# 7871

Diag. Cht. No. 1007-2

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

# DESCRIPTIVE REPORT

Type of Survey HYDROGRAPHIC

Field No. HY-10150 Office No. H-7871

LOCALITY

State FLORIDA

General locality GULF OF MEXICO

Locality SOUTHWEST OF TAMPA BAY ENTRANCE

~~194~~ 50

CHIEF OF PARTY

G. L. Anderson

LIBRARY & ARCHIVES

DATE OCTOBER 30, 1953

B-1870-1 (1)

7871

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 7871

Field No. Hy 10150

State Florida

General locality Gulf of Mexico

Locality Southwest of Tampa Bay Entrance

Scale 1/ 100 000 Date of survey 10/8/50 thru 11/9/50

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 vessel during 1950 season.

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

Fathograms scaled by Various personnel under officer supervision.

Fathograms checked by Various personnel under officer supervision.

Protracted by Wm. M. Martin

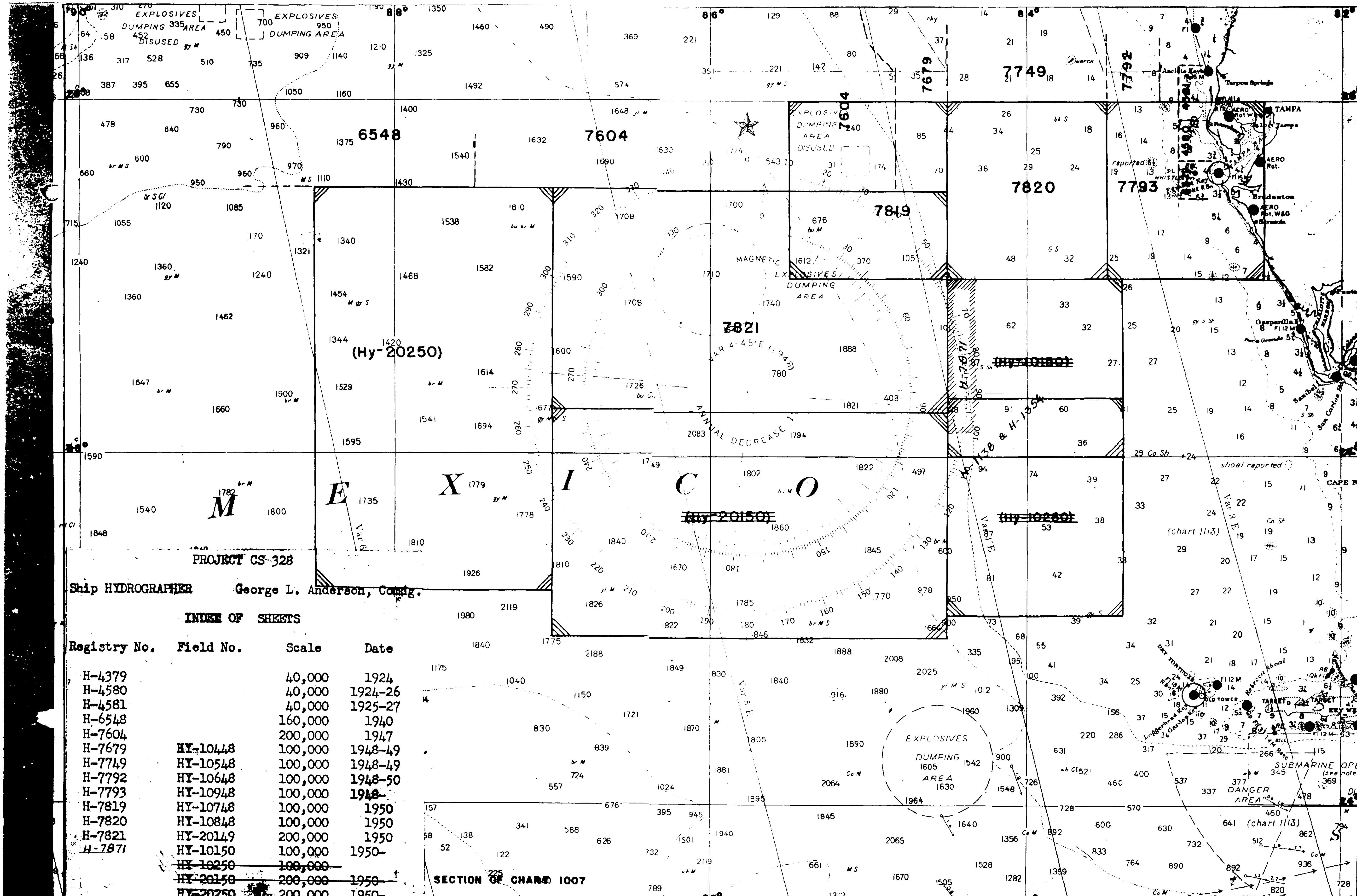
Soundings penciled by Wm. M. Martin

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

REMARKS: Offshore survey - control by E P I system.



2RE




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-~~ |
| | ~~HY-20250~~ | 200,000 | 1950- |

DESCRIPTIVE REPORT

To Accompany

HYDROGRAPHIC SURVEY H-7871 (Hy-10150)

8 October - 9 November 1950

Ship HYDROGRAPHER | Scale 1:100,000

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 off shore from and southwest of the entrance to Tampa Bay Florida. An index of adjacent hydrographic sheets is attached.

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

1. Survey H-7820, Scale 1:100,000, surveyed during 1950
2. Survey H-1138, Scale 1:600,000, surveyed during 1872
3. Survey H-1354, Scale 1:600,000, surveyed during 1875-76
4. Survey H-7821, Scale 1:200,000, surveyed during 1950

See ¶ 4 of Review

H-7821 (1950)

This survey joins modern contemporary surveys on its northern and western limits. The surveys on the east and south are old reconnaissance surveys and few soundings were taken.

not as yet in Wash. 1/8/54

The field work on this survey was started on 8 October and the last day of work was on 9 November 1950. This survey was one of many

B. (Cont.)

made with the ship based at St. Petersburg, Florida. Due to the necessity for EPI tests at frequent intervals at known points, because of weather, attempts to reduce the runs to and from port to a minimum and related factors the planning of the work to be accomplished necessarily took in the entire project instead of concentrating on any one sheet. All of the hydrography on this survey was accomplished on the runs to and from the outer limits of the project.

This survey is considered complete and while only a small amount of the area covered by the sheet has been surveyed it is being submitted at this time. Off shore hydrography has been discontinued in this area as outlined in a letter from the Director addressed to the Commanding Officer, Ship HYDROGRAPHER, (Subject: Field Work 1951 Season, dated 18 January 1951, 22/MEK, S-1-HY) and it will be some time before it is resumed.

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.

Two 808 type depth recorders were used as sounding units on this survey. The installation of these units was such that either could be used at will and both are considered regular units and neither a standby. The sounding unit is fathoms.

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

The gyroscope compass was used at all times while this 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.

D. (Cont.)

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~~ Seattle 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.

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

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 40 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 off shore survey.

H. SOUNDINGS

Sounding corrections for velocity of sound and instrumental errors were controlled by adequate serial temperature and salinity observations and by frequent simultaneous comparisons using sounding machine No. 141 with stranded wire over calibrated sheaves.

H. (Cont.)

All soundings shown on the sheet were taken with 808 J type depth recorder Nos. 131 SG & 132 SG. The effective length of the stylus arm for these machines was determined and checked. The speed of the machine 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 correct operation of the instruments. The speed of the depth recorders was verified frequently on the fathom scale by counting the number of turns of the stylus arm with the middle reed vibrating at its maximum aplitude.

There were times when the governor on the machines failed to function properly. This accounts for a large displacement of the true soundings on the fathogram. Notes have been made on the fathogram throughout the season when this happened. These soundings should not be used unless proper correctors are applied.

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 Scanner 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".

All the soundings on this survey 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 and the phase settings.

(b) The velocity template to be used is noted at the beginning of each fathogram and at each change of velocity.

H. (Cont.)

(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.

In computing the correctors for use with the templates on the 808 graphs a mean setting of 2 fathoms was used. The correctors as shown on the bottom of the 808 fathograms should be set off from ~~this value~~. the printed zero of fathogram.

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 added 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.

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 columns for recording the microsecond distances on these abstracts. The preliminary correctors (field values for plotting on the boat sheet) have been crossed out with the 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 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

I. (Cont.)

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.

Work on this survey was discontinued for the reason outlined in paragraph B above. The work on this survey was accomplished incidental to the surveys off shore from this one. Since 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 only two bottom samples were taken. Nevertheless the survey is considered completed as a new layout of sheets will be necessary when work is resumed in this area.

Ten 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. All of the hydrography on this survey was accomplished on the runs to and from the outer limits of the project. (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 surveys:

1. Survey H-1138, Scale 1:600,000, surveyed during 1872

2. Survey H-1354, Scale 1:600,000, surveyed during 1875-76

L & M (Cont.)

These surveys are the source of the hydrography shown in the area covered by this survey on the following charts:

1. Chart 1007, print date 3 March 1950

The soundings from the older surveys listed above and shown on the chart are generally shoaler than those obtained on this new survey. The charted 100 fathom curve is moved to the eastward throughout most of its length on this survey. The methods of sounding and of controlling the sounding vessel's position are superior to that used on the older surveys. It is recommended that this survey supersede all the older surveys in the area covered by the hydrography on this survey.

See ¶6 of Review

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 Spec. Report |
| 11/1/50 | Report on Settlement and Squat Tests Spec. Report |
| 1/6/51 | Methods of Recording Hydrographic Data Spec. Report. |
| 1/9/51 | Season's Report for 1950 |
| 1/15/51 | EPI Correctors for 1950 Spec. Report H 7773 |
| 1/17/51 | Report on Velocity Corrections for 1950 (S-3102) with Lgms |
| 1/18/51 | Report on Initial and Instrumental Corrections for 1950 (S-3102) " |

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
J. E. Waugh
LCdr. USC&GS

## 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.

J. C. Sammons

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

H 7871
Hy 10150

Gulf of Mexico

Processing Office Notes.

Smooth sheet.

The projection was ruled by hand on Whatman paper. To control the distance arcs points were computed along four radii from each of the stations EPI-CC and EPI-D. The distances along the radii were carefully sub-divided into 50 M/S intervals.

Plotting.

In general positions plotted from the EPI abstract were satisfactory. An occasional position out of line was adjusted holding one distance if possible. On E-day along meridian 84° 25', from 11E to 21E positions were fixed on line, time and EPI-D. Soundings were read directly from the profiles, applying corrections with templates as provided in Paragraph H Page 4 of this report. Soundings were read at two minute intervals with additional selections on shoals and deeps.

Crossings.

Good. There is a one fathom difference at $\phi$ 26 29 $\lambda$ 84 26.75. Fathometer speed and stylus arm OK.

crossing in adequate agreement.

Edgar E. Smith
Edgar E. Smith
Cart. Engr.

10/23/53

# VELOCITY CORRECTIONS

For Type 808 J Depth Recorder - Velocity of sound 820 fathoms per second

NOTE: All corrections additive unless otherwise indicated

SURVEYS: H-7793 (10948); H-7819 (10748); H-7820 (10848);
H-7821 (20149); H-7871 (10150)

PERIOD: 12 September through 13 October 1950

FEET

| Depth From | Depth To | Corrn. |
|---|---|---|
| 30.0 | 42.0 | 0.5 |
| 42.5 | 62.0 | 1.0 |
| 62.5 | 82.0 | 1.5 |
| 82.5 | 102.0 | 2.0 |
| 102.5 | 123.0 | 2.5 |
| 123.5 | 144.0 | 3.0 |
| 144.5 | 162.0 | 3.5 |

FATHOMS

| Depth From | Depth To | Corrn. (0.2) |
|---|---|---|
| 0.0 | 8.0 | 0.0 |
| 8.1 | 16.0 | 0.2 |
| 16.1 | 24.5 | 0.4 |
| 24.6 | 34.2 | 0.6 |
| 34.3 | 47.0 | 0.8 |
| 47.1 | 68.0 | 1.0 |
| 68.1 | 97.0 | 1.2 |
| 97.1 | 160.0 | 1.4 |

FATHOMS

| Depth From | Depth To | Corrn. (0.1) |
|---|---|---|
| 7.0 | 7.8 | 0.1 |
| 7.9 | 12.0 | 0.2 |
| 12.1 | 16.2 | 0.3 |
| 16.3 | 20.3 | 0.4 |
| 20.4 | 24.5 | 0.5 |
| 24.6 | 29.0 | 0.6 |
| 29.1 | 34.2 | 0.7 |
| 34.3 | 40.0 | 0.8 |
| 40.1 | 47.0 | 0.9 |
| 47.1 | 56.0 | 1.0 |
| 56.1 | 68.0 | 1.1 |
| 68.1 | 81.6 | 1.2 |
| 81.7 | 97.0 | 1.3 |
| 97.1 | 114.5 | 1.4 |
| 114.6 | 160.0 | 1.5 |

FATHOMS

| Depth From | Depth To | Corrn. (0.5) |
|---|---|---|
| 0.0 | 17.0 | 0.0 |
| 17.1 | 41.5 | 0.5 |
| 41.6 | 100.0 | 1.0 |
| 100.1 | 160.0 | 1.5 |

# VELOCITY CORRECTIONS

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

NOTE: ALL corrections additive unless otherwise indicated

SURVEYS: H-7819 (10748); H-7821 (20149); H-7871 (10150)

PERIOD: 12 September through 13 October 1950

| FATHOMS | | | FATHOMS | | | FATHOMS | | |
|---|---|---|---|---|---|---|---|---|
| Depth From | Depth To | Corrn. (0.5) | Depth From | Depth To | Corrn. (0.5) | Depth From | Depth To | Corrn. (0.5) |
| 100 | 115 | 4.0 | 861 | 884 | 18.5 | 1396 | 1410 | 33.0 |
| 116 | 134 | 4.5 | 885 | 907 | 19.0 | 1411 | 1424 | 33.5 |
| 135 | 154 | 5.0 | 908 | 928 | 19.5 | 1425 | 1439 | 34.0 |
| 155 | 176 | 5.5 | 929 | 950 | 20.0 | 1440 | 1453 | 34.5 |
| 177 | 192 | 6.0 | 951 | 971 | 20.5 | 1454 | 1467 | 35.0 |
| 193 | 205 | 6.5 | 972 | 990 | 21.0 | 1468 | 1481 | 35.5 |
| 206 | 232 | 7.0 | 991 | 1009 | 21.5 | 1482 | 1495 | 36.0 |
| 233 | 262 | 7.5 | 1010 | 1028 | 22.0 | 1496 | 1510 | 36.5 |
| 263 | 290 | 8.0 | 1029 | 1047 | 22.5 | 1511 | 1525 | 37.0 |
| 291 | 318 | 8.5 | 1048 | 1065 | 23.0 | 1526 | 1540 | 37.5 |
| 319 | 347 | 9.0 | 1066 | 1083 | 23.5 | 1541 | 1555 | 38.0 |
| 348 | 375 | 9.5 | 1084 | 1102 | 24.0 | 1556 | 1569 | 38.5 |
| 376 | 403 | 10.0 | 1103 | 1121 | 24.5 | 1570 | 1582 | 39.0 |
| 404 | 435 | 10.5 | 1122 | 1140 | 25.0 | 1583 | 1596 | 39.5 |
| 436 | 470 | 11.0 | 1141 | 1160 | 25.5 | 1597 | 1610 | 40.0 |
| 471 | 504 | 11.5 | 1161 | 1180 | 26.0 | 1611 | 1622 | 40.5 |
| 505 | 533 | 12.0 | 1181 | 1200 | 26.5 | 1623 | 1634 | 41.0 |
| 534 | 563 | 12.5 | 1201 | 1216 | 27.0 | 1635 | 1647 | 41.5 |
| 564 | 594 | 13.0 | 1217 | 1232 | 27.5 | 1648 | 1660 | 42.0 |
| 595 | 623 | 13.5 | 1233 | 1248 | 28.0 | 1661 | 1672 | 42.5 |
| 624 | 652 | 14.0 | 1249 | 1264 | 28.5 | 1673 | 1685 | 43.0 |
| 653 | 680 | 14.5 | 1265 | 1280 | 29.0 | 1686 | 1698 | 43.5 |
| 681 | 705 | 15.0 | 1281 | 1296 | 29.5 | 1699 | 1710 | 44.0 |
| 706 | 733 | 15.5 | 1297 | 1312 | 30.0 | 1711 | 1723 | 44.5 |
| 734 | 760 | 16.0 | 1313 | 1330 | 30.5 | 1724 | 1735 | 45.0 |
| 761 | 788 | 16.5 | 1331 | 1347 | 31.0 | 1736 | 1748 | 45.5 |
| 789 | 812 | 17.0 | 1348 | 1364 | 31.5 | 1749 | 1760 | 46.0 |
| 813 | 835 | 17.5 | 1365 | 1380 | 32.0 | 1761 | 1773 | 46.5 |
| 836 | 860 | 18.0 | 1381 | 1395 | 32.5 | 1774 | 1785 | 47.0 |
| | | | | | | 1786 | 1800 | 47.5 |
| | | | | | | | | 48.0 |

# VELOCITY CORRECTIONS

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

NOTE: All corrections additive unless otherwise indicated

SURVEYS: H-6548; H-7871 (10150); H-7821 (20149); H-7872 (20150); H-7873 (20250)

PERIOD: 14 October through 30 November 1950

| FATHOMS | | | FATHOMS | | | FATHOMS | | |
|---|---|---|---|---|---|---|---|---|
| Depth | | Corrn. | Depth | | Corrn. | Depth | | Corrn. |
| From | To | (0.5) | From | To | (0.5) | From | To | (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 | 988 | 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 | 1298 | 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 808 J Depth Recorder - Velocity of sound 820 fathoms per second

NOTE: ALL corrections additive unless otherwise indicated.

SURVEYS: H-7793 (10948); H-7820 (10848); H-7821 (20149); H-7871 (10150).

PERIOD: 14 October through 30 November 1950.

## FEET

| Depth From | Depth To | Corrn. |
|---|---|---|
| 0.0 | 23.0 | 0.0 |
| 23.5 | 46.0 | 0.5 |
| 46.5 | 69.0 | 1.0 |
| 69.5 | 91.5 | 1.5 |
| 92.0 | 114.5 | 2.0 |
| 115.0 | 137.0 | 2.5 |
| 137.5 | 158.5 | 3.0 |
| 159.0 | 162.0 | 3.5 |

## FATHOMS

| Depth From | Depth To | Corrn. (0.2) |
|---|---|---|
| 0.0 | 8.8 | 0.0 |
| 8.9 | 18.0 | 0.2 |
| 18.1 | 27.2 | 0.4 |
| 27.3 | 36.2 | 0.6 |
| 36.3 | 47.0 | 0.8 |
| 47.1 | 60.4 | 1.0 |
| 60.5 | 79.0 | 1.2 |
| 79.1 | 160.0 | 1.4 |

## FATHOMS

| Depth From | Depth To | Corrn. (0.1) |
|---|---|---|
| 7.0 | 8.8 | 0.1 |
| 8.9 | 13.4 | 0.2 |
| 13.5 | 18.0 | 0.3 |
| 18.1 | 22.5 | 0.4 |
| 22.6 | 27.2 | 0.5 |
| 27.3 | 31.5 | 0.6 |
| 31.6 | 36.2 | 0.7 |
| 36.3 | 41.2 | 0.8 |
| 41.3 | 47.0 | 0.9 |
| 47.1 | 53.0 | 1.0 |
| 53.1 | 60.4 | 1.1 |
| 60.5 | 69.2 | 1.2 |
| 69.3 | 79.0 | 1.3 |
| 79.1 | 92.0 | 1.4 |
| 92.1 | 160.0 | 1.5 |

## FATHOMS

| Depth From | Depth To | Corrn. (0.5) |
|---|---|---|
| 0.0 | 19.0 | 0.0 |
| 19.1 | 42.5 | 0.5 |
| 42.6 | 82.0 | 1.0 |
| 82.1 | 160.0 | 1.5 |

## INSTRUMENTAL CORRECTIONS

## 1950

Abstract of Instrumental Corrections including the correction for Settlement and Squat.

Surveys: Chart 1007; H-6548; H-7723 (10148); H-7749 (10548); H-7792 (10648); H-7793 (10948); H-7818 (10248); H-7819 (10748); H-7820 (10848); H-7821 (20149); H-7871 (10150); H-7872 (20150); H-7873 (20250).

### FOOT SCALES

| Fath. No. | Date | Scales: | A | B | C | D |
|---|---|---|---|---|---|---|
| 131 SG | 2 - 27 May | Speed: | 120 RPM and over | | | |
| | | Corrn: | - 0.5 | - 0.5 | + 2.0 | + 4.0 |
| | | Speed: | 106 RPM to 119 RPM incl. | | | |
| | | Corrn: | - 1.0 | - 1.0 | + 1.5 | + 3.5 |
| | | Speed: | 105 RPM and under | | | |
| | | Corrn: | - 1.5 | - 1.5 | + 1.0 | + 3.0 |
| | 5 June - 15 December | Speed: | 120 RPM and over | | | |
| | | Corrn: | 0.0 | + 0.5 | + 2.5 | + 4.5 |
| | | Speed: | 106 RPM to 119 RPM incl. | | | |
| | | Corrn: | - 0.5 | 0.0 | + 2.0 | + 4.0 |
| | | Speed: | 105 RPM and under | | | |
| | | Corrn: | - 1.0 | - 0.5 | + 1.5 | + 3.5 |

### FATHOM SCALES

| Fath. No. | Date | | A | B | C | D |
|---|---|---|---|---|---|---|
| 131 SG | 2 - 27 May | | CORRECTORS TO 0.1 FATHOM | | | |
| | | Speed: | 108 RPM and over | | | |
| | | Corrn: | - 0.1 | - 0.7 | + 1.9 | + 4.0 |
| | | Speed: | 107 RPM and under | | | |
| | | Corrn: | - 0.2 | - 0.8 | + 1.8 | + 3.9 |
| | | | CORRECTORS TO 0.2 FATHOM | | | |
| | | Speed: | All speeds | | | |
| | | Corrn: | - 0.2 | - 0.8 | + 1.8 | + 3.8 |

Comp: JEN
CK: NET
WRK

## FATHOM SCALES

| Fath. No. | Date | Scales: | A | B | C | D |
|---|---|---|---|---|---|---|
| 131 SG | 2 - 27 May | | CORRECTORS TO 0.5 FATHOM | | | |
| | | Speed: | All speeds | | | |
| | | Corrn: | - 0.5 | - 1.0 | + 2.0 | + 3.5 |
| | 5 June<br>15 December | | CORRECTORS TO 0.1 FATHOM | | | |
| | | Speed: | 108 RPM and over | | | |
| | | Corrn: | - 0.1 | + 0.4 | + 2.4 | + 4.3 |
| | | Speed: | 107 RPM and under | | | |
| | | Corrn: | - 0.2 | + 0.3 | + 2.3 | + 4.2 |
| | | | CORRECTORS TO 0.2 FATHOM | | | |
| | | Speed: | All Speeds | | | |
| | | Corrn: | - 0.2 | + 0.2 | + 2.2 | + 4.2 |
| | | | CORRECTORS TO 0.5 FATHOM | | | |
| | | Speed: | All speeds | | | |
| | | Corrn: | - 0.5 | 0.0 | + 2.0 | + 4.0 |

## FOOT SCALES

| Fath. No. | Date | Scales: | A | B | C | D |
|---|---|---|---|---|---|---|
| 132 SG | 2 May -<br>0231 19 May | Speed: | 120 RPM and over | | | |
| | | Corrn: | - 0.5 | - 1.5 | 0.0 | + 1.5 |
| | | Speed: | 106 RPM to 119 RPM incl. | | | |
| | | Corrn: | - 1.0 | - 2.0 | - 0.5 | + 1.0 |
| | | Speed: | 105 RPM and under | | | |
| | | Corrn: | - 1.5 | - 2.5 | - 1.0 | + 0.5 |
| | 0232 19 May -<br>0952 19 May | Speed: | 120 RPM and over | | | |
| | | Corrn: | + 1.0 | + 8.0 | | |
| | | Speed: | 106 RPM to 119 RPM incl. | | | |
| | | Corrn: | + 0.5 | + 7.5 | | |
| | | Speed: | 105 RPM and under | | | |
| | | Corrn: | 0.0 | + 7.0 | | |

Comp: JEW
Ck: NET
MRK

## FOOT SCALES

| Fath. No. | Date | Scales: | A | B | C | D |
|---|---|---|---|---|---|---|
| 132 SG | 1210 19 May-<br>20 September | Speed: | 120 RPM and over | | | |
| | | Corrn: | + 0.5 | - 0.5 | + 0.5 | + 2.5 |
| | | Speed: | 106 RPM to 119 RPM incl. | | | |
| | | Corrn: | 0.0 | - 1.0 | 0.0 | + 2.0 |
| | | Speed: | 105 RPM and under | | | |
| | | Corrn: | - 0.5 | - 1.5 | - 0.5 | + 1.5 |
| | 23 September<br>15 December | Speed: | 120 RPM and over | | | |
| | | Corrn: | 0.0 | - 0.5 | 0.0 | + 2.0 |
| | | Speed: | 106 RPM to 119 RPM incl. | | | |
| | | Corrn: | - 0.5 | - 1.0 | - 0.5 | + 1.5 |
| | | Speed: | 105 RPM and under | | | |
| | | Corrn: | - 1.0 | - 1.5 | - 1.0 | + 1.0 |

## FATHOM SCALE

| Fath. No. | Date | Scales: | A | B | C | D |
|---|---|---|---|---|---|---|
| | 2 May -<br>0231 19 May | | CORRECTORS TO 0.1 FATHOM | | | |
| | | Speed: | 108 RPM and over | | | |
| | | Corrn: | 0.0 | - 1.0 | 0.0 | + 1.8 |
| | | Speed: | 107 RPM and under | | | |
| | | Corrn: | - 0.1 | - 1.1 | - 0.1 | + 1.7 |
| | 1210 19 May -<br>20 September | | CORRECTORS TO 0.1 FATHOM | | | |
| | | Speed: | 108 RPM and over | | | |
| | | Corrn: | 0.0 | - 0.7 | + 0.2 | + 1.7 |
| | | Speed: | 107 RPM and under | | | |
| | | Corrn: | - 0.1 | - 0.8 | + 0.1 | + 1.6 |
| | | | CORRECTORS TO 0.2 FATHOM | | | |
| | | Speed: | All Speeds | | | |
| | | Corrn: | - 0.2 | - 0.8 | 0.0 | + 1.6 |
| | | | CORRECTORS TO 0.5 FATHOM | | | |
| | | Speed: | All speeds | | | |
| | | Corrn: | 0.0 | - 1.0 | 0.0 | + 1.5 |

Comp: JEW
Ck: NET
WRK

# FATHOM SCALE

| Fath. No. | Date | Scales: | A | B | C | D |
|---|---|---|---|---|---|---|
| 132 SG | 23 September | | CORRECTORS TO 0.1 FATHOM | | | |
| | 15 December | 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 2 | + 3.2 0 |
| | | | 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 |
| 205 (NMC-1) Visual & Chart | 2 May - 15 December | | CORRECTORS TO 0.5 FATHOM | | | |
| | | Speed: | All Speeds | | | |
| | | Corrn: | All Scales: 0.0 | | | |

Comp: JEW
Ck: WRK

EPI FINAL CORRECTIONS (Sheet No. 5)

SEASON 1950

SHIP HYDROGRAPHER G.L. ANDERSON, COMMANDING

| From | To | Corr. CC | Remarks |
|---|---|---|---|
| Oct. 4 1100 | Oct. 6 1200 | -1.8 | |
| Oct. 6 1201 | Oct. 7 1100 | -1.6 | |
| Oct. 7 1101 | Oct. 8 1200 | -1.4 | |
| 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 | |
| Nov. 8 1200 | Nov. 9 1100 | -0.6 | |
| Nov. 9 1101 | Nov. 10 1100 | -0.8 | |
| Nov. 10 1101 | Nov. 11 1400 | -1.0 | |
| Nov. 11 1401 | Nov. 13 0000 | -1.2 | |
| Nov. 13 0001 | Nov. 16 1400 | -1.0 | |

| From | To | Corr. D | Remarks |
|---|---|---|---|
| Oct. 4 1100 | Oct. 6 0600 | -1.6 | |
| Oct. 6 0601 | Oct. 10 0600 | -1.8 | |
| Oct. 10 0601 | Oct. 13 1300 | -1.6 | |
| Oct. 24 1130 | Nov. 3 1200 | -1.6 | |
| Nov. 8 1200 | Nov. 10 0500 | -1.6 | |
| Nov. 10 0501 | Nov. 10 2000 | -1.8 | |
| Nov. 10 2001 | Nov. 11 1800 | -2.0 | |
| Nov. 11 1801 | Nov. 12 0200 | -1.8 | |
| 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: GCM

# VELOCITY CORRECTION

## TEMPLATES

SURVEYS: Chart 1007; H-6548; H-7819 (10748); H-7820 (10648); H-7793 (10948); H-7821 (20149); H-7871 (10150); H-7872 (20150); H-7873 (20250).

PERIOD: 12 September through 13 October 1950

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

PERIOD: 14 October through 30 November 1950

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

PERIOD: 6 December through 15 December 1950

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

# COMPUTATION OF CORRECTORS
for
SURVEY H-7871 (10150)

**Reducers entered to ± 0.2 fms.**

| Date | Time | Fath. No, Phase | Index | Draft | Instr. | Tide | Total Corrector | Remarks |
|---|---|---|---|---|---|---|---|---|
| 10/8/50 | 1100 | 131 C | - 0.2 | - 0.2 | + 2.2 | - 0.4 | +1.4to1106 | LB-120 rpm |
| | 1106 | | - 0.4 | | | | +1.2 1131 | |
| | 1131 | | 0.0 | | | | +1.6 1157 | |
| | 1157 | | - 0.2 | | | | +1.4 1201 | |
| | 1201 | | | | | - 0.2 | +1.6 1223 | |
| | 1223 | | 0.0 | | | | +1.8 1248 | |
| | 1248 | | - 0.2 | | | | +1.6 1350 | |
| | 1337 | | - 0.2 | | | | | |
| | 1350 | | - 0.2 | - 0.2 | + 2.2 | - 0.2 | | LE |
| 10/9/50 | 0230 | 131 C | 0.0 | - 0.2 | + 2.2 | - 0.2 | +1.8to0331 | LB-120 rpm |
| | 0331 | | - 0.2 | | | | +1.6 0417 | |
| | 0417 | | 0.0 | | | | +1.8 0448 | |
| | 0448 | | - 0.2 | | | | +1.6 0501 | |
| | 0501 | | | | | - 0.4 | +1.4 0530 | |
| | 0530 | | - 0.2 | - 0.2 | + 2.2 | - 0.4 | | LE |
| 10/12/50 | 0440 | 132 C | - 0.2 | - 0.2 | + 1.2 | 0.0 | +0.8to0541 | LB 120 rpm |
| | 0512 | | - 0.2 | | | | | |
| | 0541 | | 0.0 | | | | +1.0 0712 | |
| | 0637 | | 0.0 | | | | | |
| | 0712 | | - 0.2 | | | - 0.2 | +0.6 0847 | |
| | 0847 | | 0.0 | | | | +0.8 0907 | |
| | 0907 | | 0.0 | - 0.2 | + 1.2 | - 0.2 | | LE |
| 10/25/50 | 0530 | 132 C | - 0.2 | 0.0 | + 1.2 | 0.0 | +1.0to0533 | LB 120 rpm |
| | 0533 | 131 C | 0.0 | | + 2.2 | | +2.2 0557 | |
| | 0557 | | - 0.2 | | | | +2.0 0630 | |
| | 0630 | | 0.0 | | | | +2.2 0646 | |
| | 0646 | | - 0.2 | | | | +2.0 0741 | |
| | 0733 | | 0.0 | | | - 0.2 | | |
| | 0741 | | - 0.2 | | | | +1.8 0807 | |
| | 0807 | | 0.0 | | | | +2.0 0842 | |
| | 0842 | | - 0.2 | | | | +1.8 0910 | |
| | 0910 | | - 0.2 | 0.0 | + 2.2 | - 0.2 | | LE |

COMPUTATION OF CORRECTORS
for
SURVEY H-7871 (10150)

| Date | Time | Fath.No. | Phase | Index | Draft | Instr. | Tide | Total Corrector | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| 10/25/50 | 2250 | 132 | D | - 0.2 | - 0.2 | + 3.0 | - 0.4 | +2.2to2306 | LB 120 rpm |
| | 2306 | | | 0.0 | | | | +2.4 2340 | |
| | 2340 | 132 | C | 0.0 | | + 1.2 | | +0.6 2341 | |
| | 2341 | | | 0.0 | - 0.2 | + 1.2 | - 0.2 | +0.8 2355 | |
| | 2355 | | | - 0.2 | - 0.2 | + 1.2 | - 0.2 | +0.6 0011 | |
| 10/26/50 | 0011 | 132 | C | 0.0 | - 0.2 | + 1.2 | - 0.2 | +0.8 0051 | |
| | 0051 | | | - 0.2 | - 0.2 | + 1.2 | - 0.2 | +0.6 0232 | |
| | 0232 | | | 0.0 | | | | +0.8 0245 | |
| | 0245 | | | | | | 0.0 | +1.0 0411 | |
| | 0330 | | | 0.0 | | | | | |
| | 0411 | | | - 0.2 | | | | +0.8 0430 | |
| | 0430 | | | - 0.2 | - 0.2 | + 1.2 | 0.0 | | LE |
| 10/27/50 | 1120 | 132 | C | 0.0 | - 0.2 | + 1.2 | - 0.2 | +0.8to1135 | LB 120 rpm |
| | 1135 | | | - 0.2 | | | | + 0.6 1142 | |
| | 1142 | | | 0.0 | | | | +0.8 1315 | |
| | 1156 | | | 0.0 | | | | | |
| | 1315 | | | - 0.2 | | | | +0.6 1435 | |
| | 1435 | | | 0.0 | | | | +0.8 1501 | |
| | 1501 | | | - 0.2 | | | | +0.6 1613 | |
| | 1613 | | | 0.0 | | | | +0.8 1627 | |
| | 1627 | | | - 0.2 | | | | +0.6 1708 | |
| | 1708 | | | 0.0 | | | | +0.8 1723 | |
| | 1723 | | | - 0.2 | | | | +0.6 1806 | |
| | 1806 | | | - 0.2 | - 0.2 | + 1.2 | - 0.2 | | LE |
| 11/1/50 | 0540 | 132 | D | - 0.2 | - 0.2 | + 3.0 | - 0.2 | +2.4to0602 | LB 120 rpm |
| | 0602 | 132 | C | 0.0 | | + 1.2 | | +0.8 0616 | |
| | 0616 | | | - 0.2 | | | | +0.6 0657 | |
| | 0657 | | | 0.0 | | | | +0.8 0710 | |
| | 0710 | | | - 0.2 | | | | +0.6 0721 | |
| | 0721 | | | | | | 0.0 | +0.8 0759 | |
| | 0759 | | | - 0.4 | | | | +0.6 0812 | |
| | 0812 | | | 0.0 | | | | +1.0 0938 | |
| | 0843 | | | 0.0 | | | | | |
| | 0938 | | | - 0.2 | | | | +0.8 1012 | |
| | 1012 | | | 0.0 | | | | +1.0 1021 | |
| | 1021 | | | - 0.2 | | | | +0.8 1048 | |
| | 1048 | | | 0.0 | - 0.2 | + 1.2 | 0.0 | +1.0 1107 | |

Line continued on sheet 3

COMPUTATION OF CORRECTORS
for
SURVEY H-7871 (10150)

| Date | Time | Fath.No. | Phase | Index | Draft | Instr. | Tide | Total Corrector | Remarks |
|---|---|---|---|---|---|---|---|---|---|
| 11/1/50 (cont.) | 1107 | 132 | C | - 0.2 | - 0.2 | + 1.2 | 0.0 | +0.8to1126 | |
| | 1126 | | | 0.0 | | | | +1.0 1148 | |
| | 1148 | | | - 0.2 | | | | +0.8 1201 | |
| | 1201 | | | | | | - 0.2 | +0.6 1220 | |
| | 1220 | | | - 0.2 | - 0.2 | + 1.2 | - 0.2 | | LE |
| 11/8/50 | 2354 | 131 | B | - 0.2 | 0.0 | + 0.2 | - 0.2 | -0.2to2400 | LB 120 rpm |
| | 2400 | | | - 0.4 | | | | -0.4 0015 | |
| 11/9/50 | 0015 | | | - 0.6 | | | | -0.6 0028 | |
| | 0028 | | | 0.0 | | | | 0.0 0101 | |
| | 0101 | 131 | C | 0.0 | | + 2.2 | | +2.0 0113 | |
| | 0113 | | | - 0.2 | | | | +1.8 0200 | |
| | 0200 | | | | | | 0.0 | +2.0 0208 | |
| | 0208 | | | 0.0 | | | | +2.2 0213 | |
| | 0213 | | | - 0.2 | | | | +2.0 0233 | |
| | 0233 | | | - 0.4 | | | | +1.8 0239 | |
| | 0239 | 132 | C | 0.0 | | + 1.2 | | +1.2 0249 | |
| | 0249 | | | - 0.2 | | | | +1.0 0302 | |
| | 0302 | | | 0.0 | | | | +1.2 0309 | |
| | 0309 | | | - 0.2 | | | | +1.0 0331 | |
| | 0331 | | | 0.0 | | | | +1.2 0341 | |
| | 0341 | | | - 0.2 | | | | +1.0 0422 | |
| | 0422 | | | - 0.4 | | | | +0.8 0433 | |
| | 0433 | | | 0.0 | | | | +1.2 0506 | |
| | 0506 | | | 0.0 | 0.0 | + 1.2 | 0.0 | | LE |
| | 0620 | | | | | | - 0.2 | | |
| | 0800 | 132 | C | 0.0 | 0.0 | + 1.2 | - 0.2 | +1.0to0828 | LB 120 rpm |
| | 0828 | | | - 0.2 | | | | +0.8 0924 | |
| | 0924 | | | - 0.4 | | | | +0.6 0942 | |
| | 0942 | | | 0.0 | | | | +1.0 1003 | |
| | 1003 | | | - 0.2 | | | - 0.4 | +0.6 1023 | |
| | 1023 | | | 0.0 | | | | +0.8 1041 | |
| | 1041 | | | - 0.2 | | | | +0.6 1059 | |
| | 1059 | | | 0.0 | | | | +0.8 1114 | |
| | 1114 | | | - 0.2 | | | | +0.6 1157 | |
| | 1157 | | | 0.0 | 0.0 | + 1.2 | - 0.4 | +0.8 1210 | |

Line continued on sheet 4

# COMPUTATION OF CORRECTORS
for
SURVEY H-7871 (10150)

| Date | Time | Fath.No. Phase | Index | Draft | Instr. | Tide | Total Corrector | Remarks |
|---|---|---|---|---|---|---|---|---|
| 11/9/50 | 1210 | 131 C | 0.0 | 0.0 | + 2.2 | - 0.4 | +1.8 to 1300 | |
| (cont.) | 1300 | | ↓ | | | - 0.2 | +2.0 1324 | |
| | 1306 | | 0.0 | | | | | |
| | 1324 | | - 0.2 | | | | +1.8 1343 | |
| | 1343 | | 0.0 | | | | +2.0 1352 | |
| | 1352 | | - 0.2 | | | | +1.8 1420 | |
| | 1420 | | - 0.2 | 0.0 | + 2.2 | - 0.2 | | LE |

Copy ✓ PR

H 7871
Hy 10150

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 correction: | Minus three (3) hours |
| Height correction: | None |

The value of the observed hourly heights and the highs 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-7871 (1950)

| Volume Number | Day Letter | Date 1950 | Number of Positions | Statute Miles of Soundings |
|---|---|---|---|---|
| 1 | A | 8 Oct. | 18 | 29.6 |
| 1 | B | 9 Oct. | 19 | 34.2 |
| 1 | C | 12 Oct. | 27 | 48.6 |
| 1 | D | 25 Oct. | 32 | 58.7 |
| 1 | E | 26 Oct. | 27 | 46.6 |
| 1 | F | 27 Oct. | 42 | 79.2 |
| 1 | G | 1 Nov. | 43 | 76.8 |
| 1 | H | 8 Nov. | 2 | 1.2 |
| 1 | J | 9 Nov. | 69 | 129.1 |
| | | TOTALS | 279 | 504.0 |

TOTAL NUMBER OF TEMPERATURE & SALINITY OBSERVATIONS 1

TOTAL AREA SURVEYED 665 Square Statute Miles

H 7871

Hy 10150

Geographic names.

Gulf of Mexico

# GEOGRAPHIC NAMES

Survey No. H-7971

| Name on Survey | A On Chart No. | B On previous survey No. | C On U. S. quadrangle Maps | D From local information | E On local Maps | F P. O. Guide or Map | G Rand McNally Atlas | H U. S. Light List | K | |
|---|---|---|---|---|---|---|---|---|---|---|
| Florida | | | | | | | | | | 1 |
| Gulf of Mexico | | | | | | | | | | 2 |
| | | | | | Names approved | | | | | 3 |
| | | | | | 11-18-53 | | L. Heck. | | | 4 |
| | | | | | | | | | | 5 |
| | | | | | | | | | | 6 |
| | | | | | | | | | | 7 |
| St. Petersburg | | (tide station) | | | | | | | | 8 |
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Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. H-7871

Records accompanying survey:

Boat sheets 1; sounding vols. 1; wire drag vols. .....; bomb vols. .....; graphic recorder rolls 3 Env.

special reports, etc. 1 Smooth Sheet; 1 Descriptive Report; 1 Cahier E.P.I. Abstracts; 1 Cahier-Computations of Velocity Corrections & 1 Cahier-Computation of Initial Corrections & Instrumental Corrections filed with H-7873

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

| | | |
|---|---|---|
| Number of positions on sheet | | 279 |
| Number of positions checked | | 25 |
| Number of positions revised | | 0 |
| Number of soundings revised (refers to depth only) | | * |
| Number of soundings erroneously spaced | | 0 |
| Number of signals erroneously plotted or transferred | | 0 |
| Topographic details | Time | 0 |
| Junctions | Time | 1 |
| Verification of soundings from graphic record | Time | 15 |

Verification by Ann Jeskind Total time 31 Date 1-18-54

Reviewed by Ann Jeskind Time 12 Date 1-19-54

* All depths obtained by 808 fathometer were erroneously pencilled 2 fms too shoal on the smooth sheet. These depths have been correctly inked on the smooth sheet.

M-2232-1

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

**REVIEW OF HYDROGRAPHIC SURVEY**

REGISTRY NO. H-7871 FIELD NO. HY-10150

Florida, Gulf of Mexico, Southwest of Tampa Bay Entrance

Project No. CS-328

Surveyed Oct., Nov. 1950 Scale 1:100,000

Soundings: Control:

808 Fathometer E.P.I.

Chief of Party - G.L. Anderson
Surveyed by - G.L. Anderson, J.P. Lushene, J.E. Waugh, E.E. Jones, N.E. Taylor, W.R. Kachel
Protracted by - W.M. Martin
Soundings plotted by - W.M. Martin
Verified and inked by - I.M. Zeskind
Reviewed by - I.M. Zeskind 1-19-54
Inspected by - R.H. Carstens

1. Shoreline and Control

No shoreline falls within the limits of this offshore survey.

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

2. Sounding Line Crossings

Depths at crossings are in good agreement.

3. Depth Curves and Bottom Configuration

The usual depth curves are adequately delineated.

The survey covers a portion of the continental slope west of the entrance to Tampa Bay. Depths in the area range from 80 to 119 fms.

4. Junctions with Contemporary Surveys

An adequate junction was effected with H-7821 (1950) on the west.

Project surveys on the south, north and east have not yet been received in the Washington Office.

5. Comparison with Prior Surveys

| | |
|---|---|
| H-483 (1854-55) | 1:200,000 |
| H-528 (1856) | 1:662,050 |
| H-599 (1857-58) | 1:200,000 |
| H-1138 (1872) | 1:600,000 |
| H-1354 (1875-76) | 1:600,000 |

A few dead reckoning sounding lines from these early small-scale reconnaissance surveys fall within the area of the present survey. A comparison between the prior and present surveys shows differences of as much as 25 fms.in depths of 115 fms. These differences are attributed to the dead reckoning control and the improper spacing of soundings on the prior surveys. Several bottom characteristics have been carried forward to the present survey from the prior surveys. With these additions, the present survey is adequate to supersede the prior surveys within the common area.

6. Comparison with Chart 1003 (Latest print date 9-15/52)

A. Hydrography

The charted hydrography originates with advance information of the present survey. Differences between the charted and present depths vary from 2 - 3 fms. in depths ranging from 80 - 110 fms.

The present survey supersedes the charted hydrography.

B. Aids to Navigation

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

7. Condition of Survey

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

b. The field plotting was accurately done, except that all soundings were smooth plotted 2 fms. too shoal. Depths were read from templates erroneously set off from the 2-fm. line (depth of the transceiver) instead of the zero line of the 808 fathogram. The soundings have been corrected on the smooth sheet.

c. Only one bottom characteristic was obtained in the area of the present survey.

8. Compliance with Project Instructions

The present survey adequately complies with the Project Instructions, except as noted in paragraph 7c.

9. Additional Field Work Recommended

This is a very good basic survey. Attention, however, is directed to the lack of bottom characteristics.

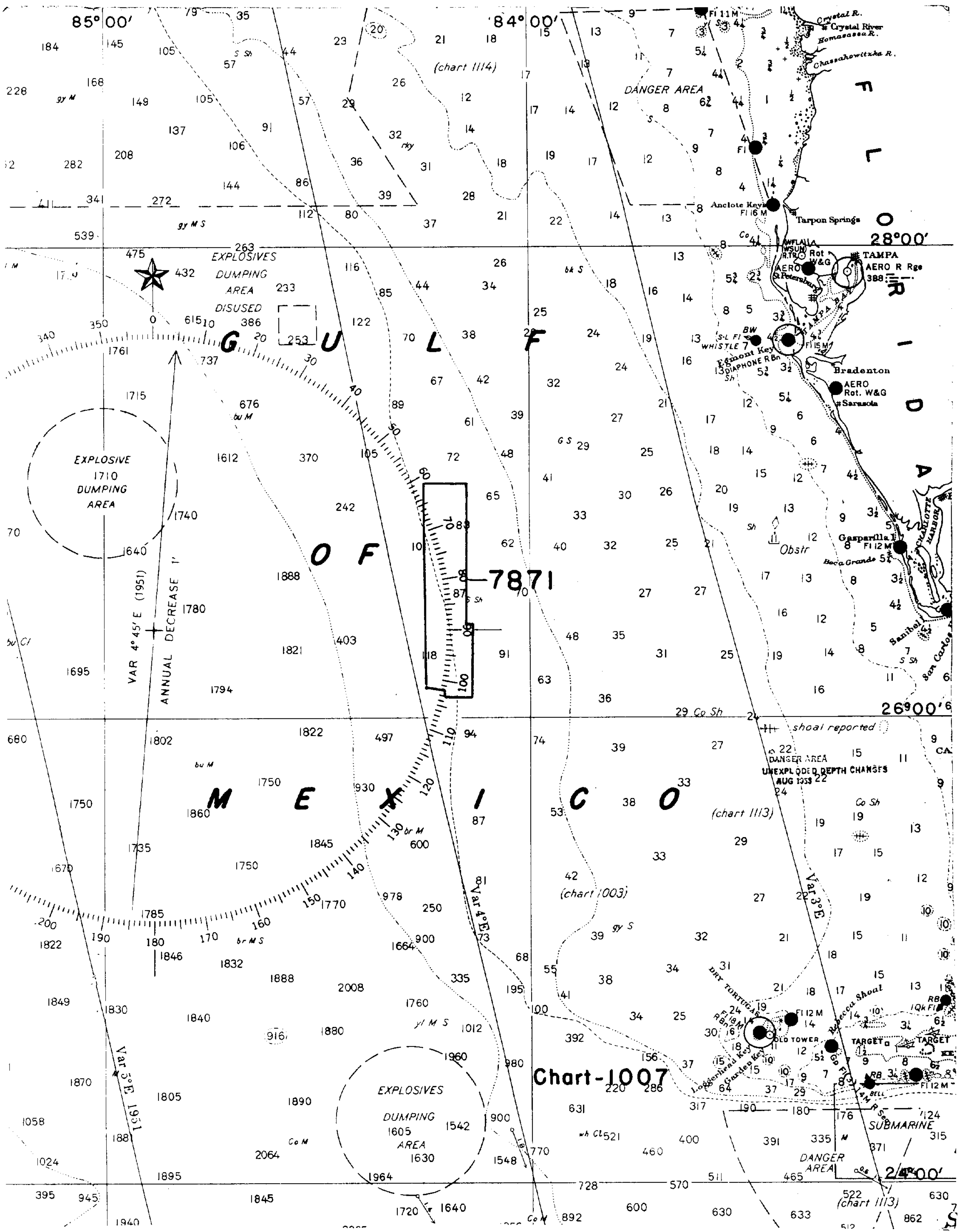
Examined and approved

H. R. Edmonston
Chief, Nautical Chart Branch

H. Arnold Karo
Chief, Division of Charts

G. R. Fish
Chief, Section of Hydrography

Earl O. Heaton
Chief, Division of Coastal Surveys



85°00′
84°00′
28°00′
26°00′
24°00′
GULF OF MEXICO
FLORIDA
Chart-1007
7871
(chart 1114)
(chart 1113)
(chart 1003)
DANGER AREA
EXPLOSIVES DUMPING AREA DISUSED
EXPLOSIVE 1710 DUMPING AREA
EXPLOSIVES DUMPING 1605 AREA
VAR 4°45′E (1951)
ANNUAL DECREASE 1′
Var 4°E
Var 3°E
Var 3°E 1951
Crystal R.
Crystal River
Homosassa R.
Chassahowitzka R.
Anclote Keys
Tarpon Springs
TAMPA
AERO R Rge
St Petersburg
TAMPA BAY
Egmont Key
Bradenton
Sarasota
Gasparilla I.
Boca Grande
CHARLOTTE HARBOR
Sanibel
San Carlos B.
Obstr
shoal reported
DANGER AREA UNEXPLODED DEPTH CHARGES AUG 1953
DRY TORTUGAS
Loggerhead Key
Garden Key
OLD TOWER
Rebecca Shoal
TARGET
SUBMARINE
DANGER AREA

# NAUTICAL CHARTS BRANCH

SURVEY NO. H-7871

Record of Application to Charts

| DATE | CHART | CARTOGRAPHER | REMARKS |
|---|---|---|---|
| 1955 17 June | 1007 | H.E. MacEwen | [redacted] After Verification and Review |
| 12/2/58 | 1003 | N.W. Burgoyne | ~~Before~~ After Verification and Review - Completely applied |
| 1-20-59 | 1007 | R.K. DeLawder | ~~Before~~ After Verification and Review Thru Cht 1003 |
| 2 Mar 59 | 1002 | Melids | ~~Before~~ After Verification and Review Thru 1003 above |
| | | | Before After Verification and Review |
| | | | Before After Verification and Review |
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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.