

7066

Diag'ed. on Diag. Ch. No. 127⁰⁷~~28~~ - 2

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey HYDROGRAPHIC

Field No. GI-1004 Office No. H-7066

LOCALITY

State MASSACHUSETTS

General locality BOSTON HARBOR

Locality Dorchester Bay

194 5

CHIEF OF PARTY

Ronald R. Moore

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DATE APR 24 1946

7066

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

REG. NO.
H7066

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-7066

Field No. 1004

State MASSACHUSETTS

General locality BOSTON HARBOR

Locality ~~Quincy and Dorchester Bays and tributaries~~

Scale 1:10000 Date of survey 31 August - 15 October 1945

Instructions dated 17 February 1940 ; Suppl. - 23 July, 1945

Vessel USC&GSS GILBERT

Chief of party Ronald R. Moore

Surveyed by James D. Thurmond

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

Protracted by Mary T. Miller

Soundings penciled by R.J. Auld

Soundings in fathoms feet at MLW ~~MLLW~~

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



DESCRIPTIVE REPORT

TO ACCOMPANY

HYDROGRAPHIC SURVEY
USC&GSS GILBERT

FIELD NO. GI 1004
Ronald R. Moore, Comdg.

Project CS-246

Scale 1:10000

H-7066

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, July 23, 1945

B. ----- The Survey is of Dorchester Bay, Neponset River, to the head of navigation at Milton Mills, the western part of Quincy Bay and the adjoining tributaries. The sheet joins the hydrographic surveys H-6995a executed by the Launch FARIS in September 1944 and sheet 6643 executed in 1940 by the field party of the OCEANOGRAPHER.

C. ----- The field work was accomplished with Motor Launch 316, a 26-foot diesel 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 gage, No. H-299, was established at the Neponset Highway Bridge, in Lat. $42^{\circ} 17' 04''$, Long. $71^{\circ} 02' 25''$. This gage performed excellently and was used for reducing all the soundings.

F. ----- The triangulation control for this sheet was accomplished by various chiefs of party, from 1933 to 1934. As all of the stations used were spires, tanks, and stacks, no recovery cards were submitted. The topographic stations were located by air-photographic methods in 1940 and 1943.

Hydrographic stations REN and HUT were located by the hydrographic party, by the use of sextants and plotting the 3-point fixes. The angles for these two stations are in sounding Vol. No. 1.

G. ----- The shoreline and topographic detail on this sheet was transferred from sheets Nos. 5771, 5772, and 5775, 1944 compilation and found to be correct as except noted below. ✓

The area in the vicinity of Lat. $42^{\circ} 19.09''$, Long. $71^{\circ} 02.38''$ is being filled slowly.

The low water line is defined, except in a few places where the shoreline was too steep or rocky to get the launch in close enough to define it. ✓

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. ✓

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, except at the south end of Governor's Island where dredging operations are still in progress. * See "Review"

K. ----- Crosslines were run, and they are in close agreement except in a few cases. The smooth plotting, using bar corrections and the actual tides, should smooth out what discrepancies there are now on the boat sheet. ✓

L. ----- No prior surveys of recent date were available for comparison. The junction with 6995a executed by the Launch FARIS in 1944 is in close agreement, except for the dredging around the south end of Governor's Island. ✓

The junctions with sheet 6643 executed by the field party of the OCEANOGRAPHER in 1940 is in close agreement. ✓

M. ----- Comparison with U. S. C. & G. S. Chart No. 246, printed 44-6/23.

The survey is in close agreement with Chart 246, except there has been some shoaling in the Neponset River, and the dredged channel into Squantum Yacht Club, Quincy Bay.

N. ----- Dangers and Shoals.

There are no changes on shoals that are not already charted.?

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

P. ----- The following are the Floating Aids to Navigation in this area:

NAME	LATITUDE			DEPTH L.L.	POSITION	DATE
	LONGITUDE					
	°	'	"			
Main Channel Buoy No. 8 Lighted	42	20	35N	40.2	1 n	9/26/45
	71	00	34W			
Main Channel Red Nun No. 6	42	20	24N	31.2	2 n	"
	71	00	16 W			
Main Channel Black Can No. 3	42	20	11N	41.7	3 n	"
	71	00	20W			
Main Channel Black Light No. 3, N side of junction channel to Pleasure Bay	42	20	02N	41.2	4 n	"
	71	00	03W			
Main Channel Black Can No. 1A, S side of junction of channel to Pleasure Bay	42	19	55N	24.7	5 n	"
	70	59	50W			
Main Channel lighted Buoy No. 1	42	19	51N	42.2	6 n	
	70	59	31 W			

NAME	LATITUDE			DEPTH L.L.	POSITION	DATE
	°	'	"			
Main Channel Nun Buoy No. 2A	42	20	07N	26.2 ✓	7 n ✓	9/26/45
	70	59	02W			
Black and Red Striped Buoy, E end of Lower Middle Channel	42	20	17N	20.2 ✓	8 n ✓	"
	70	59	02W			
S side of Governor's Id Flat, Nun No. 2	42	20	29N	18.2 ✓	9 n ✓	"
	70	59	33W			
Main Channel Bell Buoy No. 2	42	20	05N	26.0 ✓	12 n ✓	"
	70	59	27W			
Main Channel Buoy Lighted No. 2	42	20	04N	36.0 ✓	13 n ✓	"
	70	59	28W			
Main Channel Buoy Lighted No. 4	42	20	11N	32.8 ✓	14 n ✓	"
	70	59	56W			
Lower Middle Ground, Buoy No. 4A	42	20	20N	17.1 ✓	15 n ✓	"
	70	59	57W			
Pleasure Bay Buoy No. 2	42	19	55N	16.4 ✓	18n ✓	"
	71	00	22W			
Pleasure Bay Buoy No. 4	42	19	55N	15.2 ✓	19 n ✓	"
	71	00	37W			
Pleasure Bay Buoy No. 6	42	19	55N	17.2 ✓	20 n ✓	"
	71	00	52W			
Pleasure Bay Buoy No. 8	42	19	55N	20.2 ✓	21 n ✓	"
	71	00	58W			
Pleasure Bay Buoy No. 10	42	19	57N	18.0 ✓	22 n ✓	"
	71	01	04W			
Pleasure Bay Buoy No. 12	42	20	01N	26.0 ✓	23 n ✓	"
	71	01	05W			

NAME	LATITUDE			DEPTH L. L.	POSITION	DATE
	°	'	"			
Pleasure Bay Buoy No. 19	42	20	11N	16.4 ⁹	24 n	9/26/45
	71	01	03W			
Pleasure Bay Buoy No. 17	42	20	10N	13.2	25 n	"
	71	01	16W			
Pleasure Bay Buoy No. 15	42	20	02N	12.7	26 n	"
	71	01	12W			
Pleasure Bay Buoy No. 13	42	19	59N	11.5	27 n	"
	71	01	12W			
Pleasure Bay Buoy No. 11	42	19	57N	12.0	28 n	"
	71	01	10W			
Pleasure Bay Buoy No. 9	42	19	55N	13.0	29 n	"
	71	01	07W			
Pleasure Bay Buoy No. 7	42	19	52N	15.8	30 n	"
	71	01	01W			
Pleasure Bay Buoy No. 5	42	19	52N	14.8	31 n	"
	71	00	53W			
Pleasure Bay Buoy No. 3	42	19	51N	13.8	32 n	"
	71	00	38W			
Pleasure Bay Buoy No. 1	42	19	51N	16.8	33 n	"
	71	00	22W			
Old Harbor Shoal Buoy No. 2	42	19	40N	18.6	34 n	"
	71	00	05W			
Thompson I. Pt. Buoy No.	42	19	26N	19.6	35 n	"
	71	00	08W			
Thompson I. East Buoy No. 1	42	19	16N	14.9	36 n	"
	70	59	44W			
Thompson I. East Lighted Buoy No. 3	42	19	02 N	15.0	37 n	"
	70	59	26W			

NAME	LATITUDE			DEPTH	POSITION	DATE
	°	'	"			
Spectacle I. South Spit Buoy No. 6	42	19	05N	14.0	38 n	9/26/45
	70	59	14W			
Thompson I. Flats Buoy No. 3	42	19	01N	17.7	39 n	"
	71	01	15W			
Old Harbor Buoy No. 4	42	18	58N	16.2	40 n	"
	71	01	26W			
Calf Pasture Channel Buoy No. 2	42	18	37N	13.5	41 n	"
	71	01	48W			
Squantum Channel No. 1	42	18	28N	13.2	42 n	"
	71	01	48W			
Squantum Channel No. 6	42	18	10N	18.4	52 n	"
	71	01	55W			
Squantum Channel No. 4	42	18	14N	20.2	53 n	"
	71	01	56W			
Squantum Channel No. 2	42	18	17N	20.2	54n	"
	71	01	56W			
Squantum Channel No 3	42	18	23N	11.0	55 n	"
	71	01	54			
Squantum Channel Buoy	42	18	26N	12.0	56 n	"
	71	01	54W			
Cow Pasture Flats Lighted Buoy No. 6	42	18	28N	20.0	57 n	"
	71	01	58W			
Farm Pt. Shoal No. 5	42	18	22N	14.8	58 n	"
	71	02	20W			
Squantum Buoy No. 7	42	18	12N	21.6	59 n	"
	71	02	33W			
Tilston Flats Buoy No. 9	42	17	48N	17.4	60 n	"
	71	02	38W			
Chatham Pt. Flats Buoy No. 11	42	17	43N	16.9	61 n	"
	71	02	34			

NAME	LATITUDE LONGITUDE	DEPTH L. L.	POSITION	DATE
Minots Pt. Flats Buoy No. 8	42 17 33N 71 02 15W	16.7	62 n	9/26/45
Neponset River Channel Buoy No. 13	42 17 25N 71 02 08W	14.7	63 n	"
Woods Pt. Flats Buoy No. 10	42 17 19N 71 02 08W	10.0	64 n	"
Wollaston Channel Buoy No. 2	42 17 20N 71 00 14W	8.2	123q	10/9/45
Wollaston Channel Buoy No. 1	42 17 17N 71 00 14W	7.1	124 q	"
Wollaston Channel Buoy No. 4	42 16 57N 71 00 34W	4.8	125 q	"
Wollaston Channel Buoy No. 3	42 16 57N 71 00 32W	2.8	126 q	"

The only fixed aid to navigation is Castle Rocks Fog Signal (REN).

Siren on pile cluster, 42 20 06N ✓ Cut in Vol. No. 1 9/6/45 ✓
540 yds. SE of Castle Id. 71 00 16W Signal REN

TEMPORARY LANDMARKS

Depermig Control House 42 20 20N ✓ Cut in Vol. No. 1 ✓
on the S side of Lower 70 59 44W ✓ Signal HUT
Middle Ground

Cluster of piles with 42 20 17N ✓ 16 n ✓ 9/26/45 ✓
a light at Deperm House 70 59 46W ✓

Cluster of piles with 42 20 16N ✓ 17 n ✓
a light at Deperm House 70 59 48W ✓

Q. ----- The landmarks as reported by the field inspection party and indicated on the compilations were found to be adequate. Chart Letter No. 600 (1940)

The temporary landmarks reported above were located by sextant angles and are military installations and in all probability are temporary in nature.

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

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TIDAL NOTE

A portable automatic tide gage was maintained at the Neponset River Highway Bridge (Old Colony Road). Mean Low Water corresponds to a reading of 1.8 feet on the staff, reference letter 36-mlh dated 14 August 1945 from the Director of the U. S. C. & G. Survey, Washington, D. C.

STATISTICS FOR HYDROGRAPHIC SURVEY H-

Field No. GI 1004

USC&GSS GILBERT

Launch M 316

Volume Number	Day Letter	Number of Soundings	Number of Positions	Statute Miles of Soundings	Date
1	a	*	102	16.2	8/31/45
1&2	b	*	207	30.5	9/6/45
2	c	*	211	28.9	7
2&3	d	*	83	11.5	10
3	e	*	65	9.5	11
3	f	*	91	12.8	12
3&4	g	*	208	29.6	13
4	h	*	162	18.6	14
4&5	j	*	91	11.3	19
5	k	*	154	15.6	21
5&6	l	*	158	22.0	24
6	m	*	189	25.6	25
6&7	n	H.L. 64 & *	111	4.1	26
7	p	*	172	25.7	10/8/45
7&8	q	*	133	17.4	9
8	r	*	134	20.0	12
8&9	s	*	141	21.5	15
Total		64	2412	320.8	

(*) Continuous profile of bottom.

14 square miles

BAR CHECK CORRECTIONS FOR SHEET H-

USC&GSS GILBERT

Launch M 316

"a" day - 31 Aug. 1945 "b" day - 6 Sept. 1945 "c" day - 7 Sept. 1945

<u>From</u>	<u>To</u>	<u>Corr.</u>	<u>From</u>	<u>To</u>	<u>Corr.</u>	<u>From</u>	<u>To</u>	<u>Corr.</u>
0.0	24.0	0.0	1.0	7.0	-0.2	0.0	33.0	0.0
24.0	28.0	0.2	7.0	14.0	0.0	33.0	37.0	0.2
28.0	32.0	0.4	14.0	22.0	0.2	37.0	39.0	0.4
32.0	37.0	0.6	22.0	28.0	0.4	39.0	----	0.6
37.0	----	0.8	28.0	33.0	0.6			
			33.0	38.0	0.8			
			38.0	----	1.0			

"d" day - 10 Sept. 1945 "e" day - 11 Sept. 1945 "f" day - 12 Sept. 1945

0.0	28.0	0.0	0.0	2.0	0.0	0.0	11.0	0.0
28.0	35.0	0.2	2.0	7.0	0.2	11.0	30.0	0.2
35.0	39.0	0.4	7.0	15.0	0.0	30.0	35.0	0.4
39.0	----	0.6	15.0	18.0	0.2	35.0	39.0	0.6
			18.0	23.0	0.4	39.0	43.0	0.8
			23.0	31.0	0.6	43.0	----	1.0
			31.0	38.0	0.8			
			38.0	----	1.0			

"g" day - 13 Sept. 1945 "h" day - 14 Sept. 1945 "j" day - 19 Sept. 1945

0.0	31.0	0.0	0.0	19.0	0.0	0.0	34.0	0.0
31.0	36.5	0.2	19.0	27.0	0.2	34.0	37.0	0.2
36.5	40.0	0.4	27.0	32.0	0.4	37.0	39.5	0.4
40.0	43.0	0.6	32.0	35.5	0.6	39.5	43.0	0.6
43.0	----	0.8	35.5	38.5	0.8	43.0	----	0.8
			38.5	----	1.0			

"k" day - 21 Sept. 1945 "l" day - 24 Sept. 1945 "m" day - 25 Sept. 1945

0.0	40.0	0.0	No correction	0.0	25.0	0.0
40.0	----	0.2		25.0	32.0	0.2
				32.0	38.0	0.4
				38.0	----	0.6

"n", "p", "q", "r", "s" days - No correction.

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

Dorchester Bay
Quincy Bay

SHEET NO. GI-1004

TRIANGULATION STATIONS

TON Wollaston Spire, 1934
RET Turret, 1933
WAL Neponset Walter Baker Stack, 1934
GAS Dorchester Gas Tank, 1934
OIL Dorchester Ocean Oil Co., Stack, 1934
ARM Army East Stack, 1934
MON Monument Castle Island, 1934
SPEC Spectacle Island Small Stack, 1934
YAM Thompson Island Stack, 1934
EAR Squantum Tank, 1934
THIM Thimble (USE)

TOPOGRAPHIC STATIONS

T-5771

AQUA	NOT	TIT
HOE	RED	TUB
NEB	TALL	VAN

T-5772

DUO	HID	LAX	MAY	OLD	RAG	SUE	VIM
GIN	KEY	LEO	NED	ORA	RIP	TAX	WAR
GOB	KID	MAL	NIT	PET	SET	UND	ZOO

T-5775

DUD PEP RIO

HYDROGRAPHIC STATIONS

REN - Vol. 1, Pos. 1
HUT - Vol. 1, Pos. 1


APPROVAL SHEET

No. H -7066

The records and boat sheet for survey No. GI-1004 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. (See Review)

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. *(See Review)


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

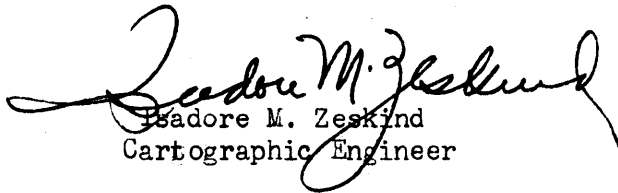
A D D E N D U M

to accompany

HYDROGRAPHIC SHEET H-7066 (Field No. Gi-1004)

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

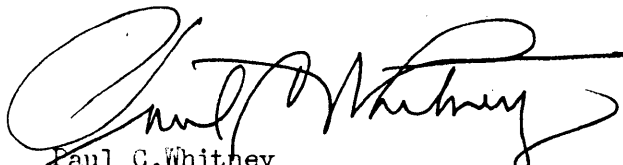
Respectfully submitted



Theodore M. Zeskind
Cartographic Engineer

Norfolk, Va.
April 19, 1946

Approved & Forwarded



Paul C. Whitney
Supervisor SE District

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. **H7066**

Records accompanying survey:

Boat sheets 1....; sounding vols. 9....; wire drag vols.;
 bomb vols.; graphic recorder rolls 17....;
 special reports, etc. 1 envelope of Marigrams - 9 (Neponset R. Bridge)

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

Number of positions on sheet	.....	2412
Number of positions checked	.....	201
Number of positions revised	.....	4
Number of soundings revised (refers to depth only)	.....	26
Number of soundings erroneously spaced	.....	0
Number of signals erroneously plotted or transferred	.....	0
Topographic details	Time	8
Junctions	Time	9
Verification of soundings from graphic record	Time	4

Verification by T. S. Williams..... Total time 126..... Date 10/1/46

Reviewed by J. F. Jordan..... Time 65..... Date 10/22/46

GEOGRAPHIC NAMES

Survey No. **H7066**

Name on Survey	Source of Name										
	A	B	C	D	E	F	G	H	K		
<u>Boston Harbor</u>											1
<u>Dorchester Bay</u>											2
<u>Quincy Bay</u>											3
<u>Neponset River</u>									U.S.G.B.		4
<u>Pleasure Bay</u>											5
<u>Governors I.</u>											6
<u>Castle I</u>											7
<u>Spectacle I</u>											8
<u>Thompson I</u>											9
<u>Moon Head</u>											10
Neponset											11
<u>Lower Mills</u>											12
<u>Billings Creek</u>											13
<u>Sagamore Creek</u>											14
<u>Gulliver Creek</u>											15
Names underlined in red approved by L. Heck on 11/1/46										16	
											17
											18
											19
<u>Neponset River Bridge</u>											20
											(location of tide staff)
											21
											22
											23
											24
											25
											26
											27

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. 7066

FIELD NO. GI-1044

Massachusetts, Boston Harbor, Dorchester Bay
Surveyed in August to October 1945 Scale 1:10,000
Project No. CS-246

Soundings:

808A Fathometer
Hand lead

Control:

Three-point fixes on shore
signals

Chief of Party - R. R. Moore
Surveyed by - J. D. Thurmond
Protracted by - M. T. Miller
Soundings plotted by - R. J. Auld
Verified and inked by - B. G. Williams
Reviewed by - G. F. Jordan, October 22, 1946
Inspected by - H. W. Murray

1. Shoreline and Control

Shoreline and control originate with air photographic surveys T-5771, T-5772 and T-5775 which were corrected to September 1944.

2. Sounding Line Crossings

The agreement of sounding line crossings is satisfactory.

3. Bottom Configuration

The originally smooth and generally shallow bottom covered by this survey is now broken with numerous dredged areas. Configuration of the bottom is satisfactorily defined by the usual depth curves.

4. Adjoining Surveys

Satisfactory junctions are effected on the northwest and east with H-6995a (1944) and H-6643 (1940), respectively. The junction with H-6995a on the north side of the channel is affected by dredging operations. The survey just north-east of Governors Island, has not yet been received.

5. Comparison with Prior Surveys

- a. Misc. No. 97 (1863-64) scale 1:10,000; H-221 (1846-48)
scale 1:20,000
H-1960 (1846-52) scale 1:20,000; H-1961 (1817-U. S. Navy)
scale 1:20,000

These prior surveys are in good agreement with the present survey except in dredged areas. Prior soundings are sparse and are superseded by subsequent surveys.

- b. H-2161 and H-2162 of 1892-93 on scales of 1:10,000

Depths on these prior surveys agree with present depths except in dredged areas and in areas which have been used for dumping grounds.

- c. T-227 (1847); T-832 (1860); T-2114 (1892); T-2197 (1894);
T-2155 (1893)

Nineteen rocks awash and the old sewer outlet at lat. $42^{\circ} 18.3'$, long. $71^{\circ} 00.58'$ have been carried forward from these prior surveys. These rocks awash were formerly shown as bare rocks or as low water features on the prior surveys and on chart 246.

The charted islet from T-2155 at lat. $42^{\circ} 18'$, long. $71^{\circ} 00'$ has apparently receded below M.H.W. The present survey shows minus 7-foot soundings here, which depths are 2 feet below M.H.W. This feature, therefore, bares at about a three-quarters tide.

The aforementioned prior surveys are superseded except as noted and except for those bottom characteristics which have been carried forward.

6. Comparison with Chart 246 (Print date of July 27, 1946)

a. Hydrography

Charted hydrography originates with the foregoing 1892-93 surveys which have been largely superseded by Army Engineers surveys of dredging operations.

- (1) The following charted soundings from Army Engineers surveys were not investigated and should be retained on the chart.

<u>Sounding</u>	<u>Lat.</u>	<u>Long.</u>	<u>Source</u>
8 ft.	42° 20.54'	71° 00.25'	Bp. 36391 (1942)
13 ft.	42° 20.50'	70° 59.90'	Bp. 36391 (1942)
6 ft.	42° 20.46'	70° 59.52'	Bp. 36391 (1942)
7 ft.	42° 20.47'	70° 59.62'	Bp. 36391 (1942)
7 ft.	42° 20.43'	70° 59.47'	Bp. 36391 (1942)
3 ft. Rks.	42° 20.35'	70° 59.95'	Bp. 36392 (1942)
*37 ft. Obstr.	42° 20.05'	70° 59.95'	Bp. 39814 (1944-45)
*36½ ft.	42° 20.06'	71° 00.10'	Bp. 39814 (1944-45)
4 ft.	42° 18.36'	71° 01.77'	Bp. 37495 (1943)
4 ft.	42° 18.23'	71° 01.88'	Bp. 37495 (1943)
4 ft.	42° 18.18'	71° 01.84'	Bp. 37495 (1943)
5 ft.	42° 18.06'	71° 01.60'	Bp. 37495 (1943)
1 ft.	42° 19.22'	71° 01.42'	Bp. 20873 (1926)
6 ft.	42° 19.70'	71° 00.55'	Bp. 20873 (1926)

*Charted in October 1945, subsequent to the survey.

- (2) Charted dolphins at the end of, and north of, the pier at lat. 42° 18.06', long. 71° 01.93', from Bp. 17962, Sheet 69 (1920) are non-existent according to a note on air photograph No. 2496 which was field inspected in 1939.
- (3) The charted position of a siren on a pile cluster at lat. 42° 20.09', long. 71° 00.29', is 40 meters west-southwest of a checked three-point fix position obtained on the present survey. The charted position is from former chart letter 533 (1943).
- (4) The charted wreck and obstruction buoy at lat. 42° 19.86', long. 71° 00.12', are from H.O. Notice to Mariners No. 19 (1946). This information is subsequent to the present survey.
- (5) The charted spots at the following positions are imperfections and should be removed from the printing plate:

<u>Latitude</u>	<u>Longitude</u>
42° 20.06'	71° 00.80'
42° 18.82'	71° 01.98'
42° 18.68'	71° 00.20'
42° 18.46'	71° 01.52'
42° 20.16'	71° 00.50'
42° 16.78'	71° 00.20'

b. Aids to Navigation

Aids to navigation located on the present survey agree satisfactorily with charted aids and adequately mark the features intended.

c. Dredged Channels

- (1) The charted southern dredged limit-line of the main channel east of Castle Island falls 20 meters outside the channel depths on the present survey. A replotting of the prescribed limit-lines on the new chart compilation is in harmony with present hydrography.
- (2) A charted 14-ft. sounding from the present survey at lat. $42^{\circ} 18.08'$, long. $71^{\circ} 01.77'$, falls in an area which was dredged to 16-ft. depths in 1943. The charted representation is correct.
- (3) At lat. $42^{\circ} 16.82'$, long. $71^{\circ} 00.7'$; a general shoaling has practically obliterated the head of the 4-ft. channel dredged here in 1939.

7. Condition of Survey

- a. The sounding records and Descriptive Report are complete and comprehensive.
- b. Smooth-plotting is satisfactory.
- c. The survey was not complete and adequate, contrary to statements in the Descriptive Report on page 2, par. J and on the approval page 14. Soundings and rock detail carried forward or to be added to the chart from blue-prints is noted in other paragraphs of this review.

8. Compliance with Project Instructions

Project instructions, paragraphs 14, 18 and 19 specified development of shoals, transfer to boat sheet and investigation of charted shoals and obstructions, and investigation of questionable air photographic survey features. These instructions were not complied with.

9. Additional Field Work

The following additional work is desirable:

- a. Investigate for possible piles in the vicinity of lat. $42^{\circ} 19.83'$, long. $70^{\circ} 59.3'$, and lat. $42^{\circ} 19.83'$, long. $70^{\circ} 59.0'$, as recommended on air photographic survey T-5775.

- b. Investigate the following soundings in, and adjacent to, the buoyed passage into Dorchester Bay:

114 on H-7158(144)WD 13 in 16-ft. depths at lat. $42^{\circ} 19.58'$, long. $71^{\circ} 00.25'$.
11 in 14-ft. depths at lat. $42^{\circ} 18.97'$, long. $71^{\circ} 01.48'$.
13 in 17-ft. depths at lat. $42^{\circ} 18.70'$, long. $71^{\circ} 01.65'$.
12 in 14 to 21-ft. depths at lat. $42^{\circ} 18.22'$, long. $71^{\circ} 02.57'$.

- c. The following charted soundings from Bp. 20873 (a tracing of U. S. Engineers surveys in 1926) should be disproved or verified:

1 ft. in 5-ft. depths at lat. $42^{\circ} 19.22'$, long. $71^{\circ} 01.42'$.
6 ft. in 9-ft. depths at lat. $42^{\circ} 19.70'$, long. $71^{\circ} 00.55'$.

- d. Investigate the old sewer outlet from T-832 (1860) (three rocks on chart) at lat. $42^{\circ} 18.33'$, long. $71^{\circ} 00.55'$, determine the limits of ledge or rocks here, and develop the low-water passage west of the sewer outlet.
- e. Investigate the charted low-water feature in 3-ft. depths at lat. $42^{\circ} 18.4'$, long. $71^{\circ} 01.44'$, from T-227 bis (1847), which is carried forward on the present survey as a rock awash. (Similar symbolization to the east on T-227 are shown as rock awash on the air photographic survey).
- f. Project instructions do not list verification of the measured mile course west of Spectacle Island. However, as neither the present survey nor air photographic surveys show range markers for this course, verification of its continued existence is desirable.

Examined and approved:

Chief, Nautical Chart Branch

Chief, Division of Charts

Chief, Section of Hydrography

Chief, Division of Coastal Surveys

Hurry

TIDE NOTE FOR HYDROGRAPHIC SHEET

June 12, 1946

~~Division of Hydrography and Topography:~~

Division of Charts: H. W. MURRAY

Plane of reference approved in
9 volumes of sounding records for

HYDROGRAPHIC SHEET 7066

Locality Dorchester Bay, Boston Harbor, Massachusetts

Chief of Party: R. R. Moore in 1945
Plane of reference is mean low water, reading
1.8 ft. on tide staff at Neponset Bridge
13.9 ft. below B. M. 2 (1926)

Height of mean high water above plane of reference is 9.5 feet.

Condition of records satisfactory except as noted below:

E. C. McKay
Section
Chief, Division of Tides and Currents.

BAR CHECKS SHEET 1004

0

5

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Note: Tabulated in Report.

"a" day 31 Aug 1945

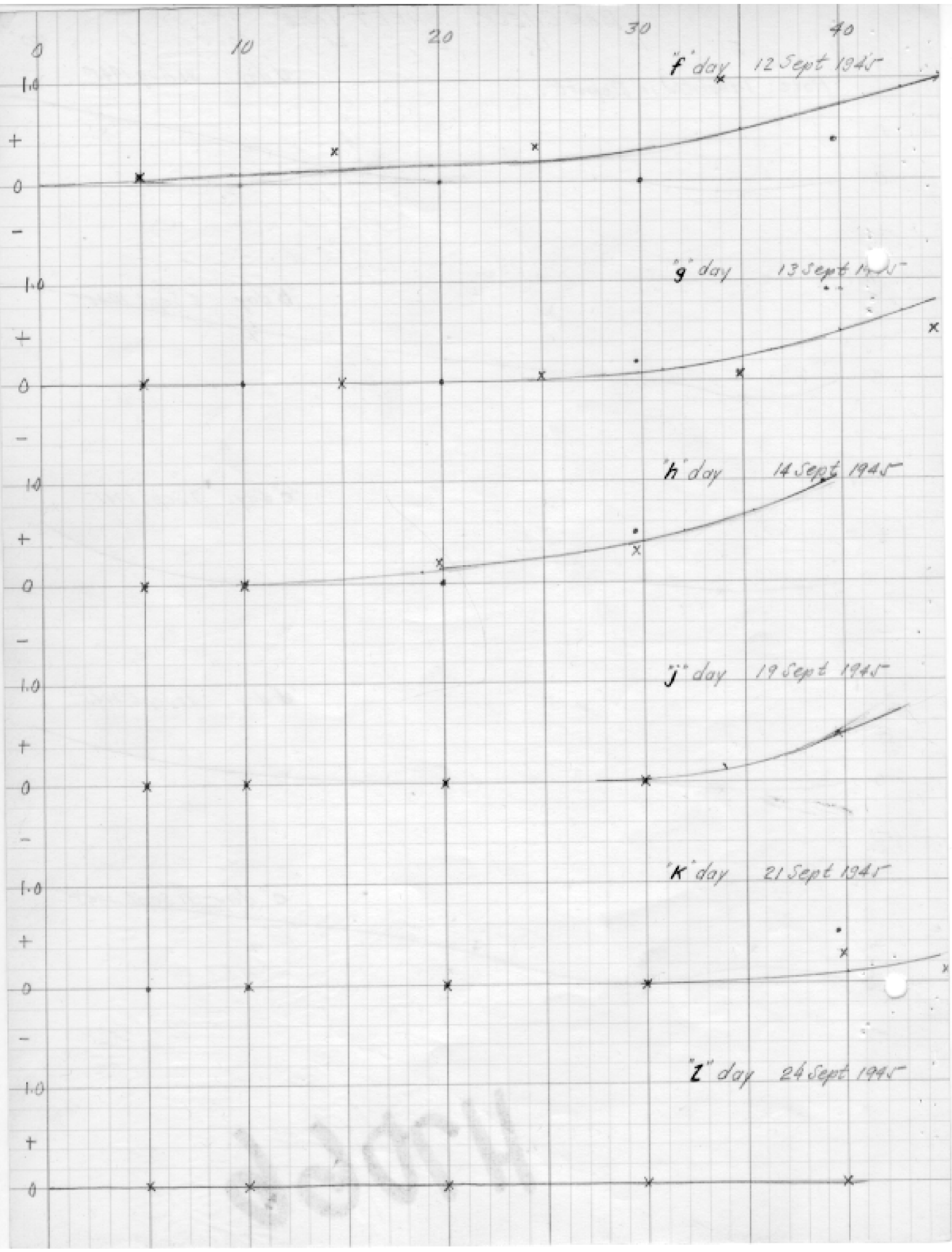
"b" day 6 Sept 1945

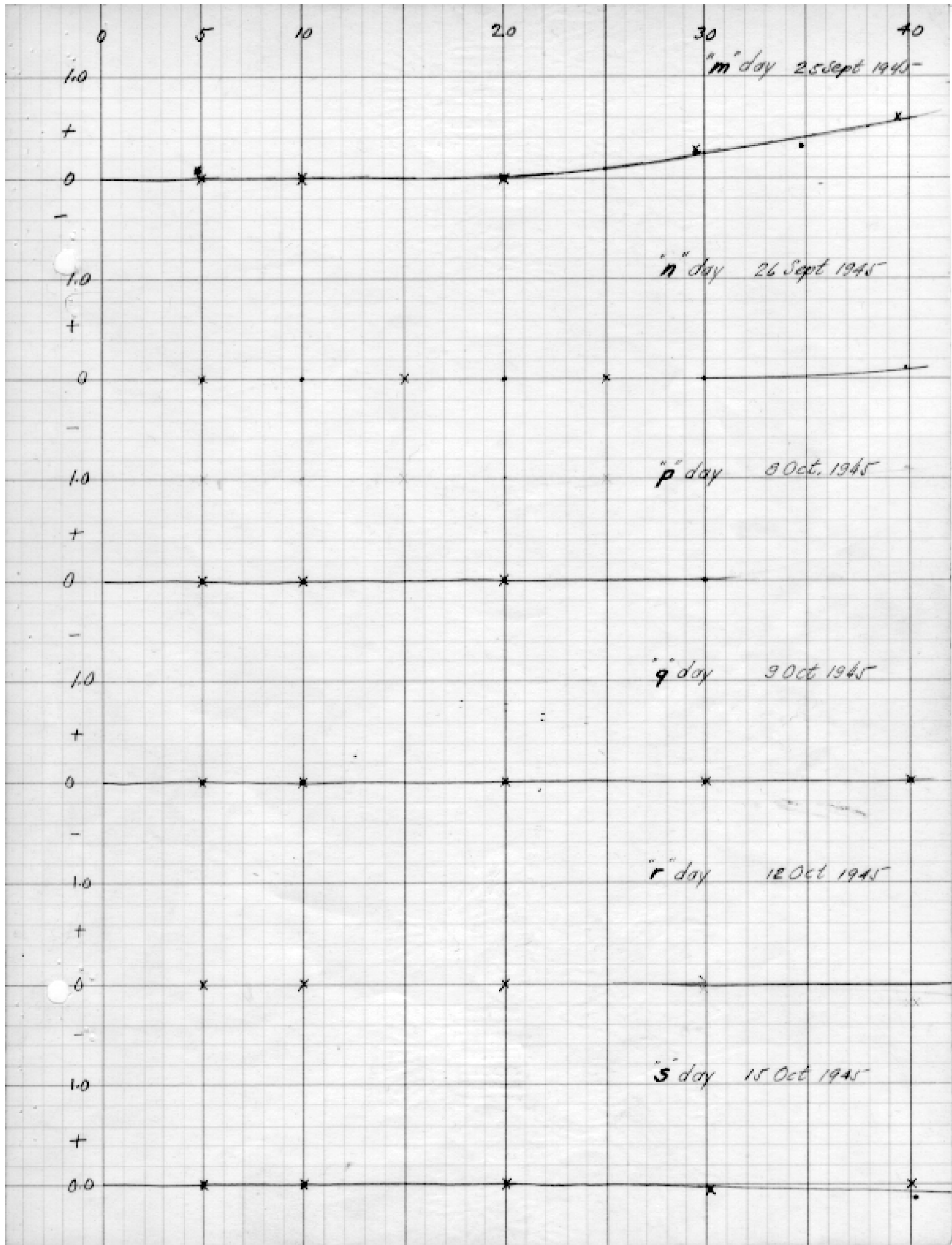
"c" day 7 Sept 1945

"d" day 10 Sept 1945

"e" day 11 Sept 1945

H7066





NAUTICAL CHARTS BRANCH

SURVEY NO. H7066

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
6/21/46	1207	J. Richardson	Before After Verification and Review <i>partially</i>
8/31/46	<i>Reconst.</i> 246	H. F. Stegman	Before After Verification and Review <i>Completely - before inspection</i>
2/1/47	<i>Reconst.</i> 248	H. F. Stegman	Before After Verification and Review <i>Completely applied - before inspection</i>
2/24/47	<i>Reconst.</i> 246	H. F. Stegman ^{SPM}	Before After Verification and Review <i>Revised channel legends. Partial application of this survey previously made. Compared with chart 246 (48-%) for critical changes.</i>
Oct. '48	1207	J. M. Albert	Before After Verification and Review
3/23/60	1207	H. Palmer	Before After Verification and Review <i>Fully applied</i>
11/5/69	<i>EXTENSION</i> 248	Maloney	<i>thru chart 246</i>
			Before After Verification and Review
2-25-82	13270 (246)	H. Radde	Before After Verification and Review <i>Re-applied only a small section of hydro sheet</i>
			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
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			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

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.