

# 7060

Diag'd. on Diag. Ch. No. 1207-2

Form 504	
U. S. COAST AND GEODETIC SURVEY	
DEPARTMENT OF COMMERCE	
DESCRIPTIVE REPORT	
Type of Survey	Hydrographic
Field No.	502
Office No.	H-7060
LOCALITY	
State	Massachusetts
General locality	Boston Harbor
Locality	Mystic River
1945	
CHIEF OF PARTY	
R. R. Moore	
LIBRARY & ARCHIVES	
DATE	Feb. 26, 1946

# 7060

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

REG. NO.

H7060

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-7060

Field No. 502

State MASSACHUSETTS

General locality <sup>INNER</sup> Boston Harbor

Locality Mystic River

Scale 1:5,000 Date of survey 21 May 1945 - 3 July 1945

Instructions dated 17 February 1940

Vessel (Ship GILBERT) Motor Launch

Chief of party Ronald R. Moore

Surveyed by James D. Thurmond

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

Protracted by M.E. Byrd

Soundings penciled by M.E. Byrd

Soundings in fathoms feet at MLW ~~MLLW~~

REMARKS: This sheet was processed in the Hydrographic Section of the Southeastern District, Norfolk, Va.



DESCRIPTIVE REPORT

TO ACCOMPANY

H-7060

HYDROGRAPHIC SURVEY

FIELD NO. GI 502

USC&GSS GILBERT

Renald R. Moore, Comdg.

PROJECT CS-246

SCALE 1:5,000

A. ----- This survey is a part of Project CS-246. It was executed under Instructions from the Director to the Commanding Officer, Steamer OCEANOGRAPHER, dated February 17, 1940.

B. ----- This survey is of the Mystic River, from the Chelsea Street Bridge, Charlestown, Mass. to the locks at Medford Square, and adjoining tributaries. The sheet joins the hydrographic survey H-6995a executed by the Launch FARIS in September 1944. Field work was accomplished between May 21 and July 3, 1945.

C. ----- The field work was accomplished with Motor Launch 316, a 26-foot deisel powered launch, loaned to the USC&GSS GILBERT by the U. S. Army Mine Service, and fitted out for surveying purposes, including the installation of an 808A Submarine Signal Depth Recorder No. 53 by the ship's personnel. This instrument was used for all soundings, giving a continuous profile of the bottom, except for some of the detached positions, when an accurately graduated leadline was used.

D. ----- A portable tide gauge No. 291 was established at the Wellington Memorial Bridge, in Lat.  $42^{\circ} 23.95' N.$ , Long.  $71^{\circ} 05.0' W.$  This gauge did not operate satisfactorily and some of the soundings will have to be reduced from the records of the standard gauge, located at the Appraiser's Stores Bldg., Boston, Mass. using a time correction of -10 minutes.

F. ----- The triangulation control for this sheet was accomplished by various chiefs of party, from 1916 to 1934. As all of the stations used were stacks and tanks, no recovery cards were submitted. The topographic stations were located by air-photographic methods in 1940 and 1943.

Sheets T-5770 and T-5771 are the source of signals. It was necessary to supplement these signals by hydrographic signals which were located by sextant fixes at the signal, or by cuts from adjacent signals. The location of the signals will be found in a separate volume.

G. ----- The shore line and topographic detail on this sheet was transferred from sheets Nos. T-5770 and T-5771 and was found to be correct.

No changes or improvements in the area on T-5770 in the vicinity of Latitude  $42^{\circ} 24.5''$  and Longitude  $71^{\circ} 06.0''$  have been made as yet.

The low water line is defined except for the east side of that section of Malden River above the lower highway bridge. Another line could have been run along this area at high tide, but its value would not have compensated the time lost, as in this area, the party would have had to go under the railroad bridges at low tide and then wait for the tide to rise high enough to do the hydrography.

H. ----- All depths, except those noted, were taken with a type 808A Depth Recorder. The echo soundings were corrected for bar checks taken to the deepest depths sounded for any day. The recorder was operated with the middle reed vibrating. The speed was checked against time signals as sent out by radio station WWV, Bureau of Standards, Washington, D. C. The speed was found to be in error less than 0.4 of 1 percent.

The launch was tested for settlement and squat, and the average for speeds attained on this sheet would be 0.05 feet which is negligible.

A list of the corrections used is attached to this report in addition to the original bar check curves from which they were computed.

I. ----- The horizontal control was by sextant angles on the triangulation, topographic and hydrographic points located as described in paragraph F above. A list of signals used is included in this report.

J. ----- The survey is complete and adequate to supersede prior surveys for charting. No holidays or excessive differences exist between soundings obtained on this survey. *See Review, par. 6*

K. ----- No attempt was made to run a system of cross lines as the area was too restricted. However, in that section between the two lower bridges, i.e. Chelsea Bridge and Everett Bridge, diagonal lines were run. The average crossing is satisfactory on the boat sheet. The tide reducers as computed from the actual tide will eliminate a large percentage of slight differences. In case of any remaining differences, the shoal soundings should be charted in all cases.

L. ----- No prior surveys of recent date were available for comparison. The junction with H-6995A executed by Launch FARIS in 1944 is in close agreement.

M. ----- Comparison with Chart 248. Print date 5/16/44. The survey is in close agreement with Chart 248. A sounding of ~~22.5~~<sup>22.4</sup> feet by fathometer and 25.5 feet by handlead was obtained on a pinnacle off the entrance to Island End Creek. This was reported on Form 786, Advance Report of Dangers to be Charted. The U. S. Engineers Department upon investigation found a sunken barge and reported in October 1945 as having removed it, and that depths in this vicinity are now 28.5 feet.

L. 529 (1945)

Sp. 40245 N.E.

N. ----- Dangers and Shoals. There are no changes on shoals that are not already charted.

O. ----- Coast Pilot. The description of this area as in the present Coast Pilot is adequate.

P. ----- There are no fixed aids to navigation in the area covered ✓  
by this survey.

FLOATING AIDS TO NAVIGATION

NAME	LATITUDE LONGITUDE	DEPTH	POSITION	DATE
Island End Flats Buoy #2	42° 23.19'N 71° 03.12'W	33.0 ✓	1b	5/28/45
" " Pt. " #4	42° 23.22'N 71° 03.27'W	27.0	2b	5/28/45
Mystic " #8	42° 23.24'N 71° 04.07'W	29.6	28a	5/25/45
Merrimac Channel Buoy #1	42° 23.52'N 71° 04.35'W	20.4 ✓	73g	6/11/45
Malden River Buoy #9	42° 23.80'N 71° 04.64'W	4.3	1g	6/11/45

Q. ----- The landmarks as reported by the field inspection party and ✓  
indicated on the compilations were found to be adequate.

R. ----- The Geographic Names as reported by the field inspection ✓  
party were found to be adequate. 84 ✓

TIDAL NOTE

A portable automatic tide gage was maintained at the Wellington Memorial Bridge. Mean low water corresponded with a height of 2.8 feet on staff and the time difference with standard gage at Boston is 10 minutes. The portable gage did not operate satisfactorily and when not operating the records of the Boston gage were used with the above time difference. The tide gage used is noted on the processing record at end of day.

STATISTICS FOR HYDROGRAPHIC SURVEY H-

USC&GSS GILBERT

Launch M 316

<u>VOLUME NUMBER</u>	<u>DAY LETTER</u>	<u>DATE</u>	<u>NUMBER OF SOUNDINGS</u>	<u>NUMBER OF POSITIONS</u>	<u>STATUTE MILES SOUNDINGS</u>
1	a	5-25-45	*	64	5.7
1	b	28	*	121	10.9
1,2	c	29	*	117	7.7
2	d	6-4-45	*	73	5.8
2	e	7	*	102	8.5
2	f	8	*	105	6.1
3	g	11	*	73	4.6
3	h	12	*	98	6.3
3	j	13	*	66	4.1
3,4	k	14	*	70	5.9
4	l	22	*	57	3.0
4	m	25	*	33	1.9
4	n	7-3-45	*	18	0.8
Total				997	71.3

AREA: 1.5 square statute miles

\* Indicates continuous profile



BAR CHECK CORRECTIONS for SHEET H- 7260

USC&GSS GILBERT

Launch M 316

"a" day 25 May 1945

2.0' to 4.0' Correction -0.4'  
4.0' to 7.0' " -0.6'  
7.0' to 40.0' " -0.8'

For the rest of this sheet, no correction  
need be applied.

\* \* \* \* \*

CORRECTIONS for SETTLEMENT and SQUAT

July 24, 1945

Tests were made to ascertain the amount of settlement and squat of Launch M 316. A level was set up on the Appraiser's Stores Dock. The launch was run to and from the instrument at varying speeds and a level rod was held on the fish. An observer read the tide staff when the level man read the rod. The results are tabulated below.

<u>TIME</u>	<u>RPM</u>	<u>ROD RDG.</u>	<u>TIDE CORR.</u>	<u>CORR. ROD RDG.</u>	<u>SQUAT</u>
12:57	0	10.02			
13:15	600	10.45	-0.45	10.00	0.02 ft.
:17	800	10.64	-0.50	10.14	0.12 "
:23	1000	10.84	-0.65	10.19	0.17 "
:27	1500	11.01	-0.75	10.26	0.24 "

SIGNALS USED

USC&GSS GILBERT

PROJECT CS-246

MYSTIC RIVER .

SHEET NO. GI-502

\* \* \* \* \*

TRIANGULATION STATIONS

NCR Charlestown East Stack 1934  
SOW Charlestown West Stack 1934  
BED Charlestown, U. S. Gypsum Co. Tank ✓  
(B&M RR) 1916-34  
NAV Chelsea Naval Hospital Tank 1934  
TAC Everett Merrimac Chemical Co. Stack 1934  
RAT Schrafft Stack 1934  
FORD Somerville Ford Tank 1934

\* \* \* \* \*

TOPOGRAPHIC STATIONS

T-5770

ACE	DOME	MAN	SPI
BAR	EAST	MO	TAR
DID	ERG	PAR	WEST

\* \* \* \* \*

T-5771

CAT	GAS	RED
DUO	MUD	TALL
FAT		THIN

\* \* \* \* \*

HYDROGRAPHIC SIGNALS

BOS	ON	ROL
DOG	POLE	SIR
FIT	R.ID	SKY

HYDROGRAPHIC SIGNALS

BOS THIN 92° 30'  
 NOR  
 FORD 100° 50'  
 RAT-NOR 33° 19'

DOG THIN 60° 33'  
 GAS  
 NAV 79° 53'  
 GAS-RID 115° 19'

FIT Located by cuts

THIN 76° 10' NOR 43° 10' EAST 122° 57'  
 NOR NAT TALL  
 FORD 115° 18' TOM 73° 29' RAT 39° 17'  
 NOR-FIT 119° 45' FIT-TOM 73° 19' TALL-FIT 35° 26'

ON Mystic River Nun Buoy #2 ✓  
 NOR 15° 07'  
 THIN  
 CAT 119° 28'

POLE SPI 37° 36'  
 DOME  
 PAR 83° 24'  
 DOME-ERG 93° 58'

RID THIN 81° 13'  
 NAV  
 CUP 43° 37'  
 CAT-NAV 34° 57'2

SIR DOME 46° 07'  
 PAR  
 WEST 05° 46'  
 PAR-FORD 17° 56'

Note: CUP is Green Cupola Clock  
 Tower on Tepe 5771. It is  
 just off of hydro sheet.

ROL Located by cuts

ACE 47° 11' ACE 31° 02' ERG 42° 32'  
 WEST WEST WEST  
 FORD 47° 43' FORD 66° 47' FORD 65° 46'  
 WEST-ROL 100° 24' ROL-WEST 101° 08' FORD-ROL 99° 23'

SKY Located by cuts

DOME 86° 19' DOME 52° 23' PAR 72° 58'  
 ERG PAR ERG  
 EAST 34° 02' ERG 66° 22' WEST 18° 33'  
 SKY-ERG 116° 59' SKY-DOME 101° 53' SKY-ERG 133° 19'

APPROVAL SHEET


No. H-7060

The records and boat sheet for Survey No. GI-502 are herewith approved. It should be borne in mind that this descriptive report was written prior to the plotting of the smooth sheet and is subject to revision, as indicated by the notes attached to this report by the Norfolk Processing Office.

The records and boat sheet were subjected to frequent inspections as the work progressed and I consider the survey complete and adequate and no other additional work is recommended. ✓

The Supervisor, N. E. District, informed me to consider, at all times, this survey as basic, and the field work was accomplished with this end in view.

RRM:wn

  
Ronald R. Moore,  
Lieut. Comdr., C&GS  
Chief of Party

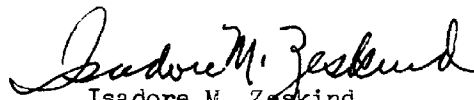
A D D E N D U M

to accompany

HYDROGRAPHIC SURVEY NO. H-7060 (Field No. Gi-502)

The shoreline shown in <sup>dashed-red</sup> pencil on the smooth sheet was taken from the boat sheet. It was the opinion of the chief of party in charge of this survey where differences of shoreline occurred between the boat sheet and the copy of airphoto compilation available at this office, the boat sheet delineation represented the shoreline at the time the survey was made. (The boat sheet containing the shoreline was furnished the survey party by the supervisor of the Northeastern District.)

Respectfully submitted

  
Isadore M. Zeskind  
Cartographic Engineer

Norfolk, Virginia  
February 21, 1946

Approved & Forwarded



Paul C. Whitney  
Supervisor SE District

Appraiser Stores.

MLW 3.3

Form 362  
Ed. May, 1929  
DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

# TIDES: HOURLY HEIGHTS

Station: \_\_\_\_\_ Year: \_\_\_\_\_  
 Observer: \_\_\_\_\_ Lat. \_\_\_\_\_ Long. \_\_\_\_\_  
 Time Meridian: \_\_\_\_\_ Height datum is \_\_\_\_\_ which is \_\_\_\_\_ ft. below B. M. \_\_\_\_\_

U. S. GOVERNMENT PRINTING OFFICE 11-792

Month and Day	mo.	d.	d.	d.	d.	d.	d.	d.	d.	d.	Horizontal Sum	
Day of Series												
	May	28	29				July	3	July	16	July	17
Hour	Feet		Feet		Feet		Feet		Feet		Feet	Feet
0	.		.		.		.		.		.	.
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6	.		.		.		.		.		.	.
7	.		.		.		.		.		.	.
8	4.0		3.7		.		10.9		.		.	.
9	5.4		5.0		.		8.7		.		.	.
10	7.3		6.4		.		6.5		.		.	.
11	9.5		8.6		.		4.4		.		.	.
Noon	11.3		10.7		.		3.3		4.6		4.2	.
13	12.4		12.3		.		.		5.8		4.8	.
	12.4	13:24			.		.		.		.	.
14	12.0		12.8		.		.		7.4		6.2	.
15	10.7		12.1		.		.		9.2		7.6	.
16	9.0		10.6		.		.		11.1		.	.
17	7.1		8.9		.		.		11.9		.	.
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Sum	.		.		.		.		.		.	.

Sum for \_\_\_\_\_ = \_\_\_\_\_ Divisor = (28d) 672; (29d) 696; (30d) 720; (31d) 744. Mean for month = \_\_\_\_\_

Tabulated by \_\_\_\_\_ Date \_\_\_\_\_ Summed by \_\_\_\_\_ Date \_\_\_\_\_

MLW 3.3

Lieut. Comdr. R. R. Moore

Form 362  
Ed. May, 1929  
DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY

# TIDES: HOURLY HEIGHTS

Station: \_\_\_\_\_ Year: \_\_\_\_\_  
Observer: \_\_\_\_\_ Lat. \_\_\_\_\_ Long. \_\_\_\_\_  
Time Meridian: \_\_\_\_\_ Height datum is \_\_\_\_\_ which is \_\_\_\_\_ ft. below B. M. \_\_\_\_\_

U. S. GOVERNMENT PRINTING OFFICE 11-792

Month and Day	mo.	d.	d.	d.	d.	d.	d.	d.	Horizontal Sum				
Day of Series	JUNE	4	JUNE	12	JUNE	13	JUNE	14	JUNE	22	JUNE	25	
Hour	Feet		Feet		Feet		Feet		Feet		Feet		Feet
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7	.		.		.		.		.		.		.
8	10.0		2.4		2.6		4.1		10.2		6.1		.
9	7.9		4.0		2.8		2.9		11.5		8.1		.
10	6.9		5.9		4.4		3.5		12.2		10.2		.
11	4.2		8.3		6.4		5.0		11.6		12.0		.
Noon	4.3		11.1		8.8		6.9		10.5		12.7		.
13	5.4		12.7		11.3		9.2		8.8		12.3		.
14	6.8		13.3		12.9		11.4		7.0		11.0		.
15	8.8		12.3		13.1		12.6		5.5		9.2		.
16	10.7		10.6		12.0		12.7		4.8		7.2		.
17	12.4		8.3		10.2		11.6		5.6		5.5		.
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(over)

Sum for \_\_\_\_\_ = \_\_\_\_\_ Divisor = (28d) 672; (29d) 696; (30d) 720; (31d) 744. Mean for month = \_\_\_\_\_

Tabulated by \_\_\_\_\_ Date \_\_\_\_\_ Summed by \_\_\_\_\_ Date \_\_\_\_\_

# TIDES: HOURLY HEIGHTS

MLW 2.8  
Wellington Bridge

Station: \_\_\_\_\_ Year: \_\_\_\_\_  
 Observer: \_\_\_\_\_ Lat. \_\_\_\_\_ Long. \_\_\_\_\_  
 Time Meridian: \_\_\_\_\_ Height datum is \_\_\_\_\_ which is \_\_\_\_\_ ft. below B. M. \_\_\_\_\_

U. S. GOVERNMENT PRINTING OFFICE 11-792

Month and Day	mo.	d.	d.	d.	d.	d.	d.	d.	d.	Horizontal Sum		
May 25	May	25	28	29	June 4	7	8	11				
Day of Series	W	a	b	c	d	W	e	W	F	W		
Hour	Feet		Feet		Feet		Feet		Feet		Feet	
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7	.		.		.		.		.		.	
8	6.7		.		.		11.0		9.0		2.8	
9	8.6		.		.		12.6		11.7		4.9	
10	10.6		.		.		12.65		12.4		7.1	
11	11.7		.		.		11.2		13.0		9.6	
11:30	11.8		.		.		11.2		12.9		9.6	
Noon	11.8		.		.		9.3		11.6		11.8	
13	10.6		.		.		7.0		9.6	H.T.	13.1	
14	9.0		.		.		4.7		7.1		12.6	
15	7.1		.		.		3.0		4.5		10.8	
16	5.2		.		.		2.8		2.8		8.8	
17	4.0		.		.		2.9		4.4	1640	2.2	
18	.		.		.		4.4		2.4		6.4	
19	.		.		.		.		.		.	
20	.		.		.		.		.		.	
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22	.		.		.		.		.		.	
23	.		.		.		.		.		.	
Sum	.		.		.		.		.		.	

Sum for \_\_\_\_\_ Divisor=(28d) 672; (29d) 696; (30d) 720; (31d) 744. Mean for month=

Tabulated by \_\_\_\_\_ Date \_\_\_\_\_ Summed by \_\_\_\_\_ Date \_\_\_\_\_



# TIDES: HOURLY HEIGHTS

Station: \_\_\_\_\_ Year: \_\_\_\_\_

Observer: \_\_\_\_\_ Lat. \_\_\_\_\_ Long. \_\_\_\_\_

Time Meridian: 8-93° K Height datum is \_\_\_\_\_ which is \_\_\_\_\_ ft. below B. M.

U. S. GOVERNMENT PRINTING OFFICE 11-792

Month and Day	mo.	d.	d.	d.	d.	d.	d.	d.	d.	Horizontal Sum	
June 12		12	13	14	22	25	July 3	July 16			
Day of Series	b	j	k	l	m	n	o	p			
Hour	Feet		Feet		Feet		Feet		Feet		Feet
0	.		.		.		.		.		.
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Noon	.		.		.		.		.		.
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23	.		.		.		.		.		.
Sum	.		.		.		.		.		.

Sum for \_\_\_\_\_ = Divisor=(28d) 672; (29d) 696; (30d) 720; (31d) 744. Mean for month=

Tabulated by \_\_\_\_\_ Date \_\_\_\_\_ Summed by \_\_\_\_\_ Date \_\_\_\_\_

GEOGRAPHIC NAMES

Survey No.

H7060

Name on Survey

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>Boston Inner Harbor</u>			(for title)							1
<u>Mystic River</u>										2
<u>Malden River</u>										3
<u>Island End River</u>										4
										5
										6
										7
										8
										9
										10
										11
										12
<u>Wellington Bridge</u>			(tide staff locations)							13
<u>Appraisers Wharf</u>										14
										15
										16
										17
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										25
										26
										27

Checked and approved  
 by A. Heck on 11/18/46

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. ....

Records accompanying survey:

Boat sheets 1...; sounding vols. .5...; wire drag vols. ....;
bomb vols. ....; graphic recorder rolls .10...;
special reports, etc. ....

The following statistics will be submitted with the cartog-
rapher's report on the sheet:

Number of positions on sheet ..... 997
Number of positions checked ..... 77
Number of positions revised ..... 5
Number of soundings revised (refers to depth only) ..... 16
Number of soundings erroneously spaced ..... 29
Number of signals erroneously plotted or transferred ..... 0
Topographic details Time 23 hrs.
Junctions Time 9 hrs.
Verification of soundings from graphic record Time 6 hrs.

Verification by Francis J. ORTIZ Total time 20 1/2 hrs Date 10/25/46

Reviewed by J. J. Jordan Time 23 Date 11/1/46

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. 7060

FIELD NO. 502

Massachusetts, Boston Inner Harbor, Mystic River  
Surveyed in May to July 1945      Scale 1:5,000  
Project No. CS-246

Soundings:

Control:

808A Fathometer

Sextant angles on shore signals

Chief of Party - R. R. Moore  
Surveyed by - J. D. Thurmond  
Protracted by - M. E. Byrd  
Soundings plotted by - M. E. Byrd  
Verified and inked by - F. J. Ortiz  
Reviewed by - G. F. Jordan, November 1, 1946  
Inspected by - H. W. Murray

1. Shoreline and Control

Shoreline and control originate with air photographic surveys T-5770 and T-5771 which were corrected to 1943, and with 1934 triangulation stations. The dashed-red shoreline in the vicinity of lat.  $42^{\circ} 25.6'$ , long.  $71^{\circ} 06.0'$  is from the boat sheet.

2. Sounding Line Crossings

Satisfactory.

3. Bottom Configuration

The down-stream half of the Mystic River on this survey has been dredged. The remainder of the survey shows the usual tributaries and mud flats.

Configuration of the bottom is satisfactorily delineated by hydrography and depth curves.

4. Adjoining Surveys

A satisfactory junction is effected with H-6995a (1944), at the southeast end of this survey.

5. Prior Surveys

H-850 (1861) Scale 1:10,000; H-1955 (1861) Scale 1:10,000  
H-1960 (1860) Scale 1:20,000; H-2156 (1892-93) Scale 1:10,000

H-850 and H-2156 are well developed surveys which compare favorably with the present survey in undredged and unimproved areas.

H-1955 and H-1960 show very little hydrography and for that reason a satisfactory comparison with the present survey could not be made.

These prior surveys are superseded except for bottom characteristics which have been carried forward in undredged areas.

6. Comparison with Chart 248 (Print date of May 18, 1946)

a. Hydrography

Charted hydrography originating with the aforementioned prior surveys has been largely superseded by after-dredging surveys and by surveys of water-front improvements.

Present hydrography has been partially applied before verification and review.

Present hydrography is adequate to supersede charted hydrography except for the following:

- (1) The charted 25-ft. sounding at lat.  $42^{\circ} 23.10'$ , long.  $71^{\circ} 03.42'$ , from a survey by the Department of Public Works of Massachusetts in 1935 (Bp. 28659) should be retained. The 25 falls in 28-ft. depths between lines spaced 40 meters apart on the present survey.
- (2) Two charted ledges in the vicinity of lat.  $42^{\circ} 23.28'$ , long.  $71^{\circ} 03.25'$ , from a survey by the Boston Navy Yard in 1923 (Bp. 18648) should be retained. Although the ledges were not investigated, minus soundings on a line on the present survey substantiate the existence of the northerly ledge.
- (3) The charted 24-ft. sounding at lat.  $42^{\circ} 23.17'$ , long.  $71^{\circ} 03.59'$ , from a survey by the U. S. Engineers 1938 is considered to have resulted from a 10-ft. error and should be rejected. This blueprint (scale 1:1,000) shows the 24 closely sur-

rounded by 34-ft. soundings. Both the present survey and a subsequent survey by the U. S. Engineers in 1946 (Bp. 41044) show 29 to 30-ft. depths here. The 26-ft. sounding 20 meters south on the present survey is adequate for charting purposes.

b. Aids to Navigation

Aids on the present surveys agree satisfactorily with charted aids and satisfactorily mark the features intended.

7. Condition of the Survey

- a. The sounding records and Descriptive Report are complete in all detail.
- b. The smooth sheet was satisfactorily plotted.
- c. The 25-ft. sounding in 29-ft. depths at lat.  $42^{\circ} 23.25'$ , long.  $71^{\circ} 03.85'$  is substantiated by shoal soundings on two other lines but was not further investigated.

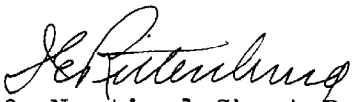
8. Compliance with Project Instructions

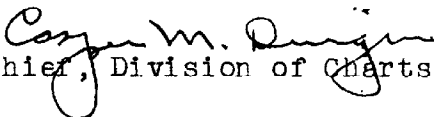
The survey adequately complies with the project instructions.

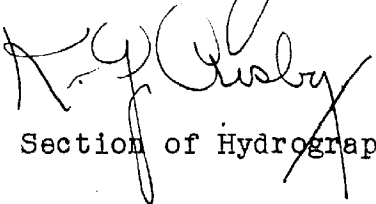
9. Additional Field Work

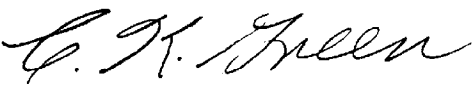
This is a basic survey and no additional field work is recommended.

Examined and approved:

  
Chief, Nautical Chart Branch

  
Chief, Division of Charts

  
Chief, Section of Hydrography

  
Chief, Division of Coastal Surveys

*N.W.M.*

## TIDE NOTE FOR HYDROGRAPHIC SHEET

March 21, 1946

~~Division of Hydrography and Topography:~~

Division of Charts: H. W. MURRAY

Plane of reference approved in  
5 volumes of sounding records for

HYDROGRAPHIC SHEET 7060

Locality Mystic River, Boston Harbor

Chief of Party: R. R. Moore in 1945  
Plane of reference is mean low water, reading  
2.8 ft. on tide staff at Wellington Bridge  
20.4 ft. below B. M. 1 at " "

16.3 ft. below B. M. 13 at Appraisers Wharf.

Height of mean high water above plane of reference is 9.4 feet.

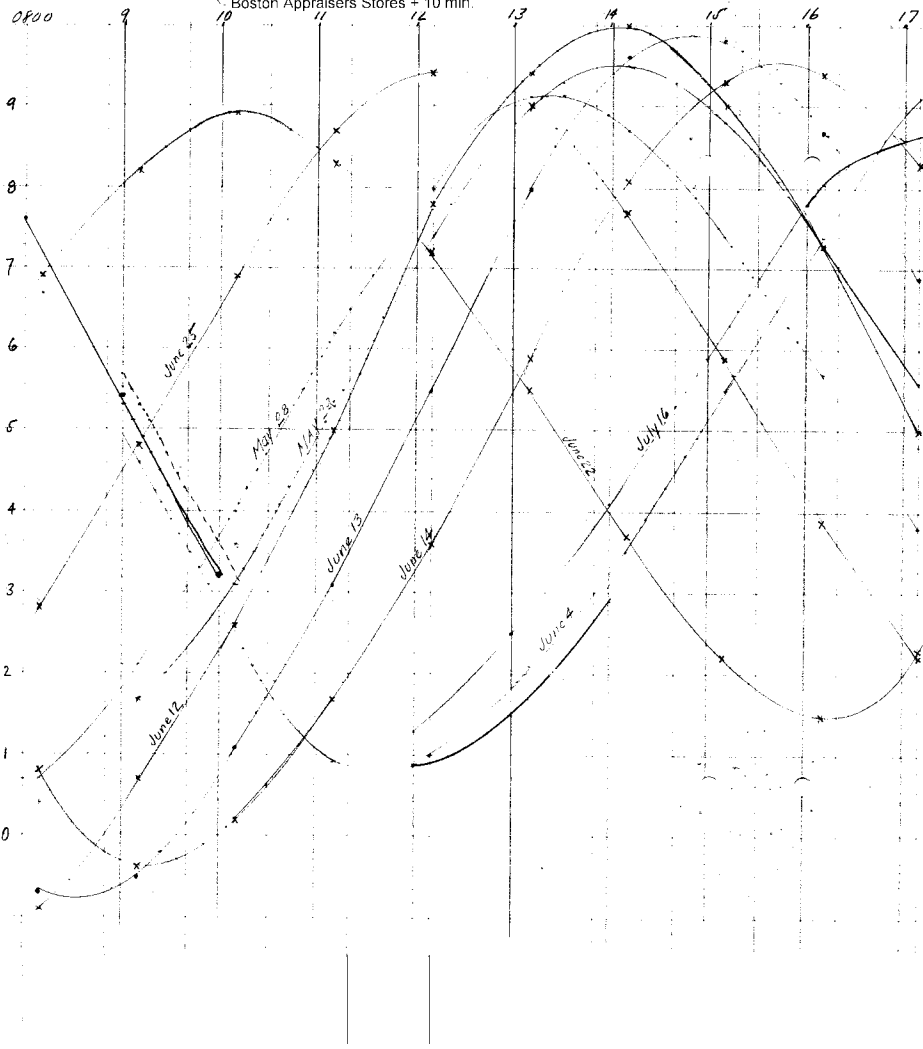
Condition of records satisfactory except as noted below:

*C. K. Green*

Chief, Division of Tides and Currents.

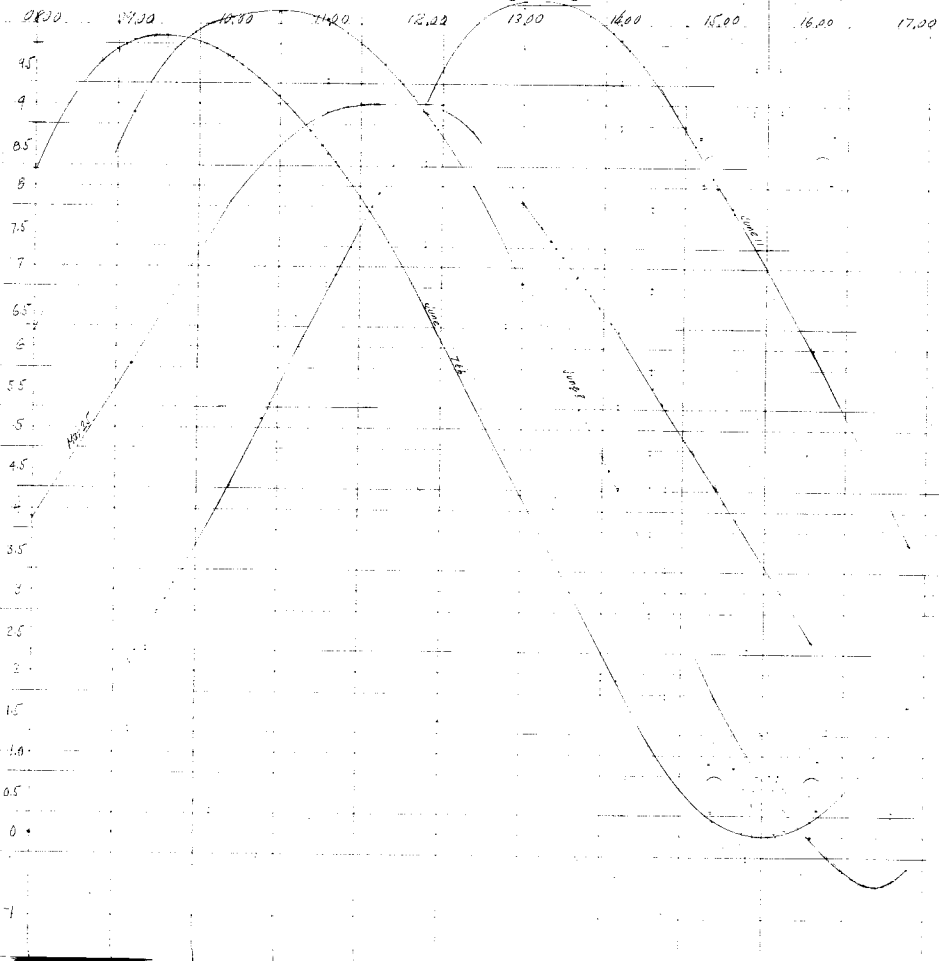
13852011 11/11/11  
Boston Appraisers Stores + 10 min.

0800

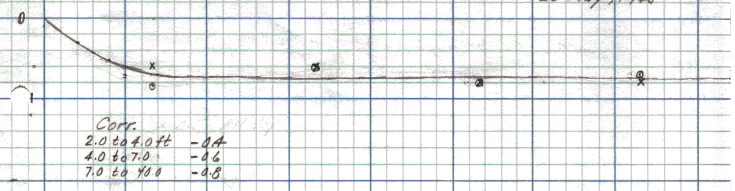




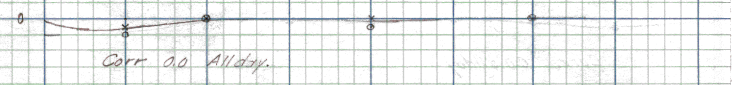
88 Wellington Bridge



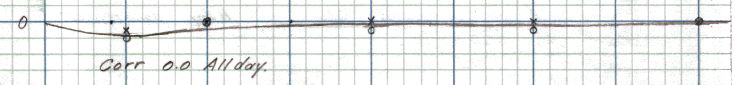
a day Sheet 502  
25 May 1941



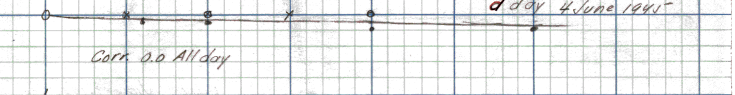
b day 28 May 1941



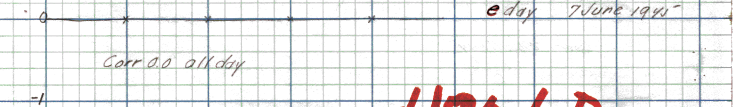
c day 29 May 1941



d day 4 June 1941



e day 7 June 1941



H7060

