

8160

Diag. Cht. No. 1205-2 & 1206-2.

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. ECEP-11454 Office No. H-8160

LOCALITY

State Maine

General locality Vicinity of York

Locality Outer Coast, Gerrish Island
to Prebbles Point.

194 54-55

CHIEF OF PARTY

C. R. Reed and M. T. Paulson

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DATE October 25, 1957

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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-8160

Field No. ECFP-1454

(see also title sheet
for 1955 work)

State MAINE

General locality VICINITY OF YORK

Locality OUTER COAST, GERRISH ISLAND TO ~~CAPE NEDDICK~~ *Prebbles Pt.*

Scale 1:10,000 Date of survey 7/16 to 10/28/54
2 6/10/55

Instructions dated 6 MARCH 1953 & 29 JANUARY 1954

Vessel EAST COAST FIELD PARTY

Chief of party CLARENCE R. REED & Marvin T. Paulson

Surveyed by R.B. NOBLE & C.E. HORNE & C.W. Tupper

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

Fathograms scaled by PARTY PERSONNEL

Fathograms checked by NORFOLK DISTRICT OFFICE

Protracted by W.L. JONNS

Soundings penciled by W.L. JONNS

Soundings in ~~fathoms~~ feet at MLW ~~MEKOW~~ and are true depths.

REMARKS: See attached descriptive report for coverage of 1955 season.

72

NOTES FOR DESCRIPTIVE REPORT TO ACCOMPANY

Hydrographic Sheet H-8160, (Field No. ECFP 1454)
Maine Outer Coast from Gerrish Island to ~~Gape Neddick~~
Prebbles Pt.

EAST COAST FIELD PARTY

CLARENCE R. REED, CHIEF OF PARTY

PROJECT CS-355

1954

SCALE 1:10,000

* * * * *

PROJECT This survey was accomplished under instructions dated 6 March 1953 and supplemental instructions dated 29 January 1954. ✓

SURVEY LIMITS AND DATES This survey includes the inshore portion of the Maine outer coast from Gerrish Island to ~~Gape Neddick~~. The area surveyed is bounded as follows: Prebbles Pt.

On the south by a line from latitude $43^{\circ} 04.00'$, longitude $70^{\circ} 40.60'$ to latitude $43^{\circ} 03.45'$, longitude $70^{\circ} 40.25'$; on the east by a line from the last point to latitude $43^{\circ} 07.00'$, longitude $70^{\circ} 36.40'$; thence due east to longitude $70^{\circ} 34.00'$, thence due north to latitude $43^{\circ} 08.95'$; on the north by latitude $43^{\circ} 08.95'$ and on the west by the Maine Coast. ✓
Junctions were made with prior survey H-8092, 1953, scale 1:10,000 on the south, surveys H-3032, 1909, scale 1:20,000 and H-7127, 1947, scale 1:40,000 on the east and with contemporary surveys H-8161, (FIELD NO. ECFP 1554) on the north and H-8162, (FIELD NO. ECFP 05154) in the entrance to York Harbor. Field work on this sheet was begun on 16 July and terminated on 28 October 1954.

VESSEL AND EQUIPMENT Launch No. CS-82 was used for all hydrography prior to 20 September 1954. After this date launch "ZIP", a 35 foot power launch leased for the work, was used for hydrography. Both launches operated from a mooring at York Harbor, Maine. On launch CS-82 Graphic Recorders No. 77 and 119S were used with transducers mounted in the bilges. Graphic Recorder No. 121S was used on launch "ZIP" with transducers in a fish which was mounted over the starboard side of the launch. Soundings other than echo soundings were taken with a hand lead. ✓

TIDE AND CURRENT STATIONS The tide note is attached to this report. No current stations were observed. ✓

Smooth SHEET The smooth sheet is to be plotted by the Norfolk Processing Office. ✓

CONTROL STATIONS Control consisted primarily of triangulation and Photo-hydro stations which were transferred from Air-photo Compilation Sheets No. T-11144, T-11166 and T-11167. One hydrographic station, signal CON, was located by sextant fix at the station site. * of 1953.

SHORELINE AND TOPOGRAPHY The shoreline and topographic features were transferred from Air-photo Compilation Sheets No. T-11144, T-11166 and T-11167. Two additional alongshore features, not shown on the shoreline manuscripts, and one which was shown inaccurately were discovered by the hydrographer. These features are as follows: ✓

A group of rocks, not shown on the manuscript, was discovered in latitude $43^{\circ} 07.19'$, longitude $70^{\circ} 37.94'$. The limit of these rocks was defined by three sextant fixes. Although this group consists of many small individual rocks, they can best be shown by reef symbol as they appear on the boat sheet.

The shoreline manuscript incorrectly shows a reef in latitude $43^{\circ} 06.94'$, longitude $70^{\circ} 38.15'$, there are actually two individual rocks awash here which were located by sextant fix and are shown on the boat sheet.

In latitude $43^{\circ} 05.09'$, longitude $70^{\circ} 39.34'$ there is a reef, just bare at MLW. The shoreline manuscript indicates the approximate position of rocks in this area. Although no detached positions were observed to define the limits of this reef, the area was developed by closely spaced sounding lines and the reef delineated from the soundings and observations from the launch at low water.

The reef known as the East Sister in latitude $43^{\circ} 04.13'$, longitude $70^{\circ} 40.00'$ appears on the shoreline manuscript with the notation (approx). Three sextant fixes were taken to locate and delineate this reef and it was found that the hydrographic location agreed exactly with the Air-photo location.

The low-water line is not defined by the soundings due to the steep banks and rocky character of the shoreline.

SOUNDINGS

Depths were measured with graphic recorders or hand leads. Bottom samples were obtained with an armed hand lead.

CONTROL OF HYDROGRAPHY

Hydrography was controlled by three-point-sextant-fixes on shore signals. Fixes were taken at 1 to $1\frac{1}{2}$ minute intervals. No position jumps were noted when changing fixes.

ADEQUACY OF SURVEY

This survey is considered complete and adequate to supersede prior surveys. Some soundings from prior surveys were transferred to the boat sheet in distinctive colors as noted on the boat sheet. The agreement with prior and contemporary surveys at junctions appears to be good, although it is difficult to make a detailed comparison of surveys of different scales. Depth curves can be adequately drawn at the junctions with survey sheets H-8092, (ECFP-1553) H-8162 (1954) (ECFP 05154), and H-8161, (ECFP-1554). The junction with the latter survey is compared on that sheet.

CROSSLINES

Prescribed crosslines were run with satisfactory agreement at crossings. ✓

COMPARISON WITH PRIOR SURVEYS

A comparison with survey sheet H-3032, 1909, scale 1:20,000 shows the general agreement to be good. Depths and features which disagree with the present survey are discussed below.

The reef known as the East Sister is shown as a shoal having a depth of 1 foot at MLW. The reason for this error in the old survey is not apparent as this reef is composed of solid rock which bares 1.6 feet at MLW. ✓

38 The 1.5 foot sounding in latitude $43^{\circ} 06.42'$, longitude $70^{\circ} 28.32'$, obtained on the old survey could not be verified. A hand lead sounding of 2.6 feet was obtained here and recorded as position 2 k. A sounding of 3.9 feet was also obtained on line between positions 200 and 201 n. It is felt that the information on the present survey is more reliable as the area was very closely and carefully developed and searched at low water. It is recommended that the rock awash symbol be deleted from the chart and replaced by a 2 foot rocky sounding. This is Preliminary Review item 58. } concur ✓

Shoals were found in the same positions as on the old survey, but in nearly every case shoaler depths were found on the new survey. ✓

The alongshore detail cannot be compared as it is not shown on the old survey sheet. ✓

Since the prior surveys to the north are very old and lacking in development no comparison with these surveys will be made. ✓

COMPARISON WITH CHART

Soundings were transferred from Charts 1205 and 228 before beginning hydrography. These soundings appear on the boat sheet in green. A discussion of the differences between the charted information and that shown on the present survey follows.

Chart 329, print date 13 September 1954, shows a 1 foot sounding in the same position as the reef, known as the East Sister, shown on this survey. Although this feature has already been discussed under COMPARISON WITH

PRIOR SURVEYS, it should be pointed out that while it is shown incorrectly on survey H-3032 and Chart 329, it is shown correctly on Chart 1205. It is recommended that the charting of the East Sister on Chart 329 be revised to agree with this survey and Chart 1205. ✓

General Agreement between this survey and charted depths in the area of Chart 329 covered by this survey is good. A small uncharted shoal was found in latitude $43^{\circ} 04.32'$, longitude $70^{\circ} 39.90'$. The shoalest depth obtained was a sounding of 12.2 feet on line between positions 78 and 79b, launch "ZIP". It is recommended that this shoal be added to the charts. ✓

The charted 12 foot sounding in latitude $43^{\circ} 04.57'$, longitude $70^{\circ} 39.51'$, Preliminary Review item 60, was investigated, the area being developed by closely spaced sounding lines. The least depth obtained was a fathometer sounding of 8.6 feet on rocky bottom, recorded as position 80b, launch "ZIP". This sounding was found 50 meters west of the charted 12 foot sounding. It is recommended that the 12 foot sounding be deleted from the chart and replaced by the new shoaler depth. ✓

The 27 foot sounding in latitude $43^{\circ} 04.05'$, longitude $70^{\circ} 39.54'$, which originates from wire drag survey H-3975 and is indicated on the Preliminary Review, could not be verified although 29 foot depths were found just east of this position. It is recommended that the 27 foot sounding continue to be charted. ✓

The 36 foot sounding charted in latitude $43^{\circ} 03.72'$, longitude $70^{\circ} 39.73'$, indicated on the Preliminary Review as a wire drag sounding, could not be verified although 38 foot depths were found 50 meters NE. It is recommended that the 36 foot sounding be retained on the chart. ✓

The charted 24 foot sounding in latitude $43^{\circ} 04.49'$, longitude $70^{\circ} 38.87'$, which is Preliminary Review item 61, was not found although the area was closely developed. A 28 foot sounding was found 120 meters E of this position. A comparison between this survey and survey sheet H-3032 shows close agreement between the two in this area. In view of this fact and of the doubtful origin of the sounding it is recommended that the 24 foot sounding be deleted and the 28 foot sounding be added to the chart. ✓

A small uncharted shoal was found in latitude $43^{\circ} 04.75'$, longitude $70^{\circ} 39.54'$. The area was closely developed and the least depth found was a fathometer sounding of 7.4 feet between positions 153 and 154 j, launch CS-82. This depth was later verified by a hand lead sounding of 8.2 on rocky bottom recorded as position 1 v, launch CS-82. It is recommended that this shoal be added to the chart. Chart 1205 shows 18 foot depths in this area. ✓

An uncharted rock was found in latitude $43^{\circ} 04.77'$, longitude $70^{\circ} 39.78'$. This rock, which is covered 2.0 feet at MLW, marks the offshore end of a shoal rocky point which extends westward to the shore. Although this inshore area was not closely developed due to heavy swells over the area, the depth curves on the boat sheet adequately show this feature. The location of this rock is recorded as position 2 v, launch CS-82. It is recommended that a 2 foot rocky sounding be added to the chart. ✓

The 21 foot wire drag sounding charted in latitude $43^{\circ} 04.88'$, longitude $70^{\circ} 38.92'$ was investigated and found to be essentially as charted. A 21.5 foot sounding on line between positions 137 and 138 j was found 30 meters ~~west~~ ^{W.W.W.}. It is recommended that the 21 foot sounding continue to be charted. ✓

Concur-
see also
Review

The uncharted reef in latitude $43^{\circ} 05.09'$, longitude $70^{\circ} 39.36'$ has already been discussed under SHORELINE AND TOPOGRAPHY. It is recommended that this reef be added to the chart.

Depths of ~~30~~²⁰ feet were found in latitude $43^{\circ} 05.18'$, longitude $70^{\circ} 38.75'$ where Chart 1205 and survey H-3032 show depths of 36 feet. It is recommended that the 36 foot sounding be deleted from the chart and replaced by a ~~30~~³⁰ foot sounding.

A small shoal in latitude $43^{\circ} 05.31'$, longitude $70^{\circ} 39.38'$ was found where chart 1205 and survey H-3032 show 22 foot depths. A fathometer sounding of ~~18.1~~¹⁸ feet, on line between positions 22 and 23 t, launch CS82, was the shoalest sounding obtained. It is recommended that the 22 foot sounding on the chart be replaced by the ~~18~~¹⁸ foot sounding found during this survey. (*8 ft. found in 1955*)

Shoaler depths than shown on chart 1205 on survey H-3032 were found in latitude $43^{\circ} 05.40'$, longitude $70^{\circ} 38.43'$. The shoalest sounding obtained was 36.4 feet on line between positions 32 and 33 t, launch CS-82. Adjacent sounding lines also show supporting soundings. Chart 1205 shows 44 foot depths here. It is recommended that the 44 foot sounding be deleted from the chart and replaced by a 36 foot sounding.

Depths of 29 feet were found in latitude $43^{\circ} 05.46'$, longitude $70^{\circ} 38.76'$ where chart 1205 and survey sheet H-3032 show 35 feet. The shoalest sounding obtained was 29.2 feet on line between positions 37 and 38 t, launch CS-82. It is recommended that the charted 35 foot depth be replaced by the shoaler sounding found on this survey.

The 30 foot sounding in latitude $43^{\circ} 05.65'$, longitude $70^{\circ} 38.09'$, which originates from wire drag survey 3975 and is indicated on the Preliminary Review, could not be verified. An inspection of the wire drag sheet indicates the least depth actually obtained was 33 feet. The present survey revealed ~~32~~³³ foot depths approximately ~~250~~²⁶⁰ meters ENE of the charted 30 foot sounding. The new position of this shoal is in agreement with survey sheet H-3032. It is recommended that the 30 foot sounding be deleted from the chart and the 33 foot sounding obtained on this survey be added to the chart. *see review*

Preliminary Review item 59, Moore's Rock, in latitude $43^{\circ} 05.95'$, longitude $70^{\circ} 38.62'$ was closely developed on this survey. The least depth obtained was a fathometer sounding of 5.4 feet between positions 136 and 137 l, launch CS-82. A detached position was taken at a later date but the shoalest hand lead sounding that could be obtained was 7.6 feet on rocky bottom. This sounding is recorded as position 9 t, launch CS-82. It is recommended that the charted depth on Moore's Rock be changed to 5 feet.

There are no soundings charted in Brave Boat Harbor in latitude $43^{\circ} 06.00'$. Since the present survey shows a small channel into the harbor it is recommended that this be added to the chart.

Preliminary Review item 58 has already been discussed under COMPARISON WITH PRIOR SURVEYS.

The 38 foot sounding in latitude $43^{\circ} 06.70'$, longitude $70^{\circ} 36.75'$, which originates from wire drag survey ~~H-3974~~^{H-3974 (1977-79)}, was investigated but could not be verified or disproved. The shoalest depth obtained was a ~~48~~⁴⁸ foot sounding 70 meters north ~~W~~^W. It is recommended that the 38 foot sounding continue to be charted.

Chart 1205 shows a 36 foot sounding in latitude $43^{\circ} 06.89'$, longitude $70^{\circ} 37.64'$. The present survey revealed shoaler depths approximately 100 meters NNE. The shoalest depth obtained was a sounding of 31.4 feet on line between positions 126 and 127 n, launch CS-82. It is recommended that the shoaler sounding from this survey be charted in place of the present charted 36 foot depth.

The following soundings indicated on the Preliminary Review of Chart 228 as undeveloped shoals were investigated during the course of this survey with results as follows:

The area in the vicinity of the charted 51 foot sounding in latitude $43^{\circ} 07.04'$, longitude $70^{\circ} 37.31'$ was developed by closely spaced sounding lines. The shoalest sounding obtained was 46.2 feet on line between positions 5 and 6 g, launch CS-82, approximately 60 meters WSW. It is recommended that the charted sounding be replaced by the shoaler depth found on this survey.

The charted 54 foot shoal in latitude $43^{\circ} 07.18'$, longitude $70^{\circ} 36.81'$ was investigated with the shoalest soundings being found approximately ~~100~~ meters WSW. The least depth found was 47.1 feet on line between positions 10 and 11 j, launch CS-82. It is recommended that the present charted 54 foot sounding be replaced by the shoaler depth from this survey.

The charted 24 foot sounding in latitude $43^{\circ} 07.30'$, longitude $70^{\circ} 37.73'$ was developed by closely spaced sounding lines. A sounding of ~~42.0~~ feet was found 45 meters NW on a crossline between positions 2 and 3 g, launch CS-82. This shoal sounding is a pinnacle rock as indicated by the appearance of the fathogram. Several supporting soundings were obtained close by. It is recommended that the present charted 24 foot sounding be replaced by a ~~12~~ foot sounding as obtained on this survey.

The shoal soundings indicated on the Preliminary Review in latitude $43^{\circ} 07.52'$, longitude $70^{\circ} 37.92'$ were investigated by closely spaced sounding lines. A sounding of ~~12.0~~ feet was obtained on line between positions 118 and 119c, launch CS-82. Chart 228 shows a 24 foot sounding here. A sounding of 7.7 feet was obtained on line between positions 13 and 14 p, launch CS-82. Chart 228 shows 8 feet here. A sounding of 9.8 feet was obtained on line between positions 15 and 16 p, launch CS-82, where Chart 228 shows 20 feet. It is recommended that the present charted soundings be revised to agree with this survey.

The area in the vicinity of the charted 31 foot sounding in latitude $43^{\circ} 07.64'$, longitude $70^{\circ} 37.53'$ was closely developed. The shoalest depth found was 26.6 feet on line between positions ~~153~~ and ~~154~~ ¹⁵⁰ p, launch CS-82. It is recommended that the 31 foot sounding be deleted from the chart and the shoaler depth from this survey added.

The 77 foot sounding in latitude $43^{\circ} 07.86'$, longitude $70^{\circ} 35.07'$, shown on Chart 228, was developed with the shoalest depth of 63.8 feet, obtained on line between positions ~~12~~ and ~~13~~ n, launch CS-82, occurring approximately ~~200~~ meters ~~NE~~ ^{SE}. Chart 1205 shows a 63 foot sounding, apparently originating from survey sheet H-667, in this area.

It is recommended that the new soundings from this survey be added to the charts and that Chart 228 be made to agree with Chart 1205. ✓

The charted 48 foot shoal in latitude $43^{\circ} 07.41'$, longitude $70^{\circ} 37.00'$ was investigated and the shoalest sounding was found approximately ~~150~~ ¹⁵⁸ meters south. The least depth obtained was 44.8⁶ feet on line between positions 47 and 48 p, launch CS-82. It is recommended that the present charted 48 foot depth be replaced by shoaler depth from this survey. ✓

The several charted soundings originating from survey sheet H-376 and listed as item 53 on the Preliminary Review were investigated during this survey with results as follows:

The charted 36 foot shoal in latitude $43^{\circ} 07.39'$, longitude $70^{\circ} 37.15'$ was not found, although the area was very closely developed. The shoalest sounding found in the area was 43.8 feet, on line between positions 70 and 71 n, launch CS-82. This depth was found approximately 150 meters ENE. Since survey H-376 is very old and the area was very carefully developed on this survey it is recommended that the present charted 36 foot sounding be replaced by soundings from this survey. see review

The charted 48 foot sounding in latitude $43^{\circ} 07.49'$, longitude $70^{\circ} 36.91'$ was found as charted. However, shoaler depths were obtained to the north. The shoalest depth found was ~~37.2~~ ^{37.2} feet, on line between positions ~~10~~ ¹⁰ and ~~10~~ ¹⁰ p, launch CS-82, lying approximately 135 meters NW. It is recommended that the present charted 48 foot sounding be deleted and the shoaler depths from this survey be added to the chart. ✓

The charted 44 foot sounding in latitude $43^{\circ} 07.58'$, longitude $70^{\circ} 37.13'$ should be replaced on the chart by a 40 foot depth which was found on line between positions 10 and 11 p, launch CS-82. This sounding occurs approximately ~~70~~ ¹⁰ meters ~~WSW~~. ✓

The charted 57 foot sounding in latitude $43^{\circ} 07.67'$, longitude $70^{\circ} 36.75'$ should be replaced on the chart by a 4⁶ foot depth which was found approximately 180 meters SW. This sounding occurs on line, between positions 149 and 150 c, launch CS-82. ✓

The charted 64 foot sounding in latitude $43^{\circ} 07.79'$, longitude $70^{\circ} 36.48'$ should be replaced on the chart by a 54 foot depth which was found approximately 165 meters north. This sounding occurred on position 90 f, launch CS-82. ✓

Preliminary Review Item 57, a charted 27 foot sounding in latitude $43^{\circ} 07.12'$, longitude $70^{\circ} 37.78'$, was found as charted. The least depth, obtained on line between positions 107 and 108 n, launch CS-82, was 27.0 feet. It is recommended that the present charted sounding be retained. ✓

Preliminary Review item 52, a charted 7 foot sounding in latitude $43^{\circ} 07.98'$, longitude $70^{\circ} 37.25'$, was not found although the area was very closely developed. Depths of ~~10~~ ¹⁰ feet were found approximately ~~35~~ ³⁶⁰ meters ~~WSW~~ and ~~110~~ ¹¹⁰ meters SW. The shoalest sounding obtained was ~~8.27~~ ^{8.27} feet, occurring ~~110~~ ¹¹⁰ meters ~~SW~~. This sounding was located by detached position and recorded as position 10 a, launch "ZIP". Since the charted 7 foot sounding originates from information of 1884 it is recommended that the charted sounding be deleted and replaced by the ~~7~~ ⁷ foot depths found on this survey. see review

The shoal to be developed in latitude $43^{\circ} 07.95'$, longitude $70^{\circ} 37.35'$ revealed soundings essentially as shown on the chart except that the 16 foot sounding at the north end of the shoal could not be verified. A 16 foot depth was found approximately 100 meters NE. It is recommended that the present charted depths be retained with the exception of the 16 foot sounding which should be replaced by the new 16 foot sounding to the north.

Banks Rock, Preliminary Review item 51, in latitude $43^{\circ} 08.28'$, longitude $70^{\circ} 37.25'$ is shown on the boat sheet as it appears on Air-Photo Compilation Sheet T-11166. The rock is composed of three separate reefs which were noted to be awash on 22 July 1954 when the tide was 2.2 feet above MLW. The Air-photo location and delineation appear to be correct as these rocks were observed and noted on several adjacent sounding lines. It is recommended that the charting of this feature be revised to agree with the present survey.

Preliminary Review item 50, which calls for development of a large shoal area, falls mostly on survey sheet H-8161, (FIELD NO. ECFP 1554). The portion of the area falling on this survey sheet was closely developed. The 33 foot sounding from wire drag sheet H-3974 was substantiated by 31 24 foot depths close by. A sounding of 32.4 was also found on line, between positions 27 and 28 f, launch CS-82. This sounding was obtained approximately 130 meters WSW. It is recommended that the ~~charted soundings in this area be retained and the new shoal soundings to the south be added.~~ ^{charted}

Charts 228 and 1205 show a rock awash which bares 5 feet at MLW in latitude $43^{\circ} 07.19'$, longitude $70^{\circ} 37.94'$. Although this feature has been discussed under SHORELINE AND TOPOGRAPHY it should be pointed out that the height above the datum is incorrectly charted. This reef actually bares only 2.3 feet at MLW. It is recommended that the rock awash symbol be deleted from the charts and replaced by reef symbol indicating the correct height above the chart datum.

Chart 228 shows a 69 foot sounding in latitude $43^{\circ} 07.48'$, longitude $70^{\circ} 36.28'$. This survey revealed shoaler soundings than charted in this area. A sounding of 49.4 feet, on line between positions 110 and 111 c, launch CS-82, was the least depth found. This depth occurred approximately 180 150 meters west. It is recommended that the charted 69 foot sounding be replaced by the shoaler depths found on this survey.

Shoaler soundings than charted were also found in latitude $43^{\circ} 07.25'$, longitude $70^{\circ} 34.93'$. The shoalest sounding obtained was 50.6 feet, on line between positions 23 and 24 c, launch CS-82. Chart 228 shows 80 to 87 foot depths in this area. It is recommended that these new shoal soundings be added to the chart.

An uncharted shoal was found in latitude $43^{\circ} 08.79'$, longitude $70^{\circ} 35.38'$. Chart 228 shows 75 foot depths in this area while this survey revealed a least depth of 57.8 feet on line between positions 175 and 176 e, launch CS-82. It is recommended that this new shoal be added to the chart.

DANGERS AND SHOALS Newly found dangers and shoals have been covered under COMPARISON WITH CHART. ✓

COAST PILOT INFORMATION Coast Pilot information will be submitted as a separate report. ✓

LANDMARKS FOR CHARTS There are no new landmarks to report. ✓

GEOGRAPHIC NAMES There are no new or additional geographic names to report. ✓

Respectfully submitted,

Robert B. Noble

Robert B. Noble
ENS., USC&GS

Approved and forwarded,

Clarence R. Reed

Clarence R. Reed
CDR, USC&GS
Chief of Party

TIDE NOTE TO ACCOMPANY

Hydrographic Survey Sheet H-8160, (Field No. ECFP 1454)

Portable automatic tide gages were maintained at Gerrish Island and York Harbor, Maine. No differences in time or height were applied to the observed tides. Planes of reference were computed from known elevations of previous tidal bench marks.

<u>STATION</u>	<u>LATITUDE</u>	<u>LONGITUDE</u>	<u>MLW ON STAFF</u>
Gerrish Island, Me.✓	43° 03.99'✓	70° 41.78'✓	2.7
York Harbor, Me.	43° 07.88'✓	70° 38.54'✓	3.4✓

FATHOMETER CORRECTIONS TO ACCOMPANY

Hydrographic Survey Sheet H-8160, (Field No. ECFP 1454)

The corrections tabulated below are based on an initial set at zero on the fathogram for soundings taken with launch CS-82 and at zero and 1.0 feet for launch "Zip" as noted in the sounding volumes. Where the initial varies from its proper setting on the fathogram INDEX CORRECTIONS must be entered in the sounding volumes.

LAUNCH CS-82

FATHOMETER NO. 77

16 July - 11 August and 17 August - 23 August 1954

CORRECTIONS	DEPTH	
A RANGE	From	To
0.0	0.0	5.0
+0.2	5.2	18.0
0.0	18.2	27.0
-0.2	27.2	36.0
-0.4	36.2	45.0
-0.6	45.2	55.0
B RANGE		
+0.6	35.0	39.0
+0.4	39.2	47.0
+0.2	47.2	56.0
0.0	56.2	72.0
-0.5	72.2	90.0
C RANGE		
0.0	70.0	83.0
-0.5	83.2	104.0
-1.0	104.2	125.0
D RANGE		
0.0	105.0	110.0
-0.5	111.0	131.0
-1.0	132.0	160.0

LAUNCH CS-82

FATHOMETER NO. 119S

13 August 1954 only

CORRECTIONS	DEPTH	
A RANGE	From	To
0.0	0.0	30.0
+0.2	30.5	37.0
-0.4	37.5	43.0
-0.6	43.5	49.0
-0.8	49.5	55.0

FATHOMETER CORRECTIONS CONT'D

LAUNCH CS-82
FATHOMETER NO. 119S
13 August 1954 only

CORRECTIONS	DEPTH	
B RANGE	From	To
+0.2	35.0	42.0
0.0	42.5	49.0
-0.2	49.5	55.0
-0.4	55.5	61.0
-0.6	61.5	66.0
-1.0	67.0	85.0
-1.5	86.0	90.0
C RANGE		
+1.5	70.0	75.0
+1.0	76.0	85.0
+0.5	86.0	96.0
0.0	97.0	107.0
-0.5	108.0	117.0
-1.0	118.0	125.0
D RANGE		
+2.0	105.0	111.0
+1.5	112.0	121.0
+1.0	122.0	131.0
+0.5	132.0	141.0

LAUNCH "ZIP"
FATHOMETER NO. 121S
20 September - 22 September 1954

CORRECTIONS	DEPTH	
A RANGE	From	To
+1.0	0.0	8.0
+0.8	8.5	16.0
+0.6	16.5	23.0
+0.4	23.5	31.0
+0.2	31.5	38.0
0.0	38.5	45.0
-0.2	45.5	53.0
-0.4	53.5	55.0
B RANGE		
+0.8	35.0	47.0
+0.6	47.5	60.0
+0.4	60.5	66.0
+0.5	67.0	77.0
0.0	78.0	90.0
C RANGE		
-0.5	ALL DEPTHS	

FATHOMETER CORRECTIONS CONT'D

LAUNCH "ZIP"

FATHOMETER NO. 121S
19 October - 28 October 1954

(New phasing head installed on this fathometer on 7 October)

CORRECTIONS	DEPTH	
A RANGE	From	To
0.0	6.0	14.0
-0.2	14.5	27.0
-0.4	27.5	40.0
-0.6	40.5	55.0
B RANGE		
+0.2	35.0	45.0
0.0	45.5	55.0
-0.2	55.5	66.0
-0.5	67.0	90.0
C RANGE		
-1.0	70.0	100.0
-1.5	101.0	125.0

STATISTICS TO ACCOMPANY

Hydrographic Sheet H-8160 (Field No. ECFP 1454)

LAUNCH CS-82

DATE 1954	DAY LTR	VOL. NO.	LEAD LINES	NO. OF POSITIONS	STAT. MI. SDG.
16 July	a	1	--	33	4.8
19 "	b	1	--	127	19.2
20 "	c	1&2	--	162	27.7
22 "	d	2&3	--	214	36.7
23 "	e	3&4	--	197	33.6
26 "	f	4	--	120	20.5
28 "	g	5	--	29	4.7
29 "	h	5	--	93	15.9
2 Aug.	j	6	--	177	27.8
3 "	k	7	1	67	9.7
4 "	l	7&8	--	143	19.0
5 "	m	8	--	128	19.0
6 "	n	8&9	--	201	29.6
9 "	p	9'10	--	142	22.1
11 "	q	10	--	46	5.6
13 "	r	10	--	128	19.9
17 "	s	11	--	104	16.0
18 "	t	11	2	89	13.3
19 "	u	12	--	53	7.9
20 "	v	12	2	87	12.3
23 "	w	12	1	45	6.7
TOTALS			6	2285	372.0

LAUNCH "ZIP"

DATE 1954	DAY LTR	VOL. NO.	LEAD LINES	NO. OF POSITIONS	STAT. MI. SDG.
20 Sept.	a	13	0	39	4.3
21 "	b	13	7	103	9.2
22 "	c	13	0	5	0.6
19 Oct.	d	13	0	36	3.1
28 "	e	13	1	36	2.4
TOTALS			8	219	19.6

Area surveyed 14.4 square statute miles

1955 SEASON					
10 June	a	14	-	31	1.7
GRAND TOTALS			14	2535	393.3

PROCESSING OFFICE
LIST OF SIGNALS
H-8160

TRIANGULATION STATIONS

BACK WHALEBACK L.H., 1878-1941
CAPE CAPE NEDDICK L.H., 1903
COVE COVE, 1943
POLA COW POINT CUPOLA, 1943
RAGE YORK BEACH ANCHORAGE HOTEL, FLAGPOLE, 1943

TOPOGRAPHIC STATIONS

SOURCE T-11144

Axe	Dim	Dog	Fox	Hat	Led	Low	Mud	Pal	Pop
Ram	Red	Sea	Sin	Sow	Tax	Try	Wen	Why	

SOURCE T-11166

Bus	End	Gin	Mar	Nay	Roc	Wit
-----	-----	-----	-----	-----	-----	-----

SOURCE T-11167

Cup	Doe	Dom	Fix	Gab	Him	Lot
-----	-----	-----	-----	-----	-----	-----

HYDROGRAPHIC STATIONS

Con Vol. 1, pg. 17

FLOATING AIDS TO NAVIGATION
H-8160

<u>BUOY</u>	<u>LAT.</u>	<u>METERS</u>	<u>LONG.</u>	<u>METERS</u>	<u>DEPTH</u>	<u>POS. NO.</u>	<u>DATE</u>
West Sister Buoy 2	43-03	290.0✓	70-40	1118.0✓	31'	¹² 16 -16u	8/19/54
YORK Harbor Bell Buoy	43-07	598.0✓	70-36	1177.0✓	69'	1-1	8/ 4/54
York Harbor Entr. Buoy 2	43-07	1642.0✓	70-37	292.0✓	35'	⁴⁵ 85 w	8/23/54

APPROVAL SHEET FOR
HYDROGRAPHIC SURVEY H-8160 (ECFP-1454)

The records and boat sheet for Hydrographic Survey H-8160 (ECFP-1454) have been inspected by me and are approved.

The descriptive report by Mr. Noble is very complete and the Chief of Party considers this to be an excellent launch hydrographic survey.

Mention should be made of the 10¹/₂ foot sounding from Survey No. 376a charted at Latitude 43°08.50' ✓, Longitude 70°37.21' ✓. The present survey shows a 7 foot sounding just inshore which should replace the charted 10 feet.

The survey does not overlap the 1/40,000 scale 1947 survey No. H-7127 but it is extended to the project limit shown on a copy of Chart 1205 furnished with instructions. The junction appears to be satisfactory. ✓

The survey is considered to be complete and no additional field work is recommended in the area covered.

Clarence R. Reed

Clarence R. Reed
CDR, USN&GS
OinC, East Coast Field Party

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-8160

Field No. ECFP-1454

State MAINE

General locality VICINITY OF YORK

Locality OUTER COAST, GERRISH ISLAND TO ~~CAPE NEDBICK~~ *Prebbles Pt.*

Scale 1:10,000 Date of survey 10 June 1955

Instructions dated 6 March 1953 & 29 January 1954

Vessel EAST COAST FIELD PARTY

Chief of party MARVIN T. PAULSON

Surveyed by CLIFFORD W. TUPPER

Soundings taken by ~~hydrographic~~ recorder, hand lead, ~~with~~

Fathograms scaled by PARTY PERSONNEL

Fathograms checked by NORFOLK DISTRICT OFFICE

Protracted by W.L. JONNS

Soundings penciled by W.L. JONNS

Soundings in ~~fathoms~~ feet at MLW ~~MLW~~ *and are true depths*

REMARKS: This report covers additional work done during the 1955 season.

ADDITIONAL SURVEY

PROJECT CS-355
Appendix to Hydrographic Descriptive Report
ECFP-1454(H-8160)
Gerrish Island to Cape Neddick

Additional Survey - 1955
by

EAST COAST FIELD PARTY

MARVIN T. PAULSON, CHIEF OF PARTY

** ** ** ** ** ** ** ** **

Additional surveys on boat sheet H-8160 as indicated after preliminary review was accomplished under the following instructions:

Supplemental Instructions - Project CS-355

Ipswich Bay, Mass., to the Saco River, Maine

Letter reference - 22/MEK FP-East Coast, dated 16 Feb. 1955

Addressed to: OinC, East Coast Field Party

On sheet H-8160 the three areas indicated were investigated thoroughly on 10 June 1955 and results plotted on the overlay of tracing paper attached to boat sheet. In each area the soundings during hydrography in 1954 were verified. It should be noted that additional hydrography on H-8160 was accomplished with the same launch used during 1954 and that the first day letter in 1955 was a-day. The two seasons work are differentiated by blue and purple inks.

Launch No. CS-82 was used for the survey. An 808 type graphic recorder No. 121-S having transducer units mounted inboard aft of the engine was the sounding apparatus used.

Velocity corrections were obtained from a curve of the mean values of the bar checks. An abstract of corrections is attached to this report.

Bar check data will be submitted as a separate report for the entire project and will be labeled "Bar Check Tabulations Project 1355." Results from the curve were tabulated, entered and checked in the sounding volumes.

Tide corrections were obtained from the Washington Office for sounding times involved on the sheet. These have been entered and checked in the sounding volumes.

Index corrections have been entered and checked in the sounding volumes whenever the initial reading varied from the zero foot setting.

Investigation and results of additional survey on sheet H-8160 are as follows:

In latitude $43^{\circ}-07.35'$, longitude $70^{\circ}-37.75'$ the shoal of ~~12~~ ¹¹ ft. was verified by a fathometer sounding. This shoal is extremely small and it was impossible to obtain a hand lead sounding after one half hour of drifting over the area.

In latitude $43^{\circ}-06.98'$, longitude $70^{\circ}-37.98'$ the shoalest sounding obtained on the 9 foot shoal was 10 feet. The shoal was so small and steep that a hand lead sounding on the shoalest point could not be obtained after one half hour of drifting over the area.

In latitude $43^{\circ}-05.3'$, longitude $70^{\circ}-39.4^{\circ}$ ³⁷ the shoalest sounding on the charted 9 foot shoal was 8 feet. The shoal was so small that a hand lead sounding on the shoalest point could not be obtained.

It should be noted that soundings plotted on the overlay are in error. Soundings were inked applying tide corrections on EST(75th meridian time) where, as the soundings were recorded on DST(60th meridian time). The depths listed above in results of the investigation are correct.

There is no additional information regarding Coast Pilot, aids to navigation, landmarks for charts or geographic names to report.

Respectfully submitted,

Clifford W. Tupper
Clifford W. Tupper
LTJG., C&GS

Attachments

- Appendix A - List of Signals
B - Velocity Corrections
C - Approval Sheet

APPENDIX B

ABSTRACT OF VELOCITY CORRECTIONS

LAUNCH 82 10 JUNE 1955 FATHOMETER 121-S

Group 1 27 May thru 22 June 1955

A Range

Corr. from to
0.0 Entire range

B Range

Corr. from to
0.0 Entire range

C Range

Corr. from to
-1.4 Entire range

D Range

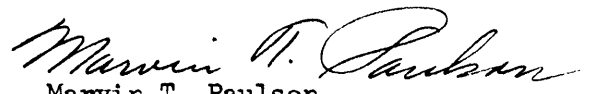
Corr. from to
-2.4 Entire range

APPENDIX C

APPROVAL SHEET

The records and boat sheet for additional hydrographic surveys on H-8160 have been inspected and approved.

Your attention is invited to the fact that the time shown in the hydrographic records is 60th meridian time.


Marvin T. Paulson
LCDR., C&GS
OinC, East Coast Field Party

ADDENDUM
To Accompany

HYDROGRAPHIC SURVEY H-8160 (Field No. ECFP-1454)

GENERAL

This appears to be an excellent basic survey and no unusual conditions were encountered other than the extremely irregular character of the bottom in this area. ✓

SOUNDINGS

All soundings were reduced with a template with the exception of the work done by launch ZIP during the 1954 season, and the work done by launch 82 during the 1955 season.

Positions 1 thru 28a, Lch. 82, 1955 season, are being submitted on an overlay to avoid congestion on the sheet. All other positions were plotted directly on the smooth sheet. ✓

There is an indication of a shoal sounding after position 206d, Page 35, vol. 3. It was not smooth plotted as it occurs after the line turns. *(1 shoal sdg. plotted after 206 d) see review*

While drifting between positions, launch ZIP recorded an 8.2' sounding between 9 and 10a. This sounding reduces to 7.6' and is about one foot shoaler than any depth in the area. It was not plotted as a position was not furnished. *(7 plotted at pos. 10a as least depth on shoal over which drift-sounding was done.)*

Norfolk, Va.
19 October 1956

Respectfully submitted,

Hugh L. Proffitt
Hugh L. Proffitt
Cartographer.

GEOGRAPHIC NAMES

Survey No. H-8160

Name on Survey	GEOGRAPHIC NAMES									
	Survey No. H-8160									
	On Chart No.	On previous survey No.	On U. S. quadrangle Maps	From local information	On local Maps	P. O. Guide or Map	Rand McNally Atlas	U. S. Light List		
	A	B	C	D	E	F	G	H	K	
<u>Maine</u>										1
<u>York</u>										2
<u>East Sister</u>										3
<u>Gerrish Island</u>										4
<u>Brave Boat Harbor</u>										5
<u>Stones Rock</u>										6
<u>Godfreys Cove</u>										7
<u>York Harbor</u>										8
<u>York Harbor</u>										9
<u>East Point</u>										10
<u>Cape Neddick</u>										11
<u>Moore's Rock</u>										12
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} for title

(see chart 1205 for position)

(tide station)

(see chart 1205)

(cove)

(village, tide station)

Names approved

11-26-56 L. Heck

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. 8160

Records accompanying survey:

Boat sheets 1; sounding vols. 14; wire drag vols.;
bomb vols.; graphic recorder rolls 9; Envelopes
special reports, etc. 1-Smooth Sheet, 1-Descriptive Report, ...
and 1-Overlay tracing (filed with the Desc. Rpt.).
.....

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

Number of positions on sheet	2,535
Number of positions checked	32
Number of positions revised	2
Number of soundings revised (refers to depth only)	25
Number of soundings erroneously spaced	0
Number of signals erroneously plotted or transferred	0
Topographic details	Time 29 hrs.
Junctions	Time 19 hrs.
Verification of soundings from graphic record	Time 7 hrs.

Verification by *Stephen Rose* Total time 273 Hrs. Date 6/25/57

Reviewed by *M. E. ...* Time 93 Date 7/31/57 - 9/25/57

RHC

TIDE NOTE FOR HYDROGRAPHIC SHEET

Chart Division: R. H. Carstens:

28 November 1956

Plane of reference approved in
114 volumes of sounding records for

HYDROGRAPHIC SHEET 8160

Locality Gerrish Island to Cape Neddick, Maine

Chief of Party {C. R. Reed in 1954
M. T. Paulson in 1955

Plane of reference is mean low water, reading

3.4 ft. on tide staff at York Harbor

27.0 ft. below B.M. 1 (1911)

2.7 ft. on tide staff at Gerrish Island Wharf
18.5 ft. below B. M. 2 (1926)

Height of mean high water above plane of reference is
as follows:

York Harbor = 8.6 feet

Gerrish Island = 8.7 feet

Condition of records satisfactory except as noted below:



Signature

Chief, Tides Branch

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

REGISTRY NO. H-8160

FIELD NO. ECFP-1454

Maine - Vicinity of York - Garrish Island to Prebbles Pt.

Surveyed - July - October 1954 & June 1955 Scale 1:10,000

PROJECT NO. CS-355

Soundings:

Control:

"808" fathometer

Sextant fixes

hand lead

Chief of Party - C. R. Reed & M. T. Paulson
Surveyed by - R. B. Noble, C. E. Horne & C. W. Tupper
Protracted by - W. L. Jonns
Soundings plotted by - W. L. Jonns
Verified and inked by - S. Rose
Reviewed by - L. V. Evans III
Inspected by - R. H. Carstens

Date: 9/25/57

1. Shoreline and Control

The shoreline originates with reviewed photogrammetric surveys T-11144, T-11166 and T-11167 of 1953, with revisions to rock and ledge details made from air photographs during verification.

The sources of control are given in the Descriptive Report.

2. Sounding Line Crossings

Depths at crossings are in adequate agreement.

3. Depth Curves and Bottom Configuration

The usual depth curves are adequately defined except for the mean low-water line which was not developed because of the steep, rocky foreshore.

The bottom is very irregular with numerous pinnacles, reefs and shoals.

4. Junctions with Contemporary Surveys

Satisfactory junctions were effected with H-8092 (1953-54) to the Southwest and H-8162 (1954) to the West in York Harbor. The junction with H-8161 (1954-55) to the North will be considered in the review of that survey. On the East, an adequate junction was made with the soundings inked on the incomplete survey H-7127 (1947) north of lat. $43^{\circ}07'$. South of that latitude the limits of the present survey are the project limits. Soundings on the present survey are in harmony with charted depths at these limits.

5. Comparison with Prior Surveys

A. New Hampshire Misc. No. 842 H (1842-44) 1:5,280

H-294	(1851)	1:20,000
H-366	(1853)	1:20,000
H-376	(1853)	1:10,000
H-376a	(1911)	1:10,000
H-667	(1858)	1:40,000
H-667 bis	(1919)	1:40,000
H-3032	(1909)	1:20,000

These surveys comprise the prior coverage of the area of the present survey. A comparison between the prior and present surveys does not reveal any significant changes in the bottom. The present survey covers the area in more detail than the prior surveys and therefore reveals more of the bottom irregularities. Shoals on the prior surveys were generally confirmed, usually with lesser depths which are attributed to the more intensive development of the present survey.

Attention is directed to the following items:

(1) The 7-ft. sounding charted in lat. $43^{\circ} 07.96'$ long. $70^{\circ} 37.25'$, from H-376 is discredited by the present development and should be disregarded. The sounding was added to H-376 from an investigation by Pillsbury in 1884 and should probably fall 100 meters westward where a 7-ft. reef was found on the present survey.

(2) The 13 ft. sounding charted in lat. $43^{\circ} 05.12'$ long. $70^{\circ} 39.18'$ from H-3032 should be disregarded. The sounding in its position on H-3032 is discredited by the hydrography of the present survey. The control of the line on which this sounding was found, is questionable and the sounding probably belongs about 120 meters northwestward in comparable depths found on the present survey.

(3) The 36-ft. sounding charted in lat. $43^{\circ} 07.38'$ long. $70^{\circ} 37.18'$ from H-376 should be disregarded. The 36 is an unsupported sounding on H-376 and is discredited by the close development on the present survey.

Two shoal soundings from H-3032 which were not disproved by the present survey have been carried forward together with numerous bottom characteristics. With these additions the present survey supersedes the prior surveys within the common area.

B. H-3974 W. D. (1917-19) 1:40,000
 H-3975 W. D. (1917) 1:20,000
 H-3976 W. D. (1917-24) 1:10,000

These wire-drag surveys covered the area of the present survey except in the inshore zone. Several soundings from these surveys have been carried forward as least depths on the present survey. The following items are specifically noted:

(1) The 24-ft. sounding charted in lat. $43^{\circ} 04.49'$ long. $70^{\circ} 38.87'$ from H-3975 should be disregarded. According to the review of H-3975 the 24-ft. sounding originated as a red sounding on the boat sheet but was not recorded in the field records, hence its reliability is questionable. It is discredited by the hydrography of the present survey which confirms the depths of H-3032.

(2) A 29-ft. sounding in lat. $43^{\circ} 05.45'$ long. $70^{\circ} 38.76'$ on the present survey falls in an area cleared by an effective depth of 30 ft. on H-3975. This apparent conflict is believed to be due to a possible 1-ft. error in effective drag depth. The 29-ft. present depth should be charted.

Except for the items just discussed there are no conflicts between depth of the present survey and effective depths of the wire-drag surveys.

1205
 corrected
 LHM
 4/22/58
 8.4-59

1205
 corrected
 LHM
 4/22/58

6. Comparison with Chart 228 (print date 12/19/55)
 Chart 329 (" " 8/12/57)
 Chart 1205(" " 7/23/56)

A. Hydrography

Charted hydrography originates with the previously-discussed prior surveys and with partial application of the present survey prior to verification and review. In addition to the discussion in the preceding section, attention is called to the following:

(1) The 6-ft. sounding charted in lat. $43^{\circ} 05.30'$ long. $70^{\circ} 39.37'$ should be disregarded. It originated on an overlay tracing of the present survey on which the soundings had been incorrectly reduced for tides. The 8-ft. depth on the smooth sheet supersedes this erroneous 6-ft. sounding.

✓ 1205
corrected
4/12/58

(2) The 30-ft. sounding charted in lat. $43^{\circ} 05.65'$ long. $70^{\circ} 38.09'$ should be disregarded in its charted position. This sounding originated as a grounding on H-3975 W. D. However, since the drag did not hang, the location of the grounding was not exact. This sounding is probably the same as the 30-ft. found about 150 m. east-northeastward on the present survey.

(3) Moore's Rock, in lat. $43^{\circ} 05.94'$ long. $70^{\circ} 38.70'$ should be corrected to show the present least depth of 5 ft. in place of the 7-ft. depth charted.

✓ 1205
corrected
4/12/58

(4) The rock awash charted as a hand correction in lat. $43^{\circ} 07.11'$ long. $70^{\circ} 38.0'$ on Chart 228 is out of position. It should be charted about 50 m. north-northeastward as located on the present survey.

The present survey supersedes the charted hydrography.

B. Aids to Navigation

All aids to navigation are in substantial agreement with their charted positions and adequately mark the intended features.

7. Condition of Survey

a. The field records and reports are complete and comprehensive.

b. The smooth plotting was satisfactory.

8. Compliance with Project Instructions


This survey adequately complies with the project instructions.

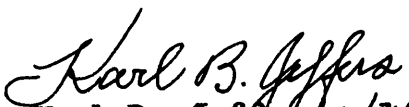
9. Additional Field Work Recommended

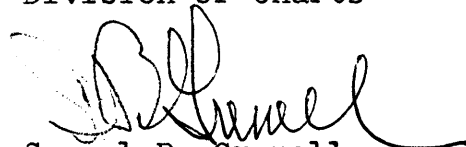
This is an excellent basic survey. No additional field work is recommended.

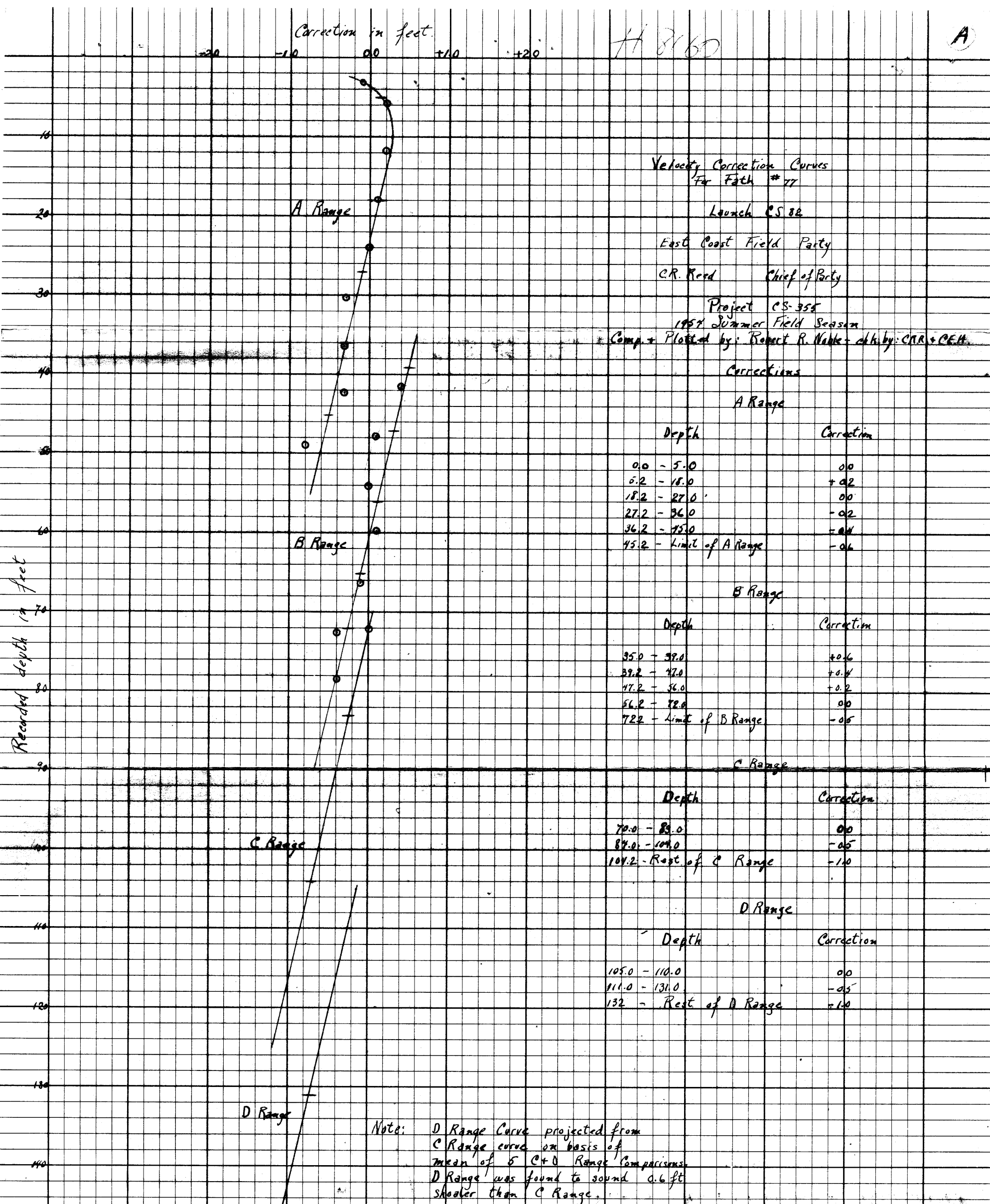
Examined and approved:


Max G. Ricketts
Chief, Nautical Chart Branch


Charles A. Schanck
Chief, Division of Charts


Karl B. Jeffers 10/31/57
Chief, Hydrography Branch

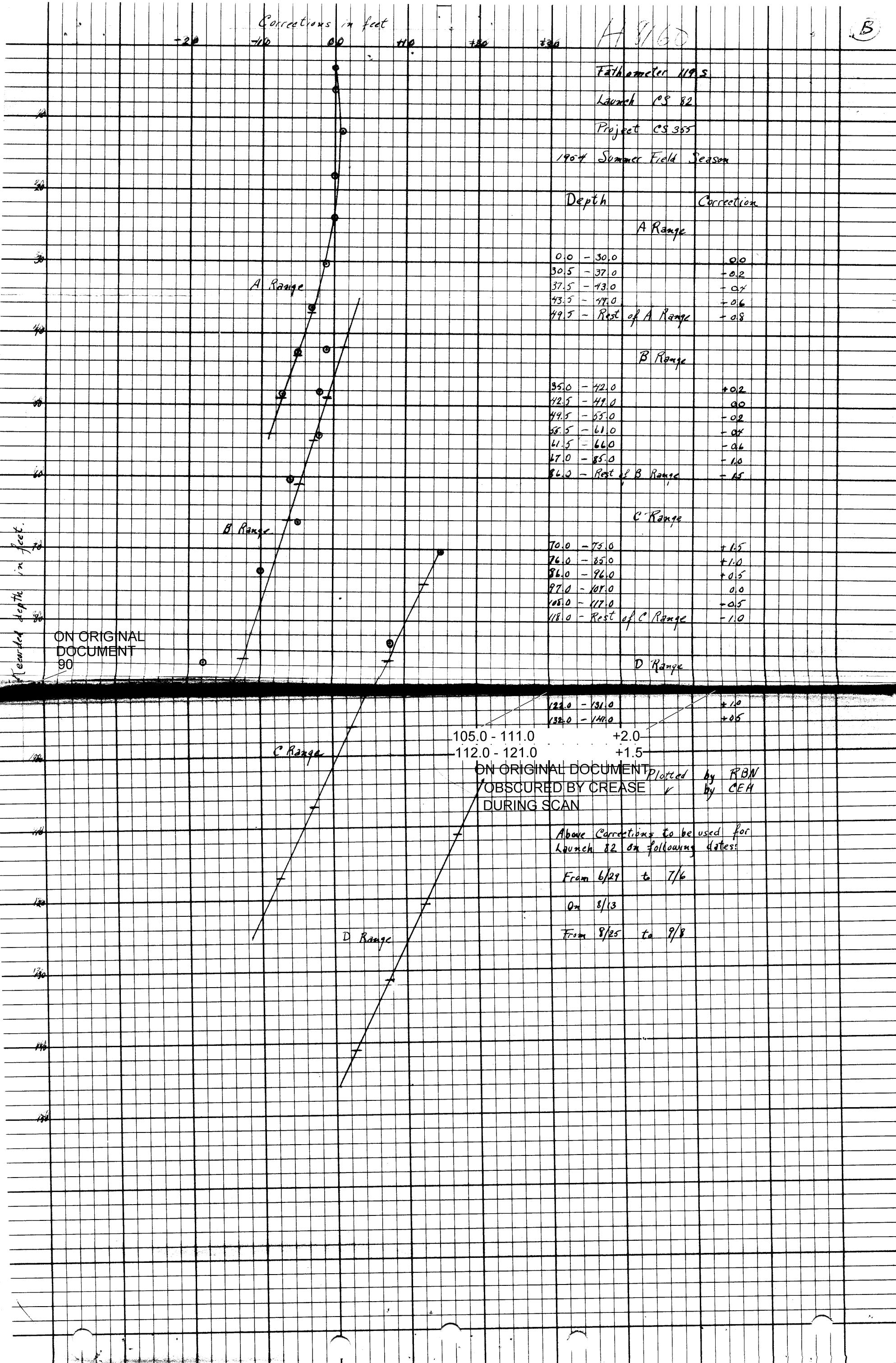

Samuel B. Grenell
Chief, Division of Coastal Surveys



Note: Fathometer # 77 was used on launch 82 during the following periods on project CS-355, therefore, corrections tabulated here apply only to those periods:

28 June 1954
 7 July - 11 Aug. Inc.
 17 Aug - position # 8 on 25 August (shot 1594)

copy 10/22



A 8/60

(B)

Fathometer 119.5

Launch CS 82

Project CS 355

1954 Summer Field Season

Depth Correction

A Range

0.0 - 30.0	0.0
30.5 - 37.0	-0.2
37.5 - 43.0	-0.4
43.5 - 49.0	+0.6
49.5 - Rest of A Range	+0.8

B Range

35.0 - 42.0	+0.2
42.5 - 49.0	0.0
49.5 - 55.0	-0.2
55.5 - 61.0	-0.4
61.5 - 66.0	-0.6
67.0 - 85.0	-1.0
86.0 - Rest of B Range	-1.5

C Range

70.0 - 75.0	+1.5
76.0 - 85.0	+1.0
86.0 - 96.0	+0.5
97.0 - 107.0	0.0
108.0 - 117.0	-0.5
118.0 - Rest of C Range	-1.0

D Range

122.0 - 131.0	+1.0
132.0 - 140.0	+0.5

105.0 - 111.0 +2.0
112.0 - 121.0 +1.5

ON ORIGINAL DOCUMENT Plotted by RBN
OBSCURED BY CREASE by CEH
DURING SCAN

Above Corrections to be used for
Launch 82 on following dates:

From 6/29 to 7/6

On 8/13

From 8/25 to 9/8

ON ORIGINAL
DOCUMENT
90

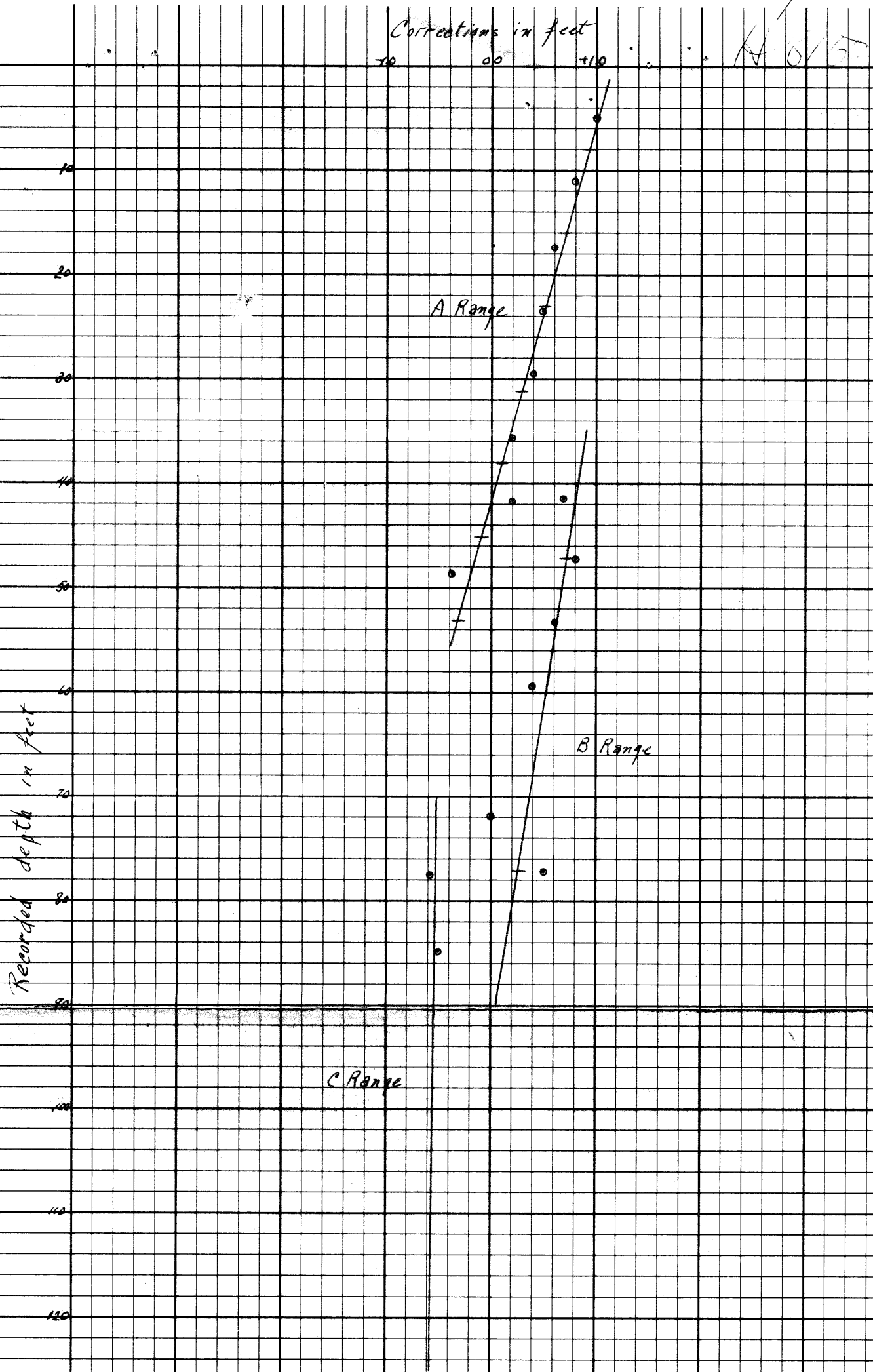
Measured depth in feet.

A Range

B Range

C Range

D Range



Velocity Correction
 curve for Fath. #121.5
 Launch Zip
 Summer Field Season 1954
 A Range

Depth	Corr
0.0 - 8.0	+1.0
8.5 - 16.0	+0.8
16.5 - 23.0	+0.6
23.5 - 31.0	+0.4
31.5 - 38.0	+0.2
38.5 - 45.0	0.0
45.5 - 53.0	-0.2
53.5 - rest of A Range	-0.4

B Range

35.0 - 47.0	+0.8
47.5 - 60.0	+0.6
60.5 - 66.0	+0.4
67.0 - 77.0	+0.5
78.0 - rest of B Range	0.0

C Range
 All depths of C Range -0.5

Plotted by RBN
 ✓ by EN²

Use above Corrections for Launch Zip
 for following dates:
 9/20 - 9/27
 10/1 - 10/7 (Part of 10/7 only)
 (Before new phase head)

Corrections in feet

48165

15

Velocity Correction Curve

Fath. 1215 Launch Zip

1954 Summer Field Season

Depth Correction

A Range

0.0 - 14.0	0.0
14.5 - 27.0	-0.2
27.5 - 40.0	-0.4
40.5 - Rest of A Range	-0.6

B Range

35.0 - 45.0	+0.2
45.5 - 55.0	0.0
55.5 - 66.0	-0.2
67.0 - Rest of B Range	-0.5

C Range

70.0 - 100.0	-1.0
101.0 - Rest of C Range	-1.5

Above Corrections to be used with
Launch Zip from:

10/7 - 10/14
(Part day only)

10/18 - 10/29

Plotted by RBW
V by EMFC

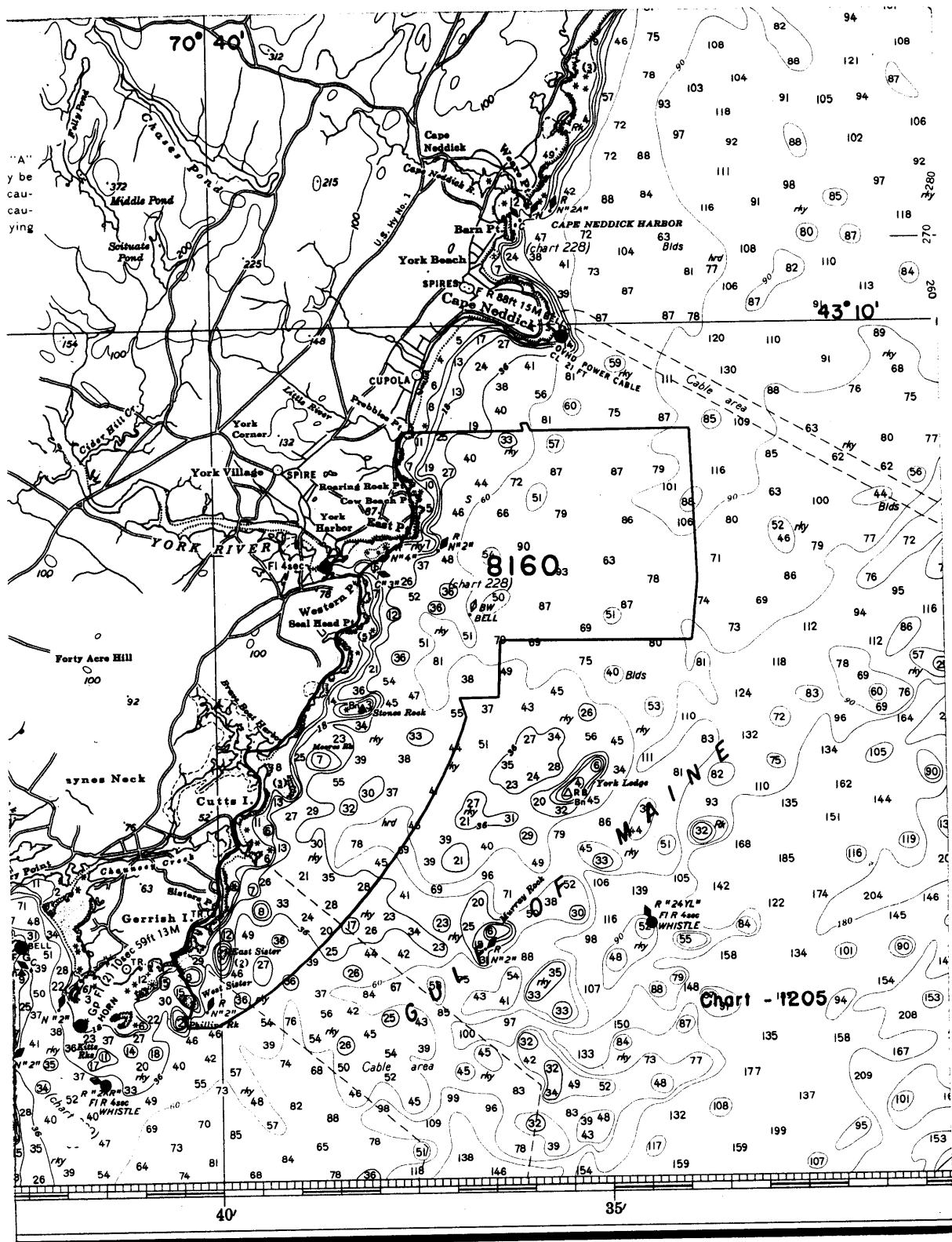
(After new phasing head installed)
(on this fathometer on 10/7/54)

Recorded depth in feet

A Range

B Range

C Range



NAUTICAL CHARTS BRANCH

SURVEY NO. H-8160

Record of Application to Charts *Review 9-25-57*

DATE	CHART	CARTOGRAPHER	REMARKS
8/15/57	228	Jam	Before After Verification and Review Partially applied.
25 Nov '57	211	H.S. MacEwen	Before After Verification and Review
4/22/58	1205	J.G. McGinnis	Before After Verification and Review (Partially) Made corrections marked in Review.
8-4-59	228	Eugene J. ...	Before After Verification and Review Partially appl'd <i>This drawing #1 of chrt 211</i>
8-20-59	1205	R.K. De Landin	Before After Verification and Review Appld thru Chrt 211
3-23-60	1206	Z.M. Albert	Before After Verification and Review via chrt. 211
10-11-61	1106	R.E. Elkins	Before After Verification and Review Fully applied Thru chart 1205 Aug 14.
5-11-64	1205	H. Riddle	Before After Verification and Review App'd thru chrts 1206 & 211 to make agree
			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.