

7715

Diag. Cht. No. 1207-2

Form 504

U. S. COAST AND GEODETIC SURVEY  
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey HYDROGRAPHIC

Field No. WA-HI-1248 Office No. H-7715

LOCALITY

State Massachusetts

General locality Boston Harbor

Locality Hingham & Quincy Bays

194 8

CHIEF OF PARTY

W.F. Malnate

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DATE April 12, 1950

B-1870-1 (1)

7715  
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DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

REG. NO. H-7715

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-7715

Field No. WAHI 1248

State MASSACHUSETTS

General locality BOSTON HARBOR

Locality HINGHAM & QUINCY BAYS

Scale 1:10,000 Date of survey 26 June - 13 October 1948

Instructions dated Original 15 February 1940 (Oceanographer) Sup. 15 March 1948(WAHI)

Vessel WAINWRIGHT & HILGARD

Chief of party W.F. Malnate

Surveyed by Walter J. Chovan

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

Fathograms scaled by Field Personnel

Fathograms checked by " "

Protracted by A.G. Atwill

Soundings penciled by A.G. Atwill

Soundings in ~~fathoms~~ feet at MLW ~~MLW~~

REMARKS:

DESCRIPTIVE REPORT  
TO ACCOMPANY  
HYDROGRAPHIC SURVEY (FIELD NO. 1248)  
HINGHAM & QUINCY BAYS, BOSTON HARBOR, MASS.  
Scale 1:10,000 June - October 1948

SHIPS WAINWRIGHT & HILGARD W.F. Malnate, Chief of Party

Surveyed by Walter J. Chovan, Lt. Comdr. C.F. Chenworth,  
Lt. Comdr.

A. PROJECT.- Project CS-246 - Original instructions dated 15 February 1940 (OCEANOGRAPHER); supplemental instructions dated 15 March, 25 June, 12 July and 3 August 1948 (WAINWRIGHT & HILGARD).

B. SURVEY LIMITS AND DATES.- This survey covers the southeast area of Quincy Bay, the south area of Hingham Bay, and the entrance to Weymouth Fore River (1940) and Weymouth Back River, and all of Weir River. Joins with H-7065 (1940) on the West, H-6643 & H-6642 on the North and extends to Latitude  $42^{\circ}15'5$  (Approx.) to the South.  
(1940) Also joins H-3406 (1942) scale 1:15,000

Field work on this sheet begun 26 June and ended on 13 October 1948.

No Hydrographic field work was done on this sheet while wire drag operations were in progress from 7 August to 6 October with the exception of a few days, when wire drag was prevented by weather.

C. VESSELS AND EQUIPMENT.- The Ships WAINWRIGHT and HILGARD and the Army Mine Yawls Nos. M-300 and M-306 were used in this survey.

In general the Ship HILGARD and M-306 were used for the survey of Quincy Bay and the entrance to Weymouth Fore River. The Ship WAINWRIGHT and M-300 were used for the survey of Hingham Bay, entrance to Weymouth Back River and Weir River.

Two portable fathometers, Model 808A, No.63 and Model 808J, No.100S were used in taking the soundings. Depths varied from 0 feet to 39 feet reduced to M.L.W. Pole soundings were taken wherever the fathometer initial obscured the echo soundings.

D. TIDES AND CURRENTS STATIONS.- A portable automatic Tide Gage was installed and maintained at Hull, Windmill Point, Mass. Latitude  $48^{\circ}18'2N$ , Longitude  $70^{\circ}55'2W$ . This gage was in continuous operation throughout the field season and was used for the reduction of soundings throughout this sheet with the exception of the Weir River. A tide staff was established at Nantasket, Weir River, Latitude  $42^{\circ}16'2N$ , Longitude  $70^{\circ}51'5W$ , and tide staff readings were recorded every 15 minutes while Hydrography was in progress, and used for the reductions of soundings in the Weir River.

M.L.W. as determined on the staff at Hull, Windmill Point is 2.5 feet, and at Weir River 2.0 feet. No time or range corrections were applied to the tidal data in reducing the soundings.

No current observations were made.

One Magnetic Station was occupied at Bumkin Island.

E. SMOOTH SHEET.- To be <sup>was</sup> processed in the Norfolk Processing Office. ✓

F. CONTROL STATIONS.- Natural objects previously located by triangulation, objects identified on published topographic sheet or previously used hydrographic sheets, and objects located by sextant angles were used for control. ✓

For source of the control stations see list of signals attached to this report. ✓

G. SHORELINE AND TOPOGRAPHY.- The Boat Sheet No <sup>(1940)</sup> H-6642 and an old Wire Drag, End Launch Sheet, which were prepared at the Washington Office for surveys in this area for a previous year, were obtained from the Boston Field Station and were used on this survey. ✓

By using these sheets two hydrographic parties were able to commence field work immediately without the delay of preparing boat sheets.

The shoreline was taken from T-5775 <sup>(1940-44)</sup> and T-5776 <sup>(1938-44)</sup>. ✓

There is considerable change in the topography around Nut Island due to construction for the sewage disposal plant. The H.W.L. was drawn in on the boat sheet controlled by sextant fixes (m day, launch M-306). The dock at Nut Island is no longer in existence. The dock at Bumkin Island is in ruins.

H. SOUNDINGS.- The portable fathometer, type 808A, No. 63 and type 808J, No. 100S, were used in obtaining soundings for this survey. Tranciever units were mounted inboard against hull on all vessels used. ✓

Corrections to soundings were obtained from bar checks. ✓

I. CONTROL OF HYDROGRAPHY.- The sounding lines were controlled by sextant angle fixes to shore objects. ✓

J. ADEQUACY OF SURVEY.- The hydrography as shown on boat <sup>(WA-HI- sheet 1248) ← H-7715</sup> is complete within the area surveyed and is adequate to supersede prior surveys for charting. ✓

When Wire Drag operations were completed there were only a few days remaining before the close of the field season. Those days were spent in additional development and squaring off the Hydrography of the area already started. No work was done in Town River Bay, South portion of Weymouth Fore River, southern portion of Weymouth Back River and Hingham Harbor.

The U.S. Engineers were making surveys at Hingham Harbor in preparation for dredging in that harbor. They were also taking borings in the vicinity of Harrys Rock for the proposed 35 foot channel from Weymouth Fore River to Nantasket Gut. ✓

The junctions with the adjoining surveys seem satisfactory with the boat sheet. More definite comparison can be made after the smooth sheet is processed. No holidays exist within the area surveyed. ✓

It was noted that no development work in the irregular bottom approximately 1/2 mile north of Sheep Island and around the rock shown on Chart 246 in Latitude 42°17'2" Longitude 70°54'4" had been done in the previous surveys. These two areas were developed.

The depth curves at the sheet junction were adequately drawn.

K. CROSS LINES.- The area surveyed is crossed by many dredged and natural channels, and the lines run with the axis of the channel serve as cross lines. Those areas where no channels exist approximately 10% of cross lines were run. In general the cross lines agreed with the regular system of lines. The slight discrepancies that exist on the boat sheet will probably be in agreement after the smooth sheet is processed.

L. COMPARISON WITH PRIOR SURVEYS.- This comparison should be made after the smooth sheet has been processed.

M. COMPARISON WITH CHARTS- This comparison should be made with USC&GS chart No. 246 after the smooth sheet has been processed.

N. DANGERS AND SHOALS.- No new dangers or shoals were found with the exception of a slight shoaling at the entrance channel to Weymouth Back River which was immediately reported. This shoaling is listed as 4114 in the 31 July 1948, No. 31 Notice to Mariners. Sounding of 18 feet in Latitude 42°16'03"N, Longitude 70°56'01"W. Least depth found is 18.2 feet position No. 5f (blue). 18 ft charted.

LIST OF CHARTED DANGERS AND SHOALS

LOCATION LATITUDE LONGITUDE	CHARTED DEPTH FEET	PRESENT SURVEY LEAST DEPTH FEET	POSITION NUMBER	RECOMMENDATIONS
42°16'55"		2		
70°58'22"	2 (vol. 13, p. 40)	<del>1.8</del>	19 b (red)	Chart as 2 feet ✓
42 16.60	Sunken Rk.	4.4 <sup>0</sup> RK	1 sgd. be- fore 22 h:	No drift sounding with hand lead. Retain Sunken Rk. Symbol ✓
70 57.83	Symbol (vol. 15, p. 44)			Deleted ✓
42 16.89	4	7 ✓	1 sgd. be- fore 144 c	Delete the 4' sgd. and chart 7'. Covered with Wire Drag. 7' effective depth. ✓
70 58.32			102-103 B (blue)	Charted ✓
	(vol. 1, p. 42)			
42 15.42	Bass	Uncovers		Bass Rk. - Chart as un-
70 56.89	Rock (vol. 18, p. 33)	0.8 @ MLW	113 n (red)	covers 1' at MLW ✓
42 15.92		6.0		
70 56.45	(vol. 18, p. 11)	5.8	9 n (red)	Chart as 6' ✓
42 15.42				3ft charted ✓
70 56.48	4 (vol. 10, p. 24)	3.0 ✓	59 w (blue)	Chart as 3' ✓
42 16.76		stray	Near	8' Not smooth plotted - stray
70 56.49	(vol. 4, p. 45)	8.4	123 g (blue)	Chart as 8' ✓
42 16.87	17	17	45 e (blue)	Chart as 17' ✓
70 56.84	(vol. 1, p. 20) (vol. 3, p. 43)			17ft ✓
42 16.29	Sunken Rk.,	2.0	122-123 W (blue)	Delete Sunken Rk. ✓
70 54.76	Symbol (vol. 10, p. 36)	3.6	124 w	Symbol & Chart as ✓
42 17.07		6.0		
70 59.40	7 (vol. 11, p. 31)	7.8	78-79 d (red)	No drift sgd. with hand lead. Retain 7' charted sounding. 6ft. charted ✓

LOCATION LATITUDE LONGITUDE	CHARTED DEPTH FEET	PRESENT SURVEY LEAST DEPTH FEET	POSITION NUMBER	RECOMMENDATIONS
42°17'18" 70°54'39"	Uncovers at L.W.	2.2 <sup>0</sup>	108 v (blue)	Rock visible, least depth at 2.2' obtained. Delete "Uncovers at LW" & chart depth as 2'.
42 17.17 } Pres. 70 55.24 } Sunday	5 { 17.13' } Ckt { 15.34' } pos.	5.0 4.8 Vol 8 2946	(Charted 2 Rk)	Between 39t & 40t (blue) Least depth of an extensive shoal area. Charted.
42 16.35 70 55.387	Rock Symbol (Vol. 4, p. 7)	-2.3	7 f (blue)	Chart as Rk. uncovers 3' at MLW / Charted * (3)
42 16.844 70 58.149	Half-Tide Rock	-2.0 -1.8	9 f (blue)	Chart as Rk. uncovers 2' at MLW / Charted * (2)

O. COAST PILOT INFORMATION.- The Coast Pilot information as shown in Atlantic Coast Pilot Section A is adequate.

The ship anchored in the following places while making this survey:- 1/2 mile west of Nut Island Stack, 1 mile SW of Sunken Ledge Light, 0.2 miles WSW of Pig Rock Light, 0.4 miles SSE of Pig Rock Light and 0.4 miles E of Sheep Island.

P. AIDS TO NAVIGATION.- No new fixed aids to navigation were located, those used as signals were obtained from the Geographic Positions furnished by the Washington Office.

The following floating aids are privately maintained during the summer season, approximately from 30 May to 15 September. All buoys are made up of single 55 gallon oil drums with kerosene lantern suspended on top and inside of a strap-metal superstructure.

POS. NO.	DATE	BUOY NO.	LATITUDE	LONGITUDE	DEPTH
	1948		0 " "	0 " "	"
10 b	7/16	3	42 16 28.1	70 53 46.5	22.2
11 b	"	5	42 16 28.5	70 53 28.8	8.4
1 c - Sunday	7/29	2	42 16 29.4	70 52 54.3	17.6
2 c	"	4	42 16 29.0	70 52 43.1	15.4
3 c	"	7	42 16 24.3	70 52 30.7	9.8
4 c	"	6	42 16 14.9	70 52 23.7	10.2
5 c	"	9	42 16 13.7	70 52 16.6	12.8
6 c	"	8	42 16 06.9	70 52 10.8	12.4
7 c	"	11	42 16 07.1	70 52 06.0	16.0
8 c	"	13	42 16 05.5	70 51 52.1	13.4
9 c	"	15	42 16 07.0	70 51 46.0	11.8

Smooth Plot as:

0 11 2  
Priv. Maintd.

FLOATING AIDS TO NAVIGATION

LIGHT LIST

H-7715

	Latitude	Longitude	m.	Depth	Position	Date
Pedlocks Island Channel Buoy #1 (Black Can)	42-17	70-57	1169	28 1/2	81k (red)	7/30/48
" " " #3 (Black Can)	"	"	548	26 1/2	80k	"
" " " #6 (Red-Nun)	42-16	70-56	1641	30	77k	"
" " " #8 (Red Nun)	"	"	1421	"	1p (red)	10/13/48
Twenty-Two Foot Spot Buoy (Nun-Buoy - see 85)	42-17	70-57	320	28 1/2	79k	7/30/48
Wreck Rock Buoy 4 (Nun Buoy - vol. 17, p. 5)	"	"	297	9	84k	"
Houghs Neck Channel Buoy 1 (Black Can)	42-16	70-56	974	10 1/2	2p	10/13/48
" " " 2 (Red Nun)	"	"	1005	12	3p	"
Fore River Channel Buoy 2 (Red Nun, vol. 18, p. 6)	"	70-55	1049	33	44p	"
" " " 2A	"	"	549	33	42p	"
" " " 3 (Black Can)	42-15	70-56	791	28 1/2	9p	"
" " " 4A (Red-Nun)	"	"	622	11 1/2	8p	"
" " " 6 (Red Nun)	"	"	377	23	114n	10/12/48
Lower Neck Sheal Buoy (Black and Red Can)	"	"	1840	19	11p	10/13/48
Spiera Stand North End Buoy (Black & Red Can)	42-16	"	600	5	4p	"
" " South " (Red & Black Nun)	"	"	319	5	5p	"
Sunken Ledge Buoy 1 (Black Can)	42-17	70-57	1189	13 1/2	82k	7/30/48
Crow Point Flats North Buoy (Red & Black Nun)	42-16	70-54	1663	17 1/2	35p	10/13/48
Crow Flats Middle Buoy 2 (Red Nun)	"	"	1189	16	36p	"
Bunkin Island Bell Buoy 3 (Black)	"	"	1542	26	33p	"
Hangman Island Lighted Buoy 2 (permanently discontinued - see Notice to Mariners)	42-17	70-57	978	12	83k	7/30/48
Sixteen-Foot Spot Buoy 1 (Black Can)	"	"	489	17 1/2	14b green	7/16/48
Fore River Channel Lighted Buoy 1 (Black)	42-16	70-55	1278	25	45p red	10/13-48
Bunkin Ledge Rock Buoy (Black-Red Can)	42-17	70-54	305	5	34p	"
Pedlocks Island Channel Lighted Buoy 5 (see 85)	42-16	70-57	1844	28 1/2	78k	7/30/48
Sheep Island Buoy 2 (Red Nun)	"	"	1077	12 1/2	40p	"
Grape Island Buoy 1 (Black Can)	42-15	70-55	1725	13 1/2	12p	10/13/48
Grape Island Buoy 1A (Black Can)	"	"	1663	17 1/2	14p	"
Grape Island Flats Buoy 3 (Black Can)	42-16	"	1312	12	38p	"
Lower Neck Cove Buoy 2 (Red Nun)	42-15	"	1505	20 1/2	13p	"
" " Buoy 4A (Red Nun)	"	"	1352	17 1/2	17p	"
Weymouth Back River Buoy 6A (Red Nun)	"	"	1567	16 1/2	15p	"
Hingham Channel Buoy 6 (Red Nun)	"	"	740	234	20p	"
" " " 5 (Black Can)	"	70-53	1816	16	20p	"
" " " (Black & Red Can)	"	"	1828	14 1/2	24p	"
" " " 4 (Red Nun)	42-16	"	842	13	25p	"
" " " " " "	"	"	812	20 1/2	28p	"
" " " " " "	"	"	1315	15 1/2	29p	"

LIGHT LIST

	LAT.	m.	LONG.	m.	Depth	Position	Date
Opposite Hewitts Cove Buoy 6	42-15	892	70-55	201	18 1/2	19p red	10/13/48
Flats Buoy 3	"	1269	"	298	17	18p	"
Bunkin Island Lighted Buoy 1	42-17	792	70-54	1208	35	3b green	7/16/48

(Red Non)  
(Black Con)

UNOFFICIAL AIDS TO NAVIGATION H-7715

Designation on Smooth Sheet	Lat.	m.	Long.	m.	Depth	Pos.	Date
WC #A*	Vicinity Bunkin Island Shoal	42-17	943	70-51	1270	37	2b green 7/16/48
Red Lt. #2*	Weir River (P.W. main line)	42-16	903	70-52	1248	17 1/2	1c green 7/29/48
Red Lt. #4*	" (P.W. main line)	"	898	"	987	15 1/2	2c
Black Lt. #7*	"	"	757	"	701	10	3c
Red Lt. #6*	"	"	474	"	539	10	4c
Black Lt. #9*	"	"	427	"	371	13	5c
Red Lt. #8*	"	"	213	"	241	12 1/2	6c
Black Lt. #11*	"	"	223	"	132	16	7c
Black Lt. #13*	"	"	176	70-51	1191	13 1/2	8c
Black Lt. #15*	"	"	220	"	1061	12	9c

\* has been deleted  
8/4/48

Q. LANDMARKS FOR CHARTS.- The landmarks within the area surveyed as shown on Chart #246 are adequate with the exception of the flagpole\* on Planters Hill which should be deleted from the chart. This landmark was not visited but it was not visible from Hingham Bay and Hingham Harbor.

R. GEOGRAPHIC NAMES.- The area surveyed has recently been covered by air photographic surveys so no special effort was made to check on Geographic names.

Z. TABULATION OF APPLICABLE DATA.-

<u>DESCRIPTION</u>	<u>DATE SENT TO WASHINGTON OFFICE</u>
Establishment of Tide Station at Hull (Wind-point) Mass.	3 July 1948
Letter dated 2 August 1948, to Commander, 1st District. U.S. Coast Guard, in regard to Position of Floating Aids; privately maintained in Hingham Bay and Weir River.	2 August 1948
Establishment of Tide Station at Nantasket(Weir River) Mass.	5 August 1948
Tide Marigrams, sheets 1 to 8 inclusive. (26 June to 30 August 1948) for Hull (Windmill Point) Tide Gage.	5 August 1948
One Folder, Form #367, Magnetic Observation, Bumkin Island.	18 October 1948
Leveling Record and Tide Marigrams, sheets 9 to 21, (30 August to 13 October 1948) for Hull (Windmill Point) Tide Gage.	10 December 1948
Leveling Record and Tide Volume, Form #277, for Nantasket (Weir River)	10 December 1948
Report on Fathometer corrections.	To be submitted

TIDE NOTE  
TO ACCOMPANY DESCRIPTIVE REPORT  
FOR FIELD SURVEY NO. 1248  
BOSTON HARBOR, MASS.

The tide station at Hull (Windmill Point) Mass. was used for the reduction of soundings throughout this sheet (See Supplemental Instructions of 12 July 1948) with the exception of the soundings in the Weir River, where the tide staff established at Nantasket, Weir River, was used.

Hull, (Windmill Point) Mass.  
Latitude  $48^{\circ}18'2''$ N, Longitude  $70^{\circ}55'2''$ W  
MLW on staff is 2.5 feet

Nantasket, (Weir River) Mass.  
Latitude  $42^{\circ}16'2''$ N, Longitude  $70^{\circ}51'5''$ W  
MLW on staff is 2.0 feet

No time or range corrections were applied to the tidal data in reducing the soundings.

LIST OF STATISTICS  
H-7715

<u>BLUE</u> DAY LETTERS	POSITIONS	TOTAL	VOL.	DATE 1948	SOUNDINGS	STAT. MI.	VESSEL
A	1-97	97	1	June 26, 1948	-	12.2	WAINWRIGHT
B	1-129	129	1	July 8	-	11.5	"
a	1-39	39	2	June 28	-	7.1	Launch M-306
b	1-187	187	2	June 30	-	29.2	"
c	1-80	126	2	July 2	-	21.9	"
	81-126		3				
d	1-84	84	3	July 7	-	13.7	"
e	1-186	186	3	July 9	-	30.1	"
f*	1-12	12	4	July 10	5	0.5	"
g	1-138	138	4	July 15	-	18.4	Launch M-300
h	1-107	152	4	July 16	-	19.0	"
	108-152		5				
j	1-85	85	5	July 17	-	9.6	"
k	1-16	16	5	July 22	-	2.1	Launch M-306
l	1-104	104	5	July 23	-	14.3	"
m	1-65	65	6	July 26	-	8.6	Launch M-300
n	1-43	43	6	July 29	-	2.9	"
p	1-174	242	6	July 30	-	24.4	"
	175-242		7				
q	1-176	176	7	August 6	-	14.8	"
r	1-120	120	8	Sept. 21	-	6.4	"
s*	1-64	64	8	Oct. 4	64	0.1	none - dock
t	1-160	203	8	Oct. 7	-	24.3	Launch M-300
	161-203		9				
u	1-122	122	9	Oct. 8	19	10.8	"
v	1-169	218	9	Oct. 12	-	15.6	"
	170-218		10				
w	1-216	216	10	Oct. 13	328	16.1	"
<u>RED</u> DAY LETTERS							
A	1-29	29	11	June 28	-	3.4	HILGARD
B	1-159	159	11	June 30	-	28.0	"
C	1-82	156	11	July 2	-	29.5	"
	83-155		12				
a	1-126	126	13	July 13	-	12.4	Launch M-306
b*	1-29	29	13	July 14	-	0.1	M-306 Skiff
c	1-110	152	13	July 15	-	17.2	Launch M-306
	111-152		14				
d	1-160	160	14	July 16	-	28.0	"
e	1-47	47	14	July 17	-	4.3	"
f	1-45	45	15	July 26	-	5.4	"
g	1-79	79	15	July 27	-	10.4	"
h	1-149	165	15	July 28	-	18.7	"
	150-165		16				

\* no fathogram

<u>RED</u> DAY LETTERS CONT.	POSITIONS	TOTAL	VOL.	DATE 1948	SOUNDINGS	STAT. MI.	VESSEL
j	1-184	184	16	July 29	-	20.2	Launch M-306
k	1-80	185	16	July 30	-	7.9	"
	81-105		17				
l	1-123	123	17	August 6	-	14.3	"
m	1-129	140	17	Oct. 7	-	14.0	"
	130-140		18				
n	1-206	206	18	Oct. 12	-	25.6	"
p *	1-47	47	18	Oct. 13	47	5.4	"

GREEN  
DAY  
LETTERS

a *	1-25	25	19	July 10	25	Detached pos.	Skiff
b *	1-26	26	19	July 16	26	Buoy Locations	"
c *	1-9	9	19	July 29	9	" "	"

TOTAL . . .4836 . . . . . 459 , . . . 561.1

AREA SQUARE STAT. MI. 9.9

\* No fathograms

SIGNALS  
HYDROGRAPHIC SHEET 1248 (WAHI)  
LOCATED BY TRIANGULATION

HYDRO NAME	TRIANGULATION NAME
EAST	Weymouth Edison East Stack, 1934
EAT	Great Quincy Tank, 1916
FOR	Fore River Channel Lt. "4"
FOX	Nantasket WBZ Radio East Tower, 1943
HAR	Harrys Rock Lt. "2"
HULL	Hull Town Hall Cupola, 1934
HOW	Nantasket WBZ Radio West Tower, 1943
LED	Sunken Ledge Light, 1934
MET	Hull Metro Stack, 1934
NAN	Nantasket-Hull Incinerator Stack, 1934
NUT	Quincy-Nut Island Stack, 1934
PIG	Pig Rock Light, 1934
RIV	Fore River Channel Lt. "2B", 1934
RAW	Hull, Strawberry Hill Tank, 1934
ROW	Flag Pole, Hingham Yacht Club
SUN	Sunken Ledge Beacon, 1934
SKI	Weymouth Back River Shipyard Stack, 1943
TOW	Nantasket Telegraph Hill Tower, 1934
WEY	Weymouth Brantley Stack, 1934

*Field list of signals.  
use for descriptions of  
stations only - see processing  
office list of signals.*

LOCATED BY HYDROGRAPHIC METHODS

HYDRO NAME	DESCRIPTION AND VICINITY	SOURCE
ACE	Westside Quincy Great Hill	Sextant - Vol. 13
ART	Center of Arch over steps (Weir River)	" " 6 Pg.21
ABE	Signal Cloth around Telegraph Pole	" " 6 Pg.22
BOB	Barrel on top of large Rk. above HWL Prince Haad)	" " 4 Pg.10
BAH	Yellow Road Sign, Weir River	" " 6 Pg.22
COO	W W on Hangman Island	" " 11 Pg.3
COD	S. Shore Quincy Bay	" " 13
CUE	W. Gable of house, Sunset Pt. Weir River	" " 2 Pg.52
CAM	End of Boat Landing, Weir River	" " 6 Pg.22
CAW	Banner Signal on Lower Neck	" " 4 Pg.16
DOC	Banner signal on SE Corner of Dock, (in ruins) Bumkin Island	" " 2 Pg.52
DAW	Weir River	Signal misplotted by processing office " " 6 Pg.23
DOG	W. Side Quincy Great Hill	" " 13
END	S. Shore Quincy Bay	" " 13
FUN	U.S.E. Station No. 5W Head Peddocks Id.	" " 4 Pg.10
FAR	SW Corner house, Weir River	" " 6 Pg.25,26
GEM	S Shore Quincy Bay	" " 13
Gig	Rock on Beach, Weir River	" " 6 Pg.25,26
HAT	S Shore Quincy Bay	" " 13
HUB	End of Small Boat Landing, Weymouth Back River	" " 4 Pg.15
HER	W.W. on Small Islet, Weir River	" " 6 Pg.26
ICE	S Shore Quincy Bay	" " 13
ION	W.W. Cañon of Rocks, Woids End, Weir River	" " 6 Pg.21

*DAW - Signal "DAW" was misplotted on S.S.*

(SIGNALS CONTINUED)

HYDRO NAME	DESCRIPTION AND VICINITY	SOURCE
IRK	W.W. Weir River	Sextant Vol.6 Pg.25
IVY	Banner in Tree, West side of Worlds End	" " 2 Pg.52
JAP	W.W. Weir River	" " 6 Pg.23
JAR	S Shore Quincy Bay	" " 13
KEN	W.W. Weir River	" " 6 Pg.24
LAX	W.W. Weir River	" " 6 Pg.24
LEO	White Pole, Weir River	" " 6 Pg.26
LUD	Gable of House, Weir River	" " 6 Pg.25
LIZ	Gable of House, Weir River	" " 6 Pg.25
MAP	Gable of Small Boat House, Weir River	" " 6 Pg.23
PIX	S Shore of Quincy Bay	" " 15
SIC	Gable Small Out House, Peddocks Id.	" " 4 Pg.11
SAL	Screen Door of House	" " 4 Pg.14
VET	Small Tan Bathhouse, Quincy Bay	" " 15
VAN	Banner Signal, Peddocks Island	" " 4 Pg.10
WIT	W.W. on Langlee Island	" " 4 Pg.15
YAM	Hangman Island Reef Beacon	" " 11 Pg.3

LOCATED BY TOPOGRAPHY OR AIR PHOTO COMPILATION

HYDRO NAME	DESCRIPTION AND VICINITY	SOURCE
AND	NE Corner of Dock, Peddocks Id.	T-5775
ALA	Dolphin, Weir River	T-5776
DAG	End of Small Boat Pier on Eastern Neck	T-5776
DEN	NE Gable Brown End House, S Shore Quincy Bay	T-5776
FED	End of Small Boat Landing, Hingham Bay near Crow Point	T-5776
GIN	Center Hiproof, Windmill Point	T-5775
JON	Lone Dolphin, Weir River	T-5776
LAB	Gable of House, W Head, Peddocks Id.	T-5775
LIP	S Shore, Quincy Bay	T-5776
LOG	S Shore, Quincy Bay	T-5776
MAR	<i>Center dock at end of jetty</i> <del>Gable of House, S Shore, Hingham Bay</del>	T-5776 <i>See manuscript.</i>
NOD	S Shore, Quincy Bay	T-5776
OWN	Most W'ly House of 4, Moon Head	T-5775
OAK	E'ly & Offshore Corner Stone Blkd.	T-5776
OFF	Gable House on Grape Island	T-5776
OLD	N Side of Sunset Point	T-5776
OHM	Gable House, Weir River	T-5776
POD	Small Open House, Sheep Island	T-5776
PAR	SW Corner Concrete Bulkhead, Weir River	T-5776
POL	Cupola on House, Sunset Point	T-5776
POP	Large Rk. off Hampton Hill, Weir River	T-5776
RIG	Gable of House, Weir River, Vol.6 Pg.23	T-5776
ROT	Large Rk. off Crow Point, Vol.4 Pg.14	T-5776
RUB	Large Rk. off Worlds End, Weir River Vol. 6 Pg. 21	T-5776

HYDRO NAME	DESCRIPTION AND VICINITY	SOURCE
RAS	NW Corner House, Weir River	T-5776
RIK	Large Rk. W of Palnters Hill	T-5776
SAD	NW Corner Concrete Blkd, Quincy Bay	T-5776
SAT	Gable of Yacht Club, Quincy Yacht Club	T-5776
SLAP	Large Rk. W of Planters Hill	T-5776
SAM	Gable of House, Weir River	T-5776
Sax	Highest Part of House, Slate Id.	T-5776
TWIN	Lone Tree, Weir River Vol.6 Pg.25 <sup>4</sup>	T-5776
TAP	Rk.Awash at MLW, Weir River Vol.6 Pg 25	T-5776
VAL	Top of Large Rk., Weir River	T-5776
WIG	Gable of House, Weir River	T-5776
WEE	Gravel Pile, Weir River	T-5776
WED	Gable of House, Weir River	T-5776
YELP	Gable of House, Raccoon Island	T-5776
YET	Dolphin, Weir River	T-5776
YEA	Gable of House,Sunset Pt.Weir River	T-5776

7 November 1949

To: Chief, Division of Coastal Surveys  
U. S. Coast and Geodetic Survey  
Department of Commerce Bldg.  
Washington 25, D. C.

Subject: Control, Project CS-246.

It is requested that positions of the signals listed below be furnished this office for use in smooth plotting survey H-7715, Project CS-246. It is believed these signals were originally located on survey H-6642 and were used again during the 1948 field season without a relocation.

Name	Description	Approx. Lat.	Approx. Long.
POD (H)	Small open house, Sheep Id.	42°-16.84'	70°-55.51'
USE (T)	Not available	42°-16.13'	70°-51.30'

Earl O. Heston  
Captain, USC&GS  
Supervisor, SE Dist.

EOH:m

C  
O  
P  
Y

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY  
Washington 25

223/MEK  
D-1-SE

10 November 1949

To: Supervisor, Southeastern District  
U. S. Coast and Geodetic Survey  
418 U. S. Post Office Building  
Norfolk 10, Virginia

Subject: Positions of Hydrographic Signals—Project CS-246

In compliance with request in your letter of 7 November 1949 there are given below positions of the signals listed for use in smooth plotting survey H-7715:

H-7719	(H)	Signal POD	Latitude	42° 16'	1,566.2 meters
				back	285.1 " ✓
			Longitude	70° 55'	696.1 " ✓
				back	678.6 " ✓
✓ H-7715	(T)	Signal USE	Latitude	42° 16'	244.8 meters ✓
				back	1,606.5 " ✓
			Longitude	70° 51'	407.5 " ✓
				back	967.6 " ✓

/s/ K. T. ADAMS  
Acting Director.

7 November 1949

To: Supervisor, Northeastern District  
10th Floor Customhouse  
Boston 9, Massachusetts

Subject: Hingham Yacht Club, Flagpole.

The subject flagpole was used as a hydrographic signal during the 1948 survey on Project CS-246. It is requested that a sextant, or other location of this object, be sent this office for use in smooth plotting the survey.

It is apparent that the field party made an incorrect identification of this object, whose approximate position, according to the boat sheet, is Lat. 42°-15.73' Long. 70°-53.61'.

Earl O. Heaton  
Captain, USC&GS  
Supervisor, SE Dist.

EOH:m

DEPARTMENT OF COMMERCE  
U. S. COAST AND GEODETIC SURVEY  
NORTHEASTERN DISTRICT HEADQUARTERS  
TENTH FLOOR, CUSTOM HOUSE  
BOSTON, 9, MASS.

IN YOUR REPLY REFER TO  
FILE  
AND DATE OF THIS LETTER

17 November 1949

To: Supervisor Southeastern Dist.  
U. S. Coast and Geodetic Survey  
Room 418, Post Office Building  
Norfolk 10, Virginia

Subject: Hingham Yacht Club, Flagpole

Reference: Letter dated 7 November 1949

1. Enclosed is a list of directions of angles taken with a theodolite at the Hingham Yacht Club flagpole.

2. Enclosed is a list of geographic positions of objects sighted upon. It will be necessary to make a number of inverse computations, three point problem computations and eccentric reductions to secure an accurate position of the flagpole.

  
L. S. Hubbard  
Comdr., USC&GS  
Supervisor, NE Dist.

LSH-jbc

LIST OF DIRECTIONS

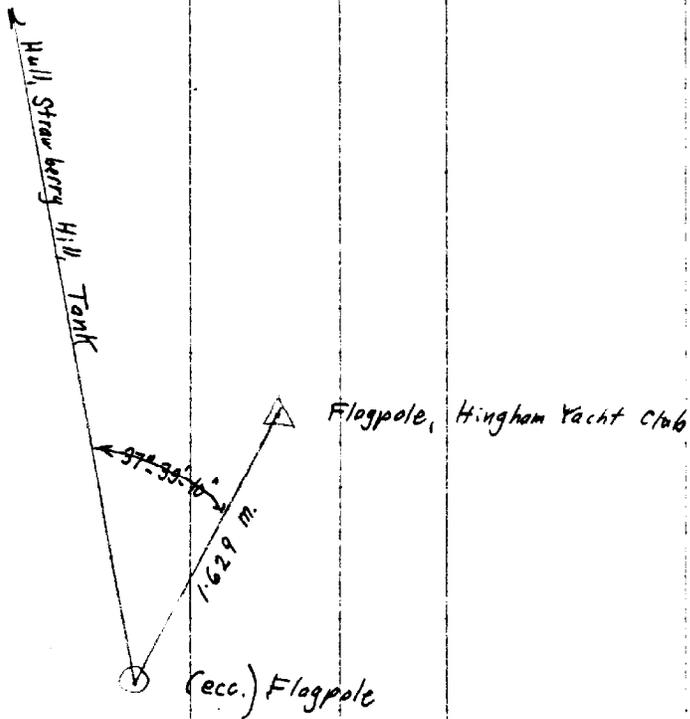
Station Hingham, Yacht Club State Mass.

Chief of party L. S. Hubbard Date 15 November 1949 Computed by L.S.H.

Observer L. S. Hubbard Instrument 7" - Berger Checked by \_\_\_\_\_

U. S. GOVERNMENT PRINTING OFFICE: 1932 11-9803

OBSERVED STATION	Observed direction	Eccentric reduction	Sea level reduction*	Corrected direction with zero initial	Adjusted direction*
Hull, Strawberry Hill, Tank	0 00 00.00			0 00 00.00	
Nantasket, WBZ, West Tower	16 28 53.3				
Flagpole, Hingham Yacht Club	37 39 10				
Hingham, Spire, Cath. Church	152 13 35.0				
Telegraph Hill, Tower	327 16 21.4				
Nantasket, Cupola, School	348 54 35.3				



\* These columns are for office use and should be left blank in the field.

Station: Ken

State: Maryland

Chief of party: C. V. H.

Date: 1917

Computed by: O. P. S.

Observer: C. V. H.

Instrument: No. 168

Checked by: W. F. R.

OBSERVED STATION	Observed direction	Eccentric reduction	Sea level reduction	Corrected direction with zero initial			Adjusted direction
				°	'	"	
Chevy .....	0 00 00.00	- 7.31	"	0 00 00.00			
Tank west of Δ Dulce .....	29 03 37.0	-1 09.8		29 02 34.5			
Ken (center), 3.469 meters .....	176 42						
Forest Glen standpipe .....	313 24 53.0	+3 01.2		313 28 01.5			
Home .....	326 31 30.21	+ 31.93		326 32 09.45			
Bureau of Standards, wireless pole ..	352 17 20.8	+ 5.7		352 17 33.8			
Reno .....	357 28 48.63	- 1.16		357 28 54.78			
Reference mark, 16.32 m .....	358 31 20						

This form, with the first three and fifth columns properly filled out and checked, must be furnished by field parties. To be acceptable it must contain every direction observed at the station.

It should be used for observations with both repeating and direction theodolites.

The directions at only one station should be placed on a page.

If a repeating theodolite is used, do not abstract the angles in tertiary triangulation. The local adjustment corrections (to close horizon only) are to be written in the Horizontal Angle Record, and the List of Directions is to be made from that record directly.

Choose as an initial for Form 24A some station involved in the local adjustment, and preferably one which has been used as an initial for a round of directions on objects not in the main scheme. Use but one initial at a station. Call the direction of the initial 0° 00' 00." 00, and by applying the corrected angles to this, fill in opposite each station its direction reckoned clockwise around the whole circumference regardless of the direction of graduation of the instrument. The clockwise reckoning is necessary for uniformity and to make the directions comparable with azimuths.

If a station has been occupied eccentrically, reduce to the center and enter in this form, in ink, the resulting corrections to the observed directions in the column provided for them. If an eccentric reduction is necessary, but not made in the field, leave the column blank. If the station was occupied centrally, and no eccentric reduction is required, put dashes in the column to show that no corrections are necessary.

Directions in the main scheme should be entered to hundredths of seconds in first-order triangulation; otherwise to tenths only. Points observed upon but once, direct and reverse, should be carried to tenths in first-order and second-order triangulation, and to even seconds only in third-order triangulation. In general, but two uncertain figures should be given.

It is recommended that the following simple plan of observing be used with a repeating instrument: Measure each single angle in the scheme at each station and the outside angle necessary to close the horizon. Measure no sum angles. Follow each measurement of every angle immediately by a measurement of its supplement. Six repetitions are to constitute a measurement. The local adjustment will consist simply of the distribution of the error of closure of the horizon.

LIST OF SIGNALS - H-7715  
(by Norfolk Processing Office)

TRIANGULATION

SKI (BETHLEHEM SHIPYARD POWER PLANT STACK, 1943)  
FORE RIVER LIGHT NO. 4, 1934  
FORE RIVER LIGHT NO. 2A, 1934  
HARRY'S ROCK LIGHT, 1934  
HINGHAM CATHOLIC CH. SPIRE, 1885-1934  
HULL, METRO STACK, 1934  
HULL, STRAWBERRY HILL, TANK, 1934  
HULL, TOWN HALL CUPOLA, 1934  
(MOONHEAD) GREAT QUINCY TANK, 1916-34  
NANTASKET, HULL INCINERATOR, BLACK STACK, 1915 - 34  
NANTASKET, TELEGRAPH HILL, TOWER, 1934  
FAT (N. WEYMOUTH, PILGRIM CONGREGATIONAL CHURCH SPIRE, 1885-1934)  
FOX (NANTASKET, WBZ RADIO, EAST TOWER, 1943)  
HOW (NANTASKET, WBZ RADIO, WEST TOWER, 1943)  
PIG ROCK LIGHT, 1934  
QUINCY, NUT ISLAND STACK, 1934  
SUNKEN LEDGE, BN. 1934  
SUNKEN LEDGE, LIGHT, 1934  
WEYMOUTH, BRADLEY STACK, 1934  
WEYMOUTH, EDISON, EAST STACK, 1934  
LOT (WINDMILL POINT, LIGHT, 1934)

TOPOGRAPHIC

from T-5776

from T-5775

Ala	Sad	Gin
Dag	Sat	Own
Den	Sax	
Fed	Slap	
Jon	Twin	
Kin	Use (See Desc. Report)	
Lip	Val	
Mar	Wed	
Nod	Wee	
Oak	Yelp	
Off		
Old		
Pol		
Pop		
Ras		
Ray		
Rik		
Rot		
Row	(See Desc. report)	

List of Signals  
Compiled by Norfolk Process. Office

AIR PHOTO COMPILATION

And T-5775  
Fuz T-5776  
Log "  
Ohm "  
Par "  
Rig "  
Sam "  
Tap "  
Wig "  
Yea "  
Yet "

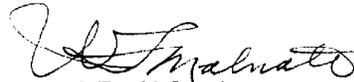
HYDROGRAPHIC

Abe	Vol. 6, p. 22	Map	Vol. 6, p. 23
Ace	Vol. 13	Pix	Vol. 15
Art	Vol. 6, p. 21	Pod	See Desc. Report
Bah	Vol. 6, p. 22	Rub	Vol. 6, p. 21
Bob	Vol. 4, p. 10	Sal	Vol. 4, p. 14
Caw	" p. 16	Sic	Vol. 4, p. 11
Cam	Vol. 6, p. 22	Toy	Vol. 4, p. 13
Cod	Vol. 13	Van	Vol. 4, p. 10
Coo	Vol. 11, p. 3	Vet	Vol. 15
Cue	Vol. 2, p. 52	Wit	Vol. 4, p. 15
Daw	Vol. 6, p. 23	Yam	Vol. 11 p. 3
Doc	Vol. 2, p. 52		
Dog	Vol. 13		
End	"		
Far	Vol. 6, p. 25-26		
Fig	Vol. 13		
Fun	Vol. 4, p. 10		
Gab	Vol. 6, p. 22-23-24-25		
Gem	Vol. 13		
Gig	Vol. 6, p. 25-26		
Her	Vol. 6, p. 26		
Hub	Vol. 4, p. 15		
Ion	Vol. 6, p. 21		
Irk	Vol. 6, p. 25		
Ivy	Vol. 2, p. 52		
Jap	Vol. 6, p. 23		
Jar	Vol. 13		
Ken	Vol. 6, p. 24		
Lab	(Cuts Indexed in volumes 16, 17 & 19)		
Lax	Vol. 6, p. 24		
Leo	Vol. 6, p. 26		
Liz	Vol. 6, p. 25		
Lud	Vol. 6, p. 25		

APPROVAL SHEET  
TO ACCOMPANY  
HYDROGRAPHIC SURVEY (FIELD NO. WA-HI 1248)

The boat sheet and sounding records were inspected daily and at the conclusion of the field work. Both are approved.

The descriptive report has been examined and is approved.



W.F. Malnate  
Lt. Comdr. C&GS  
Commanding Ship  
WAINWRIGHT & HILGARD



ADDENDUM

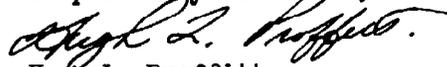
To Accompany

HYDROGRAPHIC SURVEY H-7715 (Field No. WaH1-1248)

COMPARISON WITH CHART

Further comparisons with chart 246 are shown on overlays being submitted with the smooth sheet.

Respectfully submitted,



Hugh L. Proffitt  
Cartographer

Norfolk, Va.  
March 24, 1950

Approved & Forwarded:



Earl O. Heaton  
Supervisor, S.E. District.

GEOGRAPHIC NAMES

Survey No. H-7715

Name on Survey	Source										
	A	B	C	D	E	F	G	H	K		
<u>Massachusetts</u>			(for title)							USGB	1
<u>Boston Harbor</u>			" "								2
<u>Crow Point Flatt</u>											3
<u>Hingham Bay</u>											4
<u>Quincy Bay</u>											5
<u>Bumkin Island</u>										USGB	6
<u>Sunset Point</u>											7
<u>Worlds End</u>											8
<u>Weir River</u>										USGB	9
<u>Crow Point</u>											10
<u>Grape Island</u>											11
<u>Weymouth Back River</u>											12
<u>Weymouth Fore River</u>											13
<u>Peddocks Island</u>										USGB	14
<u>Houghs Neck</u> ✓											15
<u>Sheep I</u> ✓											16
<u>Slate I</u>											17
<u>Raccoon I</u>											18
<u>Hull</u>			(location of tide gage)								19
<u>Nantasket</u>			( " " " )								20
											21
											22
											23
											24
											25
											26
											27

Names underlined in red are approved, in advance of inking; if additional names are desired, those on 1948 edition of chart 246 are all approved 4-17-50 H. HECK

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. H-7715 .....

Records accompanying survey:

Boat sheets <sup>3</sup>...; sounding vols. <sup>19</sup>.....; wire drag vols. ....;  
 bomb vols. ....; graphic recorder rolls <sup>16</sup>envel. ....;  
 special reports, etc. <sup>1</sup>Cahier, Fath. Corr. ....  
 .....

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

Number of positions on sheet		.4836
Number of positions checked		..246
Number of positions revised		....5.
Number of soundings revised (refers to depth only)		.....0.
Number of soundings erroneously spaced		.....6
Number of signals erroneously plotted or transferred		.....1.
Topographic details	Time	...29. hrs.
Junctions	Time	...17. hrs.
Verification of soundings from graphic record	Time	....9. hrs.

Verification by <sup>Stirni</sup> Stephen Rose Total time <sup>19 hrs</sup> 517 hrs. Date Sept. 4, '57

Reviewed by <sup>W. Jeske</sup> Time 100 hrs Date Dec. 21, 1951

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-7715

FIELD NO. WA HI-1248

Massachusetts, Boston Harbor, Hingham and Quincy Bays

Project No. CS-246

Surveyed in June - October, 1948

Scale 1:10,000

Soundings:

Control:

808 Fathometer  
Pole

Sextant fixes on shore signals

Chief of Party - W. F. Malnate  
Surveyed by - W. J. Chovan  
Protracted by - A. G. Atwill  
Soundings plotted by - A. G. Atwill  
Verified and inked by - S. Rose  
Reviewed by - I. M. Zeskind, 21 December 1951  
Inspected by - R. H. Carstens

1. Shoreline and Signals

The shoreline originates with air-photographic surveys T-5775 (1940-44) and T-5776 (1938-44), supplemented by the present survey. Shoreline from the present survey is shown in red.

The source of the signals is given in the Descriptive Report.

2. Sounding Line Crossings

Depths at crossings are in good agreement.

3. Depth Curves and Bottom Configuration

The usual depth curves are adequately delineated, except in a few foul inshore areas.

The bottom is very irregular. Reefs, ledges, pinnacles, shoals and mud flats contribute to the bottom irregularity. A number of natural and dredged channels fall within the surveyed area.

4. Junctions with Contemporary Surveys

Adequate junctions were effected with H-7066 (1945) on the west, with H-6643 (1940) on the northwest and with H-6642 (1940) on the northeast. Project surveys on the south have not yet been received in the Washington Office. The junctions with Project surveys on the south will be considered in the reviews of those surveys.

5. Comparison with Prior Surveys

A. Misc. 97 (1863-64)	1:10,000	H-2161 (1893)	1:10,000
H-221 (1846-47-48)	1:10,000	H-2162 (1893)	1:10,000
H-652 (1858)	1:5,000	H-2163 (1893)	1:10,000
H-1960 (1817-46-53)	1:20,000	H-3406 (1912)	1:5,000
H-1961 (1817-46-53)	1:20,000		

These prior surveys together cover the area of the present survey. The surveys accomplished prior to 1893 are of a reconnaissance nature, whereas those of that date or later are modern as to control and development. A comparison between the prior and present surveys reveals depth changes varying from 1 to 4 ft., except for greater changes in the dredged channels. The changes in the bottom are caused by dredging operations, the action of the current on the bottom and sedimentation. In general, the changes in depths are primarily those of shoaling; however, increases in depths are noted in several areas. The following prior soundings which are charted fall on the present survey in greater depths:

<u>Charted</u> <u>depth-ft.</u>	<u>Source</u>	<u>Chart</u>		<u>Pres. Survey</u> <u>depth-ft.</u>
		<u>Latitude</u>	<u>Longitude</u>	
2	H-2163	42° 16.11'	70° 54.27'	5
½	H-2163	42° 16.17'	70° 56.83'	3-4
2	H-2163	42° 16.51'	70° 56.86'	4
1	H-2163	42° 16.30'	70° 53.32'	4
1	H-2163	42° 16.30'	70° 53.15'	4
2	H-2163	42° 16.22'	70° 54.02'	4-5
spot uncovers at M.L.W.	H-2163	42° 16.26'	70° 54.03'	5
spot uncovers at M.L.W.	H-2163	42° 16.13'	70° 54.02'	4
2	H-2163	42° 15.90'	70° 53.93'	5

Changes in the shoreline are also noted. Prince Head and Nut Island which were formerly islands are now part of Peddocks Island and Houghs Neck respectively.

Except for critical soundings carried forward from H-2162 and H-2163 and inshore rock detail carried forward from H-6642, the present survey is adequate to supersede the prior surveys within the common area. A rock awash was also carried forward from T-227 (1847).

B. H-7719 W.D. (1948), 1:10,000

This wire-drag survey covers channels of the present survey in the southern portion of Hingham Bay and an area in Quincy Bay which extends eastward, southward, and westward of Hangman Island. The effective wire-drag depths are in harmony with the present depths.

6. Comparison with Chart 246 (Latest print date 2-12-51)

A. Hydrography

The charted hydrography originates principally with the previously discussed prior surveys, with the U. S. Corps of Engineers surveys to 1946, with the 1936 survey of the Department of Public Works of Massachusetts, and with the partial application of the present survey prior to verification and review.

The following discrepancies with the present survey are noted:

1. The 25-ft. sounding charted in lat.  $42^{\circ} 16.80'$ , long.  $70^{\circ} 55.97'$ , originates with the present survey prior to verification and review. The sounding was revised to 23 ft. during verification and review.
2. The 8-ft. sounding charted in lat.  $42^{\circ} 16.77'$ , long.  $70^{\circ} 56.50'$ , originates with the present survey prior to verification. As noted in paragraph 3b (2) of the review for H-7719 W.D. (1948), the 8-ft. sounding is a stray recording on the fathogram and should be deleted from the chart.
3. The 5-ft. sounding charted in lat.  $42^{\circ} 17.13'$ , long.  $70^{\circ} 55.34'$ , from the U. S. Corps of Engineers survey of 1944 (Bp. 38871) falls in present depths of 7-10 ft. The 5-ft. sounding is not considered disproved by the present survey and it, therefore, should be retained on the chart.
4. The charted rocks listed below originate with information applied to the manuscript of T-5776 (1938-44) from air-photographs of 1944 which were not field inspected. These rocks have been subsequently eliminated in the symbolization of rocks shown on the registered copy of T-5776 and should be disregarded in charting.

<u>Feature</u>	<u>Latitude</u>	<u>Longitude</u>
sunken rock	42° 16.20'	70° 56.70'
rock awash	42° 16.76'	70° 53.76'
sunken rock	42° 16.90'	70° 54.28'
3 sunken rocks	42° 16.10'	70° 54.55'
2 sunken rocks	42° 16.21'	70° 58.50'

5. The sunken rock charted in lat. 42° 16.02', long. 70° 54.45', from the present survey before verification and review is in error. A 3-ft. sounding on the present survey was erroneously smooth plotted as 3 RK. The sunken rock symbol, therefore should be deleted from the chart.

The present survey is adequate to supersede the charted hydrography within the common area.

#### B. Dredged Channels

Present survey depths in Weymouth Fore River Channel are in harmony with the charted controlling depth of 26 ft. (U. S. Corps of Engineers surveys of 1949 (Bps. 45201-03). The charted information is subsequent to and supersedes the present survey.

#### C. Aids to Navigation

Except as noted below, the present survey positions of aids to navigation are in substantial agreement with the charted positions and adequately mark the features intended.

1. Black Can Buoy No. 1 charted in lat. 42° 17.23', long. 70° 55.75' is located on the present survey 80 meters to the northeastward of the charted position. The charted position of the buoy more adequately marks the feature intended.
2. The lighted buoy No. 2 located on the present survey in lat. 40° 17.53', long. 70° 57.83' is not charted. This buoy has been removed subsequent to the present survey in accordance with H.O. Notice to Mariners No. 2, 1950.

The following privately maintained lights which are charted were not located on the present survey. The records of the present survey fail to reveal information concerning these lights.

<u>Lights</u>	<u>Charted Location</u>	
	<u>Latitude</u>	<u>Longitude</u>
Light No. 5 Hingham Yacht Club Lts.	42° 16.50'	70° 53.11'
	42° 15.75'	70° 53.60'

7. Condition of Survey

- a. The Descriptive Report and sounding records are complete.
- b. The smooth plotting was accurately done.
- c. The channel shown on the present survey in the vicinity of lat.  $42^{\circ} 16.4'$ , long.  $70^{\circ} 56.8'$  is inadequately developed. The 1936 survey made by the Department of Public Works of Massachusetts (Bp. 31172) should be used to supplement the present survey in delineating the channel in the above noted location.
- d. The two 9-ft. shoals in the Weir River Channel in lat.  $42^{\circ} 16.34'$ , long.  $70^{\circ} 52.48'$  and lat.  $42^{\circ} 16.22'$ , long.  $70^{\circ} 52.32'$ , respectively, are inadequately developed on the present survey.

8. Compliance with Project Instructions

The survey adequately complies with the Project Instructions, except as noted in paragraph 7c and d above.

9. Additional Field Work recommended

This is a very good survey. However, additional development should be accomplished to determine the least depths on the two undeveloped 9-ft. shoals in the Weir River Channel mentioned in paragraph 7d above.

As a matter of record, attention is also directed to the incomplete development of the channel in the vicinity of lat.  $42^{\circ} 16.4'$ , long.  $70^{\circ} 56.8'$ , mentioned in paragraph 7c above.

Included in 1952 instructions, 5.04

*H. R. Edmonston*  
H. R. Edmonston

Chief, Nautical Chart Branch

Examined and approved:

*H. Arnold Karo*  
H. Arnold Karo

Chief, Division of Charts

*L. S. Hubbard*

L. S. Hubbard

Chief, Section of Hydrography

*W. M. Scaife*

W. M. Scaife

Chief, Division of Coastal Surveys

colt

RHC

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Hydrography and Topography~~

19 April 1950

Division of Charts: R. H. Carstens

Plane of reference approved in  
19 volumes of sounding records for

HYDROGRAPHIC SHEET 7715

Locality Boston Harbor, Massachusetts

Chief of Party: W. F. Malnate in 1948  
Plane of reference is mean low water, reading  
2.5 ft. on tide staff at Hull (Windmill Point)  
13.5 ft. below B. M. 1 (1940)

2.0 ft. on tide staff at Nantasket  
14.4 ft. below B. M. 1 (1940)

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

Hull (Windmill Point) = 9.2 feet  
Nantasket = 9.4 feet

Condition of records satisfactory except as noted below:

*E. C. McKay*  
*Section*

Chief, ~~Division of Tides and Currents~~



