

6672

U. S. COAST & GEODETIC SURVEY
LIBRARY AND ARCHIVES

FEB 27 1942

Acc. No.

6672

Form 504
Rev. April 1935

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

DESCRIPTIVE REPORT

~~Topographic~~ } Sheet No. 6672
Hydrographic }

OCEANOGRAPHER

State MAINE

LOCALITY

~~CASCO BAY~~ ✓
Portland Harbor

~~1931~~ 1941

CHIEF OF PARTY

Fred L. Peacock.

U. S. GOVERNMENT PRINTING OFFICE 102221

Fred. L. Peacock

Chief of Party, C&GS

COMMANDING

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.

Field No. 501

REGISTER NO. H-6672

State Maine

General locality ~~Portland, Me.~~ Casco Bay

Locality Portland Harbor ~~Back Cove~~

Scale 1:5000 Date of survey Aug. 30-Oct. 18, 19 41

Vessel U.S.C. & G.S.S. OCEANOGRAPHER

Chief of Party Fred. L. Peacock

Surveyed by Ship's Officer

Protracted by -- G.F. Jordan, A.R. Stirni (Wash. office.)

Soundings penciled by -- R.H. Carstens, L. King "

Soundings in ~~fathoms~~ feet

Plane of reference M. L. W.

Subdivision of wire dragged areas by

Inked by G.F. Jordan

Verified by G.F. Jordan

Instructions dated May 7, 19 41

Remarks:

DESCRIPTIVE REPORT
to accompany
HYDROGRAPHIC SHEET NO. H-6672 (FIELD NO. 501)
Scale 1:5,000

Project No. CS-265
U.S.C. & G.S.S. OCEANOGRAPHER

Portland, Maine
Fred. L. Peacock, Chief of Party

INSTRUCTIONS:

This survey was executed under authority of Director's Instructions for Project No. C. S. 265, dated May 7, 1941.

LOCALITY:

This survey covers the north end area of Portland Harbor, Back Cove, Diamond Island Roads, and the southeastern approach to Portland Harbor.

CONTROL AND SIGNALS:

Triangulation control previously established furnished the primary control. Natural objects, banners, flags, and tripods established by the 1941 topographic parties furnished additional control for this survey.

SURVEY METHODS:

The usual visual control method of three-point fixes was used throughout this survey. The Submarine Signal Company 808-A type fathometer was used. Fixes were obtained between one and two minute intervals. The 15 U type, fifteen second interval chart fathogram was used, and soundings were scaled to the nearest half foot, every seven and one-half seconds. The depth was of such a nature that only the feet scales on the fathogram were used.

The fish of the 808-A fathometer was rigged by means of two by four (2x4) braces and brass tubing to the outer hull of the launch, and set at a depth of two feet below the surface of the water, which was the initial used throughout this survey.

The party consisted of a coxswain, engineer, right and left angle man, recorder and fathometer man, whose sole duty was to see that the fathometer ran correctly and to record all fixes, beneficial matter, and irregularities that might happen to the machine. Angles were taken close by the fish, in order to correlate the correct positions for recorded depths.

An attempt was made in the field to read and record the soundings from the fathograms. The character of the bottom was so rough, and due to the fact that the depth scales were constantly changing, the attempt was discarded as errors were frequent and the fathometer man couldn't tend the machine properly. As a result the fathograms had to be scaled after working hours and all soundings placed on the boat sheets by a night crew.

SURVEY METHODS: (CONT'D)

The main system of lines were run in a northeasterly, south-westerly direction with a maximum spacing of one hundred meters. In closer development twenty-five to fifty meter lines were run, especially around Fish Point and Pomroy Rock where the City of Portland asked for a detailed survey.

DANGERS:

The only new obstruction which would be dangerous to navigation was a sunken gravel barge, marked by topographic signal REX, which was the mast of the wreck at Lat. 43° 39.87' Long. 70° 14.23'. However, by the time the OCEANOGRAPHER sailed during the latter part of October, an attempt was being made to remove this wreck and at the present writing it may be removed.

No information of removal
3/12/42.
Removed - N.O. Notice to Mariners
33-1942
J.F.R.

CHANNELS:

Only one channel was developed on this survey, that being the channel leading from the highway bridge at the eastern entrance to Back Cove, following down its southeastern shore line to a point between topographic signals ON and PAT. The general depth being between ~~ten~~ and twelve feet, the tide reducers for which were those deducted in the field.

ANCHORAGES:

Anchorage are as shown on U.S.C. & G.S. Chart No. 325.

GEOGRAPHIC NAMES:

The geographic names remain the same as shown on U.S.C. & G.S. Charts Nos. 325, 315 and 201.

JUNCTION WITH CONTEMPORARY AND PREVIOUS SURVEYS:

This survey forms a junction with hydrographic survey (1941) H-6677 on the ^{south} east and southwest; hydrographic survey (1941) ~~H-6674~~ on the north, and hydrographic survey (1941) H-6673 on the south ^{west}. It is believed that few discrepancies occur which are greater than one or two feet at the most.

COMPARISON WITH PREVIOUS SURVEYS:

This office has no record of recent surveys in this area. The most recent survey H-3677 W.D. (1914) was of such a small extent that no real comparison could be made. H-1032 shows a depth of 31 feet on the north side of Back Cove ^{where present survey shows 20 to 25 ft.} ~~while now the Cove shows a couple of feet at mean low water.~~ H-402 shows a depth of 9 to 12 feet on the Middle Ground off signal LAD, while now it is much deeper with a depth of around 25 feet. Lat. 43° 39.7' Long. 70° 14.4'

Rev. par. 5 + 6.

28 to 30

COMPARISON WITH PREVIOUS SURVEYS: (CONT'D)

H-404A has a ^{penciled} 22 foot shoal 222 meters NNE of signal WIND, with a note "OMIT" and initialed G.B. No indication was found on this survey and this sounding was not on U.S.C. & G.S. Chart No. 325. H-949 shows a depth of 17 feet from Portland Breakwater Lighthouse westward to the piers. This survey shows a depth around 34 feet, due no doubt to dredging activities in Portland Harbor. Lat. 43° 39.4'
Long. 70° 12.4'
Disregard 22.
Rev., par. 5

All shoal areas check very closely with U.S.C. & G.S. Chart No. 325 except the following:-

The 29 foot shoal at Lat. 43° 39.16' Long. 70° 13.10' was found to be ~~32~~₃₁ feet on this survey. Rev., par. 6

On the 17 foot shoal at Lat. 43° 39.40' Long. 70° 13.81' ~~22~~₂₂ feet was found. *Investigated?* Rev., par. 7a.

DISCREPANCIES AND SHOALS:

In general the soundings agreed very well. Crossings only varied by a foot or two. The following shoals are listed:-

Least depth of 8 feet on a shoal at Lat. 43° 40.47' Long 70° 15.20'

Least depth of 1 foot on a bar at Lat. 43° 40.55' Long 70° 14.85'

Shoal with a least depth of 18 feet at Lat. 43° 39.67' Long. 70° 14.55'

Shoal with a ~~least depth of 17 feet~~ at Lat. 43° 39.39' Long. 70° 12.51' *split*

Shoal with a least depth of 31 feet at Lat. 43° 39.16' Long. 70° 13.10'

Shoal with a least depth of 5 feet at Lat. 43° 39.11' Long. 70° 13.50' *part of Spring Pt Ledge*

MISCELLANEOUS:

This survey was surveyed by the ship's officers.

This descriptive report is only as accurate as the soundings set down upon the boat sheets, as the Washington office has requested that the smooth sheet be plotted in that office. The field tide reducers and field bar checks might differ within a foot or two with the final tabulation. As a result several discrepancies might occur on the smooth sheet which could not be detected on the boat sheet.

Bar checks were taken in most cases, one at the beginning of the day's work and one at the end, and sometimes at noon. However, in fifty percent of the cases, bar checks were taken under unfavorable conditions, such as tide, currents, wind, and limited depths.

MISCELLANEOUS: (CONT'D)

The method employed in taking bar checks was to lower the bar, which consisted of a piece of one inch wood, capped with sheet metal, and just a trifle wider and longer than the fish. Cradled to each end of the bar was attached a 5/16" galvanized iron wire graduated every six feet, by means of different colored cloth. The bar was lowered by means of a hand windlass, bottom permitting, to a depth of 84 feet. Readings were recorded every six feet, going down and coming up. The different scales were recorded separately, and separate curves drawn for each scale, for it was found that they varied as much as one foot with each other. The bar corrections were entered to 0.2 of a foot to fit in with the tide reducers, as per instructions from the Washington office. On the 15 U type fathogram, which was the type we used on this survey, or 15 second interval between marks, soundings were recorded every $7\frac{1}{2}$ seconds between fixes.

Since marks on the fathogram governed the time instead of the time governing the marks, that is to say, when the fathometer stylus came to one of the red marks on the fathogram, the man in charge of the machine called mark, and the recorder recorded the time to the nearest second, and the angle men snapped their angles together, it was found necessary to obtain the run of time in seconds between fixes in order to ascertain whether the fathometer was running fast or slow, in order that time corrections might be applied to the depths, so that the true soundings could be ascertained. Differences of one or two seconds in time between fixes were ignored, as accumulative errors or errors due to recording or not calling mark and pushing the marker at the same instant, could have been in error by two seconds. Most large errors of 3 seconds or over were usually found at the beginning or end of lines, and were in all probably due to the recorder, in not recording the proper time. If the time was found to be consistently in error in the same direction for a number of fixes it was assumed the fathometer was running incorrectly and so an adjustment was allowed. The average of error for time corrections was found by dividing by the number of fixes between which the error was committed. If the exact location of the time corrections could not be found on the fathogram, one-half of the computed time correction was applied to the preceding fix and one-half to the following fix, due to accumulative errors which might precede or follow the fixes between which the time corrections occurred.

On the 15 U type fathogram every other A scale was found to be one second too long between marks, that is it recorded 16 seconds instead of 15 seconds.

For depths beyond the bar checks limits, that were taken in the field, on different day letters, temperature and salinity curves were used. If at a depth of 72 feet there was a difference in depth over 0.2 of a foot between the last limit of the bar check and the salinity and temperature curve, a phase or index curve was drawn. This curve was simply a continuation of the last bar check curve based upon the salinity and temperature correction curve.

MISCELLANEOUS: (CONT'D)

A more detailed discussion of the above will be furnished in a special report.

The inshore area between Portland Breakwater Light and Fort Preble is undergoing considerable change due to the building of new piers, dredging activities, and the building of new shipyards.

All fathograms were re-scaled, but corrections, alterations and additions were not rechecked in this office.

Bottom characteristics were taken separately by hand lead and checked by the fathometer, amounting to about eight to the square mile.

It is recommended that soundings be plotted to the nearest half foot on this survey. ✓ Done only to smooth curves.

Respectfully submitted,

Henry O. Fortin
Henry O. Fortin,
Lieutenant (jg), C&GS.

Respectfully forwarded, 2/23/42

H. C. Warwick
H. C. Warwick,
Lieutenant, C&GS.

SEE APPENDUM PAGE 6

Plotting notes.
Disposition made
and notes removed
from this report.

H6672

STATISTICS

SHEET FIELD NO. 501

DATE	VOL. NO.	DAY LETTER	STAT. MI.	NO. SDG.	POSITIONS	BOAT
SEPT.						
8	1	a(PURPLE)	29.0	2124	197	75
9	2	b	9.5	706	66	"
22	2 & 3	c	17.8	1776	181	"
23	3 & 4	d	24.9	2132	216	"
24	4	e	25.9	1614	182	"
26	5	f	20.5	1655	186	"
26	6	g	10.3	861	101	"
OCT.						
8	6	h	9.8	446	82	"
AUGUST						
30	7	a(RED)	0.5	98	18	81
SEPT.						
15	8	b	20.6	1575	169	"
20	7	c	0.0	3	3	"
SEPT.						
13	9	a(BLUE)	8.6	741	70	82
29	9	b	0.0	51	51	"
OCT.						
18	9	c	0.7	107	14	"
TOTALS	9		178.1	13,889	1,536	

Area In SQUARE STATUTE MILES- 3.3

FAC

TIDE NOTE FOR HYDROGRAPHIC SHEET

February 19, 1942

~~Division of Hydrography and Topography:~~

Division of Charts: Attention: Mr. H. R. Edmonston.

Plane of reference approved in
9 volumes of sounding records for

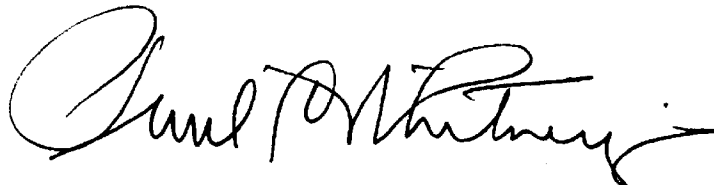
HYDROGRAPHIC SHEET 6672

Locality Portland Harbor, Maine

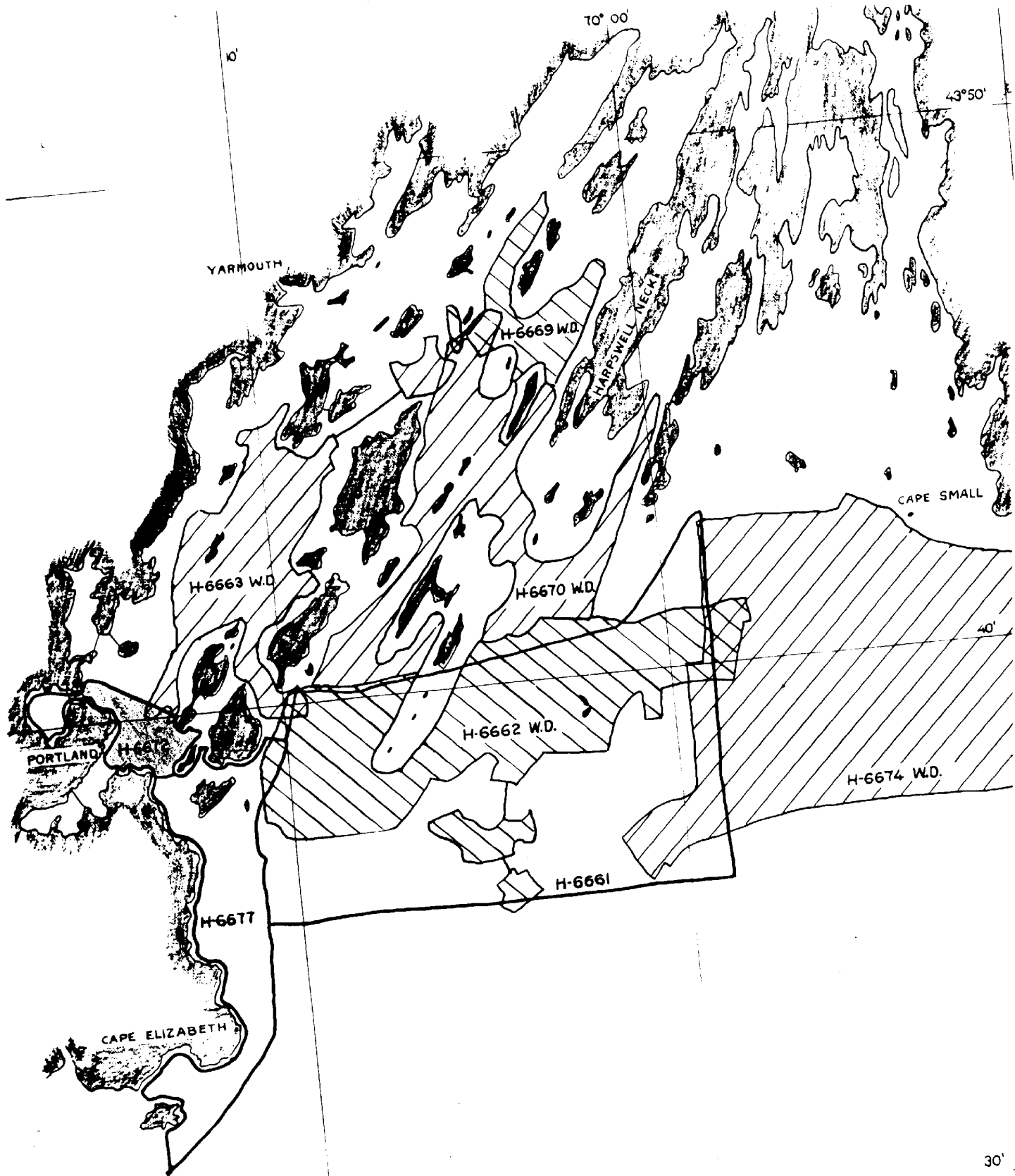
Chief of Party: F. L. Peacock in 1941
Plane of reference is mean low water reading
8.6 ft. on tide staff at Portland
19.0 ft. below B. M. 31

Height of mean high water above plane of reference is 8.9 feet.

Condition of records satisfactory except as noted below:



Chief, Division of Tides and Currents.



INDEX
PROJECT CS-265
70° 00' CASCO BAY, MAINE

Surveys Section (Chart Division)

HYDROGRAPHIC SURVEY NO. **H.6672**

Records accompanying survey:

Boat sheets ~~one~~.; sounding vols. (9).; wire drag vols.;
 bomb vols.; graphic recorder rolls (14).;
 special reports, etc. ~~One special report on Objects for locating~~....
~~Aids to Navigation. 1 "Record of Temperatures and Salinities, Bar Check~~
~~Computations & Reducers# filed with descriptive report H* 6673~~

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

Number of positions on sheet	1536.
Number of positions checked	...23.
Number of positions revised	...3.
Number of soundings recorded	13,889.
Number of soundings revised (refers to depth only)2.
Number of soundings erroneously spaced0
Number of signals erroneously plotted or transferred
Topographic details	Time ...5 $\frac{1}{2}$.
Junctions	Time
Verification of soundings from graphic record	Time

Verification by *G. F. Jordan*..... Total time ..92. Date *Mar. 5, 1942.*

Review by *J. A. M^cCormick*..... Time 28 hrs. Date *3/11/42.*

Protracting + Plotting:
Carstens - 60 hrs
Jordan - 28
Stirni - 29
King - 68
185

Combined total 277 hrs

Remarks

Decisions

1	For title	436702
2		"
3	For title	436700 U.S.G.B
4		436702
5	Location of tide staff	"
6		" U.S.G.B
7	See p.1	"
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
M 234		

GEOGRAPHIC NAMES
 Survey No. **H6672**

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.	
<u>Portland Harbor</u>										1
<u>Back Cove</u>										2
<u>Casco Bay</u>										3
<u>Fish Pt</u>										4
<u>Portland</u>										5
<u>Little Diamond I</u>										6
<u>Diamond Island Roads</u>										7
										8
										9
										10
										11
										12
										13
										14
										15
										16
										17
										18
										19
										20
										21
										22
										23
										24
										25
										26
										27
										M 234

Names underlined in red approved
 by L. Heck on 5/6/42

H6672
H6677

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

ADMIRAL L. O. COLBERT, DIRECTOR

SPECIAL REPORT

OBJECTS
for locating
AIDS TO NAVIGATION

Casco Bay and Portland Harbor, Maine

Project C. S. 265

1941

U.S.C. & G.S.S. OCEANOGRAPHER

H.B. Campbell

Commander, C&GS

COMMANDING

SPECIAL REPORT
OBJECTS FOR LOCATING AIDS TO NAVIGATION ✓

Project C. S. 265
Casco Bay and Portland Harbor, Maine

1941

Date of this report

February 20, 1942

AUTHORITY:

The work covered by this report was executed in connection with hydrographic and topographic surveys in Casco Bay and Portland Harbor (INSTRUCTIONS, Project C.S.-265, dated May 7, 1941) and in accordance with Field Memorandum No. 1 - 1941 (Objects for Locating Aids to Navigation) dated December 26, 1941.

INFORMATION FURNISHED U. S. COAST GUARD:

One copy each of charts No. 315 (Casco Bay) and No. 325 (Portland Harbor) showing natural and artificial objects to be used for locating floating Aids to Navigation were prepared by this party and forwarded on February 19, 1942 to the Senior Coast Guard Officer, First Naval District, Portland, Maine.

Only those Aids within the area covered by the above hydrographic surveys were included in this work. The area covers all of chart No. 325 and only the western portion of chart No. 315 (West of Long. $70^{\circ} 00'$ and northwest of a line from Halfway Rk. L.H. to Lat. $43^{\circ} 32'$, Long. $70^{\circ} 12'$ off Richmond Island).

The latest available prints of the two above charts were used and corrections to date relative to Aids to Navigation as per weekly "Notices to Mariners" were applied.

An addition to the legend of each chart was made as follows:

OBJECTS FOR USE OF U. S. COAST GUARD

FROM FIELD SURVEYS

U.S.C. & G.S.S. OCEANOGRAPHER

APRIL TO OCTOBER, 1941

Fred. L. Peacock

Commanding

INFORMATION FURNISHED U. S. COAST GUARD: (CONT'D)

The objects recommended to serve as fixes for the Aids were shown on the charts by a black dot encircled by a large, heavy, red circle. Each object was assigned a number which together with a brief description of the object was shown in red adjacent to its plotted position.

Each floating Aid to Navigation was encircled by a small red circle. The assigned numbers of the Objects best suited to serve as 3-point fixes were shown in red and in brackets adjacent to the Aid. This system of indicating the fixes was adopted because of the intensity of floating Aids on these two charts.

Chart No. 201 (Western Part, Casco Bay) although of larger scale than Chart No. 315, was not used in the work because of its confidential character and because it is unavailable for general distribution.

CHART DATA:

By comparing the scaled positions of charted objects with geographic positions determined by triangulation and topography it was determined that both Chart No. 315 and Chart No. 325 were on the North American Datum (old). However, many of the landmarks, permanent aids, and other artificial and natural objects (docks, islets, etc.) as shown on these two charts failed to check this determination. This failure in some cases is known to be due to the rebuilding of the landmarks and aids.

OBJECTS USED FOR FIXES:

Each object recommended to the Coast Guard to serve as a fix for Aids was plotted on the charts with an adjustment to the geographic position for datum. In cases of disagreement with charted positions the new positions were plotted on the charts furnished the Coast Guard.

A list on Form 567 of the charted objects whose positions did not agree with the adjusted geographic positions available to this party are submitted with this report.

Also, on Form 567 and submitted with this report is a list of all other objects plotted on the chart forwarded to the Coast Guard.

Each floating aid within the area covered by this work was visited for the purpose of selecting the most suitable objects for 3-point fixes for use of the Coast Guard.

RECOMMENDATIONS:

None of the natural and artificial objects for use in locating aids as listed with this report and not previously submitted as "Landmarks for Charts" by this party are recommended to be used as "Landmarks for Charts".

Landmarks within the area of Project C.S. 265 - 1941 were submitted by this party on the following dates:

August 5, 1941
October 7, 1941
February 19, 1942

A scheme of triangulation established by P. L. Bernstein, 1941 vicinity of Portland and Casco Bay is recommended as a possible source of geographic positions for the landmarks in this vicinity. Only preliminary positions of triangulation stations located by P. L. B. 1941 around Portland were available at the time of completion of this work.

Respectfully submitted,

Don A. Jones

Don A. Jones, Aid
U.S.C. & G.S.S. OCEANOGRAPHER

Approved and Forwarded:

H. B. Campbell
H. B. Campbell, Commander, C&GS,
Commanding Ship OCEANOGRAPHER

I recommend that the following objects which have (have not) been inspected from seaward to determine their value as landmarks. be charted on *deleted from* the charts indicate The positions given have been checked after listing.

OBJECTS FOR USE OF U.S. COAST GUARD - CHART 315

Chief of Party

GENERAL LOCALITY	NAME AND DESCRIPTION	LATITUDE		LONGITUDE		DATUM	METHOD OF LOCATION	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
		°	'	°	'							
	RED ROOF HOUSE (S. CHY) ^{C. Elizabeth} McKenney Pt.,	43	33	846	70 13	10	NA 1927	Topo	1941			
	FLAGPOLE, Seal Cove, C. Elizabeth	43	33	1638	70 13	619	"	"	"			
	LONE HOUSE (S.E. GABLE) Seal Cove, C. Elizabeth	43	33	533	70 14	861	"	"	"			
	DOCK HOUSE (FLAGSTAFF) Palomouth Foreside	43	44	679	70 11	943	"	"	"			
	METAL BLDG. (S.B. GAB.) Palomouth Foreside	43	43	1350	70 12	777	"	"	"			
	RED ROOFED HOUSE (GRAY CHY) Cliff Id., Croth I.	43	41	1127	70 06	911	"	"	"			
	RED ROOFED GREEN HOUSE (CHY.) N.E. end Long Id.	43	42	357	70 08	338	"	"	"			
	SMALL PIER (S.W. COR.) Hope Id.	43	42	916	70 07	180	"	"	"			
	PIER HOUSE (N.W. GABLE) N. end Long I.	43	42	679	70 08	752	"	"	"			
	HOUSE IN PINES (S. Gab.) S.E. side Long Id.	43	41	950	70 08	1123	"	"	"			
	LONE HOUSE (E. GABLE) Crow I.	43	43	1410	70 06	329	"	"	"			
	FLAGPOLE, Stockbridge Point	43	48	745	70 06	672	"	"	"			
	TRBB (LONE), Grab I.	43	47	1385	70 05	994	"	"	"			

This form shall be prepared in accordance with 1934 Field Memorandum, "LANDMARKS FOR CHARTS." The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given. These objects not to be charted on Ch. 3201 unless listed as a landmark elsewhere - H.E.P. 1/8/43

I recommend that the following objects which have (*have not*) been inspected from seaward to determine their value as landmarks, be checked 1 on *deleted from* the charts indicate
 The positions given have been checked after listing.

OBJECTS FOR USE OF U.S. COAST GUARD - CHART 315

Chief of Party.

GENERAL LOCALITY	NAME AND DESCRIPTION	LATITUDE		LONGITUDE		DATUM	METHOD OF LOCATION	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
		° ' "	D. M. METERS	° ' "	D. P. METERS							
	Gr. Chebeag I.	43	44	70	06	NA 1927	Topo	1941				
	EAST GAB. CENTRAL LANDING,	43	45	70	05	"	"	"				
	HOUSE (GAB.) SMALL BROWN, I.	43	45	70	05	"	"	"				
	O.2 Mi. S. Chebeag Pt. Gr. Chebeag/	43	42	70	02	"	Topo	1941				
	HIGHEST POINT, Whale Rock	43	42	70	00	"	"	"				
	ROCK CAIRN, Turnip I.	43	42	70	00	"	"	"				
	BEACH HOUSE(CHY) Merloneag Sd.	43	44	70	00	"	"	"				
	HIP*ROOFED HOUSE (S.GAB) Potts Har.	43	44	70	01	"	"	"				
	N'LY HOUSE (S.GAB) Stoyes Pt. Gr. Chebeag/	43	45	70	59	"	"	"				
	2-STORY WHITE HOUSE (CHY)	43	34	70	12	"	"	"				
	LOWE HOUSE (CHY.), Little Chebeag I.	43	42	70	08	"	"	"				
	MARINE HOSPITAL STACK, Portland	43	41	70	14	"	"	"				
	FLAGPOLE, Greet Diamond I.	43	41	70	11	"	"	"				
	TOWER, Jewell I.	43	40	70	05	"	"	"				
	FLAGPOLE AT WHITE HOUSE, Harpswell Harbor	43	45	70	00	"	"	"				

This form shall be prepared in accordance with 1934 Field Memorandum, "LANDMARKS FOR CHARTS." The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

I recommend that the following objects which have (*have not*) been inspected from seaward to determine their value as landmarks, be cha. 1 on *deleted from* the charts indicate
 The positions given have been checked after listing.

OBJECTS FOR USE OF U.S. COAST GUARD - CHART #15

Chief of Party

GENERAL LOCALITY	NAME AND DESCRIPTION	POSITION		DATUM	METHOD OF LOCATION	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
		LATITUDE D. M. METERS	LONGITUDE D. P. METERS							
	CHY. LARGE WHITE HOUSE, /Cove)	43 43	70 06	NA 1927	Topo	1941				✓
	Gt. Chebeag Id. (N.E. of Johnsons)	800								✓
	LARGE YELLOW HOUSE, (CHY) /Cove)	43 43	70 06	"	"	"				✓
	Gt. Chebeag I. (S.W. of Johnsons)	316								✓
	HOUSE ON SMALL DOCK (S.E. COR.)	43 42	70 07	"	"	"				✓
	Gt. Chebeag I. (SW of Colemans Cove)	1477								✓
	N'LY HOUSE (N.GABLE)	43 43	70 05	"	"	"				✓
	Stave I.	250								✓
	N'LY HOUSE (E.GABLE) Colemans Cove	43 42	70 07	"	"	"				✓
	Gt. Chebeag I.	1754								✓
	FLAGSTAFF (HOTEL)	43 44	70 01	"	Tri.	"				✓
	S. Hargswell	338								✓
	PROM. WHITE HOUSE, (CHY.)	43 44	70 06	"	Topo	"				✓
	Gt. Chebeag I. N. of Central Idg.	770								✓
	HOUSE CHY. (S.W. GAB.) N'LY of 2-	43 44	70 01	"	"	"				✓
	Ho. Ash Point, Potts Harbor	1282								✓
	FLAGPOLE, Barnes Island	43 44	70 02	"	"	"				✓
	1784									✓
	FLAGPOLE, Moore Point	43 48	70 05	"	"	"				✓
	1091									✓
	FLAGPOLE, Little Flying Pt.	43 49	70 02	"	"	"				✓
	1549									✓
	HOUSE (END), N.W. COR., Birch I.	43 49	70 00	"	"	"				✓
	787									✓
	HOUSE (S. GAB.), Birch I.	43 48	70 01	"	"	"				✓
	1670									✓

This form shall be prepared in accordance with 1934 Field Memorandum, "LANDMARKS FOR CHARTS." The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

I recommend that the following objects which have (have not) been inspected from seaward to determine their value as landmarks, be charted (not charted from) the charts indicated.
 The positions given have been checked after listing.

OBJECTS FOR USE OF U.S. COAST GUARD - CHART 315 Chief of Party

GENERAL LOCALITY	NAME AND DESCRIPTION	LATITUDE		POSITION		DATUM	METHOD LOCATION	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
		° ' "	D. M. METERS	° ' "	D. P. METERS							
	EAST GAB, Small White House, E. Side Birch Id.	43	49	646	69 59	1148	NA 1927 Topo	1941				✓
	HOUSE (CHY.), Wilson Cove	43	48	1835	69 58	882	"	"				✓
	GREEN HOUSE (W. GABIE), Harpswell Neck	43	48	134	69 59	1128	"	"				✓
	HOUSE (W. GABIE), S. ly of 2 Boathouses	43	48	802	69 59	852	"	"				✓
	HOUSE (OCTAGONAL), Bustins I.	43	47	1427	70 04	454	"	"				✓
	HOUSE (CHY), LARGE WHITE, Harpswell Neck	43	45	1477	70 01	917	"	"				✓
	PROM HOUSE (CHY.) Boyle Pt. Cousin I.	43	45	138	70 08	674	"	"				✓
	FLAGPOLE, Little John I. Idg.	43	45	610	70 07	1031	"	"				✓
	FLAGPOLE, Drinkwater Pt.	43	46	772	70 09	570	"	"				✓
	CUPOLA (SCHOOL HOUSE) Long I.	43	41	1048	70 09	629	"	"				✓
	DOCK HOUSE (N.W. COR.), Bustins I.	43	47	1465	70 04	997	"	"				✓

This form shall be prepared in accordance with 1934 Field Memorandum, "LANDMARKS FOR CHARTS." The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

I recommend that the following objects which have (have not) been inspected from seaward to determine their value as landmarks, be charted (not charted) on (deleted from) the charts indicated.
 The positions given have been checked after listing.

OBJECTS FOR USE OF U.S. COAST GUARD * CHART 325

Chief of Party

GENERAL LOCALITY	NAME AND DESCRIPTION	LATITUDE		LONGITUDE		DATUM	METHOD OF LOCATION	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
		°	'	°	'							
PAVILION, S end Cushing I.		43	38	70	12	498	NA 1927	Topo	1941			
DOCK. HO. (FLAGSTAFF), Cushing I.		43	38	70	12	821	"	"	"			
		43	40			677		"	"			
S.E. Corner HO. (FLAGSTAFF), Gt. Dia. I.		43	39	70	11	1344	"	"	"			
HOUSE (TOWER), Peak I.		43	41	70	11	172	"	"	"			
FLAGPOLE, Gt. Diamond I.		43	41	70	10	194	"	"	"			
Dock Ho. (POLE), Long I.		43	41	70	11	85	"	"	"			
LIGHT ON POST, Cushing I.		43	39	70	12	704	"	"	"			
FLAGPOLE, House I.		43	40	70	10	229	"	"	"			
POST IN CONCRETE, Overset I.		43	38	70	16	641	"	"	"			
STACK, E. of Vaughn Bridge, Portland		43	38	70	13	1157	"	Tri.	"			
SILVER TANK, S. Portland		43	41	70	11	66	"	"	1933			
TOWER, Cow I.		43	40	70	11	385	"	Topo	1941			
DOCK HO. (N.W.GAB.) Peaks, I.												

This form shall be prepared in accordance with 1934 Field Memorandum, "LANDMARKS FOR CHARTS." The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

I recommend that the following objects which have (have not) been inspected from seaward to determine their value as landmarks, be charted on ~~deleted from~~ the charts indicated.
 The positions given have been checked after using
 OBJECTS FOR USE OF U.S. Coast Guard - CHART 315
 POSITIONS NOT AGREEING WITH CHARTED POSITIONS

Chief of Party

GENERAL LOCALITY	NAME AND DESCRIPTION	LATITUDE		LONGITUDE		DATUM	METHOD OF LOCATION	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
		°	'	°	'							
	BEACON, Stockman I.	43	43	1835	70	05	9	NA 1927 TRI				4
	STONE TOWER, S. of Portland Head	43	36	1707	70	12	955	"	Topo	1941		4
	BEACON, Drunkers Ledge	43	41	534	70	01	1003	"	TRI	1933		4
	BEACON, Wills Str. Mericomeag Sd.	43	45	398	69	59	525	"	Topo	1941		4
	HOUSE (SW. CHY.) Hope I.	43	42	235	70	07	409	"	"	"		4
	HOUSE (CHY.) Eagle I.	43	42	1361	70	03	200	"	TRI	1933		4
	HOUSE (CHY.) Gt. Chebeag I.	43	45	949	70	05	1098	"	"	"		4
	PUMPKIN NOB, highest point	43	45	903	70	10	796	"	Topo	1941		4

This form shall be prepared in accordance with 1934 Field Memorandum, "LANDMARKS FOR CHARTS." The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

I recommend that the following objects which have (have not) been inspected from seaward to determine their value as landmarks, be charted on *noted from* the charts indicated. The positions given have been checked after using.

OBJECTS FOR USE OF U.S. COAST GUARD
POSITIONS NOT AGREEING WITH CHARTED POSITIONS - CHART 325

Chief of Party

GENERAL LOCALITY	NAME AND DESCRIPTION	POSITION				DATUM	METHOD OF LOCATION	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
		LATITUDE	D. M. METERS	LONGITUDE	D. P. METERS							
	LIGHT, Ft. Scammel Pt.	43 38	1740	70 12	1152	NA1927	Topo	1941				
	LIGHT, House I.	43 39	642	70 12	656	"	"	"				
	LIGHT, Diamond ledge	43 39	1444	70 13	711	"	"	"				
	LIGHT, Crow I.	43 41	325	70 11	306	"	"	"				
	LIGHT, Little Diamond I.	43 39	1844	70 12	340	"	"	"				
	BEACON, Troots Rk, Whithead Pass.	43 38	1731	70 11	818	"	TRI.	1933				
	STONE TOWER, S. of Portland Head	43 36	1707	70 12	955	"	Topo	1941				
	* DOCK (S.W. COR.), Forest City Idg Peaks I.	43 39	583	70 12	33	"	"	"				

*None objects checked against chart 325
6/3/42*

* Position scaled from smooth sheet
This form shall be prepared in accordance with 1934 Field Memorandum, "LANDMARKS FOR CHARTS." The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

MEMORANDUM

IMMEDIATE ATTENTION

SURVEY
 DESCRIPTIVE REPORT
~~PHOTOSTAT OF~~

} No. H H6672
~~No. 11~~

{ received February 27, 1942
 registered February 27, 1942
 verified
 reviewed
 approved

This is forwarded in order that your attention may be directed to the matters as indicated below. Please initial in column 3 as an acknowledgement that your attention has been thus directed. The complete original records are available if desired. If you cannot give this your immediate attention, please initial, note, and forward to the next section marked, calling for the records at your convenience.

ROUTE		Initial	Attention called to
20			
22			
24			
25			
26			
30			
40			
62			
63			
82			
83			
88			
90			

RETURN TO

82	R. W. Knox
----	------------

Ruf

Extensive dredging operations are responsible for wide differences between old and new surveys inside the 36-ft. curve of the present survey. Otherwise, agreement between the present survey and surveys from 1867 on is fairly good. H-404 is rather loosely executed and cannot be classed with the others. Depths of 10 and 30 feet (charted) in Lat. $43^{\circ}39.0'$, Long. $70^{\circ}13.4'$ and 44 feet (charted) in Lat. $43^{\circ}39.2'$, Long. $70^{\circ}13.2'$ on H-404 are clearly out of position and should be disregarded. The penciled depth of 22 feet (not charted) in Lat. $43^{\circ}39.5'$, Long. $70^{\circ}12.4'$ on H-404a was rejected by the field party of 1906 with the explanation that it probably should have been 45 feet, a depth which is in excellent agreement with the present survey. Rejection of the 22 was approved by G. Bradford, Assistant in charge of the Office in 1907, and is accepted as the proper disposition. The present survey adequately covers the area without retention of any material from the older projects.

6. Wire Drag Surveys

H-3677 (1914) W.D.; H-6663 (1941) W.D.

The 1914 drag survey carried strips up the main channel from the southeast to the vicinity of Diamond Island Ledge. There is some conflict west of the ledge, the drag work plotting too close to the rocks. A 29-ft. sounding (charted) in Lat. $43^{\circ}39.15'$, Long. $70^{\circ}13.10'$ on H-3677 was investigated by the present field party and a depth of 31 feet obtained on the 808-A Recorder. The 29 has been carried forward because it was obtained as a result of dragging and was a hand lead sounding to rocky bottom. H-6663 (W.D.) overlaps only a small part of the present work north of Diamond Island Ledge. Effective depths are not in conflict with soundings.

7. Comparison with Chart 325 (New Print of 8-21-41)

a. Hydrography

Charted depths are about equally divided as to origin between surveys discussed in the foregoing paragraphs and surveys of the U. S. Engineers. In general they agree very well with depths on the present survey. A depth of 17 feet charted in Lat. $43^{\circ}39.4'$, Long. $70^{\circ}13.8'$ originates with B.P. 13910 of 1911 and falls in depths of 22 to 23 feet on the present survey. Later B.P.'s do not cover the spot and the present survey made no special effort to disprove it. The 17 should be retained on the chart. The present survey shows the channel in Back Cove has shoaled to a controlling depth of 9 to 10 feet as compared with 12 feet reported for June 1932.

b. Aids to Navigation

Survey positions of floating aids differ from charted information by as much as 170 meters but none of the differences are in a direction which would seriously affect navigation. It should also be noted that topographic or triangulation positions are now available for all fixed aids in the area. Some of the charted positions are slightly in error.

8. Compliance with Project Instructions

Satisfactory.

9. Additional Field Work Recommended

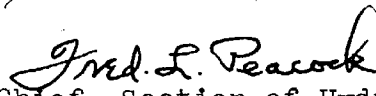
None. The 17-ft. depth mentioned in Par. 7a is of minor importance.

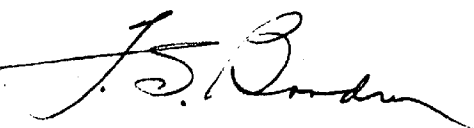
10. Superseded Surveys


H-404	in part	H-1032	in part
H-404a	" "	H-1033a	" "
H-788	" "	H-1034b	" "
H-949	" "	H-3033	" "

Examined and approved:


Chief, Surveys Section


acting Chief, Section of Hydrography


Chief, Division of Charts


Chief, Division of Coastal Surveys

c/o Postmaster, Norfolk, Va.

Ship OCEANOGRAPHER

February 19, 1942

To: Senior Coast Guard Officer,
First Naval District,
Portland, Maine

From: The Commanding Officer,
U.S.C. & G.S.S. OCEANOGRAPHER

Subject: Charts showing Objects for use in locating Aids
to Navigation

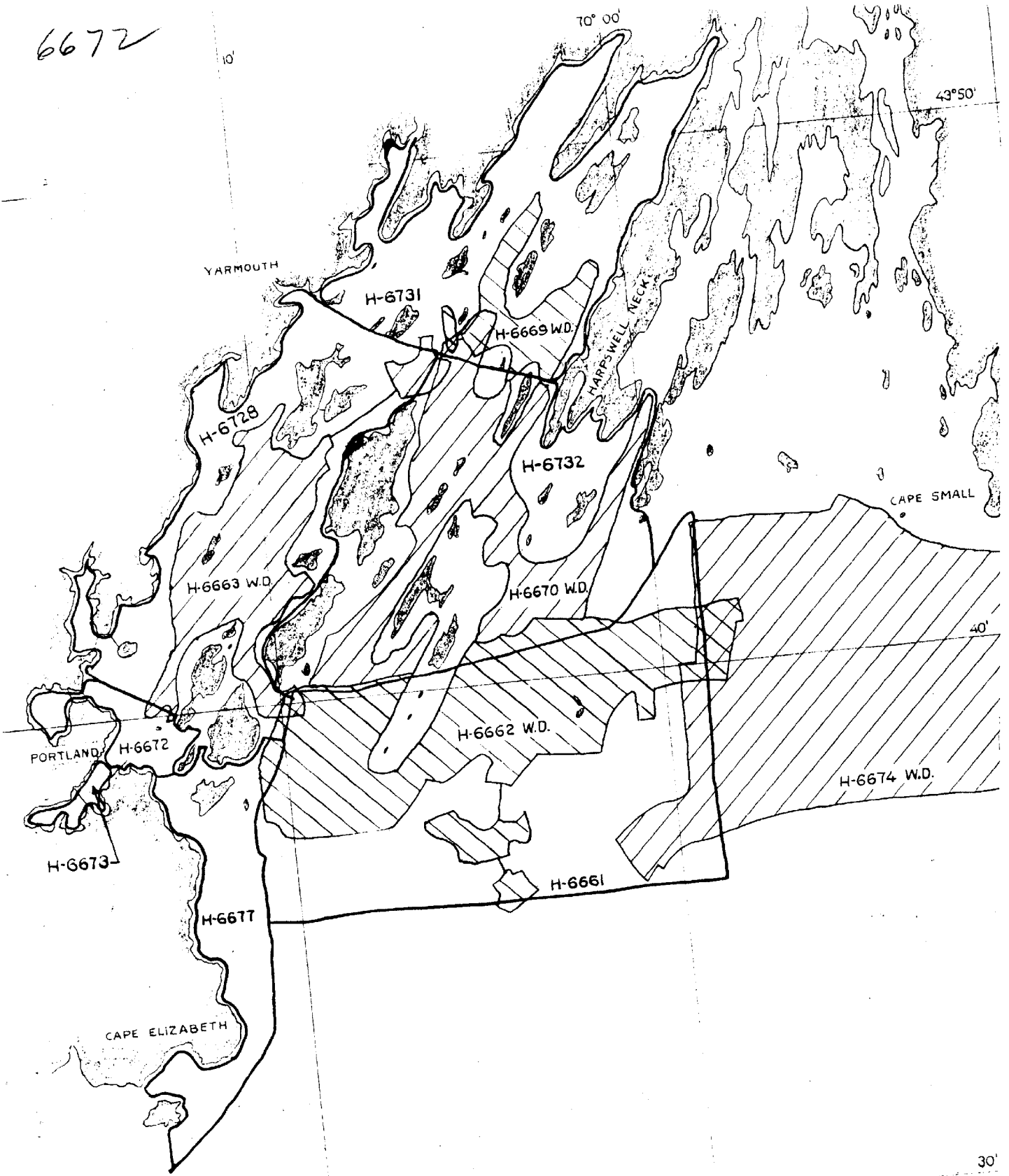
Copies of specially prepared charts number 315 (Casco Bay) and number 325 (Portland Harbor) are being forwarded to you by ordinary mail.

The prepared charts show natural and artificial objects best suited to serve as 3-point fixes for the location of Aids to Navigation within the areas covered by hydrographic surveys by this vessel during the summer field season 1941.

DAJ/n

H. B. Campbell, Commander, C&GS,
Commanding Ship OCEANOGRAPHER

6672



INDEX
PROJECT CS-265
70° 00' CASCO BAY, MAINE

DIVISION OF CHARTS

SURVEYS SECTION

REVIEW OF HYDROGRAPHIC SURVEY

REGISTER NO. 6672

Field No. 501

Maine; Portland Harbor
Surveyed in August - October 1941, Scale 1:5,000
Instructions dated May 7, 1941 (OCEANOGRAPHER)

Soundings:

808-A Recorder,
Hand Lead

Control:

Sextant Fixes on Shore Signals

Chief of Party - F. L. Peacock
Surveyed by - Officers of Ship OCEANOGRAPHER
Protracted by - G. F. Jordan; A. R. Stirni
Soundings plotted by - R. H. Carstens; L. King
Verified and inked by - G. F. Jordan
Reviewed by - J. A. McCormick, March 11, 1942
Inspected by - H. R. Edmonston

1. Shoreline and Signals

The only information on the subject available to the reviewer at this time is shown on T-6846 (1941) covering a small area in the southeast corner of the survey. Topographic maps T-5957 and T-5958 and graphic control surveys (numbers unknown) covering the remainder of the area are still in the processing offices.

2. Sounding Line Crossings

Satisfactory.

3. Depth Curves

Satisfactory.

4. Adjoining Surveys

The junction with H-6677 (1941) on the southeast will be considered in the review of that survey. Adjoining surveys on the north and southwest have not been received from the processing office.

5. Previous Surveys

H-404 (1852-53), 1:10,000; H-404a (1906), 1:10,000
H-788 (1862), 1:20,000; H-949 (1867), 1:5,000;
H-1032 (1868), 1:1,200; H-1033a (1869), 1:2,400;
H-1034b (1869), 1:2,400; H-3033 (1909), 1:10,000

Applied to chart correction 315 Apr. 22, 1942 H.S.M.

Partially applied to cht. 325 June 3, 1942 S.M.A.

Applied to new chart Comp. 201 March 21, 1942 H.S.M.
Review consulted for chart correction, ²⁰¹ Dec. 16 1942 H.S.M.

Applied to Chart 3201 - Jan 8, 1943 - JFW

H.O. N^o 33-1942