8014

Diag. Cht. Nos. 1002 & 1007-2

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. HY-10252 Office No. H-8014

LOCALITY

State Florida

General locality Gulf of Mexico

Locality Southwest of Tampa Bay Entrance

19A 52-53

CHIEF OF PARTY

J. C. Sammons & L. S. Hubbard

LIBRARY & ARCHIVES

DATE November 18, 1954

B-1870-1 (1

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-8014

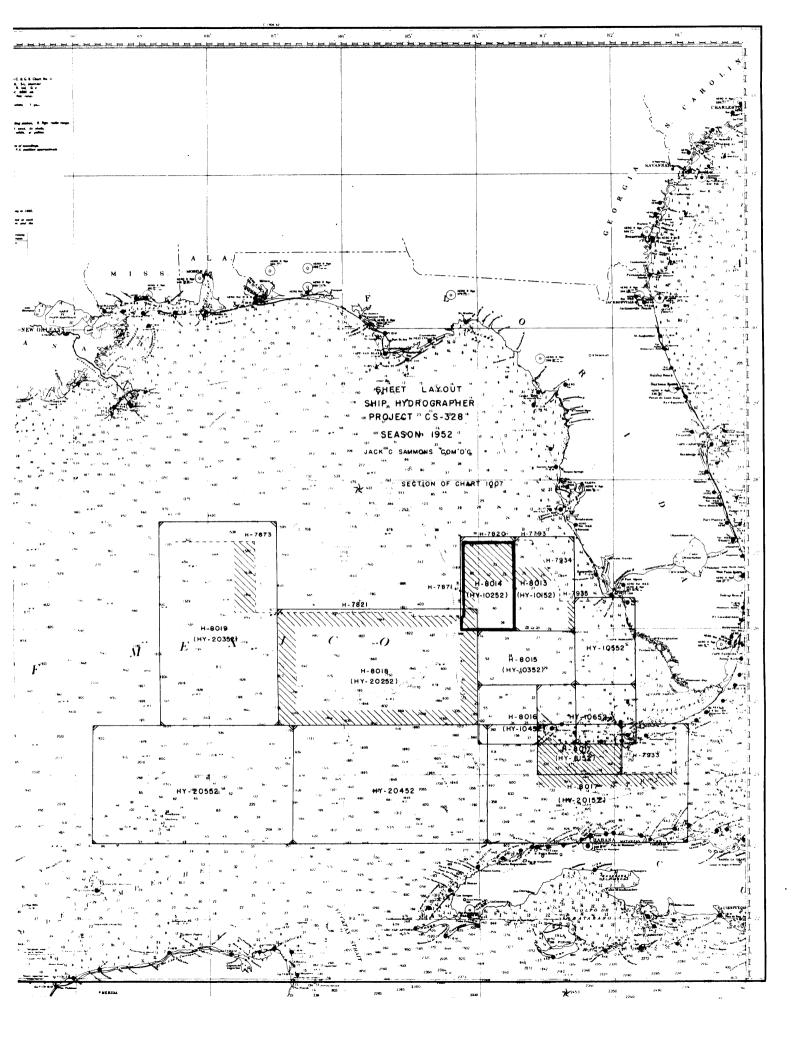
Field No. .. HY-10252....

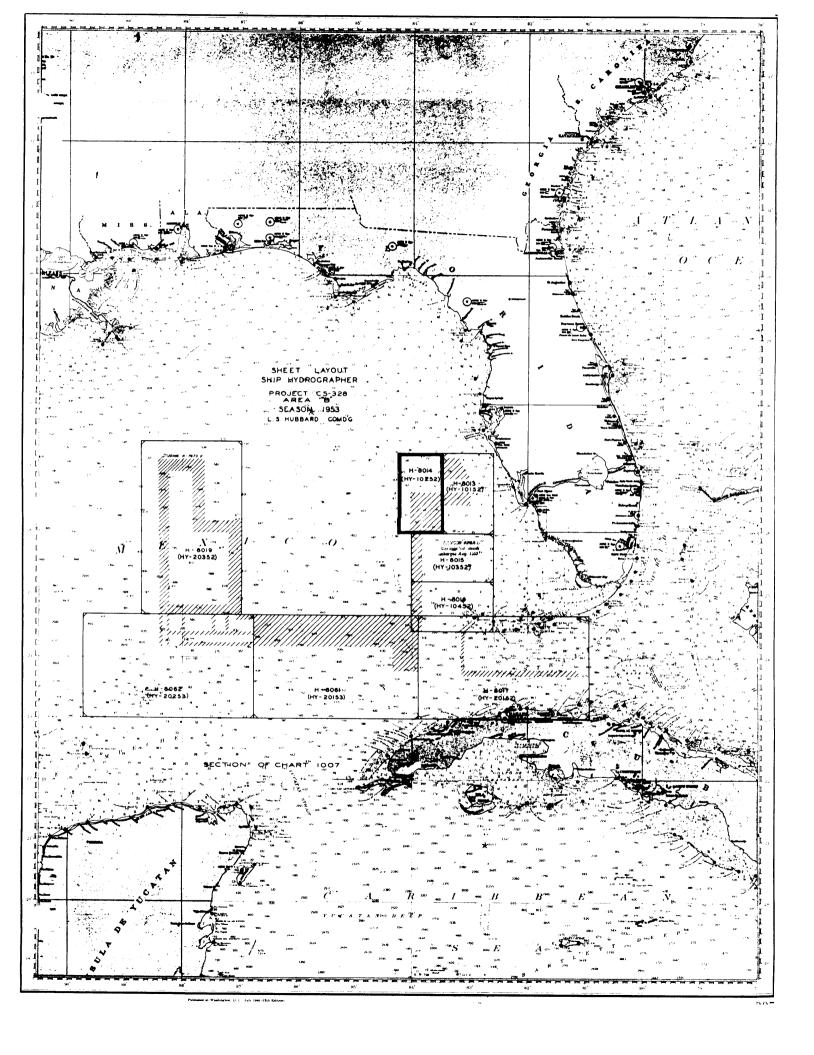
State	Florida
General locality	Gulf of Mexico
S Locality	outhwest wife Tampa Bay Entrance
	5 August - 23 Nov. 1952 1:100,000 Date of survey 21 July - 5 Nov. 1953 20 March 1952
Instructions dated	9 March 1953
Vessel	Ship HYDROGRAPHER
Chief of party	Jack C. Sammons 1952 Season L. S. Hubbard 1953 Season
Surveyed by	R.A. Earle, I.R. Rubottom, R.M. Stone, M.T. Paulson, E.E. Jones
Soundings taken by	fathometer, graphic recorder,/hahl/leas//tylye/
Fathograms scaled	by Personnel aboard Ship HYDROGRAPHER
Fathograms checke	d byD.P. Harnden
Protracted by	D.P. Harnden
Soundings penciled	by D.P. Harnden
Soundings in fa	thoms feet at MLW MILIMI and are true depths
REMARKS: Th	is survey was smooth plotted in the Hydrographic Section of
. 	Offshore Survey the Norfolk Processing Office.
	Control by E.P.I. System
	<u></u>

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Sheet H-8014, (HY-10252)

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DESCRIPTIVE REPORT

to Accompany

Hydrographic Survey H-8014 (HY-10252)

5 August to 23 November 1952 21 July to 5 November 1953

Ship HYDROGRAPHER

Scale 1:100,000

Chief of Party: Jack C. Sammons - - 1952 L. S. Hubbard - - 1953

A. PROJECT:

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

B. SURVEY LIMITS AND DATES:

This survey is offshore in the Gulf of Mexico. The northeastern corner of the sheet lies approximately 40 miles southwest of the entrance to Tampa Bay, Florida. The survey is joined by prior modern surveys as follows:

- 1. On the north by Survey H-7820, scale 1:100,000, surveyed during 1950.
- 2. On the west by Survey H-7871, scale 1:100,000, surveyed during 1950.
- 3. On the northeast by Survey H-7793, scale 1:100,000, surveyed during 1950.

The survey joins contemporary surveys on the east, south, and southwest. On the east it joins survey H-8013 (HY-10152), scale 1:100,000. On the south it joins survey H-8015 (HY-10352), scale 1:100,000. On the southwest it joins survey H-8018 (HY-20252), scale 1:200,000. Surveys H-8013 and H-8015 were only partially completed during 1952 and 1953. Survey H-8018 was completed during the 1952 season.

The field work on this survey was started on 5 August and was discontinued on 23 November 1952. Work was resumed on 21 July and and was completed on 5 November 1953. This survey was made in conjunction with other surveys in the area with the ship based at St. Petersburg, Florida.

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 and there have been no changes in the ship's trim or hull since that time.

No sub-parties were operated from the ship on this survey.

Two 808-J type depth recorders were used as sounding units on this survey. The installation of the 808-J type machines was such that either could be used at will and both considered regular units and neither a standby.

All soundings were recorded from the fathograms and they are the permanent records of the depths.

To obtain instrumental corrections, numerous simultaneous comparisons were made between the 808-J model fathometer and a wire sounding machine, with an accurately calibrated sheave in depths of less than 25 fathoms as recommended in the Hydrographic Manual. Please refer to report on Fathometer Corrections for additional details. A copy of the fathometer correctors is attached to this report. Fath Report 1952 with H-8011

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:

No tide or current stations were occupied within the limits of this survey.

Tidal data from the primary tide station at Key West, Florida, were used for the reduction of soundings.

The observed tides were used during the 1952 season, and predicted tides for the 1953 season. (Refer to Tidal Note for additional information).

E. SMOOTH SHEET:

The plotting of the smooth sheet will be accomplished by the Norfolk Processing Office.

F. CONTROL STATIONS:

The hydrography on this survey was controlled by two EPI shore stations, station EPIE on Grassy Key in the Florida Keys and station

EPIF at the northern end of Boca Ciega Bay in the vicinity of Largo, Florida. Station EPIE was located by triangulation methods from triangulation station KEY 1935. Station EPIF was located by triangulation methods from recoverable topographic stations located by air photographic plot.

Station Latitude Longitude

EPIE - Grassy Key 24° 45' 46.83 (1441 m.) 80° 57' 37.56 (1055 m.)

EPIF - Boca Ciega Bay 27° 50' 15.82 (487 m.) 82° 49' 22.46 (615 m.)

G. SHORELINE AND TOPOGRAPHY:

This is an offshore survey.

H. SOUNDINGS:

All soundings on this survey were taken with 808-J type depth recorders. Recorder Nos. 131 SG and 132 SG were used during the 1952 season, and Nos. 132 SG and 153 SPX were used during 1953. The effective length of the stylus arm for these machines were determined and checked. The speed of the 808-J type machines was checked against the fathogram as described in paragraph 5554 of the Hydrographic Manual. Frequent additional checks were made during the season to assure the continued correct operation of the instruments. The speed of the 808-J type depth recorders was frequently checked by counting the number of turns of the stylus arm with the middle reed vibrating at maximum amplitude. There were times when the governor on the 808-J type machines failed to function properly. When this occurred an immediate shift was made to the other machine while repairs were being made. However, a displacement of the true soundings will occur at these times which cannot be accurately corrected. Notes have been made on the fathograms when this happened and the soundings should not be used.

The modified method of recording was used as requested in paragraph 34 of Supplemental Instructions and as outlined in paragraph 817 of the Hydrographic Manual. All corrections were computed to be applied mechanically as outlined in paragraph 562 of the Manual.

The fathograms have the following notations made on them:

- (a) Fix marks, fix number, phase settings and the correct time on at least every sixth position mark.
- (b) The velocity template to be used is noted at the beginning of each fathogram and at each change of velocity.
- (c) Whenever a change occurs In the algebraic sum of all corrections (except velocity) the new corrector is entered at the bottom of the fathogram on the proper time ordinate if practicable.

Otherwise the corrector is entered in a clear area on the fathogram paying due attention to the proper time ordinate. An abstract of the computations of these correctors is a part of this report.

In computing the correctors for use with the templates on the 808 graphs, a mean setting of 2 fathoms was used. The correctors as entered on the bottom of the 808 fathograms should be set off from the zero line on the graph.

I. CONTROL OF HYDROGRAPHY:

All hydrography on this survey was controlled by the EPI system using stations EPIE and EPIF. The boat sheets were prepared with the EPI curves by the Norfolk Processing Office. A special test buoy was established near the edge of the working grounds, 38 miles south southwest of Sarasota, Latitude 26° 45.8 N, Longitude 82° 50.8 W, on a small obstruction that had previously been located by shoran. Routine calibrations on this test buoy were used in determining correction factors. These tests were made in accordance with the EPI Manual and were recorded in a separate record book. The results were summarized in the "E.P.I. Calibration" report, and acopy of the final correctors is attached to this report.

The observed EPI distances have been entered at the top of the horizontal space on the E.P.I. Plotting Abstracts. The corrected distances have been entered in ink or typewritten under the observed values. E.P.I. fixes were observed at 10 minute intervals, (ie., 0000, 0010, 0020, 0030, etc.). Other recorded times on the abstracts are to indicate when changes of course, speed and other items that effect the plotting, took place.

On a few occasions static caused interference with the EPI signals. During thunder squalls the line was usually continued and good signals could be received after passing through the squall. These relative short portions of the lines can be adequately plotted by using dead reckoning methods.

J. ADEQUACY OF SURVEY:

This survey is complete and adequate to supersede prior surveys for charting purposes. All junctions with contemporary adjoining surveys are satisfactory and no holidays or excessive differences exist. All depth curves can be drawn at the junctions with the other surveys without conflict.

Depth curves were drawn on the boat sheet in pencil as the survey progressed. When the survey was completed, the curves were inked in the colors specified in Table 27 of the Hydrographic Manual. The remaining curves were left in pencil.

Κ. CROSSLINES:

Approximately 9% of the hydrography on this survey is crosslines. No excessive discrepancies were noted on the boat sheet.

L. COMPARISON WITH PRIOR SURVEYS:

Μ. COMPARISON WITH EXISTING CHARTS:

Satisfactory junctions were obtained with surveys listed in paragraph "B". This survey supersedes all old surveys of the area. While the depths of the present Chart 1007 are in relative close agreement, the methods of sounding and of controlling the sounding vessel's position are superior to that used on the older surveys.

N. DANGERS AND SHOALS:

No dangers or shoals were found within the limits of this survey.

0. COAST PILOT INFORMATION:

This is an offshore survey and no applicable Coast Pilot Information was compiled.

P. AIDS TO NAVIGATION:

No aids to navigation are located within the limits of this survey.

OCEANOGRAPHIC SURVEYS: U.

Oceanographic surveys were conducted during the 1953 season in accordance with Supplemental Instructions dated 9 March 1953.

Special reports concerning oceanographic surveys are submitted separately as follows:

- (a) Bathythermograph Observation Report, (July Nov. 1953)
- Sea and Swell Observation Report, (July Nov. 1953)
 Set and Drift " " , (" " ")
- (c) Set and Drift

During the 1953 season, bathythermograph observations were obtained concurrently with bottom sample casts, while the vessel was stopped. The location of these bottom sample and bathythermograph observations was indicated by a red circle on the boat sheet.

Ζ. TABULATION OF APPLICABLE DATA:

The data listed below were forwarded to the Washington Office as indicated:

DATE

Data Forwarded to the Washington Office

11/1/50 Report on Settlement and Squat Tests
1/6 /51 Method of Recording Hydrographic Data
1/21/53 Season's Report for 1952
1/21/53 E.P.I. Calibration for 1952
1/21/53 Fathometer Corrections 1952 with H-8011
1/22/53 Computation of Velocity Corrections 1952
1/23/53 Location of E.P.I. Stations EPIE and EPIF
2/10/53 Report on Calibration of Registering Sheaves - 1952
2/11/54 Bathythermograph Observation Report, (July - Nov. 1953)
2/11/54 Sea and Swell Observation Report, (JUly - Nov. 1953)
2/11/54 Set and Drift " " , (" - " ")
2/15/54 E.P.I. Calibration for 1953 with H-8014
2/15/54 Fathometer Corrections for 1953 with H-8014
2/15/54 Report on Calibration of Registery Sheaves - 1953 with H-Bail
2/16/54 Seasons' Report for 1953
3/25/54 Computation of Velocity Corrections - 1953

The sounding volumes, fathograms, and E.P.I. plotting abstracts are being forwarded to the Officer in Charge, Norfolk Processing Office.

Raymond M. Stone Lt. Comdr., USC&GS

Approved and Forwarded:

L. S. Hubbard

Captain, USC&GS Commanding Officer

Ship HYDROGRAPHER

APPROVAL SHEET

The field work accomplished on this survey was under my immediate supervision. Daily inspections of the records, fathograms and boat sheet were made as the survey progressed.

The records and boat sheet as submitted to the Norfolk Processing Office have been reviewed and are approved by me.

L. S. Hubbard

Captain, USC&GS

Commanding Officer Ship HYDROGRAPHER C C O P P

AIR MAIL

1 April 1952 .

To:

The Director

U. S. Coast & Geodetic Survey

Dept. of Comerce Bldg. Washington 25, D. C.

Subject:

Supplemental Instructions - Project CS-328

Receipt of Supplemental Instructions - Project CS-228, dated 20 March 1952, is acknowledged.

Verification of the project number is requested. It is assumed that the project number CS-228 is in error and should read Project CS-328, since this was the previous project number for the area.

nefer to paragraph 5 - "LIMITS, Area A"

Verification of positions (c), (d), and (e) is requested. It is believed that the referred positions are listed in error and should be corrected to read:

Position (c) in Lat. 24° 32, Long. 83° 06

Position (d) in Lat. 240 25', Long. 820 35'

Bosition (e) in Lat. 240 251, Long. 826 25

Refer to paragraph 15 - "ELECTRONIC CONTROL, SHOWAR CONTROL"

Attached is a tracing of the layout for boat sheet HY-8152 which has been constructed. The southern limit of this boat sheet (Lat. 24° 00) was the extreme southern limit for adequate shoran control in 1951. E.P.I. equipment will probably be required, to control the survey of the area south from latitude 24° 00.

Jack C. Sammons
Captain, USC&GS Survey
Commanding, Ship HYDROGRAPHER

Enclosure: Tracing Sheet Layout.

22/MEK S-2-HY

1952

4 April 1952

To:

Commanding Officer

USC&GS Ship HYDROGRAPHER

P. O. Box 1259

St. Petersburg 1, Florida

Subject:

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SUPPLEMENTAL INSTRUCTIONS -- PROJECT CS - 328

Reference:

Your letter dated 1 April 1952- File MTP/rab

This office has verified the corrections noted in the reference letter and has found that your assumptions are correct. The copies in this office will be corrected in accordance with your letter.

with reference to the last paragraph in your letter, it is realized that the 5-mile strip located between latitudes 23° 55' North and 24° CO' North is beyond the limits of shoran control. Your offshore sheets for EPI-controlled hydrography will include this strip. It is now expected that EPI equipment will be ready for installation approximately 15 May for use in the control of this area before operations south of the Florida Keys are suspended.

/s/ R.F.A. Studds

Mrector

cc. Supervisor, Southern District Supervisor, Southeastern District Chief, Hydrography Section C C O P P P

31 July 1952

To:

The Commanding Officer

U.S.C.& G.S. Ship HYDROGRAPHER

Box 1259

St. Petersburg 1, Florida

Subject:

Tide Reducers, Project CS-328

Reference is made to your letter of 24 July 1952 requesting the zoning of the area of Project CS-328 for tide reducers.

The tide station at St. Petersburg has been inoperative since June 30 and the date of its reactivation is uncertain. Therefore the entire project area will be zoned on the basis of Key West as a reference station/

For field sheets 20552, 20352, 20252, 10452, 10352 and 10252 the Key West record can be used with no correction for either time or height.

For field sheets 20152 and 20452 the Key West record can be used with no height correction but with a time correction of - 1 nour.

For field sheets 10152, 10552, and 10652 the Key West record can be used with no height correction but with a time correction of plus 1 hour.

Rourly heights from the Key West record for such dates as needed will be furnished upon further request. Your index map of the project area is returned herewith as requested.

/s/ Robert W. Knox

Acting Director

Enclosure

o o p

223/MEK 3–1–HY

1 December 1952

To:

Commanding Officer

USCAGS Ship HYDROGRAPHER

P. O. Box 1259

St. Petersburg 1, Florida

Subject:

Registry Numbers for Hydrographic Surveys

Project CS-328, Gulf of Mexico

In compliance with your request of 24 November 1952, IRR/cld, the following registry numbers have been assigned to the hydrographic surveys listed in your letter for Project CS-328 in the Gulf of Mexico:

Registry Number
H-8011
H-8013
H-8014
H-8015
H -8016
H-8017
H-8018
H-8019

Your sheet layout chart No. 1007 is returned, as requested.

/s/ Robert W. Knox

Acting Director

inclosare:

cc. Chief, Hydrographic Section, Div. of Charts Chief, Hydrography Section, Div. of Coastal Surveys

Ref. No. 36-rib

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 somed 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 authorised.

Zoning for project area using Key West as a reference station was furnished in my letter of 3L July 1952, a copy of which is enclosed.

/s/ Robert W. Knox

Acting Director

Enclosure

STATISTICS
For Hydrographic Survey H-8014 (HY-10252)

Date	Day Le tter	Volume Number	Number of Positions	Statute Miles of Soundings
1952				
5 Aug. 6 Aug. 7 Aug. 14 Aug. 21 Aug. 22 Aug. 28 Aug. 29 Aug. 4 Sept. 16 Sept. 17 Sept. 24 Sept. 25 Sept. 1 Oct. 2 Oct. 8 Oct. 16 Oct. 17 Oct. 18 Oct. 19 Oct. 19 Nov. 10 Nov. 11 Nov. 12 Nov. 12 Nov. 23 Nov.	ABCDEFGHJKLMNPQRSTUVWXYZAAAAAAFAAFAA	11111111111122222222222333333	22 57 22 50 41 15 20 32 38 22 19 36 17 16 37 54 22 30 24 31 33 15 138 142 20 30 40 64 115	40.9 106.0 38.9 93.0 75.9 26.7 33.9 56.2 67.8 34.3 26.4 68.7 92.5 41.4 55.2 36.8 57.7 36.2 61.6 24.6 24.6 24.6 24.1 256.5 35.3 52.9 65.2 115.0 210.4
TOTAL		3	1262	2252.0

Number of Temperature and Salinity Observations in the Area --- 7*

Total area surveyed 1906 Square Statute Miles

^{* (}Refer to "Computation of Velocity Correction --- 1952")

STATISTICS
For Hydrographic Survey No. H-8014 (HY-10252)

	D	Volume	Number of	Statute Miles
Date	Day	Number	Positions	of Sounding
	Letter	Number	1081010018	or bounding
1953				
· 07 Tee7	H A	IA	17	31.3
21 July	JA	IV	'88	158.8
22 July	KA	IA	53	95.6
27 July	LA	IA	60	83 •4
28 July	MA	IA	6	10.1
30 July		IA	20	34.8 31.8
31 July	NA DA	IV	15	29.2
6 August	PA		30	55.0
7 August	QA DA	IV	17	31.9
13 August	RA	IV		23.0
14 August	SA	IV	13	38.6
20 Aligust	TA	IV	21	45 • 4.
21 August	UA	IV	23	47 • 4. 37 • 7
27 August	VA	IA	22	40 . 4
28 August	WA	IV	23 16	28.3
3 September	XA	IA		46 . 0
4 September	YA	Λ	24	46.5
11 September	ZA	V	24	
12 September	AB	V	18	61.4
21 September	BB	V	16	30.5
22 September	CB	V	21	40.2
7 October	DB	V	56	85.3
8 October	EB	V	46	79.4
12 October	FB	V	14	23.2
13 August	GB	V	156	267.7
🖟 14 August	HB	V	152	265.4
15 August	JB	VI	151	261.3
, 16 August	KB	VI	12	18.9
21 August	LB	VI	13	22.3
22 August	MB	VI	31	55.2
3 26 August	NB	VI	5	10.7
27 August	PB	VI	159	258.1
28 August	Q B	VI	44	79.1 79.3
4 November	RB	VI	13	23.6
5 November	SB	VI & VII	92	156.4
•			1471	2574.7
				2571.9

Ck'd: PH

Numbercof temperature and salinity observations in the area: 5 *

Total area surveyed 2120 square statute miles (during 1953 044)

Refer to "Computation of Velocity Corrections---1953*

Total area surveyed (during 1952 & 1953) = 4026 59 5747. miles

(14)

~p=y=V#H

TIDE NOTE

Tide Station:

Key West, Florida

Latitude: Longitude:

24° 33.2 N 81º 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-10252

(Director's letter of 31 July 1952).

Time Correction:

None)

Director's letter of 31 July 1952

Height Correction:

None)

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.

ADDENDUM To Accompany

HYDROGRAPHIC SURVEY H-8014 (Field No. Hy-10252)

GENERAL

This appears to be an excellent basic survey and no unusual problems were experienced during the smooth plot.

The agreement of soundings at crossings was generally good. How-ever, it is believed that some minor crossing discrepancies, as well as, irregularaties in depth curves could have been smoothed out by a closer determination of the instrument corrections. Note the variation of $l_2^{\frac{1}{2}}$ fathoms on positions 156GB (fath. 132) and 1HB (fath. 153). These are simultaneous positions on different fathometers. 40 ng 8347'

Respectfully submitted,

Cartographer.

Norfolk, Va. 9 November 1954

	0 H	Or No.	02.7	S district of the state of the	Silor Or Des M	of Children	Mar hording	V. Signal
Name on Survey	$\frac{A}{A}$	B / (<u> </u>	G	<u> </u>	/ K
Florida								86.1
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Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. 4-8014...

Records accompanying survey:			
Boat sheetsl; sounding vols7; w	ire dra	g vols.	• • • • ;
bomb vols; graphic recorder rolls	12 Env.		
special reports, etc. l.Descriptive Report; l.	Smooth Sl	neet; 2 Ca	hiers-E.P.I.
Plotting Abstracts; Fothogram Corrections	filed wi	th#\$.0!	١
The following statistics will be submitted wirepher's report on the sheet:	th the	cartog_	
Number of positions on sheet		• • • • • •	Examination + Verification
Number of positions checked		• • • • •	16
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	• • • • •	10
Verification of soundings from graphic record	Time	• • • • • •	E
Verification by Mydr. Section N.P. Q: Total time	32	Date .	ec 23 1954 ept 15, 1955
Reviewed by A. R. S. T. IR MI Time	32 his	De te	pt 22, 1955

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-8014

FIELD NO. HY-10252

Gulf of Mexico, Southwest of Tampa Bay Entrance

Project No. CS-328

Surveyed, August, Nov., 1952 - July, Nov. 1953

Scale 1:100,000

Soundings:

Control:

808 Fathometer

E. P. I.

Chief of Party - J. C. Sammons, L. S. Hubbard
Surveyed by - R. A. Earle, I. R. Rubottom, R. M. Stone
M. T. Paulson, E. E. Jones
Protracted by - D. P. Harnden
Soundings plotted by - D. P. Harnden
Verified and inked by - Hydro. Section (Norfolk Processing Office)
Reviewed by - A. R. Stirni
22 September 1955
Inspected by - R. H. Carstens

1. Shoreline and Control

There are no land areas within the limits of this offshore survey.

The E. P. I. system of control was used. The control is discussed in the Descriptive Report and in the special E. P. I. reports listed under heading "Z" of the Descriptive Report.

2. Sounding Line Crossings

Sounding line crossings were in good agreement, except that on 68 miles of crossline on LA-day, soundings were arbitrarily revised one fathom in order to effect agreement with soundings of several other days.

3. Depth Curves and Submarine Relief

The usual depth curves are adequately delineated. The sand-shell bottom slopes gently from the northeast portion of the survey, where depths are 28-30 fathoms to the southwest, where depths are 95-100 fathoms.

4. Junctions with Contemporary Surveys

Adequate junctions were effected with surveys H-7871 (1950) on the west and H-8018 (1952) on the southwest. The present survey is in harmony with preliminary verification of H-7820 (1950) on the north, but junctional soundings and depth curves have not been transferred and inked pending complete verification of H-7820. Project surveys on the east and southeast have not yet been registered in the Washington Office.

5. Comparison with Prior Surveys

H-483 (1854-55), 1:1,200,000 H-528 (1856), 1:1,662,050 H-1354 (1875-76), 1:600,000

H-599 (1857-58), 1:1,200,000 H-1138 (1872), 1:600,000

These prior surveys are of a reconnaissance nature, primarily made for oceanographic data. The few soundings from these surveys which fall within the present survey area differ with present survey depths by as much as 30 fathoms. The differences are attributed to the inaccuracy of dead reckoning control on the long lines of the prior surveys extending from Key West to the Mississippi Delta.

The present survey entirely supersedes the prior surveys within the common area.

6. Comparison with Chart 1113 (latest print date 8-2-54) Chart 1003 (latest print date 11-16-53)

A. Hydrography

The charted hydrography originates with the previously discussed prior surveys supplemented by U. S. Navy surveys corrected to 1948, and by partial application of the boat sheet of the present survey (Bp. 50883). Soundings charted from the U. S. Navy surveys differ with the present survey by as much as 10 fathoms. Minor differences are noted between the boat sheet soundings and verified soundings of the present survey.

The present survey entirely supersedes the charted hydrography within the common area.

B. Aids to Navigation

There are no aids to navigation charted within the limits of the present survey.

7. Condition of Survey

(a) The sounding records and Descriptive Report are complete and comprehensive.

- (b) The one-fathom correction applied to 68 miles of soundings during verification was based entirely on disagreement of cross-lines. Insufficient vertical casts were taken to provide adequate checks for instrumental error in the fathometer.
- (c) The smooth plotting was accurately done.

8. Compliance with Project Instructions

The present survey adequately complies with the Project Instructions.

9. Additional Field Work

This is a good basic survey and no additional field work is recommended.

Examined and Approved:

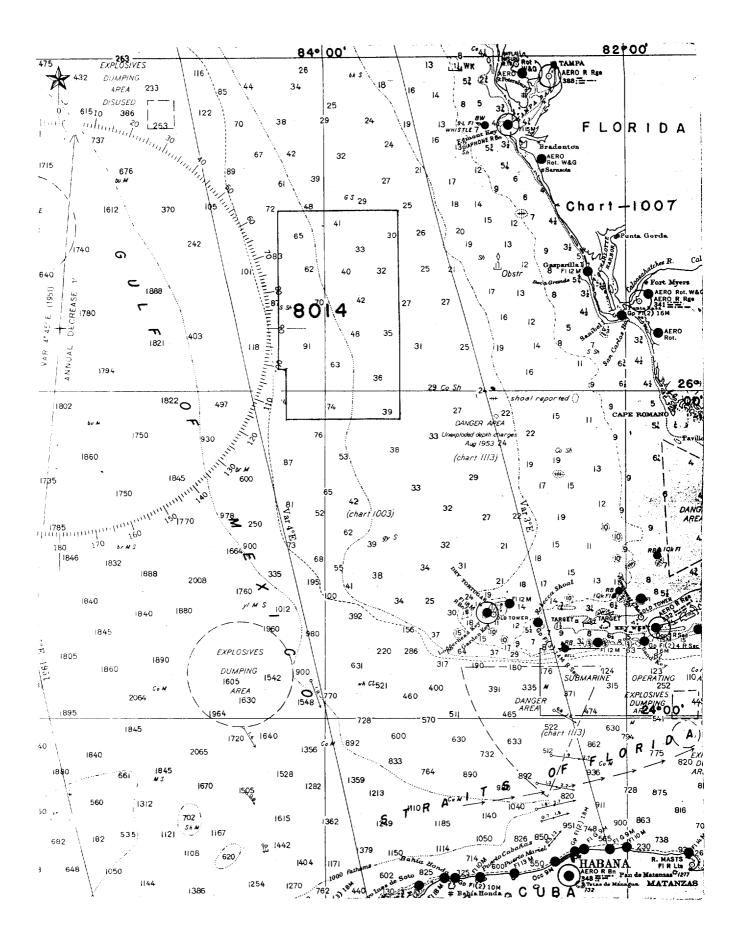
H. R. Edmonston

Chief, Nautical Chart Branch

E. R. McCarthy Chief, Division of Charts

Chief, Hydrography Branch

Earl O. Heaton Chief, Division of Coastal Surveys



NAUTICAL CHARTS BRANCH

SURVEY NO. H-8014

Record of Application to Charts

	DATE	CHART	CARTOGRAPHER	REMARKS
	4/3/56	1002	HELLIAC Ewen	Examined for critical sage. Before After Verification and Review nothing applied.
	#-1-57	1003	R.K. Se Lowder	
				Before After Verification and Review
	12/4/58	///3	H. W. Burgayne	Boson After Verification and Review Completely applied.
٠	12/8/58	100.3	H.W. Burgayne	Petore. After Verification and Review Completely applicat
	1-20-59	1007	R. K. De Lande	Before After Verification and Review Thu Chiloo3
<u>-</u>	Mar 59	1002	Tuelolo	Batter Verification and Review
				Turn 1003 above Before After Verification and Review
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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.