

8200

Diag. Cht. Nos. 1000-3 and 1107.

Form 504

U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

Type of Survey HYDROGRAPHIC

Field No. HY-12355 Office No. H-8200

LOCALITY

State MAINE

General locality GULF OF MAINE

Locality NORTH OF GEORGES BANK &

WEST OF BROWNS BANK

1955

CHIEF OF PARTY

WALTER J. CHOVAN

LIBRARY & ARCHIVES

DATE JUN 13 1960

COMM-DC 61300

8200

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-8200

Field No. Hy-12355

State MAINE

General locality GULF OF MAINE-NORTHEASTERN PART

Locality NORTH OF GEORGES BANK-WEST OF BROWNS BANK

Scale 1:120,000 Date of survey 5 May to 29 Sept. 1955

Instructions dated 7 January 1955

Vessel HYDROGRAPHER

Chief of party WALTER J. CHOVAN

Surveyed by G.E. Morris, W.N. Martin, C.A. George, H.W. Keith,
J.D. Hodges & M.B. Miller

Soundings taken by ~~XXXXXX~~ graphic recorder, ~~XXXXXXXXXX~~

Fathograms scaled by L.C. Smith, D.H. Straughan, J.J. Curley &
L.J. Shillenn

Fathograms checked by D. Moscopulos

Protracted by W.L. Jonns (Norfolk Processing Office)

Soundings penciled by W.L. Jonns (Norfolk Processing Office)

Soundings in fathoms ~~XXX~~ at MLW ~~XXXXX~~

REMARKS: Offshore survey

286

Notes for
DESCRIPTIVE REPORT

to accompany

Hydrographic Survey H-8200 (HY 12355)

5 May to 29 Sept. 1955

Ship HYDROGRAPHER

Scale 1:120,000

Walter J. Chovan
Chief of Party

A. PROJECT:

This survey was accomplished under instruction 22-SRO, S-2-HY for Project 1376, dated 7 January 1955 from the Director to the Commanding Officer, Ship HYDROGRAPHER.

B. SURVEY LIMITS AND DATES:

This is a survey of that part of the Gulf of Maine lying immediately north of Georges Bank and west of Browns Bank.

The southern and western limits of this sheet (below latitude $42^{\circ}-46'$) are the project limits. Above this latitude the western limit is longitude $67^{\circ}-45'W$, the eastern limit is longitude $66^{\circ}-34'W$, the northern sheet limit is latitude $43^{\circ}-20'N$.

Field work began 5 May and concluded 29 September 1955.

Junctions were made as follows: On the west with contemporary surveys H-8202 and H-8201; on the north, H-8199; and on the west H-8198.

Junctions to the south and to the west were made with surveys; H-5173, 1:100,000-1931; and with H-6565, 1:120,000-1940, respectively.

C. VESSEL AND EQUIPMENT:

All work in this survey was accomplished by the Ship HYDROGRAPHER. The Ship's turning radius at sounding speed was 80-120 meters depending upon wind or current conditions. There are no corrections for settlement and squat for soundings taken on the fathom scale.

Soundings were made by the 805-J type depth recorders (153 SPK and 132 SG). Their installation is such that either could be used at will and neither is considered a standby unit. Soundings were made to 160 fathoms with these graphic recorders

Soundings in depths greater than 160 fathoms were made with an Ede model 185 fathometer.

D. TIDE AND CURRENT STATIONS:

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

Hourly heights for the reduction of soundings were furnished by the Washington Office from the standard automatic gage at Bar Harbor, Maine.

Time and range differences are shown in the attached Tidal Note.

Predicted tides were used in the reduction of boat sheet soundings.

E. SMOOTH SHEETS:

The sheet projections and EPI arcs were hand ruled by the Norfolk Processing Office. The surveys are to be smooth plotted by the Norfolk Office.

These are offshore surveys and contain no shoreline or topographic details.

F. CONTROL STATIONS:

The hydrography on this survey was controlled by EPI system. EPI-A was located at Southwest Harbor, Maine (Lat. $44^{\circ}-14'-47.65''$, Long. $68^{\circ}-17'-37.61''$) and EPI-B at Cape Ann, Mass. (Lat. $42^{\circ}-41'-21.79''$, Long. $70^{\circ}-38'-07.48''$).

F. (Continued)

The station sites were selected by the Washington Office, and the geographic positions of these stations was determined by F. B. Quinn, Northeast District Officer, in 1955 and forwarded by him to the Norfolk Processing Office for use in the construction of the boat and smooth sheets.

G. SHORELINE AND TOPOGRAPHY:

These are offshore surveys containing no shoreline or topographic details.

H. SOUNDINGS:

Survey depths were measured by Edo and 808 type graphic recorders as noted in C. The effective length of stylus arm and the paper speed travel for the 808 type machine was determined by standard methods.

Instrumental corrections were determined by simultaneous comparisons between the wire sounding machine and the 808 type fathometers. Simultaneous comparisons were also made between the two 808 fathometers and between the 808 and Edo fathometer. Such comparisons were made at regular intervals throughout the season.

Frequent speed counts of the stylus arm revolutions on the fathom scale were made during the field season.

The wire sounding machine was used with two sheaves during the field season. These sheaves were calibrated in accordance with HM 4641 and their factors determined as follows:

Sheave B-374	0.00482
Sheave B-376	0.00518

The sheave recorders were set to measure directly in fathoms.

Velocity corrections were determined from temperature-depth recordings made at intervals during the field season.

No handlead soundings were taken in the progress of this survey.

I. CONTROL OF HYDROGRAPHY:

The intersection of the two EPI arcs was not less than 45° for any portion of these surveys.

I. (Continued)

EPI calibrations were made at the beginning and end of each trip and their mean used as the correction for that trip. Calibrations were made at the site of a visually located buoy planted by this party for that purpose. Corrections and corrected EPI distances are entered in all sounding records.

J. ADEQUACY OF SURVEY:

The completed portions of these surveys are considered complete and adequate to supersede prior surveys. Surveys H-8198 (68% complete) and H-8199 (8% complete) are not considered adequate since their completed portions require some additional development and crosslines.

Junctions with contemporary surveys are adequate since all necessary depth curves are continuous through the junctions.

K. CROSSLINES:

Crosslines on the completed portions of these surveys were run as follows:

H-8198	6.7%
H-8199	4.4%
H-8200	8.5%

There were no boat sheet discrepancies noted at these crossings.

L. COMPARISON WITH PRIOR SURVEYS:

Prior surveys in the area covered are H-1305, 1:400,000 (1853-1874) and H-5112, 1:200,000 (1931). The age of the first precludes its value for comparison purposes. The soundings on H-5112 lie generally beyond the 100 fm. curve and their value for comparison purposes was questioned in the original instructions. The remaining survey of this area is H-1532, 1:240,000 a reconnaissance survey of 1882. For these reasons the survey comparisons will be limited to those made with the latest and largest scale chart of the area.

M. COMPARISON WITH CHART:

The following comparison covers the area surveyed by H-8198, H-8199, H-8200. The comparison is made with Chart 71, print date 8-10-53, corrected to 3-26-55. The comparison includes those soundings cited for investigation in the preliminary review by the chart division.

M. (Continued)

In general the area covered by H-8200 shows good agreement with the charted soundings and depth curves. The isolated soundings listed below were not found.

<u>Latitude</u>	<u>Longitude</u>	<u>Sounding</u>
42° - 31.2'	66° - 41.7'	97
42° - 36.0'	66° - 48.6'	93
42° - 40.5'	66° - 51.0'	90
42° - 41.0'	66° - 55.3'	90

The 100 fm. shoal charted in latitude 42°-46.3', longitude 67°-26.7' was located as charted. The least depth obtained was ~~77~~² fathoms on position ~~38-3~~²⁵⁸ 2 minutes.
97

The shoal charted in latitude 43°-16.1', longitude 67°-03.9' was located as charted. The 90 fathoms on position 89 PA 6 minutes is recommended for charting.

⁸⁹ The ~~86~~⁴⁷ fathoms (position 46 PA) located in latitude 43°-19.5', longitude 67°-23.7' is recommended for charting.

The area surveyed on H-8199 covers that portion of chart 71 covered by the compass rose and is an area of few soundings. Agreement with the charted soundings is good.

The 78 fathoms located on position 5 G - 1 minute in latitude 43°-21.4', longitude 67°-29.3' is recommended for charting.

The 75 fathoms charted in latitude 43°-35.7', longitude 67°-07.9' and cited for investigation in the Preliminary Review was not covered by this survey.

The area surveyed on H-8198 shows good agreement with the charted soundings and depth curves.

The 96 fathoms located in latitude 43°-16.0', longitude 67°-56.6', position 129AA is recommended for charting.

M. (Continued)

The isolated shoal charted in 43°-19.8', 68°-14.0' is actually an extension of the 100 fm. curve and should be so charted. The least depth recommended for charting on this shoal is the 82 fms. of position 25 D, latitude 43°-19.8', longitude 68°-22.2'.

The below listed soundings were noted on the Preliminary Review for investigation:

43° - 22.5'	68° - 39.5'	49
43° - 24.5'	68° - 34.1'	46
43° - 25.5'	68° - 32.6'	46
43° - 26.0'	68° - 31.0'	70

These appear to be charted 3 - 5 miles east of their charted location.

The below listed soundings are believed to be more representative of the true location and depth of the shoals and should be so charted.

<u>Latitude</u>	<u>Longitude</u>	<u>Depth</u>	<u>Position</u>
43°-21.3'	68°-44.4'	36	34 R / 5 minutes
43°-26.3'	68°-40.3'	42	23 U / 2 minutes
43°-29.8'	68°-37.8'	59	33 H / 4 minutes

The 50 fathoms of position 1 QA -2 minutes in latitude 43°-32.6', longitude 68°-31.1' is also recommended for charting.

N. DANGERS AND SHOALS:

No new dangers or shoals were found with the exception of those previously listed in M.

O. COAST PILOT INFORMATION:

These are offshore surveys. During the field season the Ship HYDROGRAPHER based out of the Naval Reserve Base at South Portland, Maine. No additions or revisions are recommended to Coast Pilot notes for Portland Harbor and eastern approaches.

P. AIDS TO NAVIGATION:

No fixed or floating aids to navigation were located in these surveys.

Z. TABULATION OF DATA:

The EPI Report, Velocity Report, Fathometer Report, and Settlement and Squat report, for the entire project will be forwarded under separate cover. Copies will be furnished the processing office. The lists of applicable correctors for this survey are attached.

E.K. McCaffrey
Lt.(j.g.), C&GS

FORWARDED:

J.C. Partington
CAPT., C&GS
Chief of Party

TIDE NOTE

to accompany

H-8198

H-8199

H-8200

Tide Station: Bar Harbor, Maine

Latitude: 44° - 25.5' N

Longitude: 68° - 12.9' W

Plane of Reference: Mean Low Water =
3.4 feet on tide staff (Director's letter
of 6 June 1955; 36-275-982h)

Area Covered

H-8198

H-8199

H-8200

Height Correction

0.9 (Ratio of Range)

1.0 (Ratio of Range)

0.8 (Ratio of Range)

Time Correction

0.0 (75th

-0.5hr. (Meridian)

-0.5hr. (Time)

This station is a standard automatic tide gage and was last inspected by the East Coast Tide Party in August 1955. It was previously inspected by an officer from this ship at the start of the field season to insure its proper operation. The time and height corrections were furnished by the Washington Office.

STATISTICS

to accompany

Survey H-8200 (HY 12355)

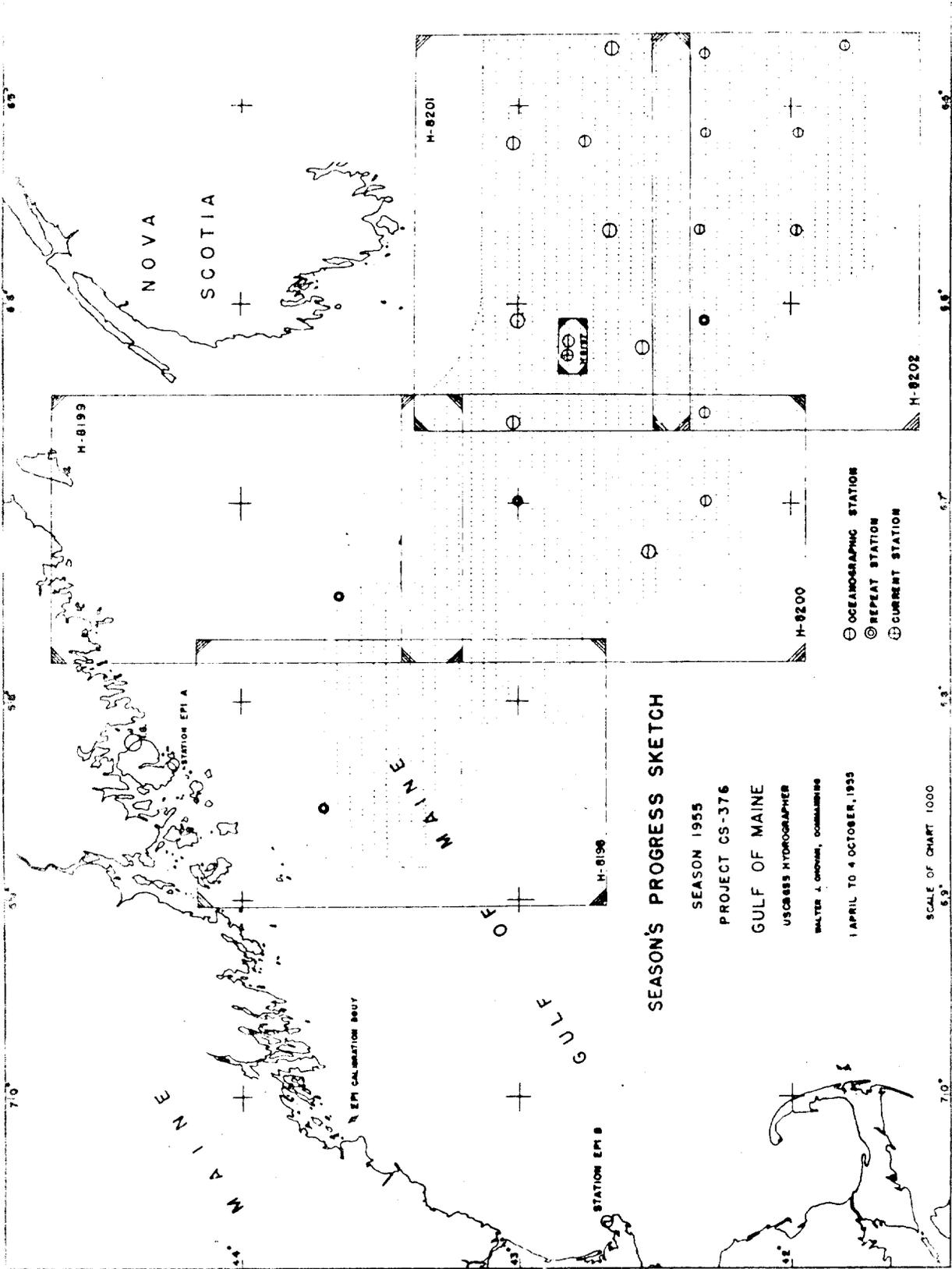
<u>Date (1955)</u>	<u>Day Letter</u>	<u>Vol.</u>	<u>No. Fbs.</u>	<u>Stat. Mi. Sdg.</u>
5 May	A	1	24	42.3
6 "	B	1	82	133.9
12 "	C	1	64	114.2
20 "	D	1	57	103.5
26 "	E	2	54	79.4
7 June	F	2	64	94.4
8 "	G	2-3	145	104.4
9 "	H	3	61	108.1
14 "	J	3	80	120.2
21 "	K	3	74	105.8
26 "	L	3-4	70	81.1
27 "	M	4	150	200.2
28 "	N	4	62	85.3
8 July	P	5	43	65.6
14 "	Q	5	24	47.2
15 "	R	5	11	14.4
23 "	S	5	105	137.8
24 "	T	5	40	43.7
29 "	U	5-6	69	96.6
6 Aug.	V	6	48	67.9
9 "	W	6	20	40.8
10 "	X	6	10	19.0
11 "	Y	6	13	16.7
12 "	Z	6	75	121.6
23 "	AA	7	54	83.5
30 "	BA	7	62	99.9
31 "	CA	7	8	13.2
7 Sept.	DA	7	53	84.5
8 "	EA	7	5	7.2
15 "	FA	7	49	73.6
23 "	GA	8	114	183.5
24 "	HA	8	159	274.6
25 "	JA	8-9	161	260.4
26 "	KA	9	76	113.0
28 "	LA	9-10	83	132.5
29 "	MA	10	125	198.0
TOTALS:	----	10	2394	3568.0

No. Oceanographic Stations:

5

Area Surveyed:

4474.12 Sq. Stat. Mls.

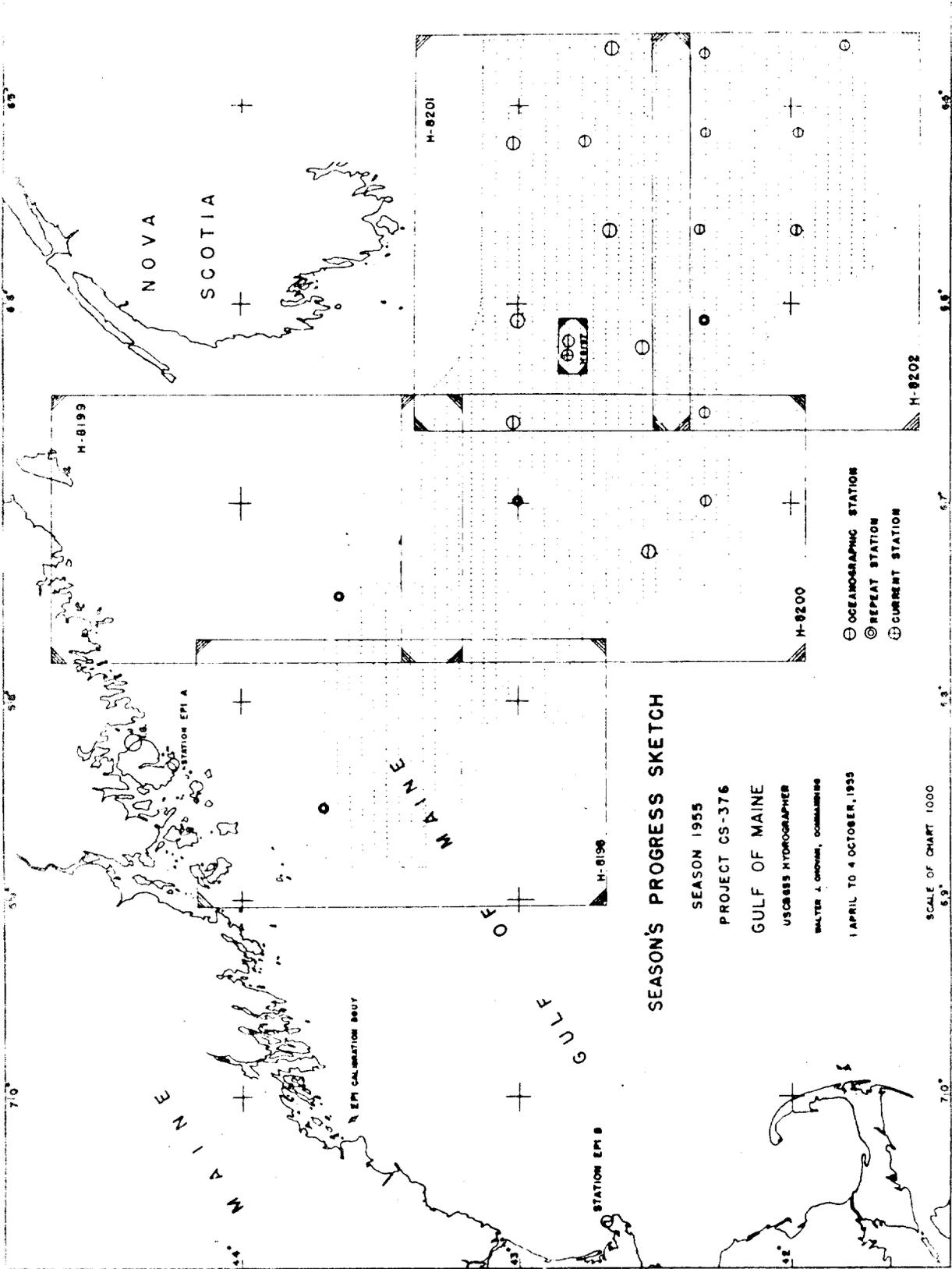


SEASON'S PROGRESS SKETCH

SEASON 1955
 PROJECT CS-376
 GULF OF MAINE
 USCGS HYDROGRAPHER
 WALTER J. GORHAM, COMMANDER
 1 APRIL TO 4 OCTOBER, 1955

SCALE OF CHART 1000

- ⊕ OCEANOGRAPHIC STATION
- ⊙ REPEAT STATION
- ⊕ CURRENT STATION



APPROVAL SHEET

H8198
H8199
H8200

The field work accomplished on these surveys was under my immediate supervision. Daily inspections of bathograms, records, and boat sheets was made as the surveys progressed.

The records and boat sheets were reviewed and approved by me through the period of processing while I was Chief of Party.

These surveys were made in going to and from the working grounds further out in the project area. Lack of time during the field season prevented full coverage called for in the project instructions.

Sheet H8200 was covered, but the line spacing was spread in order to permit full coverage of the area of the sheet.

Sheets H8198 and H8199 did not cover the areas given by the project limits for those sheets, due to the above mentioned lack of time during the field season. The percentage of coverage of the sheets is given in the body of this report.

Walter J. Chovan
Cdr. C&GS

42° 20'

153
153

152
151

151
150

146
146

144
142

140

134
131

130
129

129
128

129
128

127

125

124
123

120

117
114

115

15'

42° 10'

67° 30'

25'

67° 20'

TO ACCOMPANY
H- 8200
Pos 48F thru 16

PROJECT 1376

1956 → 1955 (H.I.P.)

ABSTRACT OF EPI COLLECTORS

<u>Trip No.</u>	<u>Dates</u>	<u>EPIA</u>	<u>EPIB</u>	<u>Remarks</u>
1	4-13 May	-5.5	-6.0 -4.3*	*Positions 79 to 91 Sheet H-8202 only, Set No. 11
2	19-27 May	-3.5	-5.1	
3	6-15 June	-7.5	-6.3	
4	20-29 June	-6.1	-5.8	
5	7-15 July	-3.8	-3.5	
6	22-30 July	-4.9	-4.7	
7	5-14 August	-4.1	-3.8	
8	22-31 August	-3.1	-4.6	
9	6-16 Sept.	-2.5	-4.9	
10	22-30 Sept.	-2.4	-4.5	

CHKD: HWK

ABSTRACT

INSTRUMENTAL & PHASE CORRECTIONS

800 Fathometers

132

<u>Scale</u>	<u>0.2 corr.</u>	<u>0.5 corr.</u>
A Scale	0.0	
E Scale	-0.8	
C Scale thru June	-1.0	-1.0
C Scale July on	-2.0	-2.0
D Scale thru June	-0.6	-0.5
D Scale 1 thru 23 July	-1.6	-2.0
D Scale 24 July on	-2.6	-2.5

153

A Scale	0.0	
B Scale	1.2	
C Scale thru 9 September	1.2	1.0
C Scale 10 September on	0.6	0.5
D Scale thru 9 September	-0.2	-0.5
D Scale 10 September on	-0.8	-1.0

ABSTRACT

INSTRUMENTAL & PHASE CORRECTIONS

Edo Fathometer

<u>Depth & Scale</u>	<u>Correction</u>
0 - 150	-2.5
150 - 600	-3.0
600 - 1800	-4.0

MC II Fathometer *

<u>Depth & Scale</u>	<u>Correction</u>
0 - 400	-16.0
400 - 800	-30.0
Deep Scale	-16.0

* See Fathometer Correction Report, MC II Fathometer,
Instrumental & Phase Corrections.

ABSTRACT
 VELOCITY CORRECTIONS
 1955
 Sheet H-8200

May through July (A)

Edo & NMC Table 2

808

TABLE 1

<u>Fm.</u>	<u>Corr.</u>	<u>Fm.</u>	<u>Corr.</u>
32 - 42	2.2	21 - 26	-0.3
42 - 70	2.4	26 - 31	-0.4
70 - 89	2.6	31 - 40	-0.6
89 - 101	2.8	40 - 50	-0.8
101 - 144	3.0	50 - 62	-1.0
144 - 150	3.5	62 - 74	-1.2
150 - 179	3.0	74 - 86	-1.4
179 - 280	4.0	86 - 101	-1.6
280 - 470 500	5.0	101 - end	-2.0

August - September (C)

Edo & NMC Table 4

808

Table 3

<u>Fm.</u>	<u>Corr.</u>	<u>Fm.</u>	<u>Corr.</u>
32 - 33	2.6	00 - 36	0.0
33 - 46	2.8	36 - 54	-0.2
46 - 62	3.0	54 - 70	-0.4
62 - 78	3.2	70 - 86	-0.6
78 - 95	3.4	86 - 101	-0.8
95 - 101	3.6	101 to end	-1.0
101 - 130	3.5		
130 - 280	4.0		
280 - 470 500	5.0		

Comp: HWK
 Chkd: EMcC

EDO & NMC corrections include draft correction of ~~2.0~~ fm.

NORFOLK PROCESSING OFFICE
ADDENDUM
To Accompany

HYDROGRAPHIC SURVEY H-8200 (Hy-12355)

GENERAL

This appears to be an excellent survey and no unusual conditions were experienced during the smooth plot. Except for the discrepancies listed below, soundings are in good agreement considering the water depths and the bottom irregularities. Several apparent crossing discrepancies of from 2 to 3 fathoms may be attributed to the slight displacement inherent in EPI positioning.

DISCREPANCIES

Positions 48^F/thru 1G are being submitted on an overlay due to questionable courses caused by heavy sea conditions. The remainder of this line was run under similar conditions but it appears to agree satisfactorily with surrounding hydrography.

Lat. 43-02.25' and Long. 66-52.50', This Office was unable to account for discrepancies of approximately 15 fathoms where line 122 to 122G crosses 16 to 17FA

adjustment needed

CHART COMPARISON

See the attached section of chart 71 showing comparative smooth sheet depths in red ink.

Norfolk, Va.
7 June 1960

Respectfully submitted,

Hugh L. Proffitt
Cartographer

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. 8200

Records accompanying survey: Smooth sheets ¹.....;
 boat sheets ¹.....; sounding vols. ¹⁰.....; wire drag vols.;
 Descriptive Reports ¹.....; graphic recorder envelopes ¹³.....;
 special reports, etc. 1 Cahier- EPI Abstracts and 1-Overlay.....

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

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

Verification by Total time Date

Reviewed by Time Date

RAC

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~XXXXXXXXXXXXXXXXXXXX~~

8 July 1960

Division of Charts: R. H. Carstens

Plane of reference approved in
10 volumes of sounding records for

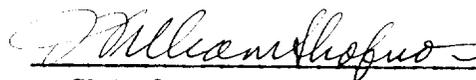
HYDROGRAPHIC SHEET 8200

Locality Gulf of Maine, Maine

Chief of Party: W.J. Chovan in 1955
Plane of reference is mean low water
ft. on tide staff at
ft. below B. M.

Height of mean high water above plane of reference at the working
grounds is 8.3 feet.

Condition of records satisfactory except as noted below:



Chief, Tides Branch

~~XXXXXXXXXXXXXXXXXXXX~~

VERIFIER'S REPORT OF HYDROGRAPHIC SURVEY NO. H- 8200

The verifier should deal with the present hydrographic survey only, as the reviewer considers its relation to previous surveys and published charts. He should be thoroughly familiar with Chapters 3, 7 and 9 of the Hydrographic Manual.

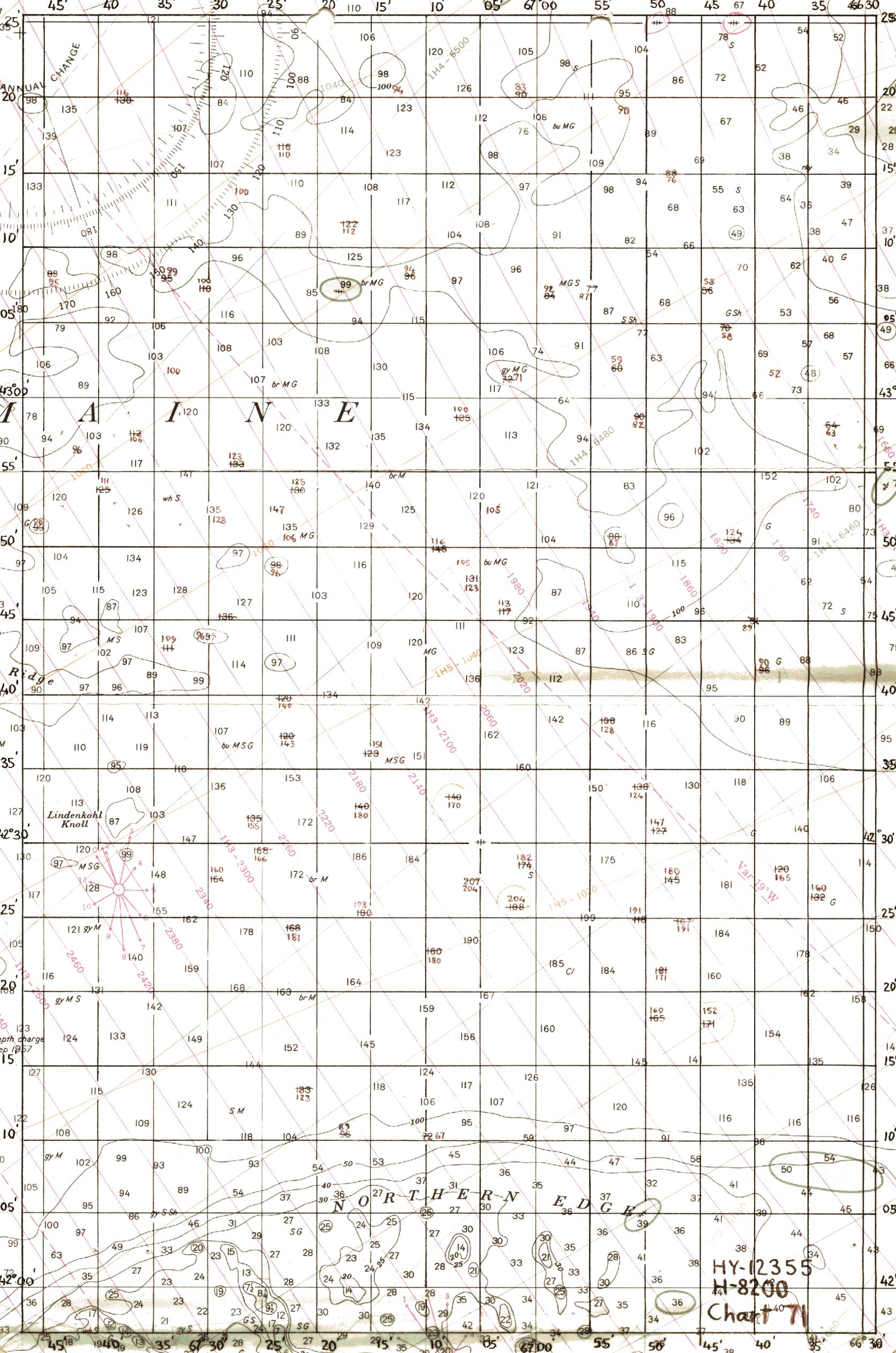
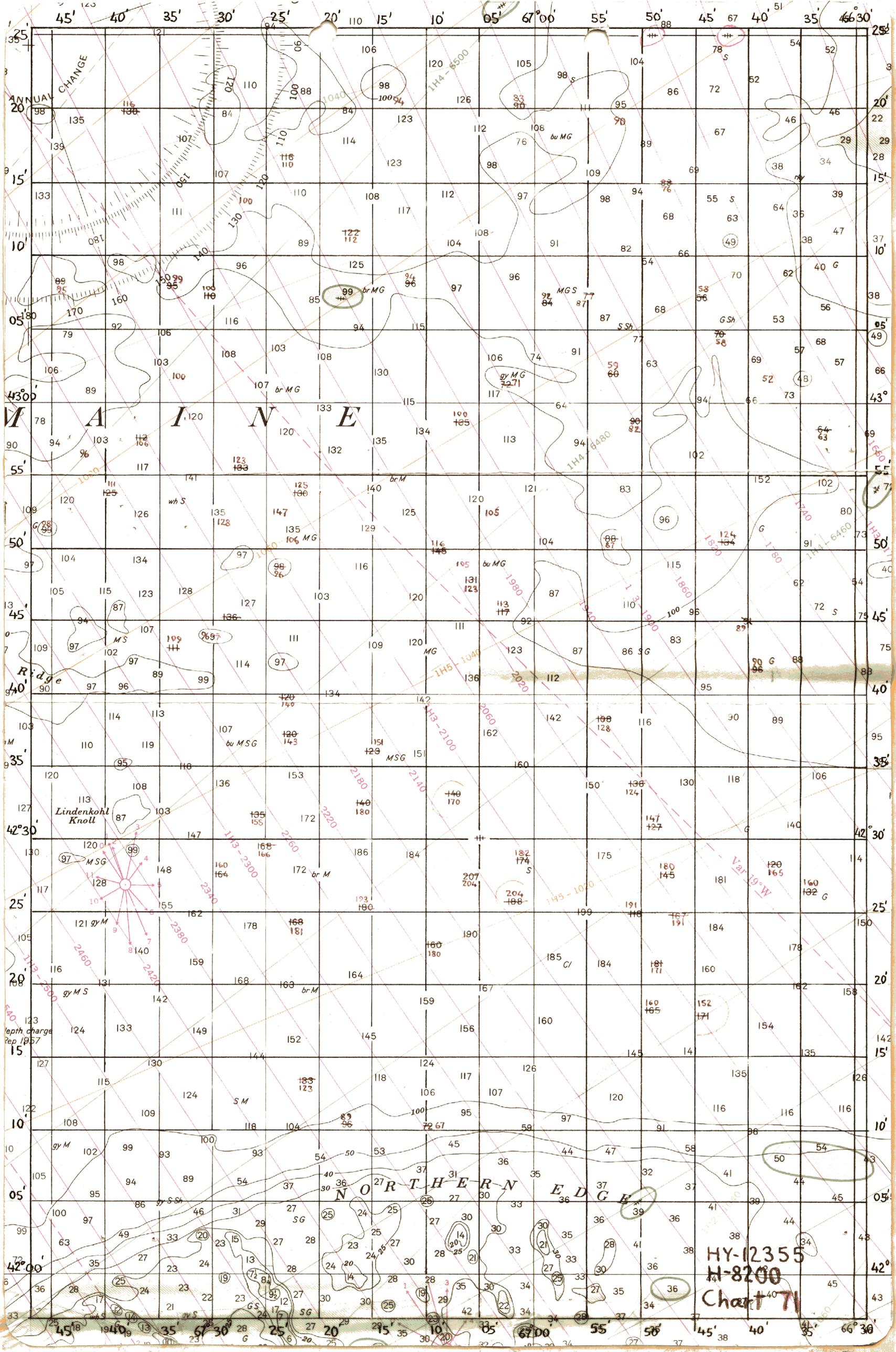
1. The descriptive report was consulted and appropriate notes were made in soft pencil regarding action taken.
2. Soundings originating with the survey and mentioned in the descriptive report have been verified, including latitude and longitude.
3. All reference to survey sheets mentioned in the descriptive report include the registry number and year.
4. Geographic names of hydrographic features if on sheet are in slanting lettering and of topographic features in vertical lettering.
5. All items affecting the plotting of the survey which are entered in the remarks columns of the sounding records were noted and check marked. In all cases appropriate action was taken.
6. All positions verified instrumentally were check marked in the sounding records.
7. All critical soundings are clear and legible and are a little larger than the adjacent soundings.
8. The metal protractor has been checked within the last three months.
9. The protracting and plotting of all bad crossings were verified.
10. All detached positions locating critical soundings, rocks or buoys were verified.
11. The boat sheet was compared with the smooth sheet.

12. The spacing of soundings as recorded in the records was closely followed.
13. The bottom characteristics were shown on outstanding shoals.
14. The reduction and plotting of doubtful soundings were checked.
15. The transfer of contemporary topographic information was carefully examined.
16. All junctions were transferred and overlapping curves made identical.
17. The notation "JOINS H- (19--)" was added in ink for all contemporary adjoining or overlapping sheets now registered. Those not verified are shown in pencil.
18. The depth curves have been inspected before inking.
19. All triangulation stations and transfer of topographic and hydrographic signals were checked.
20. Heights of rocks were checked against range of tide.
21. Rocks transferred from topographic surveys have a dotted curve where shown thereon. Rocks located accurately by hydrographer are encircled by dotted red curve.
22. Unnecessary pencil notes have been removed.
23. Objects on which signals are located and which fall outside of the low water line have been described on the sheet.
24. The low water line and delineation of shoal areas have been properly shown.
25. Degree and minutes values and symbols have been checked.
26. Questionable soundings have been checked on the fathograms.

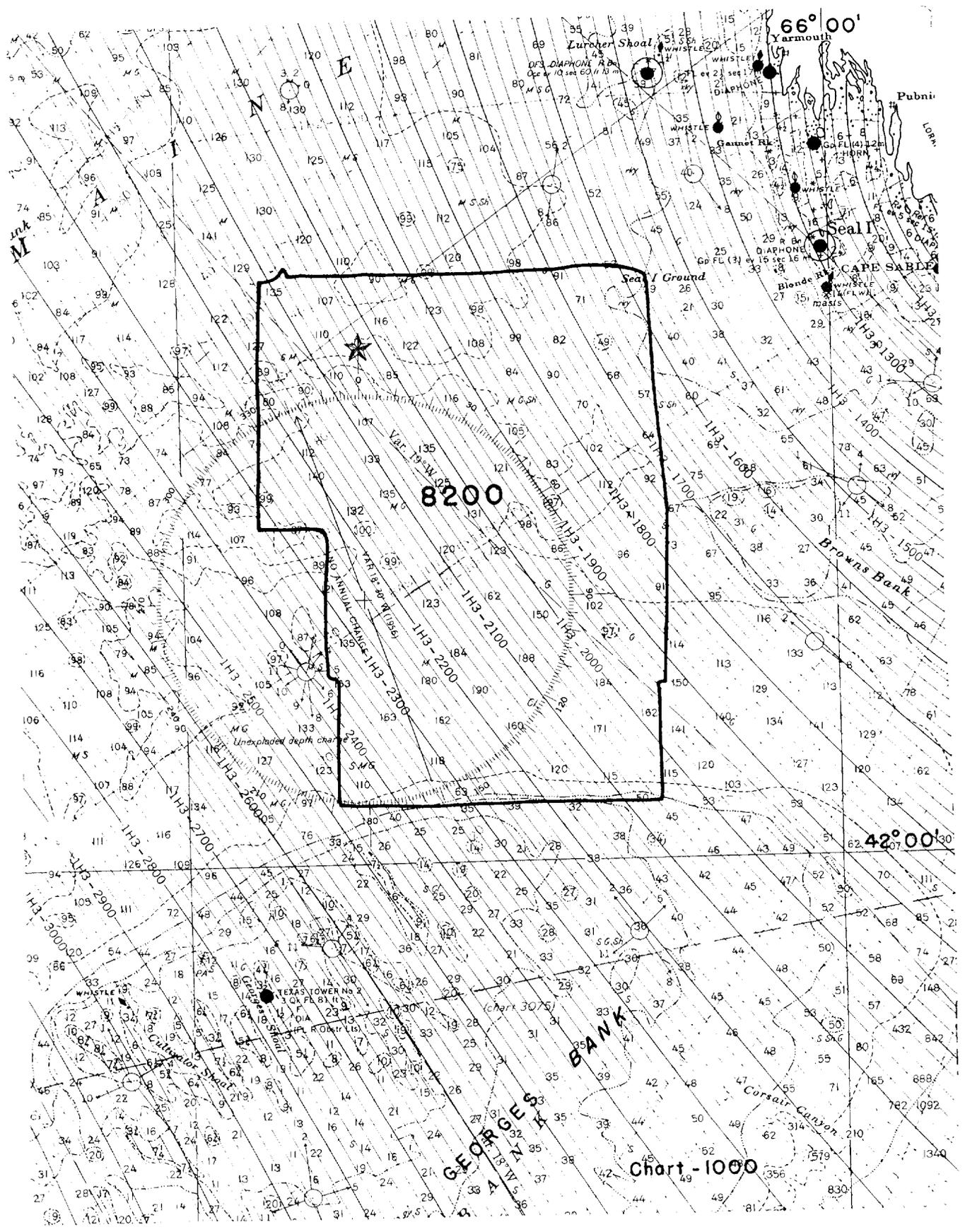
27. Source of shoreline and signals (when not given in report).
28. All notes on sheet are in accordance with figure 171 in the Hydrographic Manual.
29. All aids located, with those on contemporary topographic sheets, have been shown on survey.
30. Depth curves were satisfactory except as follows:
31. Sounding line crossings were satisfactory except as follows:
32. Junctions with contemporary surveys were satisfactory except as follows:
33. Condition of sounding records was satisfactory except as follows:
34. The protracting was satisfactory except as follows:
35. The field plotting of soundings was satisfactory except as follows:
36. Notes to reviewer:

Verified by

Date



HY-12355
H-8200
Chart 71



NAUTICAL CHARTS BRANCH

SURVEY NO. H-8200

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
6-23-60	71	J.M. Albert	Examined. No correction Before After Verification and Review
8-24-60	70	C.R. Wittmann	No corr. Before After Verification and Review
3-8-61	1107 diag 14	R.E. Elkins	Before After Verification and Review Partly applied Revised a few soundings.
3-8-61	71	R.E. Elkins	Before After Verification and Review Partly applied thru chart 1107 diag 14. Revised a few soundings to conform to revisions to 1107.
3-8-61	70	R.E. Elkins	Before After Verification and Review Partly applied, thru chart 1107 diag 16. Revised a few soundings to conform to revisions to chart 1107.
10-18-61	1106	R.E. Elkins	Before After Verification and Review Partly applied Revised and added numerous soundings. applied in part thru chart 1107 diag 16.
7-5-63	3076	h. j. Keeler	Before After Verification and Review Exam. No corr.
7-17-63	3075	h. j. Keeler	Revised & added soundings, changed depth curve. Before After Verification and Review
1-11-90	13204	Russell P. Kennedy	Before After Verification and Review Adequately Applied
2-12-90	13006	Russell P. Kennedy	Before After Verification and Review Adequately Applied. diag 47
2-23-90	13260	Russell P. Kennedy	Adequately applied

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.