Erased 395 added 779

(b) The 395 fm. sounding in latitude 23° 37' N, longitude 86° 43' W is misplaced and should be moved approximately 10 miles to the west.

Not now.

(c) The 182 fm. shoal sounding in latitude 23° 15' N, longitude 85° 31' W should be deleted. No shoal in this area is indicated and the actual depths range around 550 fathoms.

Chart. removed

(d) The 2119 fm. sounding in latitude 23° 40' N, longitude 86° 02' W is too deep and should be changed. There were no soundings over 2000 fathoms in this area. not now

(e) The 702 fm. shoal sounding and shoal area in latitude 23° 23' N, longitude 84° 54' W should be deleted. The bottom is irregular in this area but all depths are over 1000 fathoms.

(f) The shoal area around the 620 fm. shoal sounding in latitude 23° 11' N, longitude 84° 37' W should be limited to below the latitude 23° 10' N line. Although the 620 fm. sounding did not fall within the limits of this survey and could not be verified, there is some doubt as to the existence of this shoal area. No indication of a shoal of this nature is apparent in the area adjacent to the 620 fm. sounding that falls on this sheet.

(g) There are two soundings shown near the center of the surveyed area that are incorrect. The first is the 2065 fm. sounding in latitude 23° 48' N, longitude 84° 50' W and the second is the 2064 fm. sounding in latitude 24° 08' N, longitude 85° 09' W. Both of these soundings are too deep and should be changed. No depths were recorded within the limits of this survey over 2000 fathoms.

(h) The 1000 fm. curve in the northeast corner of the survey is somewhat different from that shown on the chart and the necessary revisions should be made.

A comparison with C&GS Chart 1003 printed 9/15/52 shows only one addition to the information given above that effects this chart. This is the 916 fm. sounding and shoal area in latitude 24° 39.5' N, longitude 85° 12' W; this sounding and area should be deleted as there is no indication of a shoal on the survey. NOT SHOWN AFTER LAST REVISION (1953)

A comparison with C&GS Chart 1002 printed 3/8/54 shows no additional discrepancies to be considered other than those given above which fall within the limits of this chart.

N. - S.

None

T. BY-PRODUCT INFORMATION

Several reports were submitted for the 1953 and 1954 seasons relative to oceanographic information obtained during the course of the survey. Of particular interest are the set and drift observations taken which give a good picture of current flow and velocity over the

area of this survey. It was also noted that all the bottom samples obtained contained brown mud. These were fairly well scattered over the sheet and disprove some of the bottom characteristics shown on the chart. A list of reports submitted follows:

(a) Oceanographic Activities Report 1953 Season
by Raymond M. Stone

(b) Oceanographic Activities Report 1954 Season
by Carlton S. Frost

(c) Bathythermograph Observation Report 1953
by Raymond M. Stone

(d) Sea and Swell Observation Report 1953
by Raymond M. Stone

(e) Set and Drift Observation Report 1953
by Raymond M. Stone

U. - Y.

None

Z. TABULATION OF APPLICABLE DATA:

(a) Letter from Director to CO, Ship HYDROGRAPHER dated 19 April 1954; 22/MEK, S-2-HY; Subject: Combined boat sheet and smooth sheet for hydrographic surveys.

(b) Letter to Director from CO, Ship HYDROGRAPHER dated 28 May 1954; Subject: Smooth Sheet, project CS 328/54.

(c) Letter from Chief, Hydrography Branch, Coastal Surveys Division dated 29 June 1954; 22/MEK, S-1-HY; Subject: Combination boat and smooth sheet.

(d) Letter to Director by Marvin T. Paulson thru CO, Ship HYDROGRAPHER dated 30 July 1954; Subject: Smooth boat sheet, CS 328/54.

(e) Letter from Director to CO, Ship HYDROGRAPHER, undated; 22-SRO, S-1-HY; Subject: Plotting of smooth sheet during progress of survey.

(f) Letter to Director from CO, Ship HYDROGRAPHER dated 23 September 1954; Subject: Plotting of smooth sheet during progress of survey.

(g) Special Report, Combination Smooth Sheet and Boat Sheet, Project CS-328, by Lcdr. M. T. Paulson; submitted 11 January 1955.

(h) Report - EPI Calibration 1953, by Lcdr. R. M. Stone; submitted 13 December 1954. filed with H-8014

(i) Report - Computation of Fathometer Corrections 1953, by Lcdr. R. M. Stone; submitted 13 December 1954. "

(j) Report - Calibration of Registering Sheaves 1953, by Lcdr. R. M. Stone; submitted 13 December 1954. "

(k) Bathythermograph Slides, 3 boxes, 1954; submitted 1 March 1955.

(l) Oceanographic Activities Report 1954, by Ens. C. S. Frost; submitted 3 March 1955.

(m) Other Oceanographic Data for 1954 submitted 3 March 1955 as follows:

(1)	1 folder	Oceanographic Log Sheet B
(2)	1 folder	Shipboard Wave Observation Logs
(3)	1 folder	Set and Drift Observations
(4)	1 folder	Hydrographic Station Logs
(5)	7 folders	Oceanographic Station Data

(n) Velocity Correction Report 1954, by Lt. H. W. Keith; submitted 19 April 1955. In Library # 1505 # 151

(o) Fathometer Correction Report 1954, by Lt. H. W. Keith; submitted 19 April 1955. " "

(p) Oceanographic Activities Report 1953, by Lcdr. R. M. Stone; submitted 2 April 1954.

(q) Bathythermograph Observation Report 1953, by Lcdr. R. M. Stone; submitted 11 February 1954.

(r) Sea and Swell Observation Report 1953, by Lcdr. R. M. Stone; submitted 11 February 1954.

(s) Set and Drift Observation Report 1953, by Lcdr. R. M. Stone; submitted 11 February 1954.

(t) Computation of Velocity Corrections Report 1953, by Lcdr. R. M. Stone; submitted 25 March 1954. with H-8014

(u) Special Information Relative to Hurricane Florence, September 1953; submitted 30 September 1953.
Special Report on Hurricane Florence; submitted 22 September 1953.

(v) Special Report - Set and Drift in Gulf of Mexico, 1953; submitted 19 August 1953.

Respectfully submitted,

James D. Hodges

James D. Hodges
Lt. (j.g.), C&GS

1953

STATISTICS

For Hydrographic Survey No. H-8061 (HY-20153)

Ship HYDROGRAPHER **Project CS-328**

Date 1953	Day Letter	Volume Number	Number of Positions	Statute Miles of Sounding
22 July	A	I	10	14.0
23 July	B	I	69	158.6
26 July	C	I	26	79.9
28 July	D	I	25	59.2
29 July	E	I	99	282.9
30 July	F	I	60	108.1
7 August	G	I	45	115.2
8 August	H	I	28	77.6
21 August	J	I	59	138.6
22 August	K	I	21	57.5
26 August	L	I	36	92.0
27 August	M	I	56	147.2
4 September	N	I	27	60.8
5 September	P	I	104	250.7
6 September	Q	I	31	74.8
9 September	R	II	10	31.4
10 September	S	II	117	270.6
11 September	T	II	72	123.5
22 September	U	II	59	130.5
23 September	V	II	26	72.9
22 October	W	II	32	58.8
23 October	X	II	129	179.2
24 October	Y	II	133	247.5
25 October	Z	II	147	268.8
26 October	AA	II	54	99.2
			1475	3199.5

Ck'd: PH ✓

Number of temperature and salinity observations in this area: 5 *

~~Total~~ Area surveyed: 8120 square statute miles (1953)

*——Refer to "Computation of Velocity Corrections"

To cross reference manual records to automated records use list of position numbers on preceding pages.

copy ✓ PH

STATISTICS

For Hydrographic Survey H-8061 (1953-1954)

Ship HYDROGRAPHER
Project CS-328

DATE 1954	DAY LETTER	VOLUME NUMBER	Number of Positions	Statute Miles of Sounding
10 July	BA	III	15	41.1
11 July	CA	III	86	216.4
12 July	DA	III	4	12.1
13 July	EA	III	31	84.3
14 July	FA	III	33	97.7
22 July	GA	III	24	51.7
23 July	HA	III	50	141.0
24 July	JA	III	15	40.2
25 July	KA	III	10	11.5
26 July	LA	III	96	261.0
27 July	MA	III & IV	98	287.7
28 July	NA	IV	74	232.2
6 August	PA	IV	24	58.6
7 August	QA	IV	80	207.9
8 August	RA	IV	23	57.5
10 August	SA	IV	61	140.2
11 August	TA	IV	97	256.4
12 August	UA	V	91	226.6
13 August	VA	V	45	113.3
24 August	WA	V	80	218.7
25 August	XA	V	98	278.9
26 August	YA	VI	104	267.4
27 August	ZA	VI	85	156.1
28 August	AB	VI	99	270.4
29 August	BB	VI	12	37.0
10 September	CB	VI	21	52.0
11 September	DB	VI	93	219.6
12 September	EB	VII	79	207.2
		TOTALS (1954)	1628	4244.7
		TOTALS (1954 & 1953)	3103	7444.2

Total No. of square statute miles: 19,224

To cross reference manual records to automated records use list of position numbers filed in this report.

TIDE NOTE - 1953

Tide Station:	Key West, Florida	
Latitude:	24° 33!2 N	
Longitude:	81° 48!5 W	
Plane of reference:	Mean Low Water = 6.0 feet on tide staff (Director's letter of 15 Aug. 1952).	
Area Covered:	Entire area of Sheet HY-20153 (Director's letter of 31 July 1952).	
Time Correction:	-1 hour	Director's letter of 31 July 1952.
Height Correction:	None	

No tides applied to final soundings on this survey. Not required because of deep depths.

Tide reducers for the project area were determined by using observed tides for Key West during the 1952 season and predicted tides for the 1953 season, as authorized in the Director's letter, 36-rjb, dated 25 August 1953, a copy of which is appended to this report.

Hourly heights for the 1952 season were furnished by the Washington Office. These heights were referred directly to Mean Low Water.

1954

No tide reducers used during the 1954 field season since all depths were greater than 150 fms.

1953

Ref. No. 36-ejb

25 August 1953

To: The Commanding Officer
U.S.C.& G.S. Ship HYDROGRAPHER
P. O. Box 1259
St. Petersburg, Florida

Subject: Tide Reducers, Project CS-328

Reference is made to your letter of 19 August 1953 requesting that subject project area for the 1953 season be zoned for tide reducer purposes using St. Petersburg as the reference station.

The use of St. Petersburg as a reference station would result in relatively large time corrections. The inside location of the St. Petersburg station makes it subject to local tide conditions that would not necessarily be reflected in the project area. The project area is offshore where the time and range of tide have not been accurately determined. Under the circumstances therefore it is believed that tide reducers for the project area could be more effectively determined by using predicted tides for Key West rather than observed tides for St. Petersburg, and this procedure is authorized.

Zoning for project area using Key West as a reference station was furnished in my letter of 31 July 1952, a copy of which is enclosed.

/s/ Robert W. Knox

Acting Director

Enclosure

VELOCITY CORRECTION TEMPLATES

1953

AREA B

H-8061

Gulf of Mexico

SURVEYS: H-8013, (HY-10152) H-8016, (HY-10452) H-8061, (HY-20153)
H-8014, (HY-10252) H-8017, (HY-20152) H-8062, (HY-20253)
H-8015, (HY-10352) H-8019, (HY-20352)

PERIOD: 13 July through 25 September 1953

Velocity Correction Table attached

Use table of for 1953 work

DEPTH FATHOMS From	To	TEMPLATE Meters per second
00.0	28.6	1545
28.8	94.0	1530
94.2	210	1515
211	and deeper	1500

PERIOD: 6 October through 25 November 1953

DEPTH FATHOMS From	To	TEMPLATE Meters per second
00.0	111.5	1530
112	210	1515
211	and deeper	1500

Final soundings reduced for velocity by historical correction table, furnished by Mr. Starr, Oceanographic Analysis Branch, filed in this report.

Comp by: RMS
Ck'd by: GWT

1954

VELOCITY TEMPLATE ABSTRACT

1954

Ship HYDROGRAPHER Project OS-328

Sheets H-8017, H-8015, H-8104, H-8112, H-8013, H-8015, H-8016, H-8018, H-8061

No. 1		No. 2		Gulf of Mexico Mean	
Depths fm	Template m/s	Depths fm	Template m/s	Depths fm	Template m/s
0-55	1545	0-75	1545	0-101	1545
55-155	1530	75-220	1530	101-280	1530
155-325	1515	220-400	1515	280-530	1515
325 & over	1500	400 & over	1500	530-2000	1500
				2000 & over	1515

Sheets H-8017, H-8105, H-8013, H-8015, H-8016, H-8018, H-8061
Gulf of Mexico Mean

Sheet H-8104 A thru M day, 5 May thru 17 May - No. 1
N thru T day, 21 May thru 26 May - No. 2
U thru end, 8 June thru end, Gulf of Mexico Mean

Sheet H-8112 A thru C day, 5 May thru 17 May - No. 1
D day, 21 May - No. 2
E day thru end, 16 June thru end - Gulf of Mexico Mean

velocity correction
H-8061 use table #2 which agrees adj. with C.M.M.

Final soundings reduced for velocity by historical correction table on next page.

insert copy table 2

1953

FATHOMETER INSTRUMENTAL CORRECTORS

PERIOD "B"
(13 July to 25 November, 1953)

SURVEYS:

H-8013, (HY-10152)
H-8014, (HY-10252)
H-8015, (HY-10352)
H-8016, (HY-10452)
H-8017, (HY-20152)
H-8019, (HY-20352)
H-8061, (HY-20153)
H-8062, (HY-20253)

Fathometer, 808-J, No. 132-SG:

Scale (phase)	A	B	C	D
Correctors to 0.2 fathoms:	-0.2	-0.8	-1.4	-1.4
Correctors to 0.5 fathoms:	---	---	-1.5	-1.5

Fathometer, 808-J, No. 153-SPK:

Scale (phase)	A	B	C	D
Correctors to 0.2 fathoms:	-0.2	+0.8	+1.0	+0.6
Correctors to 0.5 fathoms:	---	---	+1.0	+0.5

Fathometer, NMC-2:

Correctors to 0.5 fathoms: -1.5

Comp by: RMS
Ck'd by: PH

INSTRUMENTAL CORRECTIONS

1954

SHIP HYDROGRAPHER L. S. Hubbard, Comdg.

808 Fathometers

	No. 132					No. 153			
Scale	0.1	0.2	0.5	1.0 fm. corr.	Scale	0.1	0.2	0.5	1.0 fm. corr.
A	+0.2	+0.2			A	-0.2	-0.2		
B	-0.6	-0.6	-0.5		B	+1.1	+1.0	+1.0	
C	-1.1	-1.2	-1.0		C	+1.7	+1.6	+1.5	
D		-1.2	-1.5 C+D	-1.0	D		+0.8	+0.5	+1.0

NMC Fathometer

Scale	0.2	0.5	1.0	2.0	4.0 fm. corr.
0-400, 400-800	-1.2	-1.5	-1.0	-2.0	
Deep			-3.0	-4.0	-4.0

Edo Fathometer

Scale	0.2	0.5	1.0	2.0	4.0 fm. corr.
0-600, 600-1200	-4.6	-4.5	-5.0	-4.0	
1200-1800				~~-22.0~~ -30.0	
Deep					~~-20.0~~ -40.0

Revised from comparison of scale changes along sdg. lines

5-19-66

1953

ABSTRACT OF DRAFT CORRECTORS - - 1953
(Correctors in ±0.2 fms. and ±0.5 fms.)

Strip No.	Time and Date	±0.2	±0.5
1	0000 - 20 April to 1200 - 22 April	-0.2	0.0
	1201 - 22 April to 2400 - 24 April	-0.2	-0.5
2	0000 - 26 April to 1200 - 27 April	0.0	0.0
	1201 - 27 April to 1200 - 28 April	-0.2	0.0
	1201 - 28 April to 2400 - 1 May	-0.2	-0.5
3	0000 - 5 May to 2400 - 9 May	0.0	0.0
	0000 - 10 May to 0800 - 15 May	-0.2	0.0
	0800 - 15 May to 2400 - 15 May	-0.2	-0.5
4	0000 - 18 May to 1200 - 20 May	0.0	0.0
	1201 - 20 May to 2400 - 29 May	-0.2	0.0
5	0000 - 9 June to 0800 - 13 June	0.0	0.0
	0801 - 13 June to 0800 - 18 June	-0.2	0.0
	0801 - 18 June to 2400 - 19 June	-0.2	-0.5
6	0000 - 23 June to 2400 - 25 June	0.0	0.0
	0000 - 26 June to 2400 - 2 July	-0.2	0.0
7	0000 - 13 July to 2400 - 15 July	0.0	0.0
	0000 - 16 July to 2400 - 17 July	-0.2	0.0
8	0000 - 21 July to 0400 - 22 July	0.0	0.0
	0401 - 22 July to 2400 - 26 July	-0.2	0.0
	0000 - 27 July to 2400 - 31 July	-0.2	-0.5
9	0000 - 6 August to 1200 - 9 August	0.0	0.0
	1201 - 9 August to 0400 - 12 August	-0.2	0.0
	0401 - 12 August to 2400 - 14 August	-0.2	-0.5
10	0000 - 20 August to 0800 - 26 August	0.0	0.0
	0801 - 26 August to 2400 - 28 August	-0.2	0.0
11	0000 - 3 September to 2400 - 7 September	0.0	0.0
	0000 - 8 September to 2400 - 12 September	-0.2	0.0
12	0000 - 21 September to 2400 - 27 September	0.0	0.0
13	0000 - 6 October to 2400 - 10 October	0.0	0.0
14	0000 - 12 October to 2400 - 15 October	0.0	0.0
	0000 - 16 October to 2400 - 16 October	-0.2	0.0
15	0000 - 21 October to 1800 - 28 October	0.0	0.0
	1801 - 28 October to 2400 - 29 October	-0.2	0.0
16	0000 - 4 November to 1200 - 9 November	0.0	0.0
	1201 - 9 November to 2400 - 12 November	-0.2	0.0
17	0000 - 19 November to 1200 - 21 November	0.0	0.0
	1201 - 21 November to 2400 - 25 November	-0.2	0.0

Comp by: RMS
Ck'd by: PH

DRAFT CORRECTIONS

1954

Ship HYDROGRAPHER L. S. Hubbard, Comdg.

From	To	0.1 fm. corr.	0.2 fm. corr.
5 May	0936 10 May	0.0	0.0
0936 10 May	17 May	-0.1	-0.2
21 May	1912 25 May	0.0	0.0
1912 25 May	29 May	-0.1	-0.2
7 June	1424 12 June	0.0	0.0
1424 12 June	17 June	-0.1	-0.2
21 June	0448 22 June	∠0.1	0.0
0448 22 June	0000 27 June	0.0	0.0
0000 27 June	30 June	-0.1	-0.2
9 July	16 July	0.0	0.0
21 July	0000 26 July	0.0	0.0
0000 26 July	31 July	-0.1	-0.2
5 August	0000 7 August	∠0.1	0.0
0000 7 August	0330 12 August	0.0	0.0
0330 12 August	15 August	-0.1	-0.2
21 August	0000 26 August	0.0	0.0
0000 26 August	30 August	-0.1	-0.2
9 Sept.	1320 13 Sept.	0.0	0.0
1320 13 Sept.	16 Sept.	-0.1	-0.2
21 Sept.	1312 27 Sept.	0.0	0.0
1312 27 Sept.	30 Sept.	-0.1	-0.2
6 October	0000 7 October	∠0.1	0.0
0000 7 October	9 October	0.0	0.0
15 October	2136 17 October	0.0	0.0
2136 17 October	20 October	-0.1	-0.2
23 October	0448 26 October	0.0	0.0
0448 26 October	30 October	-0.1	-0.2
6 Nov.	1200 10 Nov.	0.0	0.0
1200 10 Nov.	12 Nov.	-0.1	-0.2
16 Nov.	0400 20 Nov.	-0.1	-0.2
0400 20 Nov.	21 Nov.	-0.2	-0.2

DRAFT CORRECTORS

1954

Ship HYDROGRAPHER L. S. Hubbard, Comdg.

From	To	0.5 fm. corrector
5 May	0712 30 July	0.0
0712 30 July	31 July	-0.5
5 August	1424 29 August	0.0
1424 29 August	30 August	-0.5
9 September	1000 29 October	0.0
1000 29 October	30 October	-0.5
6 November	0500 19 November	0.0
0500 19 November	21 November	-0.5

Draft correction zero for 1.0, 2.0, and 4.0 fathom correctors for all days.

EPI CORRECTIONS
(in microseconds)

1953

Ship HYDROGRAPHER - - Season of 1953

Period "B" - - Gulf of Mexico

SURVEYS: H-8013, (HY-10152)
H-8014, (HY-10252)
H-8015, (HY-10352)
H-8016, (HY-10452)
H-8017, (HY-20152)
H-8019, (HY-20352)
H-8061, (HY-20153)
H-8062, (HY-20253)

DATE	SURVEYS	EPI CORRECTOR			
		EPIF		EPIF	
		Regular Set #31	Spare Set #11	Regular Set #32	Spare Set #10
13 July through 25 November 1953	All Surveys	(-5.1)	(-3.7)	(-4.8)	(-3.8)

Comp by: IRP
Ck'd by: RMS

EPI CORRECTORS

(in microseconds)

GULF OF MEXICO

1954

Surveys: H-8061 (HY-20153)

Date	EPI Correctors			
	F		G	
	Regular Set #32	Spare Set #10	Regular Set #31	Spare Set #11
10 July - 28 July	-4.0		-7.0	
6 Aug. - 12 Sept.	-3.0		-6.0	

Comp: GEM
CHkd: JDH

CROSS REFERENCING OF POSITION NUMBERS

H-8061

ORIGINAL RECORDS (Sounding Volumes)			AUTOMATED RECORDS		
Day	Date	Positions	Day	Year	Positions
A	7-22-53	1-10	203	53	1-9
B	7-23-53	1-69	204	53	10-78
C	7-26-53	1-26	207	53	79-104
D	7-28-53	1-25	209	53	105-128
E	7-29-53	1-99	210	53	129-226
F	7-30-53	1-60	211	53	227-287
G	8-07-53	1-45	219	53	288-331
H	8-08-53	1-28	220	53	332-359
J	8-21-53	1-59	233	53	360-417
K	8-22-53	1-21	234	53	418-438
L	8-26-53	1-36	238	53	439-473
M	8-27-53	1-56	239	53	474-534
N	9-04-53	1-27	247	53	535-562
P	9-05-53	1-104	248	53	563-669
Q	9-06-53	1-31	249	53	670-700
R	9-09-53	1-10	252	53	701-709
S	9-10-53	1-117	253	53	710-827
T	9-11-53	1-72	254	53	828-902
U	9-22-53	1-59	265	53	903-960
V	9-23-53	1-26	266	53	961-986

Day	Date	Positions		Day	Year	Positions
W	10-22-53	1-32	.....	295	53	987-1018
X	10-23-53	1-129	.....	296	53	1019-1148
Y	10-24-53	1-133	.....	297	53	1149-1280
Z	10-25-53	1-147	.....	298	53	1281-1427
AA	10-26-53	1-54	.....	299	53	1428-1481
BA	07-10-54	1-15	.....	191	54	1482-1495
CA	07-11-54	1-86	.....	192	54	1496-1572
DA	07-12-54	1-4	.....	193	54	1573-1577
EA	07-13-54	1-31	.....	194	54	1578-1607
FA	07-14-54	1-33	.....	195	54	1608-1641
GA	07-22-54	1-24	.....	203	54	1642-1666
HA	07-23-54	1-50	.....	204	54	1667-1717
JA	07-24-54	1-15	.....	205	54	1718-1733
KA	07-25-54	1-10	.....	206	54	1734-1742
LA	07-26-54	1-96	.....	207	54	1743-1838
MA	07-27-54	1-97	.....	208	54	1839-1944
NA	07-28-54	1-74	.....	209	54	1945-2020
PA	08-06-54	1-27	.....	218	54	2021-2049
QA	08-07-54	1-80	.....	219	54	2050-2136
RA	08-08-54	1-23	.....	220	54	2137-2163
SA	08-10-54	1-61	.....	222	54	2164-2224
TA	08-11-54	1-100	.....	223	54	2225-2325
UA	08-12-54	1-91	.....	224	54	2326-2415

Day	Date	Positions	Day	Year	Positions
VA	8-13-54	1-45	225	54	2416-2461
WA	8-24-54	1-80	236	54	2462-2541
XA	8-25-54	1-98	237	54	2542-2641
YA	8-26-54	1-104	238	54	2642-2751
ZA	8-27-54	1-85	239	54	2752-2840
AB	8-28-54	1-99	240	54	2841-2941
BB	8-29-54	1-12	241	54	2942-2954
CB	9-10-54	1-21	253	54	2955-2974
DB	9-11-54	1-93	254	54	2975-3063
EB	9-12-54	1-79	255	54	3064-3145

The total number of positions for a certain day as recorded in the original records and the automated records may differ by a few numbers. Positions not plotted and rejected positions recorded in the original records are not reflected in the totals of the automated records. Also any additional artificial fixess(turning positions, etc.) recorded in the automated records are not reflected in the totals of the original records.

ARTIFICIAL FIXES

Day	Year	Positions
210	53	171
211	53	248
239	53	476, 477, 483, 486, 494, 507
247	53	561, 562
248	53	589, 590, 611, 626
253	53	793, 819
254	53	860, 873, 889

ARTIFICIAL FIXES

Day	Year	Positions
295	53	1012
296	53	1059, 1071, 1142, 1143
297	53	1234
298	53	1376
192	54	1543
203	54	1660, 1664
205	54	1725
208	54	1844, 1846, 1870, 1903, 1905, 1919, 1921, 1935
209	54	1947
218	54	2026, 1948, 2033, 2039, 2043
219	54	2058, 2060, 2067, 2090, 2104, 2105, 2115, 2117
220	54	2143, 2153, 2160
222	54	2199
223	54	2253, 2304, 2307
224	54	2407
225	54	2428
236	54	2504
237	54	2552, 2623
238	54	2643, 2686, 2690, 2696, 2732, 2744
239	54	2757, 2760, 2769, 2776, 2793, 2796, 2814
240	54	2846, 2849.
254	54	3018, 3035, 3038, 3039, 3064
255	54	3067, 3078

H-8061

VELOCITY CORRECTIONS

Final soundings reduced for velocity by using this table.

800 fm./sec.
NMC-2 EDO

Table 2

Corrections to Depth

± 0.1 fm.	5.0 fm.	± 4.3 fm.	91.0 fm.
± 0.2	7.0	± 4.5	95.0
± 0.3	9.0	± 4.7	100.0
± 0.4	11.0	± 4.9	105.0
± 0.5	14.0	± 5.0	112.0
± 0.7	18.0	± 5.5	123.0
± 0.9	22.0	± 6.0	135.0
± 1.1	26.0	± 6.5	148.0
± 1.3	30.0	± 7.0	160.0
± 1.5	34.0	± 8.0	195.0
± 1.7	38.0	± 9.0	222.0
± 1.9	42.0	±10.0	254.0
± 2.1	46.0	±11.0	289.0
± 2.3	50.0	±12.0	327.0
± 2.5	54.0	±13.0	367.0
± 2.7	58.0	±14.0	408.0
± 2.9	62.0	±15.0	462.0
± 3.1	66.0	±16.0	542.0
± 3.3	70.0	±17.0	615.0
± 3.5	74.0	±18.0	722.0
± 3.7	78.0	±20.0	835.0
± 3.9	83.0	±22.0	933.0
± 4.1	87.0	±24.0	1018.0

Table above submitted by Starr, Oceanographic Analysis Branch, is extended to greater depths from field corrections in sounding volumes, H-8061 (1953-54)

+26.0 fm.	1035 fm	+38.0 fm		1435 fm	+50.0 fm		1750 fm
+28.0	1115	+40.0		1495	+52.0		1840
+30.0	1185	+42.0		1545	+56.0		1950 Deepest
+32.0	1250	+44.0		1605			
+34.0	1315	+46.0		1655			
+36.0	1360	+48.0		1705			

H-8061
HY-20153

APPROVAL SHEET

The field work accomplished on this survey was under the immediate supervision of Captain L. S. Hubbard. He made daily inspections of the records, fathograms, Boat and Smooth Boat Sheet as the survey progressed. He was detached after the 1954 field season and prior to the completion of the processing of the field records.

The field work commenced in 1953 and completed in 1954. The 1954 field work was plotted on a Smooth Boat Sheet. This Smooth Boat Sheet with all the necessary field records was forwarded to the Norfolk Processing Office in order that the 1953 field work may be plotted thereon.

The survey is considered complete and adequate and no additional field work is recommended.

Walter J. Chovan
CDR, USC&G Survey
Commanding Officer
Ship HYDROGRAPHER

NORFOLK PROCESSING OFFICE
ADDENDUM
To Accompany

HYDROGRAPHIC SURVEY H-8061 (Field No. Hy-20153)

GENERAL

All work accomplished during the 1953 field season (A thru AA days), was processed and plotted by the Norfolk Office. The remaining work (BA thru EB days), accomplished during the 1954 season, was plotted aboard Ship Hydrographer as a "Smooth Boat Sheet."

See Review Par. 4

The 1953 work was plotted with a minimum of difficulty and has resulted in, what appears to be, an excellent survey. The 1953 soundings agree very well at crossings and in most instances check the 1954 work. Some scattered discrepancies were noted at crossings of the two seasons work but these could usually be resolved by re-scanning the 1954 work. (These discrepancies are shown in red pencil on the accompanying overlay)

No changes were made on the smooth sheet and no verification was made of work done aboard ship as it is believed a better evaluation of the "Smooth Boat Sheet Method" can be made in the Washington Office.

SOUNDINGS

All fathograms covering the 1953 work were check scanned and the final reducers were applied by template. The reduced soundings are recorded in the volumes in red pencil.

Soundings reduced by template not used on final automated smooth sheet.

Norfolk, Va.
1 July 1957

Respectfully submitted,

Hugh L. Proffitt

Hugh L. Proffitt
Cartographer.

GEOGRAPHIC NAMES

Survey No. H-8061

Name on Survey	On Chart No. A	On previous survey No. B	On U. S. quadrangle Maps C	From local information D	On local Maps E	P. O. Guide or Map F	Rand McNally Atlas G	U. S. Light List H	K	
Florida		}	for title						RGH	1
Gulf of Mexico		}								2
										3
										4
			Names approved							5
			7-19-57. L. Hack							6
										7
Key West			(Tide station)						BFH	8
										9
										10
										11
										12
										13
										14
										15
										16
										17
										18
										19
										20
										21
										22
										23
										24
										25
										26
										27

M 234

Hydrographic Surveys (Chart Division)

See Form 946 following for time data.

HYDROGRAPHIC SURVEY NO. 8061...

Records accompanying survey: Destroyed 1/16/70 B9

Boat sheets .1..; sounding vols.. .7...; wire drag vols. .....;

bomb vols. .....; graphic recorder rolls 13-Envelopes

special reports, etc. 1-Smooth sheet., 1-Descriptive report., and

1-Myla plotting overlay.. 2-Cahiers., EPI Plotting abstracts.....

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

Number of positions on sheet		......
Number of positions checked		......
Number of positions revised		......
Number of soundings revised (refers to depth only)		......
Number of soundings erroneously spaced		......
Number of signals erroneously plotted or transferred		......
Topographic details	Time	......
Junctions	Time	......
Verification of soundings from graphic record	Time	......

Verification by...................Total time ...... Date ....

Reviewed by.......................... Time ...... Date ....

M-2232-1

FORM C&GS-946
(REV. 11-65)
(PRESC. BY HYDROGRAPHIC MANUAL 20-2, 6-94, 7-13)

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

HYDROGRAPHIC SURVEY STATISTICS

HYDROGRAPHIC SURVEY NO. H-8061

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

RECORD DESCRIPTION	AMOUNT	RECORD DESCRIPTION	AMOUNT
SMOOTH SHEET		BOAT SHEETS	
DESCRIPTIVE REPORT		OVERLAYS	

DESCRIPTION	DEPTH RECORDS	HORIZ. CONT. RECORDS	PRINTOUTS	TAPE ROLLS	PUNCHED CARDS	ABSTRACTS/ SOURCE DOCUMENTS
ENVELOPES						
CAHIERS						
VOLUMES						
BOXES						

T-SHEET PRINTS *(List)*

SPECIAL REPORTS *(List)*

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				3089
POSITIONS CHECKED		~~3089~~		
POSITIONS REVISED		55		
DEPTH SOUNDINGS REVISED		0		
DEPTH SOUNDINGS ERRONEOUSLY SPACED		0		
SIGNALS ERRONEOUSLY PLOTTED OR TRANSFERRED		0		
	TIME (MANHOURS)			
TOPOGRAPHIC DETAILS				
JUNCTIONS				
VERIFICATION OF SOUNDINGS FROM GRAPHIC RECORDS		8		
SPECIAL ADJUSTMENTS wrote article proposing name Jordan Canyons		0	32 hrs.	
ALL OTHER WORK includes erasing and replacing all depth curves.		242 (80)	97.5 hrs.	
TOTALS		~~250~~ 330	129.5 hrs.	

PRE-VERIFICATION BY	BEGINNING DATE	ENDING DATE
VERIFICATION BY J. B. Chambers / Lenore J. Romesburg	BEGINNING DATE 5-17-66	ENDING DATE 7-24-68
REVIEW BY Dale E. Westbrook	BEGINNING DATE 4/1/69	ENDING DATE 4/28/69

USCOMM-DC 36271-P65

Reg. No. H-8061 (1953-54)

The Computer and Excess Sounding Cards for this survey have not been corrected to reflect the changes made to the Computer Card and Excess Card Printouts at this time of the review.

When the cards have been updated to reflect the final results of the survey, the following shall be completed:

CARDS CORRECTED

DATE_____ TIME REQ'D_____ INITIALS_____

REMARKS:

INFORMATION FOR FUTURE PRE-SURVEY REVIEWS

A future pre-survey review of this area should recommend a more intensive development of the submarine canyons in the northeast corner of the present survey and development of the knoll in lat. 23°55', long. 85°24.5'.

An investigation of the reported soundings as discussed in Par. 7 of the review is also warranted.

Dale E. Westbrook

OFFICE OF HYDROGRAPHY AND OCEANOGRAPHY

MARINE CHART DIVISION

HYDROGRAPHIC SURVEY REVIEW

REGISTRY NO. H-8061 FIELD NO. HY-20153

Alabama, Florida, Gulf of Mexico, South Central Gulf of Mexico

SURVEYED: July through October 1953 and July through September 1954

SCALE: 1:200,000 PROJECT NO.: CS-328

SOUNDINGS: NMC II and EDO (AN/UQN-1B) Depth Recorders CONTROL: EPI (Electronic Position Indicator)

Chief of Party	L. S. Hubbard
Surveyed by	R. A. Earle
	I. R. Rubottom
	R. M. Stone
	M. T. Paulson
	G. E. Morris
	W. J. Chovan
	J. D. Hodges
	C. S. Frost
	G. W. Thompson
Protracted by	Gerber Digital Plotter
Soundings Plotted by	Gerber Digital Plotter
Verified by	J. C. Chambers
	D. J. Romesburg
	(Rockville)
Reviewed by	D. E. Westbrook
	date: April 23, 1969
Inspected by	R. H. Carstens

1. Description of the Area

This survey covers part of the south central Gulf of Mexico, and extends from the northern end of Campeche Bank on the west to the southwestern terminus of the Straits of Florida on the east.

Several features of special interest fall in the area covered by this survey. In about lat. 23°30', long. 86°00', a major embayment, called Campeche Tongue on bathymetric maps, interrupts the general trend of the Mexico continental slope. The slope in this area is characterized by an escarpment of 1,000 fathoms, the abrupt nature of which is surprisingly unchanged throughout Campeche Tongue.

From lat. 24°00', long. 83°50' to lat. 24°40', long. 84°25' in the northeast corner of the survey, a series of canyons incise the Florida continental slope. These features continue to the northwestward on survey H-8018. There are a total of 13 contiguous canyons in the group.

These canyons were contoured and discussed by Jordan and Stewart (1959) in the article, Continental Slope Off Southwest Florida, and by Jordan (1962) in Submarine Physiography of the U.S. Continental Margins, C&GS Technical Bulletin No. 18.

Most of the remaining area covered by the present survey covers the relatively flat abyssal depths of the floor of the Gulf of Mexico.

The bottom throughout much of the area is composed of brown mud, fine sand, and some broken shells.

2. Control and Shoreline

The source of the control is adequately described in the Descriptive Report.

There is no shoreline within the limits of this survey.

3. Hydrography

A. Depths at crossings are in good agreement. Isolated crossing discrepancies of up to 5 fathoms remain on the smooth sheet in the deeper portions of the survey (1800-1900 fathoms). Because of small, usually negligible imperfections in the sounding equipment, and the fact that the smallest estimable unit on the NMC fathometer on the deep scale is 5 fathoms, it is unrealistic to attempt to obtain perfect crossings over the entire smooth sheet, or in any case to claim a greater sounding accuracy than ½ of 1 percent of the depth.

B. The usual depth curves were adequately delineated. Additional curves were drawn at 100-fm. intervals from 600-900 fms. to more adequately portray the canyons in the northwest corner of the survey. The 1500-fm. depth curve was also drawn, not only to help portray those canyons, but to reveal the escarpment in the southwestern portion of the survey.

C. The development of the bottom configuration and delineation of least depths are considered adequate. If the survey were to be undertaken today, however, it is certain that bathymetric mapping requirements would have necessitated a more intensive and perhaps larger scale delineation of the canyons in the northwest corner of the survey.

4. Condition of the Survey

The sounding records, automated plotting, and the Descriptive Report are adequate and conform to the requirements of the Hydrographic Manual and the Instruction Manual, Automated Hydrographic Surveys.

This survey was originally smooth plotted by manual methods in 1957, and the soundings were reduced by using templates. In order to facilitate verification of the survey, and to eliminate the hand inking of the soundings, the original data were logged in digital form in 1966, reduced by computer, and a new smooth sheet plotted by the Gerber Digital Plotter. The old manual smooth sheet was utilized during the verification process and will be destroyed after this review is signed.

Velocity corrections for the automated smooth sheet were furnished by Mr. Starr, Oceanographic Analysis Branch. These corrections correspond reasonably well to the original velocity corrections applied to the manual smooth sheet by the template method.

A correction of -20 fathoms was applied to all soundings from Pos. 9 (1505) to Pos. 20 (1516) CA-day to provide agreement with a crossline and other adjacent lines. An additional portion of the line from Pos. 20-1 (151601) to Pos 51-2 (153702) CA-day was rejected as it was an unimportant crossline which did not agree with the regular system of lines. Apparently, either the fathometer frequency was incorrect or the top of the bottom trace was not registering properly on the CA-day fathogram during the above portions of the day.

The Mylar Position Number Overlay was not entirely satisfactory, as the position numbers were not dark enough. The legibility of the plotter's products should be controlled more carefully.

5. Junctions

Adequate junctions were effected with H-8062 (1953-4) on the west; H-8018 (1952) on the north; and both H-8017 (1952-54) and H-8570 (1960) on the east.

The junction with unverified survey H-8016 (1952-54) also on the east will be discussed in the review of that survey.

No contemporary survey joins the present survey on the south. However, the present survey is in general harmony with charted depths in this area, except as described in Par. 7 of this review.

6. Comparison With Prior Surveys

H-1138	(1:600,000)	1872
H-1353	(1:600,000)	1875-77
H-1399	(1:800,000)	1877-78

These prior surveys contain only a few reconnaissance soundings within the present survey area. These old soundings were obtained by wire, and were controlled by dead reckoning. Consequently they are only accurate enough to provide general depths.

The present survey, by virtue of its larger scale, more complete delineation, and more accurate control adequately supersedes these prior surveys within the common area.

H-8521 (1960) Position Plotting Sheets 13 and 14

Several soundings from this Ship EXPLORER trackline survey fall within the present survey limits. No soundings from this source are presently charted within the present survey limits, but because they are uncorrected for velocity, these soundings should not be used for future charting within the common area.

7. Comparison with Chart 1002, 21st. ED., Dec. 9, 1968
Chart 1007, 22nd. ED., Dec. 2, 1968

A few charted soundings within the present survey area originate with the previously discussed prior surveys which require no further consideration. The majority of the charted soundings are from U.S. Navy charts and trackline sheets of various years, supplemented by soundings from the boat sheet and manually plotted smooth sheet of the present survey.

The quality of the U.S. Navy soundings seems to vary considerably, thus a detailed comparison with the present survey would not be meaningful.

Attention is directed to the following:

The 20-fm. sounding Rep. (1965) PA charted in lat. 23°18', long. 85°53' originates with Notice to Mariners No. 38 of 1965 (CL-1357/65). The 68-fm. sounding Rep. (1959) PA charted in lat. 23°12', long. 85°51' originates with Notice to Mariners No. 24 of 1959 (CL-569/59). These two reported soundings fall in 600-800 fathom depths on the present survey and obviously appear to be in error.

However, other shoal depths have been reported about 10-15 mi. to the southeastward, beyond the limits of the present survey and give evidence that a shoal feature may exist in the general area.

Since the northerly two soundings were reported subsequent to the present survey, and since the southerly two reported soundings cannot presently be evaluated, it is recommended that the reported soundings, falling within the present survey limits, be retained pending some future investigation of the reports.

Except for the above reported soundings, the present survey is adequate to supersede the charted soundings within the common area.

8. Compliance With Instructions

The present survey adequately complies with the Project Instructions.

9. Additional Field Work

This survey is considered a good basic survey and no additional field work is recommended. However, the reported soundings discussed in Par. 7 should be investigated if the opportunity presents itself, without specifically assigning a ship to the area.

Examined and Approved:

Chief
Marine Chart Division

Associate Director
Office of Hydrography
and Oceanography

Form 712
(11-30-55)

U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

TIDE NOTE FOR HYDROGRAPHIC SHEET

Chart Division: R. H. Carstens 26 July 1957

Plane of reference approved in
7 volumes of sounding records for

HYDROGRAPHIC SHEET 8061

Locality Gulf of Mexico, Florida

Chief of Party: L. S. Hubbard in 1953-1954

Plane of reference is

ft. on tide staff at

ft. below B.M.

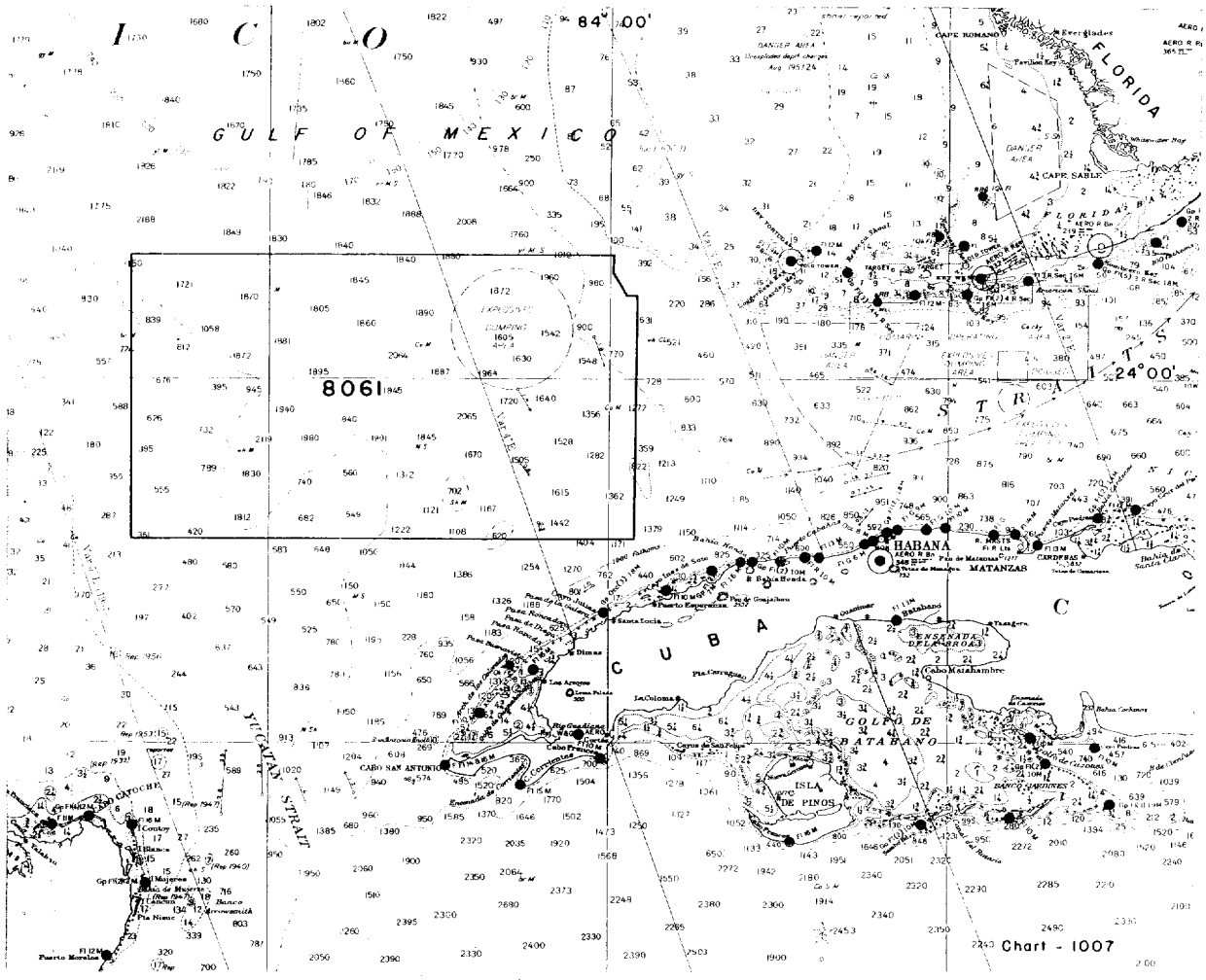
Condition of records satisfactory except as noted below:

NOTE: Tide reducers have not been entered due to large depths.

Signature

Chief, Tides Branch

Comm-DC 34330


GULF OF MEXICO
84° 00'
24° 00'
8061
FLORIDA
CAPE ROMANO
CAPE SABLE
HABANA
MATANZAS
CUBA
GOLFO DE BATABANO
ISLA DE PINOS
ENSENADA DE LA BROA
Cabo Matahambre
CABO SAN ANTONIO
YUCATAN STRAIT
CAMPECHE
Chart - 1007

NAUTICAL CHARTS BRANCH

SURVEY NO. H-8061

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
8/6/57	1007	Saue	Before ~~After~~ Verification and Review Revised one sounding only.
9/26/57	1002	McAlinden	Before ~~After~~ Verification and Review few soundings added in bold figs Partially applied
8/18/59	1003	M. Rogers	Before ~~After~~ Verification and Review one sounding added
8-24-70	1007	Eric Frey	Part appd ~~Before~~ After Verification and Review Examined for critical corrections only. To be appl'd to larger scale chts later
10/9/70	1002	Q. Williams	Fully Appl'd ~~Before~~ After Verification ~~and~~ Review & Inspected, Revised 1000 fm curve & added numerous sdgs.
9/29/71	1003	S. McKellar	Partial ~~Before~~ After Verification and Review Exam. for critical corrections. Made correction partly from 1002
11/8/71	1007	S. McKellar	~~Before~~ After Verification and Review, inspection. Fully Applied. ~~X-DWG~~ DWG #48
1-9-73	1003	O. Williams	~~Before~~ After Verification and Review, inspection. Fully Applied. X-DWG #23
2/13/73	1007	O. Williams	~~Before~~ After Verification and Review, inspection. Fully Applied to DWG #49
			Before After Verification and Review

M-2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.