FE133

Diagram No. 1203-3

NOAA FORM 76-35A

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SURVEY

DESCRIPTIVE REPORT
(HYDROGRAPHIC)

Type of Survey Field Examination

Field No. CS-265

Office No. FE-133

LOCALITY

State Maine

General Locality Approaches to Penobscot Bay

Locality Foster & Bay Ledges

1955

CHIEF OF PARTY
J.C. Ellerbe

LIBRARY & ARCHIVES

DATE September 14, 1955

☆U.S. GOV. PRINTING OFFICE: 1976—669-441

NOTE: A new system for registering Field Examinations (FE's) was established in 1980. All FE's are now consecutively numbered as shown hereon. The date shown in the new format is the actual date of survey. This material was previously registered as; FE No.3 1955

FE133

Diag. Cht. No. 1203-3

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. CS-265 Office No. F.E.No. 3(1955)

LOCALITY

State Maine

General locality Approaches to Penobscot Bay

Locality Foster & Bay Ledges

194 55

CHIEF OF PARTY

J. C. Ellerbe

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DATE September 14, 1955

B-1870-1 (1)

SHIPS WAINWRIGHT & HILGARD
DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

POST-OFFICE ADDRESS: Post Office Box 659
Southwest Harbor, Maine

TELEGRAPH ADDRESS:

EXPRESS ADDRESS:

16 August 1955

To: Director
U. S. Coast and Geodetic Survey
Department of Commerce Bldg.,
Washington 25, D. C.

Subject: Special Report, Project CS-265 WD, Investigation of Bay and Foster Ledges.

Ref.: Supplemental Instructions, Project CS-265 WD, dated 27 May 1955 (22/MEK, S-2-WA & HI)

On 25 July 1955, the investigation of subject Ledges, as specified in paragraph 2 of reference, was accomplished.

Foster Ledge was visited first. It was found, upon arrival, that it would be very impractical to attempt wire dragging due to the number of lobster traps set in the area. Investigation by development and drift sounding therefore was attempted.

First the shoal was located and a marker buoy set thereon. This was easily accomplished since at low water in a calm sea, the bottom is plainly visible. After placing the buoy, very closely spaced lines were run on ranges, and the least depth obtained was recorded as the soundings became progressively shoaler. The marker buoy was used as a reference point in the development. After the least depth was determined by fathometer in this manner, the launch was allowed to drift over the shoal a number of times, soundings being taken constantly with the fathometer and hand lead. The least depth obtained on several of the drift passes was recorded as a detached sounding.

It will be noted that some differences appear in the fathometer and hand lead soundings. The bottom appeared to be rough boulders, with many small, sharp pinnacles projecting from one to two feet above the general ground contour. Some kelp was evident.

A least depth of 5.8 feet was obtained, checking very closely the presently charted sounding of 6-feet. This hand-lead sounding was closely supported by a 6.1-foot sounding by fathometer.

Position of 6' from H-3523(1913) retained on H-8168 VVD

It will be noted that the position of the shoal soundings on this ledge plot slightly to the North of the 6-foot shoal as plotted on Chart 322. It is not believed that the two positions are actually different, but that the discrepancies inherent in plotting 3-point fixes on a chart are responsible. No evidence of further extension of the shoal to the Southward was found in the investigation.

At Bay Ledge, a 1½ hour investigation by skiff with the hand lead resulted in the location of the ledge and a sounding of 5.8 feet. Later, a marker buoy was planted on the shoal, which is of a very small extent, and a series of lines on ranges run across it with launch CS-171 and the fathometer. A least depth of 4.8 feet was found by this method, with deep water close by on all sides. 3' from H-3023(1913) not disproved and was carried forward to H-8168

This least depth was checked by wire drag methods. A small drag, 200 feet in length, was pulled by skiff and outboard over the shoal, which was still marked by the buoy. The center of the drag (#2 buoy) passed over the center of the shoal, the marker buoy being raised and dropped again as the drag passed. Three point fixes of #2 buoy were taken at the beginning and end of the drag strip; also three point fixes of the two boats at the end. The ledge was cleared at an effective depth of 4.5 feet.

Portland, Maine tides, furnished by the Washington office, were used in reducing soundings and computing effective depths of the drag. These tides were corrected by -20 min. and +0.3 foot at Bay Ledge and -20 min. and +0.2 foot at Foster Ledge. Lead line corrections were obtained by check as prescribed; a bar check was taken the same day to furnish fathometer corrections. All positions were plotted on chart No. 322, furnished by the Washington office.

John C. Ellerbe

John C. Ellerbe
Commander, USC&GS
Chief of Party

JCE/rog

RHC

Form 712
DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
Rev. Apr. 1950

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~DIVISION OF TIDES AND CURRENTS~~ 23 September 1955

Division of Charts: R. H. Carstens

Plane of reference approved in 2
volumes of ~~sounding records for~~
Wire drag records

~~HYDROGRAPHIC SHEET~~ FE No. 3 1955

Locality Penobscot Bay Entrance, Maine

Chief of Party: J. C. Ellerbe in 1955
Plane of reference is mean low water, reading
3.6 ft. on tide staff at Portland
19.0 ft. below B. M. 31 (1910)

Height of mean high water above plane of reference at the working grounds is 9.1 feet.

Condition of records satisfactory except as noted below:

William Thofus

Act'g Chief, Di~~vision of~~ Tides a~~nd Currents~~. Branch

U. S. GOVERNMENT PRINTING OFFICE 877933

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. F.E. No. 3 (1955)

Records accompanying survey:

Boat sheets .....; sounding vols. .2...; wire drag vols. .....;

bomb vols. .....; graphic recorder rolls .1...;

special reports, etc. .1-Special report & 1-Chart No. 322.....

.....

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	.....

Verification by J.E. GEARHART.....Total time .24.... Date 9-6-55

Reviewed by. [illegible] ..... Time ..... 8 Date 5-1-61

M-2232-1

FIELD EXAMINATION NO. 3, 1955

Maine, Approaches to Penobscot Bay, Foster Ledges and Bay Ledge

1. The field examination was made in compliance with Supplemental Instructions for Project CS-265, dated 27 May, 1955.

2. The purpose of the field examination is as follows:

   a. To determine the present least depth over the charted 3 ft. at Bay Ledge in Lat. 43°58.05', Long. 63°51.70'.

   b. To determine the present least depth over the charted 6 ft. at Foster Ledges in Lat. 43°52.08', Long. 68°56.70'.

3. The results of the field examination are as follows:

   a. The 4.8-ft. sounding obtained by the field examination of Bay Ledge in Lat. 43°58.05', Long. 68°51.70', is considered not to disprove the reliability of the 3-ft. sounding found on H-3023 (1913) W.D.

      The 3-ft. sounding which has been carried forward to H-8168 (1954), should be retained on the chart.

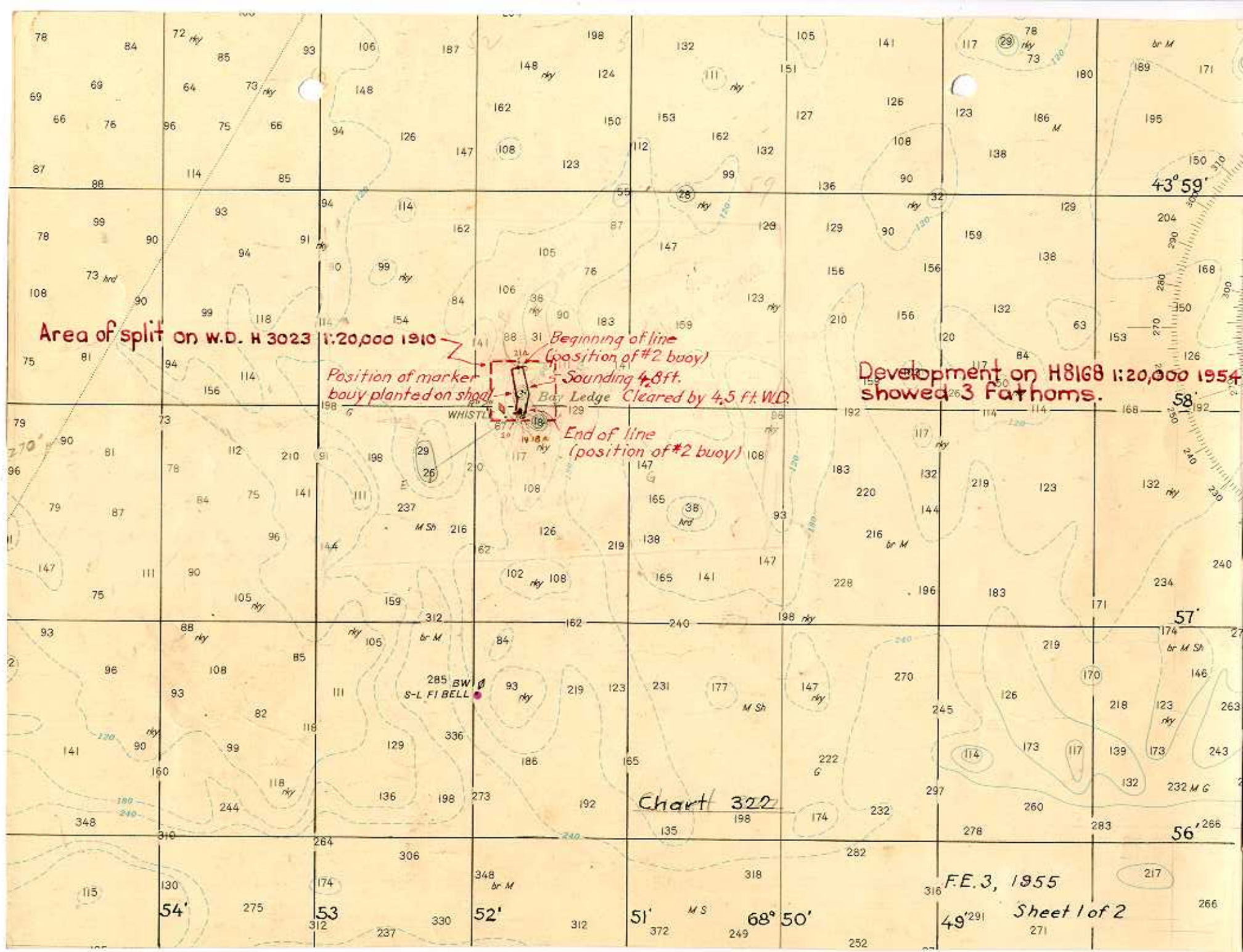
   b. The 6-ft. sounding charted on Foster Ledges in Lat. 43°52.08', Long. 68°56.70', from H-3528 WD (1913) was adequately confirmed by the field examination. The sounding has been carried forward to H-8168 (1954) and should be retained on the chart.

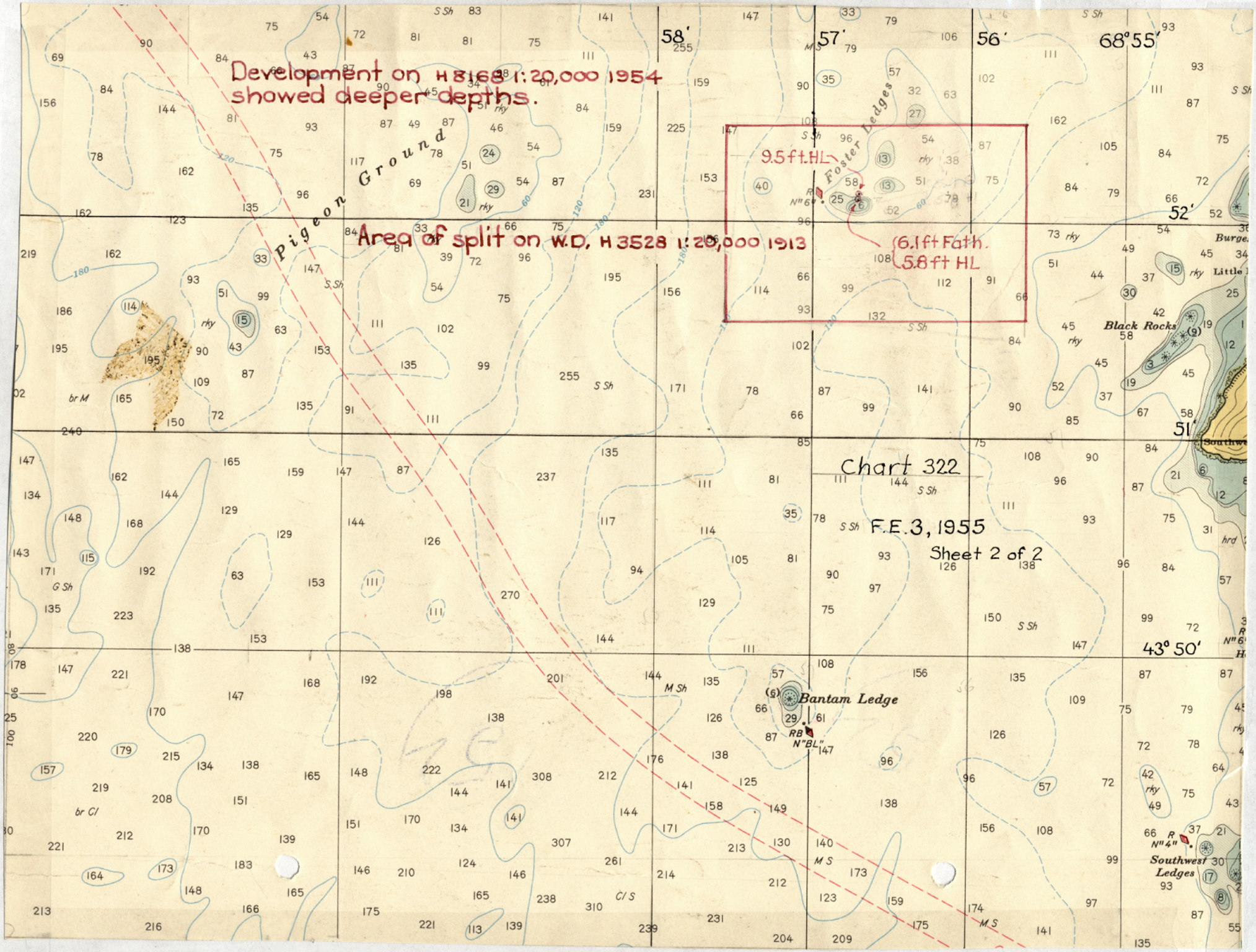
4. The results of the field examination are shown on the accompanying 2 sections of chart 322.

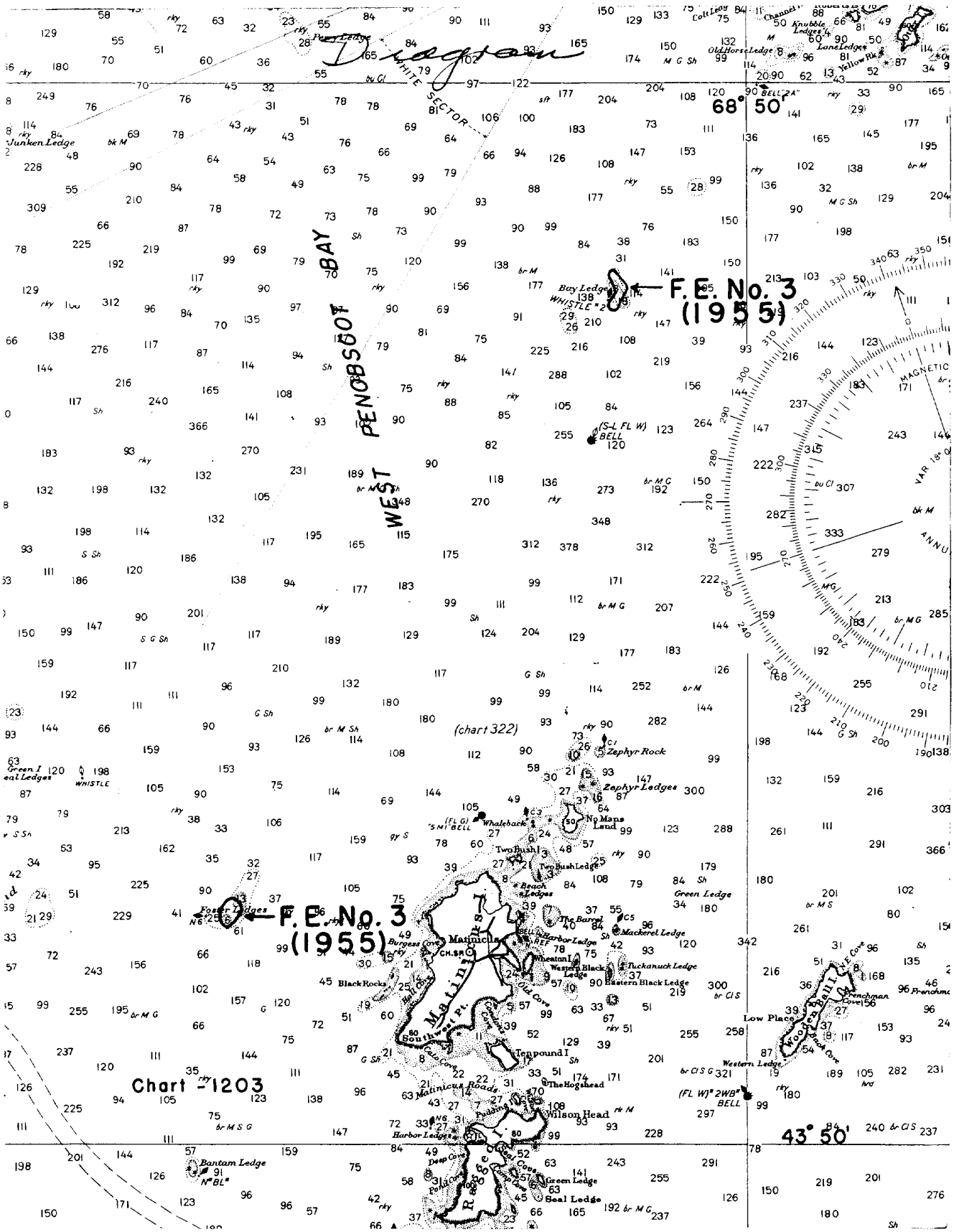
5. The attached correspondence adequately covers all matters pertaining to this examination. No further discussion is considered necessary.

Reviewed by: I. M. Zeskind
5-1-61

Inspected by: R. H. Carstens


Area of split on W.D. H 3023 1:20,000 1910
Beginning of line
(position of #2 buoy)
Position of marker
bouy planted on shoal
Sounding 4.8ft.
Bar Ledge Cleared by 4.5 ft. W.D.
End of line
(position of #2 buoy)
Development on H8168 1:20,000 1954
showed 3 fathoms.
WHISTLE
S-L FI BELL
Chart 322
F.E. 3, 1955
Sheet 1 of 2
43° 59'
58'
57'
56'
54'
53
52'
51'
68° 50'
49'


Development on H 8168 1:20,000 1954
showed deeper depths.
Pigeon Ground
Foster Ledges
9.5 ft. HL
Area of split on W.D. H 3528 1:20,000 1913
6.1 ft Fath.
5.8 ft HL
Black Rocks
Little
Burge
Southwe
Chart 322
F.E. 3, 1955
Sheet 2 of 2
Bantam Ledge
Southwest Ledges
68°55'
58'
57'
56'
52'
51'
43° 50'


Dungeon
WHITE SECTOR
68° 50'
F. E. No. 3
(1955)
PENOBSCOT BAY
WEST
(chart 322)
F. E. No. 3
(1955)
Chart 1203
43° 50'
Junken Ledge
Bay Ledges
Zephyr Rock
Zephyr Ledges
No Maps Land
Two Bush I.
Two Bush Ledge
Beach Ledges
Green Ledge
The Barrel
Mackerel Ledge
Harbor Ledge
Wheeler I.
Western Black Ledge
Tuckanuck Ledge
Eastern Black Ledge
Foster Ledges
Burgess Cove
Matinicus
Matinicus Rock
Black Rocks
Southwest Pt.
Tenpound I.
The Hogshead
Wilson Head
Matinicus Roads
Harbor Ledges
Bantam Ledge
Green Ledge
Seal Ledge
Rock Island
Low Place
Western Ledge
Frenchman Cove
Wooden Ball I.
Old Cove
Deep Cove
MAGNETIC
VAR 18° W
ANNU

NAUTICAL CHARTS BRANCH

SURVEY NO. F.E. No. 3 (1955)

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
9-14-55	322	R.K. de Landa	Before ~~After~~ Verification and Review
8-17-56	1203	L.S.S.	Before ~~After~~ Verification and Review no correction
8-30-62	1203	M.R.	Completely applied ~~Before~~ After Verification and Review
7-3-63	322	mR	Completely appld ~~Before~~ After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			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.