

7873

Diag. Cht. Nos. 1007-2 & 1115-2

Form 504

U. S. COAST AND GEODETIC SURVEY  
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey ..... HYDROGRAPHIC

Field No. HY-20250 ..... Office No. H-7873

LOCALITY

State ..... FLORIDA

General locality ..... Gulf of Mexico

Locality .....

1945

CHIEF OF PARTY

George L. Anderson

LIBRARY & ARCHIVES

DATE ..... SEP 2 1953

7873

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 7873

Field No. Hy 20250

State Alabama - Florida

General locality Gulf of Mexico

Locality Central Gulf of Mexico

Scale 1/ 200 000 ✓ Date of survey 10/28/50 thru 12/12/50 ✓

Instructions dated 9/26/46: Sup. 7/9/47, 10/6/48, 3/15/49, 7/17/50, 9/1/50.

Vessel HYDROGRAPHER

Chief of party George L. Anderson

Surveyed by Officers attached to ship during 1950 season. (Ships Officers) ✓

Soundings taken by fathometer, graphic recorder, ~~and lead~~

Fathograms scaled by Corrected soundings read from fathogram with template by L.W. Eason for plotting directly on the smooth sheet.

Fathograms checked by \_\_\_\_\_

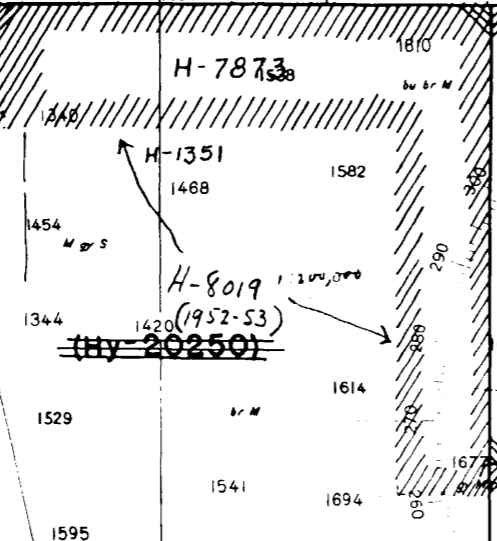
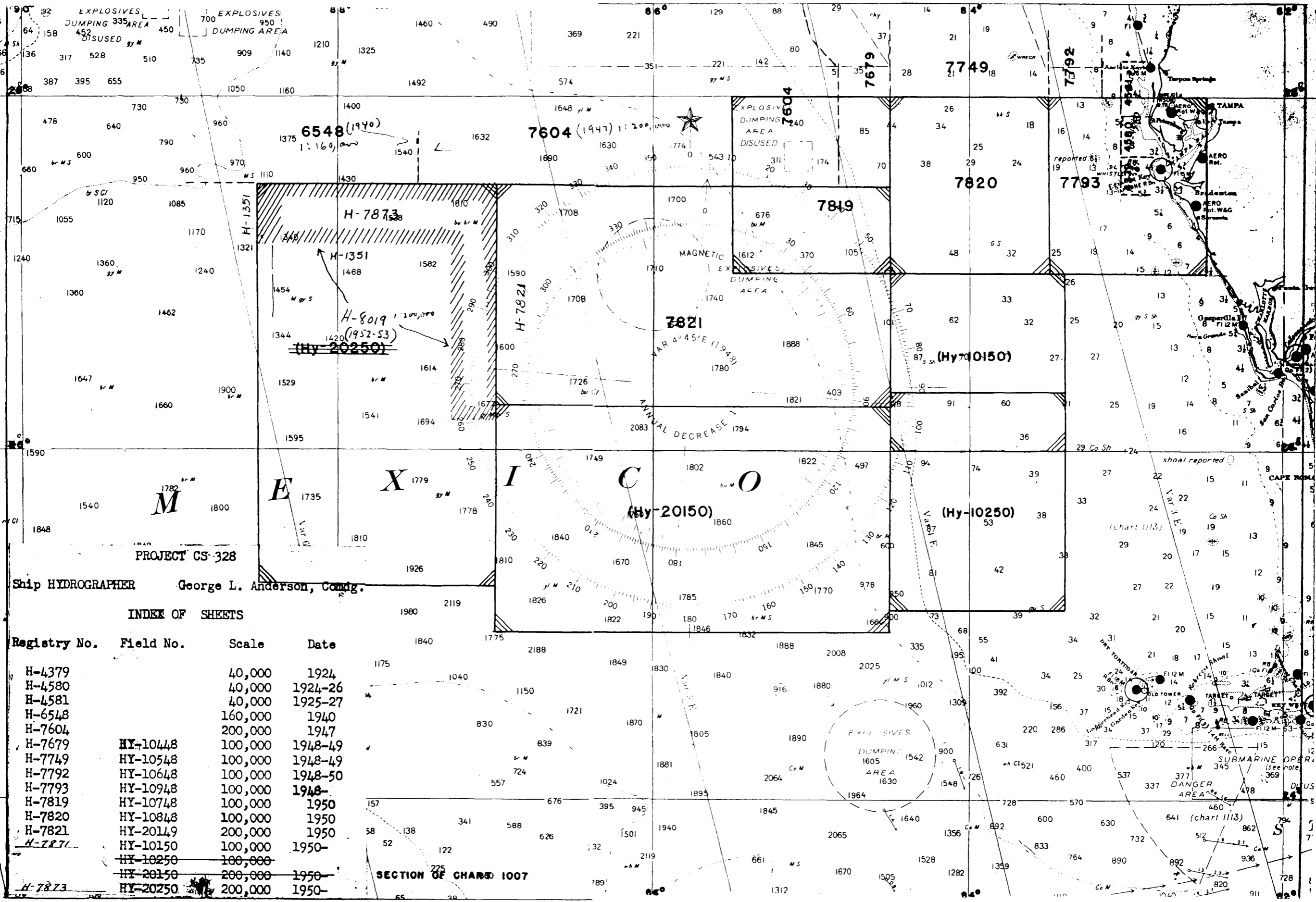
Protracted by Wm. M. Martin

Soundings penciled by H.C. Parsons

Soundings in fathoms ~~XXXX~~ at MLW ~~XXXX~~ ✓  
and are true depths

REMARKS: Off shore survey - Control by E P I system.

788



PROJECT CS-328

Ship HYDROGRAPHER George L. Anderson, Comdg.

INDEX OF SHEETS

Registry No.	Field No.	Scale	Date
H-4379		40,000	1924
H-4580		40,000	1924-26
H-4581		40,000	1925-27
H-6548		160,000	1940
H-7604		200,000	1947
H-7679	HY-10448	100,000	1948-49
H-7749	HY-10548	100,000	1948-49
H-7792	HY-10648	100,000	1948-50
H-7793	HY-10948	100,000	1948-
H-7819	HY-10748	100,000	1950
H-7820	HY-10848	100,000	1950
H-7821	HY-20149	200,000	1950
H-7871	HY-10150	100,000	1950-
	HY-10250	100,000	
	HY-20150	200,000	1950-
H-7873	HY-20250	200,000	1950-

SECTION OF CHART 1007

DESCRIPTIVE REPORT

To Accompany

HYDROGRAPHIC SURVEY H-7873 (HY-20250)

28 October - 12 December 1950

Ship HYDROGRAPHER

Scale 1:200,000

Chief of Party  
George L. Anderson

A. PROJECT

This survey was made under Instructions from the Director to the Commanding Officer, Ship HYDROGRAPHER, for Project CS-328 and are dated 26 September 1946; amended by Supplemental Instructions dated 9 July 1947, 6 October 1948, 15 March 1949, 17 July 1950 and 1 September 1950.

B. SURVEY LIMITS AND DATES

This survey is offshore, approximately 250 miles west of Tampa Bay Entrance and 200 miles south of the entrance to Mobile Bay. An index of adjacent hydrographic sheet is attached.

Starting on the northwest and proceeding thru the east, south and west to the point of beginning this survey joins:

1. Survey H-6548, Scale 1:160,000, surveyed during 1940
2. Survey H-7604, Scale 1:200,000, surveyed during 1947
3. Survey H-7821, Scale 1:200,000, surveyed during 1950
4. Survey H-1351, Scale 1:400,000, surveyed during 1875-77

*Review, par. 4.*

This survey joins modern contemporary surveys on its northern and eastern limits. The work in the northwestern part of the sheet effects a junction with H-1351. This is an old reconnaissance survey and few soundings were taken. The index of sheets furnished this party does not show the surveys south of H-1351. (1875-77)

The field work on this survey was started on 28 October 1950 and was completed on 12 December 1950. This survey was one of many made with the ship based at St. Petersburg, Florida. This sheet is farthest offshore of any of the surveys made this year. It was not started until late

B. (Cont.)

in the season and the weather at this time of the year interfered materially with its completion. After the receipt of the Director's letter of 18 January 1951 discontinuing the EPI surveys for the present time, it was decided to submit the survey as completed.

C. VESSEL AND EQUIPMENT

All work on this survey was accomplished by the Ship HYDROGRAPHER. No subparties were operated from the ship on this survey.

The Ship HYDROGRAPHER has a turning radius of 80 to 120 meters depending on the wind and/or current.

A NMC-1 type fathometer was used as the sounding unit on this survey. The soundings were read from the visual red light to the nearest fathom. (See the Commanding Officer's comment on page 14, volume 1, Survey H-7819). The fathograms are also submitted with this survey.

The fathometer had a special gear installed that drives the paper approximately four times faster than when the old gear was in place. All soundings on this survey were taken with the deep side of the NMC-1 fathometer.

Frequent simultaneous comparisons were made during the 1950 season with wire soundings to obtain corrections and to assure the correct operation of the fathometer at all times.

The gyroscope compass was used at all times while the survey was in progress. Bearings were taken when proceeding in and out of port and sun azimuths 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 hydrography on this survey.

The observed tides at the Tampa Bay, Florida, Primary Tide Station located at Saint Petersburg were used for the reduction of soundings. (See Tidal Note for additional information).

E. SMOOTH SHEET

The smooth sheet is being processed by the Norfolk Processing Office.

F. CONTROL STATIONS

The hydrography on this survey was controlled by two EPI shore stations, Station EPICC at Cedar Keys and Station EPID at Venice. These stations were located by subparties working from the Ship HYDROGRAPHER by inspection of and/or short traverse on planimetric maps of the areas.

	Latitude	Longitude
EPICC - Cedar Keys	29° 07' 48".0 (1478 m.)	83° 03' 07".7 ( 207 m.)
EPID - Venice	27 04 53.4 (1643 m.)	82 26 47.7 (1314 m.)

The length of base line between EPICC and EPID is 145.8 statute miles. The least angle of intersection on this survey between any pair of arcs is approximately 23 degrees.

For control used in the location of fixed buoys off Tampa Bay Entrance refer to the applicable reports as listed under paragraph Z.

G. SHORELINE AND TOPOGRAPHY

This is an offshore survey.

H. SOUNDINGS

The correction to sounding on this sheet were computed as outlined in the special report. See paragraph Z for the dates the applicable reports were forwarded.

*Filed with  
14-7871*

All soundings shown on the sheet were taken with a NMC-1 type fathometer. The speed of this machine is controlled by a tuning fork and on the deep scale the stylus arm makes six complete turns every 60 seconds. The change in speed of the paper (see paragraph B) did not affect the speed of the stylus arm or disc on the visual soundings.

H. (Cont.)

A modified method of recording was used on Instructions from the Director. Please refer to the Director's letter dated 22 August 1950 - reference 22/MEK, S-1-HY; memorandums from the Chief, Division of Charts to the Assistant Chief, Division of Coastal Surveys dated 7 August 1950 and "Explanatory Notes - Use of Fathogram Scammer and Graphic Reducers" for the outline of the methods to follow and the aims to be accomplished by the use of this modified method. Copies of this correspondence is attached to the Report for Survey H-7793. A detail description of the steps taken to put this system into effect is given in the Report "Method of Recording Hydrographic Data".

The red light of the NMC-1 was read as outlined in paragraph C and the soundings were recorded as described in paragraph 817 of the Hydrographic Manual. This system was modified to the extent that a two minute sounding interval was used and the soundings recorded in every other column - the intermediate columns being used to record the extra soundings as needed. As an added check against the loss of the control data as recorded on the EPI plotting abstracts, the recorder entered all control data on the right hand page of the records.

The fathograms have the following notations made on them:

- (a) Fix marks, fix number, correct time on at least every fifth 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 correctors (except velocity) the new corrector is entered at the bottom of the fathogram on the proper time ordinate. An abstract of the computations of these correctors is a part of this report.

On the NMC-1 machine the initial reading on the red light was set at zero fathoms. The initial setting of the red light and the initial setting of the chart were set together. The initial line as drawn by the fathometer did not always correspond with the zero line of the chart. The correctors for the NMC-1 machine can be used with either the chart or with the red light soundings. When using the templates the correctors as shown on the bottom of the NMC-1 fathograms may be set from the initial as drawn on the graph; the printed scale, including the zero line should be ignored completely.

H. (Cont.)

It is recommended that the zero of the template be set on the zero line as drawn on the fathogram as the largest corrector to be applied is 2 fathoms. Tabulated values for the velocity corrections are attached for use with the red light sounding.

There are two places on the fathogram where the soundings cannot be used. (Position 2-4 E and 43-49 E). The sum of the correctors as computed for use on the fathograms have been combined algebraically with the velocity corrections and entered in the sounding volumes as one corrector. The reduced sounding can be used on the survey.

✓ A.R.S.  
11/17/54

Summaries of all applicable reducers are attached to this report.

I. CONTROL OF HYDROGRAPHY

All hydrography on this survey was controlled by the EPI system using stations EPICC and EPID. The boat sheet was constructed in the Washington Office. The EPI arcs were drawn in the Norfolk Processing Office prior to being sent to the field. Special test buoys (none are within the limits of this survey) were planted near shore and on the working grounds to obtain corrections to the EPI distances received during hydrographic operations. For the explanation of the use of these buoys and the correctors derived see the applicable reports.

The work outlined in the Supplemental Instructions dated 1 September 1950 was carried out in December. Please refer to the special report, a copy of which is attached.

Under the modified system of recording, the EPI plotting abstract was the record for all plotting data. The value of the final EPI corrections for reducing the observed EPI distances to the correct distances has been entered in red at the top of the column for recording the microsecond distances on these abstracts. The preliminary correctors (field values for plotting on the boat sheet) have been crossed out with red pencil. The correct values for the reduced distances have been entered in red after applying the final correctors. When a change in the correctors occurs the old and the new values with proper notes are entered in the remarks column.

The observed EPI distances have been entered at the top of the horizontal space. This enables the entering of the corrected distance opposite the time the fix was taken which is the recorded value on



I. (Cont.)

on the bottom of the horizontal spaces and under the time column. Except at the beginning or the end of lines the EPI fixes were observed at ten minute intervals (ie., 0000, 0010, 0020, 0030, etc.). In some instances this interval was reduced to five minutes for additional control. Other recorded times are to indicate when changes of course, speed and other items that affect the plotting took place.

J. ADEQUACY OF SURVEY

This survey is complete and adequate to supersede prior surveys for charting except as noted. All junctions with contemporary adjoining surveys are satisfactory, no holidays or excessive differences exist. All depth curves can be drawn at the junctions with the other surveys without conflict. The apparent differences on the boat sheet along the north limits are due to the boat sheet soundings not being corrected for velocity. After this large correction is applied the surveys are in good agreement.

Work on this survey was discontinued for the reason outlined in paragraph B above. The area covered up to the time field work was suspended for the year was small. The survey has not been adequately covered by crosslines and no bottom samples were taken. Nevertheless the survey is considered completed as a new layout of sheets and new arcs will be necessary when work is resumed in this area.

One hundred fathom depth curves were drawn as the survey progressed. The curves have not been inked on the boat sheet.

K. CROSSLINES

No crosslines were run on this survey. (See paragraph J above).

L. COMPARISON WITH PRIOR SURVEYS

M. COMPARISON WITH EXISTING CHARTS

Satisfactory junctions were obtained with the surveys listed in paragraph B above. This survey supersedes in part the following survey:

1. Survey H-1351, Scale 1:400,000, surveyed during 1875-77

L & M (Cont.)

This survey is the source of the hydrography shown in the area covered in part by this survey on the following chart:

1. Chart 1007, print date 3 March 1950

*See Review,  
pars. 5 & 6*

The soundings from the older surveys listed above and shown on the chart also listed above are generally in agreement. The methods of sounding and of controlling the sounding vessel's position are superior to that used on the older survey. It is recommended that this survey supersede all the older surveys in the area covered by the hydrography on this survey.

N. DANGERS AND SHOALS

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

P. AIDS TO NAVIGATION

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

Z. TABULATION OF APPLICABLE DATA


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

Date	Data
3/18/49	Location Data for Station EPICC
5/18/50	Report on Calibration of Registering Sheaves
11/1/50	Report on Settlement and Squat Tests
1/6/51	Methods of Recording Hydrographic Data
1/9/51	Season's Report for 1950
1/15/51	EPI Correctors for 1950
1/17/51	Report on Velocity Corrections for 1950
1/18/51	Report on Initial and Instrumental Corrections for 1950

} with H-7871

Z. (Cont.)

The sounding volumes, fathograms, EPI plotting abstracts, boat sheet and related material are being forwarded to the Officer in Charge, Norfolk Processing Office.

  
J. E. Waugh  
LCdr, USC&GS

7873

MAY 26 1952

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DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY  
USC&GSS HYDROGRAPHER, BOX 1259  
ST. PETERSBURG 1, FLORIDA

POST-OFFICE ADDRESS:

TELEGRAPH ADDRESS:

EXPRESS ADDRESS:

5 March 1951


To: The Supervisor, Southeastern District  
U. S. Coast & Geodetic Survey  
Room 418, Post Office Building  
Norfolk 10, Virginia

Subject: Status of Processing of Records for Survey H-7873

The boat sheet, sounding volume, descriptive report and related records for Survey H-7873 are being forwarded to you under separate cover.

Personnel aboard the Ship HYDROGRAPHER have completed the processing of the records as indicated. This survey was made under the modified method of recording.

1. Template to use and the correctors to be applied have been indicated on the fathograms. These entries have been checked.
2. All EPI correctors entered and checked on plotting abstracts. The corrected distances have been computed and checked.


  
Jack C. Sammons  
Commander, USC&GS  
Commanding Ship HYDROGRAPHER

CC: Director

APPROVAL SHEET

The field work accomplished on this survey was under the immediate supervision of Commander George L. Anderson. He made daily inspections of the records, fathograms and boat sheet as the survey progressed. He was detached after the 1950 field season and prior to the completion of this report.

The sounding volume, fathograms and boat sheet as submitted to the Norfolk Processing Office have been reviewed and approved by Commander Anderson.

  
Jack C. Sammons  
Commander, USC&GS  
Commanding Officer  
Ship HYDROGRAPHER

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21 December 1950

To: The Director  
U. S. Coast & Geodetic Survey  
Washington, D.C.

Subject: Report on the Maximum Range Test of EPI Equipment

Reference: Supplemental Instructions - Project CS-328  
Reference 22/MEK dated 1 September 1950.

The Ship HYDROGRAPHER used the Electronic Position Indicator to fix the ships position while engaged in hydrographic surveying during the 1950 season. The maximum ranges used while sounding on offshore Sheet 20250 were 3873 Ms. from EPICC and 4098 Ms. from EPID. Strong signals and good matches were obtained at these distances except during periods of excessive static. In general static made the operation of EPI at these long ranges difficult during the period from 2000 to 0100 daily.

During the period from 9 to 11 December 1950 the HYDROGRAPHER made a distance run westward to Longitude  $91^{\circ} 40' W$  to determine the maximum range of the EPI equipment. Station EPID signal began to fade after passing 5800 Ms. and at 6194 Ms. the signal had lost its shape making it impossible to get a fair match. The time of the maximum range was 1545 10 December. The weather was clear and static conditions were favorable. The maximum range obtained from EPICC was 5682 Ms. and at that distance the signal was of good quality.

Static has a pronounced effect on EPI operation. The ship had very little difficulty in obtaining good returns under 1500 Ms. At ranges from 2500 to 3000 Ms. EPI positions were erratic during periods of bad static. Beyond 3000 Ms. the EPI is not dependable for the control of sounding line during adverse static conditions which usually cover the period from about 2000 to 0100 daily. Electrical Storms near a shore station in the daytime has more effect on EPI operation of that station than if the storm is near the ship. The worst static conditions in the Gulf of Mexico are during June, July and August.

There is attached to a copy of this report for technical analysis by the Electronics Section the following records relating to the distance run for maximum range:

1. Report from operator at EPICC.

C  
O  
P  
Y

-2-

C  
O  
P  
Y

2. Report from operator at EPID.
3. Report from Ship's Radio Technician.
4. Notes Submitted by Lt. E.E. Jones.
5. Copy of Log for Station EPICC.

/s/ George L. Anderson  
Commander, USC&GS  
Commanding Officer, Ship HYDROGRAPHER

COMPUTATION OF CORRECTORS  
for  
SURVEY H-7873 (20250)

Reducers entered to  $\pm 0.5$  fms.

Date	Time	Fath.No. Phase	Index	Draft	Instr.	Tide	Total Corrector	Remarks
10/28/50	1920	NMC-1	+ 2.0	0.0	0.0	- 0.5	+1.5	2210 LB 120 rpm
	2210	NMC-1	+ 2.0	0.0	0.0	- 0.5		LE
10/30/50	0200	NMC-1	+ 2.0	- 0.5	0.0	- 0.5	+1.0	0355 LB 120 rpm
	0355					0.0	+1.5	1445
	1445					- 0.5	+1.0	2400
	2400							
10/31/50	0000	NMC-1	+ 2.0	- 0.5	0.0	- 0.5	+1.0	0505
	0505					0.0	+1.5	1355
	1355					- 0.5	+1.0	1655
	1655	NMC-1	+ 2.0	- 0.5	0.0	- 0.5		LE
12/11/50	1040	NMC-1	+ 2.0	0.0	0.0	0.0	+2.0	1701 LB 120 rpm
	1701					- 0.5	+1.5	2400
	2400							
12/12/50	0000	NMC-1	+ 2.0	0.0	0.0	- 0.5	+1.5	0516
	0516					0.0	+2.0	1000
	1000	NMC-1	+ 2.0	0.0	0.0	0.0		LE



H 7873  
Hy 20250

Gulf of Mexico.

Processing Office Notes.

Smooth sheet.

The projection was made by hand on a cut sheet supplied by the Washington office.

To control the E P I curves points on lines radiating from the E P I stations were computed and plotted. The radii between the plotted points were subdivided carefully into 100 microsecond intervals, and the arcs were drawn thru the points obtained. The curves were drawn in pencil over the entire sheet but only those arcs required for plotting were inked.

Soundings for plotting were read directly from the fathograms using the correction templates indicated on the profiles.

*E. E. Smith*  
Edgar E. Smith  
Capt. Engr. 8/27/53

VELOCITY CORRECTIONS

For Type NMC-1 Depth Recorder - Velocity of sound 800 fathoms per second

NOTE: ALL corrections additive unless otherwise indicated

SURVEYS: H-6543; H-7871 (10150); H-7821 (20149); H-7872 (20150);  
H-7873 (20250)

PERIOD: 14 October through 30 November 1950

FATHOMS			FATHOMS			FATHOMS		
Depth From	To	Corrn. (0.5)	Depth From	To	Corrn. (0.5)	Depth From	To	Corrn. (0.5)
100	115	4.0	877	898	18.5	1411	1426	33.0
116	135	4.5	899	920	19.0	1427	1440	33.5
136	158	5.0	921	942	19.5	1441	1454	34.0
159	181	5.5	943	964	20.0	1455	1468	34.5
182	194	6.0	965	983	20.5	1469	1482	35.0
195	215	6.5	989	1008	21.0	1483	1496	35.5
216	242	7.0	1009	1026	21.5	1497	1510	36.0
243	272	7.5	1027	1046	22.0	1511	1524	36.5
273	302	8.0	1047	1066	22.5	1525	1540	37.0
303	332	8.5	1067	1084	23.0	1541	1554	37.5
333	362	9.0	1085	1102	23.5	1555	1566	38.0
363	400	9.5	1103	1120	24.0	1567	1580	38.5
401	425	10.0	1121	1140	24.5	1581	1594	39.0
426	462	10.5	1141	1160	25.0	1595	1608	39.5
463	500	11.0	1161	1180	25.5	1609	1620	40.0
501	536	11.5	1181	1200	26.0	1621	1632	40.5
537	570	12.0	1201	1216	26.5	1633	1644	41.0
571	600	12.5	1217	1232	27.0	1645	1656	41.5
601	628	13.0	1233	1248	27.5	1657	1670	42.0
629	654	13.5	1249	1262	28.0	1671	1682	42.5
655	680	14.0	1263	1280	28.5	1683	1694	43.0
681	708	14.5	1281	1293	29.0	1695	1708	43.5
709	736	15.0	1299	1314	29.5	1709	1720	44.0
737	760	15.5	1315	1330	30.0	1721	1734	44.5
761	784	16.0	1331	1346	30.5	1735	1748	45.0
785	808	16.5	1347	1362	31.0	1749	1760	45.5
809	830	17.0	1363	1378	31.5	1761	1772	46.0
831	854	17.5	1379	1394	32.0	1773	1786	46.5
855	876	18.0	1395	1410	32.5	1787	1800	47.0

VELOCITY CORRECTIONS

For Type MHC-1 Depth Recorder - Velocity of sound 800 fathoms per second

NOTE: All Corrections additive unless otherwise indicated

SOUNDINGS: H-6548; H-7821 (20249); H-7873 (20250); Chart 1007

PERIOD: 6 December through 15 December 1950

FATHOMS			FATHOMS			FATHOMS		
Depth From	To	Corrn. (0.5)	Depth From	To	Corrn. (0.5)	Depth From	To	Corrn. (0.5)
100	123	4.0	931	952	18.5	1445	1458	33.0
124	147	4.5	953	972	19.0	1459	1470	33.5
148	176	5.0	973	992	19.5	1471	1484	34.0
177	196	5.5	993	1010	20.0	1485	1500	34.5
197	222	6.0	1011	1030	20.5	1501	1514	35.0
223	260	6.5	1031	1050	21.0	1515	1528	35.5
261	295	7.0	1051	1070	21.5	1529	1542	36.0
296	330	7.5	1071	1088	22.0	1543	1556	36.5
331	368	8.0	1089	1106	22.5	1557	1570	37.0
369	403	8.5	1107	1124	22.0	1571	1584	37.5
404	440	9.0	1125	1142	23.5	1585	1596	38.0
441	474	9.5	1143	1160	24.0	1597	1610	38.5
475	508	10.0	1161	1180	24.5	1611	1622	39.0
509	544	10.5	1181	1200	25.0	1623	1636	39.5
545	576	11.0	1201	1218	25.5	1637	1650	40.0
577	606	11.5	1219	1234	26.0	1651	1662	40.5
607	634	12.0	1235	1250	26.5	1663	1674	41.0
635	662	12.5	1251	1264	27.0	1675	1686	41.5
663	690	13.0	1265	1282	27.5	1687	1700	42.0
691	716	13.5	1283	1300	28.0	1701	1712	42.5
717	740	14.0	1301	1316	28.5	1713	1724	43.0
741	764	14.5	1317	1332	29.0	1725	1736	43.5
765	790	15.0	1333	1350	29.5	1737	1750	44.0
791	814	15.5	1351	1366	30.0	1751	1762	44.5
815	836	16.0	1367	1382	30.5	1763	1776	45.0
837	860	16.5	1383	1398	31.0	1777	1788	45.5
861	884	17.0	1399	1414	31.5	1789	1800	46.0
885	908	17.5	1415	1428	32.0			
909	930	18.0	1429	1444	32.5			

FATHOM SCALE

Fath. No.	Date	Scales:	A	B	C	D
132 SG	23 September 15 December		CORRECTORS TO 0.1 FATHOM			
		Speed:	108 RPM and over			
		Corrn:	+ 0.1	- 0.3	+ 1.3	+ 3.1
		Speed:	107 RPM and under			
		Corrn:	0.0	- 0.4	+ 1.4 <sup>2</sup>	+ 3.2 <sup>0</sup>
			CORRECTORS TO 0.2 FATHOM			
		Speed:	All speeds			
		Corrn:	0.0	- 0.4	+ 1.2	+ 3.0
			CORRECTORS TO 0.5 FATHOM			
		Speed:	All speeds			
		Corrn:	0.0	- 0.5	+ 1.0	+ 3.0
<hr/>						
205 (MIG-1) Visual & Chart	2 May - 15 December	Speed: Corrn:	CORRECTORS TO 0.5 FATHOM			
			All Speeds			
			All Scales: 0.0			

Comp: JEN  
Ck: FRK

KPT FINAL CORRECTIONS

(Sheet No. 5)

SEASON 1950

SHIP HYDROGRAPHER

G.L. ANDERSON, COMMANDING

From	To	Corr. C	Remarks	From	To	Corr. D	Remarks
Oct. 4 1100	Oct. 6 1200	-1.8		Oct. 4 1100	Oct. 6 0600	-1.6	
Oct. 6 1201	Oct. 7 1100	-1.6		Oct. 6 0601	Oct. 10 0600	-1.8	
Oct. 7 1101	Oct. 8 1200	-1.4		Oct. 10 0601	Oct. 13 1300	-1.6	
Oct. 8 1201	Oct. 9 2300	-1.2					
Oct. 9 2301	Oct. 11 1200	-1.0					
Oct. 11 1201	Oct. 13 0000	-0.8					
Oct. 13 0001	Oct. 13 1300	-0.6					
Oct. 24 1130	Nov. 3 1200	-0.4		Oct. 24 1130	Nov. 3 1200	-1.6	
Nov. 8 1200	Nov. 9 1100	-0.6		Nov. 8 1200	Nov. 10 0500	-1.6	
Nov. 9 1101	Nov. 10 1100	-0.8		Nov. 10 0501	Nov. 10 2000	-1.8	
Nov. 10 1201	Nov. 11 1400	-1.0		Nov. 10 2001	Nov. 11 1800	-2.0	
Nov. 11 1401	Nov. 13 0000	-1.2		Nov. 11 1801	Nov. 12 0200	-1.8	
Nov. 13 0001	Nov. 16 1400	-1.0		Nov. 12 0201	Nov. 12 1000	-1.6	
				Nov. 12 1001	Nov. 13 1200	-1.4	
				Nov. 13 1201	Nov. 16 1400	-1.6	

Comp: JPL  
Chk: GCE

RPI FINAL CORRECTIONS

(Sheet No. 6)

SEASON 1950

SHIP HYDROGRAPHER

G.L. ANDERSON, COMMANDING

From	To	Corr. CG	Remarks	From	To	Corr. D	Remarks
Nov. 24 1200	Nov. 25 1200	-1.4		Nov. 24 1200	Nov. 25 0600	-2.0	
Nov. 25 1201	Nov. 28 1200	-1.6		Nov. 25 0601	Nov. 27 0200	-1.8	
Nov. 28 1201	Nov. 29 0600	-1.4		Nov. 27 0201	Nov. 30 1300	-1.6	
Nov. 29 0601	Nov. 30 0900	-1.2					
Nov. 30 0901	Nov. 30 1300	-1.0					
Dec. 6 1230	Dec. 6 1400	-0.4		Dec. 6 1900	Dec. 6 2000	-2.2	
Dec. 6 1501	Dec. 6 2100	-0.6		Dec. 6 2001	Dec. 7 0800	-2.0	
Dec. 6 2101	Dec. 7 0300	-0.8		Dec. 7 0801	Dec. 7 1800	-1.8	
Dec. 7 0301	Dec. 7 0600	-1.0		Dec. 7 1801	Dec. 14 1800	-1.6	
Dec. 7 0601	Dec. 7 1400	-1.2					
Dec. 7 1401	Dec. 7 1900	-1.4					
Dec. 7 1901	Dec. 8 0100	-1.6					
Dec. 8 0101	Dec. 8 0600	-1.8					
Dec. 8 0601	Dec. 8 1400	-2.0					
Dec. 8 1401	Dec. 9 0500	-1.8					
Dec. 9 0501	Dec. 9 2100	-1.6					
Dec. 9 2101	Dec. 10 1100	-1.4					
Dec. 10 1101	Dec. 11 0300	-1.2					
Dec. 11 0301	Dec. 11 1800	-1.0					
Dec. 11 1801	Dec. 12 1000	-0.8					

Comp: JPL  
Chk: GCM

EPI FINAL CORRECTIONS

(Sheet No. 7)

SEASON 1950

SHIP HYDROGRAPHER

G.I. ANDERSON, COMMANDING

From	To	Corr. CO	Remarks
Dec. 12 1001	Dec. 13 0200	-0.6	
Dec. 13 0201	Dec. 13 2100	-0.4	
Dec. 13 2101	Dec. 14 1800	-0.6	

Comps JPL  
Chkcs GCM

VELOCITY CORRECTION

TEMPLATES

SURVEYS: Chart 1007; H-6548; H-7819 (10748); H-7820 (10848);  
 H-7793 (10948); H-7821 (20149); H-7871 (10150);  
 H-7872 (20150); H-7873 (20250).

PERIOD: 12 September through 13 October 1950

DEPTH		TEMPLATE
Fathoms		Meters per second
From	To	
00.0	91.2	1530
91.3	278	1515
279	and deeper	1500

PERIOD: 14 October through 30 November 1950

DEPTH		TEMPLATE
FATHOMS		Meters per second
From	To	
00.0	107.5	1530
107.6	255	1515
256	and deeper	1500

PERIOD: 6 December through 15 December 1950

DEPTH		TEMPLATE
Fathoms		Meters per second
From	To	
00.0	83.5	1530
83.6	212	1515
213	555	1500
556	980	1485
981	and deeper	1500



# 7873

## TIDE NOTE

Tide Station	Tampa Bay Florida Primary at St. Petersburg, Florida
Latitude:	27° 46'
Longitude:	82° 38'
Plane of reference:	Mean Low Water
Time:	Minus two and one half ( $2\frac{1}{2}$ ) hours
Height correction:	None

The value of the observed hourly heights and the high and lows were furnished this party by the Washington Office. Time and height corrections were applied in the field as indicated in the Director's letters of 13 January 1949, reference 36-tmo and 13 September 1950, reference 36-rcb.

STATISTICS FOR HYDROGRAPHIC SURVEY H-7873 (1950)

Volume Number	Day Letter	Date 1950	Number of Positions	Statute Miles of Soundings
1	A	28 October	18	34.6
1	B	30 October	133	245.2
1	C	31 October	102	187.6
1	D	11 December	81	146.7
1	E	12 December	60	111.0
Totals			394	725.1

TOTAL AREA SURVEYED 3150 Square Statute Miles

H 7873  
Hy 20250

Geographic name  
penciled on smooth sheet.

Gulf of Mexico

GEOGRAPHIC NAMES

Survey No. H-7873

Name on Survey	Source										
	A	B	C	D	E	F	G	H	K		
<u>Florida</u>											1
<u>Gulf of Mexico</u>											2
											3
											4
											5
											6
											7
											8
											9
<u>St. Petersburg</u>											10
											11
											12
											13
											14
											15
											16
											17
											18
											19
											20
											21
											22
											23
											24
											25
											26
											27

Names approved  
10-22-52  
L. Heck

(tide station)

BK

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. H-7873

Records accompanying survey:

Boat sheets ..1.; sounding vols. ....1.; wire drag vols. ....;  
 bomb vols. ....; graphic recorder rolls 1 Env.;  
 special reports, etc. 1 Smooth Sheet; 1 Descriptive Report; 1 Cahier  
 EPI Plotting Abstracts;

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

Number of positions on sheet		.394
Number of positions checked		0
Number of positions revised		0
Number of soundings revised (refers to depth only)		0
Number of soundings erroneously spaced		0
Number of signals erroneously plotted or transferred		0
Topographic details	Time	0
Junctions	Time	8
Verification of soundings from graphic record	Time	0

Edge without as per chart  
 Verification consisted of  
 general inspection

Inking & Chambers (Norfolk)  
 Verification by ..... Total time 5 1/2 Date 5/14/54  
 Curves and Junctions by: T.A. Dinsmore --- 16 Date 6/16/54  
 Reviewed by: T.A. Dinsmore ..... Time 8 Date 6/7/54

DIVISION OF CHARTS  
REVIEW SECTION - NAUTICAL CHART BRANCH  
REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-7873

FIELD NO. HY-20250

Alabama - Florida, Gulf of Mexico, Central Gulf of Mexico

Project No. CS-328

Surveyed - Oct. - Dec., 1950

Scale 1:200,000

Soundings:

Control:

NMC-1 Fathometer

E.P.I.

Chief of Party - G. L. Anderson  
Surveyed by - Ships Officers  
Protracted by - W. M. Martin  
Soundings plotted by - H. C. Parsons  
Verified and inked by - J. C. Chambers  
Reviewed by - T. A. Dinsmore 7-June 1955  
Inspected by - R. H. Carstens

1. Shoreline and Control

No shoreline falls within the limits of this offshore survey.  
The origin of the control is given in the Descriptive Report.

2. Sounding Line Crossings

No crosslines were run on this survey. However, depths on adjacent lines are in harmony.

3. Depth Curves and Submarine Relief

The usual depth curves are adequately delineated.

The survey covers a portion of the Gulf of Mexico south of Alabama and west of Florida. Depths drop gradually from 1100 fms. in the northwest to 1700 fms. in the southeast. No unusual submarine features are apparent.

4. Junctions with Contemporary Surveys

Adequate junctions were effected with the following surveys:

H-6548 (1940), on the north  
H-7604 (1947), on the northeast

\*H-7821 (1950), on the east  
H-8019 (1952-53), on the south and west  
H-8018 (1952), on the southeast

\*The transfer of junctional soundings from H-7821 to the present survey is deferred pending the complete verification of H-7821.

There are no contemporary surveys on the extreme northwest.

5. Comparison with Prior Surveys

H-1351 (1875-77), 1:400,000      H-1353 (1875-77), 1:600,000

Only a few soundings from these early reconnaissance surveys fall within the area of the present survey. A comparison between the prior and present depths reveals no important differences. Because of the more complete coverage, however, the present survey is adequate to supersede the prior surveys within the common area.

6. Comparison with Chart 1003 (Latest print date 11/16/53)

A. Hydrography

Charted hydrography originates principally with track-line soundings by the U. S. Navy as shown on H. O. Chart No. 1125 and partial application of the present survey through advance information furnished on blueprint 47367. There are numerous differences of 40-60 fms. with the charted soundings. The charted hydrography is entirely superseded by the present smooth-sheet depths.

B. Aids to Navigation

No aids to navigation are charted in this open-sea area.

7. Condition of Survey

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

(b) The smooth plotting was accurately done.

8. Compliance with Project Instructions

The survey adequately complies with the Project Instructions.

9. Additional Field Work

The survey is basic for the area covered and no additional field work is required.

Examined and Approved:

*Wallace A. Bruder*

Wallace A. Bruder  
Acting Chief, Nautical Chart Branch

*E. R. McCarthy*

E. R. McCarthy  
Acting Chief, Chart Division

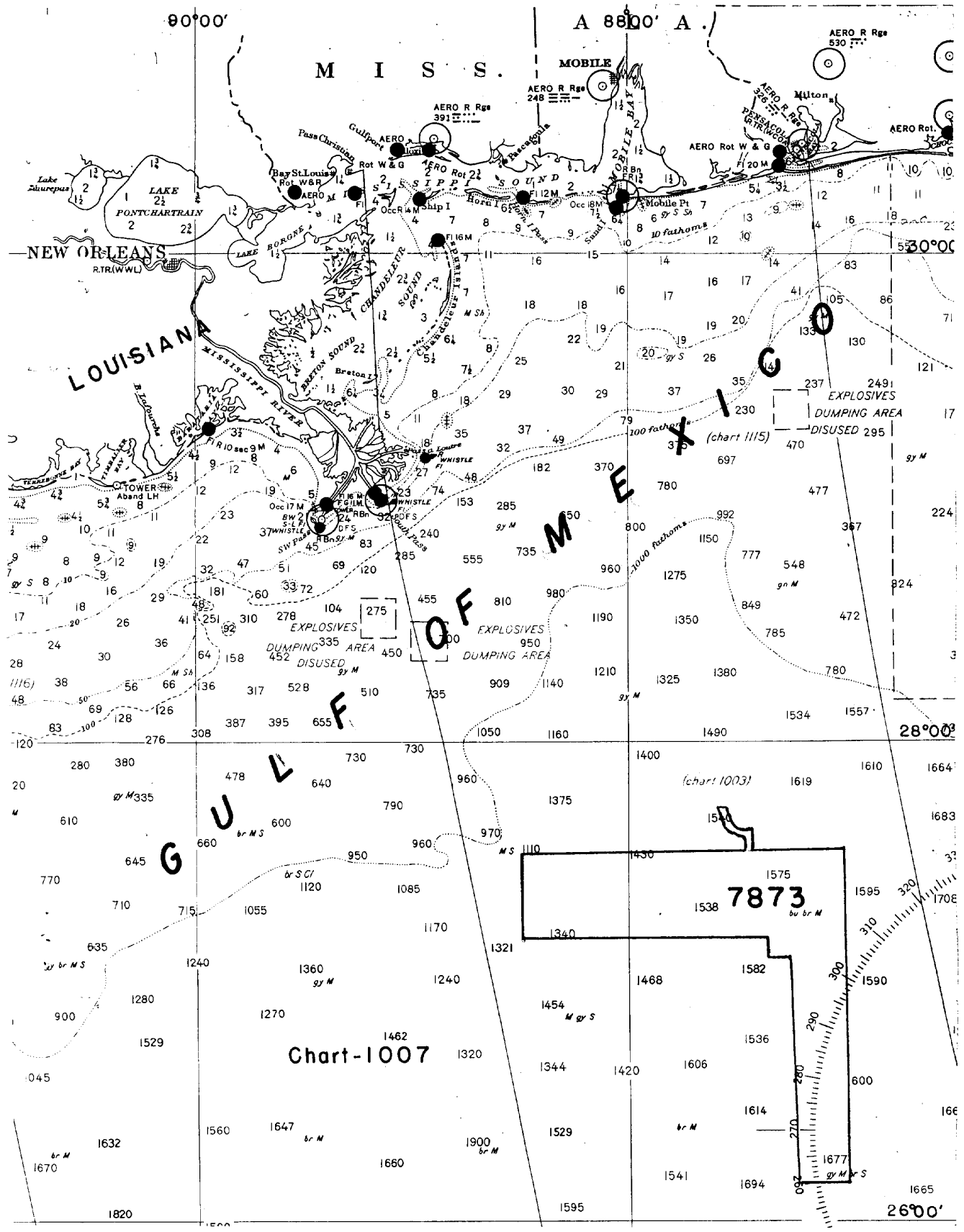
*J. C. Bull*

J. C. Bull  
Chief, Hydrography Branch

*Earl O. Heaton*

Earl O. Heaton  
Chief, Division of Coastal Surveys





# NAUTICAL CHARTS BRANCH

SURVEY NO. H-7873

## Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
10-13-53	1003	<i>E. M. [unclear]</i>	Before <del>After</del> Verification and Review <i>Examined and corrected.</i>
12/2/58	1003	H. W. Burgoyne	<del>Before</del> After Verification and Review - <i>Completely Applied</i>
1-20-59	1007	R. H. DeLauder	<del>Before</del> After Verification and Review <i>then chart 1003</i>
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
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			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			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.