8005

Diag. Cht. Nos. 1107 and 1207-2

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey Hydrographic

Field No. ECSP-1152 *Office No.* H-8005

LOCALITY

State Massachusetts

General locality Hingham Bay

Locality Weymouth Back River and Vicinity

19 52

CHIEF OF PARTY

Clarence R. Reed

LIBRARY & ARCHIVES

DATE March 19, 1954

B-1870-1 (1)

8005

Form 537
(Ed. June 1946)

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

HYDROGRAPHIC TITLE SHEET

The Hydrographic Sheet should be accompanied by this form, filled in as completely as possible, when the sheet is forwarded to the Office.

REGISTER No. H-8005

Field No. CSP-1152

State MASSACHUSETTS

General locality ~~WEYMOUTH FORE RIVER, WEYMOUTH BACK RIVER, HINGHAM HARBOR~~ Hingham Bay

Locality ~~& WEIR RIVER~~ Weymouth Back River and vicinity

Scale 1:10,000 Date of survey 17 Apr. to 21 July, 1952

Instructions dated 28 MARCH 1952

Vessel EAST COAST SHORE PARTY

Chief of party CLARENCE R. REED

Surveyed by CLARENCE R. REED & HOWLAND S. FOOTE

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

Fathograms scaled by PARTY PERSONNEL

Fathograms checked by C.R. REED, H.S. FOOTE & R.H. HOULDER

Protracted by RICHARD D. LYNN

Soundings penciled by RICHARD D. LYNN

Soundings in ~~XXXXXX~~ feet at MLW ~~XXXXX~~

REMARKS: This report is an original covering all the surveys on this project.

U. S. GOVERNMENT PRINTING OFFICE 777032

JRE

NOTES FOR
DESCRIPTIVE REPORT
TO ACCOMPANY

HYDROGRAPHIC SHEETS H-8005, H-8006, H-8007,(FIELD NOS. ECSP 1152, 1252,05152)

BOSTON HARBOR, BOSTON, MASSACHUSETTS

EAST COAST SHORE PARTY CLARENCE R. REED, CHIEF OF PARTY

PROJECT CS-246 1952 SCALES: 1:5000 & 1:10000

* * * * * * * * * * * * * * * *

PROJECT This survey was accomplished under Supplemental Instructions dated 28 March 1952, 22/MEK, FP East Coast, Project CS-246 which called for a basic hydrographic survey within the project limits, except in the dredged channels regularly surveyed by the United States Engineers. They were addressed to the Officer in Charge, USC&GS East Coast Field Party.

SURVEY LIMITS AND DATES

The survey on Sheet H-8005 (Field No. ECSP 1152) covers Hingham Harbor to latitude 42-15.76, Weymouth Back River to latitude 42-15.80, Weymouth Fore River to longitude 70-57.00 on the east and longitude 70-57.80 on the west; a channel development at approximate latitude 42-16.40 and longitude 70-56.70; and a shoal investigation at approximate latitude 42-16.30 and longitude 70-52.40.

A junction was made with Sheet No. H-7715 (1:10,000 - 1948) and a contemporary junction was made with Sheet No. H-8007, (Field No. ECSP 05152). The field work was accomplished between 17 April and 21 July. Joins H-8005

The survey on Sheet H-8007 (Field No. ECSP 05152) covers Town River Bay and Weymouth Fore River to longitude 70-57.75. A contemporary junction was made with Sheet No. H-8005 (Field No. ECSP 1152). The field work was accomplished between 30 June and 18 July.

The survey on Sheet H-8006 (Field No. ECSP 1252) covers an area bounded on the west by longitude 70-49.40, on the east by longitude 70-48.00, on the north by latitude 42-16.45 and on the south by the shoreline. The survey junctioned with Sheet Nos. 6642 and 6643 (1:10,000-1940) on the west, with contemporary survey on sheet H- (Field No. HI-25/152) on the north and with contemporary survey on Sheet No. H-8009 (Field No. ECSP 05152) on the east. The field work was accomplished between 29 August and 25 September. Does not join H-8005

VESSEL AND EQUIPMENT Aluminum Launch No. 168 was used for the survey. The launch was operated from a shore base at Hingham, Massachusetts and a mooring at Cohasset Harbor.

This launch had a turning radius of 15 meters while running at sounding speed. Sounding speed for this launch was 5 knots at 1500 R.P.M.

On Sheet No. H-8007 (Field No. ECSP 05152) all echo soundings were obtained with Graphic Recorder No. 150 SPX. On Sheet No. H-8006 (Field No. ECSP 1252) all echo soundings were obtained with Graphic Recorder No. 159 SPX. On Sheet No. H-8007 (Field No. ECSP 1152) both Graphic Recorders were used. The transducers were mounted inboard.

TIDES AND CURRENTS The tide note is attached to this report. No currents were observed.

SMOOTH SHEET The smooth sheet is to be plotted by the Norfolk Processing Office.

CONTROL STATIONS The control consisted mainly of triangulation stations and topographic stations located by planetable methods using a three point fix. On Sheet ~~No. T-~~ graphic control (ECSP Bb 1952) a traverse of 1000 meters was run with an error of closure of 4 meters. Hydrographic stations were located by using a three point fix taken at the station site. Several check angles were also taken at each station. The number of hydrographic stations was kept to a minimum and they were used as little as possible.

The control for Sheet No. H-8006 (Field No. ECSP 1252) consisted of triangulation and photogrammetric stations. The photogrammetric stations were transferred from Sheet No. T-9512(1:10,000-1950).

Control for H-8005 = △ and graphic control surveys ECSP Aa and Ab 1952. These latter graphic control surveys have been marked for destruction.

SHORELINE AND TOPOGRAPHY The shoreline for the various boat sheets was obtained as is shown below.

*H-8005 (Field No. ECSP 1152) from T-5776 (1:10,000-1944)
H-8006 (Field No. ECSP 1252) from T-9512 (1:10,000-1950)
H-8007 (Field No. ECSP 05152) from T-5776 (1:5000-1944)

*And changes in shoreline shown on Bp 48714.

There were no major inaccuracies in the shoreline. The hydrographer sketched certain minor changes directly onto the boat sheet. | see IP/ Review

SOUNDINGS The depths were measured with graphic recorders and hand leads. Bottom samples were obtained with armed handleads.

CONTROL OF HYDROGRAPHY The sounding lines of this survey were controlled by the three-point-sextant-fix method. There were no unusual "jumps" when changing control stations. Fixes were taken at 1 to 2 minute intervals. In the upper reaches of creeks where hydrographic control was lacking, positions of sounding lines were referred to distinctive shoreline details. Appropriate remarks were entered in the sounding record.

ADEQUACY OF SURVEY This survey is complete and considered adequate to supersede prior surveys. The junctions with adjoining sheets are satisfactory. There are no holidays and depth curves can adequately be drawn at the junctions. PS of Review

CROSSLINES Crosslines required by the Supplemental Instructions were run during the progress of the work. The crossings were in good agreement.

COMPARISON WITH PRIOR SURVEYS A comparison made with surveys H-2162, and H-2163 (1:10,000-1893) showed no major changes other than the natural changes that can be expected over a period of fifty years. PS Review

Some of the channels have been dredged in recent years, therefore spot-checks were made with the following U.S. Engineers surveys:

In Town River Bay:
Dr. 18; File No. 183; March, 1947
Dr. 18; File No. 187; October, 1947
In Weymouth Fore River:
Dr. 24; File No. 311; February, 1949

* A photo corrected copy of T-5776 (Bp. 48714 Sht 238-52) was applied to smooth sheet in red ink.

COMPARISON WITH CHART Chart No. 246 - 12 February 1951 (25th Edition)

Latitude	Longitude	1952 Survey	Chart	Remarks
Sheet No. H-8005 (Field No. 1152) Hingham Harbor				
42-15.71	70-52.92	4-5 ft.	10 ft.	Six foot curve in this area does not extend as far north as shown on chart. Corrected 6ft curve and deleted 10ft sdg. on Cht 246 dated 9-3-56
42-15.60	70-53.40	~~Rock awash~~ ~~Sunken rock~~	Sunken rock	As charted Revised to * on Cht. 246 (9-3-56) Y. cht 246 Jan '58
42-15.55	70-53.37	7½ ft.	6 ft.	Shoalest sounding, item 2 of Preliminary Review, Project CS-246 (H-6642 archives) Retain 6' from H-6642
666				
Sheet No. H-8005 (Field No. 1152) Weymouth Back River				
42-15.40	70-55.08	~~7-8~~ 6½-9 ft.	2 ft.	Shoal does not extend as far off shore as shown on chart. 6½ ft sdg. shown on Chart 246 dated 9-3-56
Sheet No. H-8005 (Field No. 1152) Weymouth Fore River				
42-~~15~~14.94	70-57.~~76~~2	-------	Boiler	No sign of this boiler was found during the survey in this area. Sdg lines run at high tide. boile carried forward from H-6642 as uncovering at MLW (amount it uncovers is not known)
Sheet No. H-8007 (Field No. 05152) Town River Bay				
42-14.97	70-58.39	Wreck	Wreck	As charted, verified as per Preliminary Review, Project CS-246
Sheet No. H-8007 (Field No. 05152) Weymouth Fore River				
42-13.94	70-57.58	Pier ruins	Wreck	No wreck was found in this area, only a pier in ruins.
Sheet No. H-8006 (Field No. 1252) Black Rocks-Black Ledge				
42-16.30	70-48.50	19 ft.	24 ft.	Shoalest sounding
42-16.40	70-48.33	28 ft.	29 ft.	do
42-16.32	70-48.76	23 ft.	22 ft.	do

COAST PILOT INFORMATION The Coast Pilot notes were reveiwed and no important corrections or additions were found. In U.S.C.P. -Atlantic Coast-Section A-1950, page 348, line 17 the following phrase should be inserted: "This channel is marked with temporary buoys."

AIDS TO NAVIGATION ~~Submitted to the office as a special report. A copy of the lists of aids is appended to this report.~~

The following channels are marked by unofficial aids:

Weymouth Fore River-below latitude 42-14.00- temporary markers maintained by the Weymouth Yacht Club.

Hingham Harbor-channel to head of bay- Temporary markers maintained by Harbormaster.

LANDMARKS FOR CHART There are no landmarks to report.

GEOGRAPHIC NAMES No changes or additions were found.

MISCELLANEOUS The area SE of Grape Island and SW of Slate Island at the entrance to Weymouth Back River is shoaling. Extensive mussel beds are developing in this area. 182 feet now charted in this area Jan '58

Detached positions located by skiff relating to sheet H-8006 (ECSP-1252) were recorded in two volumes submitted with Project 349. CS

TIDE NOTE TO ACCOMPANY
Hydrographic Survey Sheets: H-8005,H-8006,H-8007

Observations were obtained at eight tide stations. Portable automatic tide gages were maintained at all of these stations except Weymouth Fore River Bridge, which was a standard automatic gage. Limits of the area in which each was used is shown on the boat sheet in blue ink. No difference in time and height was applied to the observed tides. Planes of reference were furnished by the Washington office or computed from elevations of previous tidal bench marks.

STATION	LATITUDE	LONGITUDE	MLW ON STAFF	
Eastern Neck(Weymouth Back River)	42-15.28 H	70-55.36 H	2.2 ft.	H-8005
Naval Depot (Weymouth Back River)	42-14.~~39~~ 38	70-55.61 H	3.9 ft.	
Crow Point (Hingham Harbor)	42-15.75 H	70-53.61 H	1.8 ft.	
Hingham Town Wharf(Hingham Harbor)	42-14.76 H	70-53.12 H	1.9 ft.	
Fore River Bridge	42-14.66 H	70-58.08 H	1.8 ft.	
Town River Bay	42-15.22	70-58.74	1.5 ft.	H-8007
Weymouth (Weymouth Fore River)	42-13.47	70-57.88	3.1 ft.	H-8007
White Head (Cohasset Harbor)	42-14.~~88~~ 94	70-47.04	3.0 ft.	H-8006

see "Tides" in back of DR H

FATHOMETER CORRECTIONS

HYDROGRAPHIC SURVEY

H-8005 (FIELD NO. ECSP 1152)
H-8007 (FIELD NO. ECSP 05152)
H-8006 (FIELD NO. ECSP 1252)

The corrections tabulated below are based on an initial set with a correct sounding of twelve feet. Where the initial on the fathogram varies from the correct setting, INDEX CORRECTIONS must be entered in the sounding volumes. All depths were obtained on the (A) or (B) Range, FOOT SCALE.

All corrections are positive unless otherwise noted.

FATHOMETER NO. 139 SPX
and
FATHOMETER NO. 150 SPX

16 May --- 23 June

(A) Scale

Corr.	Depth From	To
-1.0	2.8	2.9
-0.8	3.0	3.1
-0.6	3.2	3.3
-0.4	3.4	3.5
-0.2	3.6	3.9
-0.0	4.0	Sdg. Limit

24 June --- 21 July

(A) Scale

-1.2	1.0	2.9
-1.0	3.0	3.2
-0.8	3.3	3.3
-0.6	3.4	3.8
-0.4	3.9	4.8
-0.2	4.9	8.2
-0.0	8.3	18.0
0.2	18.1	Sdg. Limit

(Cont. From Page 1)

22 July --- 14 Aug.

(A) Scale

Corr.	Depth From	To
-1.0	2.8	2.9
-0.8	3.0	3.1
-0.6	3.2	3.3
-0.4	3.4	3.5
-0.2	3.6	3.9
0.0	4.0	19.5
-0.0	19.6	34.0
-0.4	34.1	48.5
-0.6	48.6	Sdg. Limit

(B) Scale

Corr.	Depth From	To
-1.8	34.5	48.5
-2.0	48.6	62.5
-2.2	62.6	76.5
-2.4	76.6	Sdg. Limit

FATHOMETER NO. 139 SPX

15 August - 14 October

(A) Scale

Corr.	Depth From	To
-1.0	2.8	2.9
-0.8	3.0	3.1
-0.6	3.2	3.3
-0.4	3.4	3.5
-0.2	3.6	3.9
-0.0	4.0	19.5
-0.2	19.6	34.0
-0.4	34.1	48.5
-0.6	48.6	Sdg. Limit

(B) Scale

Corr.	Depth From	To
2.0	35.0	48.5
1.8	48.6	62.0
1.6	62.1	Sdg. Limit

APPROVAL SHEET - HYDROGRAPHIC SURVEYS

H-8005 - H-8006 - H-8007

The records and boat sheets for Hydrographic surveys numbered H-8005, H-8006, and H-8007 have been inspected by me and are approved.

Clarence R. Reed

Clarence R. Reed
CDR, USC&GS
OinC, East Coast Shore Party

STATISTICS TO ACCOMPANY HYDROGRAPHIC SHEET H-8005

(FIELD NO. ECSP 1152)

Date 1952	Day Ltr.	Vol. No.	Lead Lines	No. Of Positions	Stat. Mi. Sdgs.
16 May	a	1	6	69	6.0
19 "	b	1	3	29	2.6
20 "	c	1	0	29	3.7
22 "	d	1	1	43	4.2
23 "	e	2	0	57	5.7
27 "	f	2	4	19	1.3
28 "	g	2	0	26	1.2
29 "	h	2	0	16	3.2
3 June	j	2	11	47	3.1
4 "	k	2&3	0	46	6.1
5 "	l	3	0	29	2.8
10 "	m	3	3	77	7.8
11 "	n	3	0	40	5.0
12 "	p	3&4	1	91	9.2
13 "	q	4	6	113	8.7
23 "	r	4	8	57	3.0
27 "	s	4	0	24	2.0
10 July	t	5	8	90	8.2
14 "	u	5	4	9	0.0
15 "	v	5	0	70	6.4
16 "	w	5	25	29	0.0
18 "	x	5	0	4	0.1
21 "	y	5&6	0	76	5.0
		TOTALS-----	80	1090	95.3

Area in square statute miles: 1.8 sq.mi.

AIDS TO NAVIGATION
H-8005

BUOY		LOCATION	DEPTH	POS. NO.	DATE
*Weir River Buoy 8		42-16.30 4 70-52.46.47	12' 4	1r 4	6/23/52 4
*Weir River Buoy 7		42-16.33 4 70-52.41 4	12' 4	2r 4	"
*Weir River Buoy 6		42-16.39 4 70-52.60 4	11' 4	3r 4	"
*Weir River Buoy 10		42-16.165 70-52.27 4	5' 4	8r 4	"
*Weir River Buoy 9	42°-16.18' 70°52.21'	42-16.~~18~~ 31	15' 4	9r 4	"

*Private aids maintained from May 15 to Sept. 15 by Wilson Line of Mass., Inc.
Red and Black Barrels

**CHANNEL MARKERS

LOCATION	DEPTH	POS, NO.	DATE
42-15.40 4 70-53.04 4	0' 4	43r 4	6/23/52
42-15.33 4 70-53.03 4	0' 4	44r 4	
42-15.29 4 70-52.98 4	2' 4	45r 4	
42-15.26.27 - 4 70-52.87.86	2' 4	46r 4	
42-15.28 4 70-52.79 4	2' 4	47r 4	
42-15.26.27 - 4 70-52.75 4	½' 4	48r 4	
42-15.26.25 4 70-52.72 4	½' 4	49r 4	
42-15.22 4 70-52.72 4	0' 4	50r 4	
42-15.17.16 4 70-52.75 4	-1' 4	51r 4	
42-15.12 4 70-52.78 4	-1' 4	52r 4	
42-14.96.95 4 70-52.91 4	0' 4	54r 4	
42-14.84.82 4 70-53.07 4	1' 4	55r 4	

** Markers in Hingham Harbor. No numbers or descriptions available.
Marker with keg on top

FLOATING AIDS TO NAVIGATION
H-8005

BUOY	LOCATION	DEPTH	POS. NO.	DATE
Lower Neck Buoy 4A	42-15.73 CH 70-55.29 CH	17' CH	1a CH	5/16/52 CH
Flats Buoy 3	42-15.69.68 70-55.22 CH	17' CH	2a CH	"
Weymouth B.R. Buoy 5	42-15.18 CH 70-55.52 CH	17' CH	41a CH	"
Opp.Hewitts Cove Buoy 6	42-15.48 CH 70-55.15 CH	18' CH	61a CH	"
Weymouth B.R. Buoy 6A	42-15.38 CH 70-55.17.18	18' CH	62a CH	"
Fertilizer Pt. Buoy 8	42-15.32 CH 70-55.20.21	17' CH	63a CH	"
Weymouth B.R. Buoy 10	42-15.16 CH 70-56.00 CH	~~19'~~ 18'	1b CH	5/19/52 CH
Weymouth B.R. Buoy 7	42-15.14 CH 70-55.95 CH	19' CH	2b CH	"
Weymouth B.R. Buoy 9	42-15.08 CH 70-55.99 CH	10' CH	3b CH	"
Weymouth B.R. Buoy 12	42-14.93.92 70-55.96.97	18' CH	29d CH	5/22/52 CH
Weymouth B.R. Buoy 20	42-14.38.37 70-55.71 CH	21' CH	1f CH	5/27/52 CH
Weymouth B.R. Buoy 18	42-14.47.46 70-55.73 CH	16' CH	2f CH	"
Weymouth B.R. Buoy 16	42-14.65.67 70-55.94 CH	11' CH	3f CH	"
Weymouth B.R. Buoy 14	42-14.78.77 70-55.92 CH	13' CH	4f CH	"
Lower Neck Pt. Buoy 4	42-15.87.85 70-55.41 CH	~~11'~~ 12'	29l	6/ 5/52 CH
Hingham Chan. Buoy 8	42-15.53.52 70-53.43.45	13' CH	75m CH	6/10/52 CH
Hingham Chan. Buoy 11	42-15.56.55 70-53.40 CH	12' CH	76m CH	"
Hingham Cham. Buoy 9	42-15.61.60 70-53.42.43	10' CH	77m CH	"
Hingham Chan. Buoy 5	42-15.99.98 70-53.70 CH	16' CH	112q CH	6/13/52 CH
Hingham Chan. Buoy 6	42-15.97 CH 70-53.80.79	17' CH	113q CH	"
Houghs Neck Chan. Buoy 1	42-16.53 CH 70-56.60 CH	10' CH	1t CH	7/10/52 CH
Houghs Neck Chan. Buoy 2	42-16.53 CH 70-56.62 CH	11' CH	2t CH	"
Fore River Chan. Buoy 6	42-15.20 CH 70-56.92 CH	25' CH	90t CH	"
Fore River Chan. Buoy 5	42-15.04 CH 70-57.18 CH	29' CH	2u CH	7/14/52 CH
Fore River Chan. Buoy 8	42-15.03 CH 70-57.31.32	27' CH	3u CH	"
Fore River Chan. Buoy 10	42-14.87.85 70-57.77.76	32' CH	4u CH	"

LIST OF SIGNALS
H-8005

TRIANGULATION STATIONS

FORE	FORE RIVER, LIGHT NO. 4, 1934
HAM	HINGHAM, NORTH TANK, 1934
HOL	HINGHAM, CATHOLIC CHURCH, SPIRE, 1885-1934
HULL	NANTASKET, HULL INCINERATOR, BLACK STACK, 1915-34
LAG	WEYMOUTH, MYLES FLAGPOLE, 1934
MOON	GREAT QUINCY, MOONHEAD, TANK, 1916-34
NAN	NANTASKET, WBZ RADIO, WEST TOWER, 1943
NUT	QUINCY, NUT ISLAND STACK, 1934
POW	BETHLEHEM SHIPYARD, POWER PLANT STACK, 1943
RIM	NORTH WEYMOUTH, PILGRIM CONG. CHURCH,SPIRE, 1885-1934
RIV	FORE RIVER, LIGHT NO. 2A, 1934
ROCK	PIG ROCK, LIGHT, 1934
SIN	BETHLEHEM SHIPYARD, INCINERATOR STACK, 1948
TAN	BETHLEHEM SHIPYARD, WATER TANK, 1943
WBZ	NANTASKET, WBZ RADIO, EAST TOWER, 1943
	HULL STRAWBERRY HILL, TANK, 1934
	HULL, METRO TANK, 1934

TOPOGRAPHIC STATIONS

(SOURCE - ECSP-Ab-52)

Ape	Bar	Bat	Bid	Bob	Bud	Cab	Can	Con	Cul	Day
Dig	Dog	Fox	Fun	Gem	Gin	Gob	Gus	Gut	Him	How
Ida	Ivy	Jag	Jig	Jug	Kim	Lad	Liz	Man	Met	Mop
Mug	Now	Off	Old	Pal	Par	Pie	Pig	Pla	Pop	Pug
Rat	Ram	Red	Rob	Rot	Roy	Sam	She	Tar	Tap	Tim
Tot	Vat	Wed	Yac	Zoo						

(SOURCE - ECSP-Aa-52)

Cop	Dol	Fog	His	Jet	Joe	Lux	May	Oil	Rep	Pin
Pro	Rye	Tax	Vim	Wig						

(AIR-PHOTO COMPILATION T-5776)

Era	Sis

(HYDROGRAPHIC STATIONS)

Mat	H-8007	Vol. 2, pg. 18
Ros	H-8005	Vol. 2, pg. 38
Zob	H-8005	Vol. 4, pg. 64

SPECIAL INVESTIGATION - WEIR RIVER

The investigation of charted 9 and 10 foot soundings in the Weir River Channel called for by the review of the Division of Charts was undertaken on 6/23 - 7/16 and 9/11/52. This work was replotted on a 1/5,000 boat sheet for legibility although field work was originally done on the regular 1/10,000 scale. On 23 June a system of lines was run using aluminum launch No. 168 and 808 depth recorder. The fathogram presented a rather odd picture in that returns which appeared to be possible soundings in mid - channel would reduce to as shoal as zero. On 16 July a 294 foot piece of tarred marline attached to a sounding lead at each end and towed by skiffs was used to sweep the channel. No obstructions were found in the vicinity of the charted shoal soundings. The positions of the two skiffs were determined by fixes taken from the aluminum launch immediately astern of each skiff alternately along the dragged strip. On 11 September a lead-line investigation to determine the nature of the bottom in the area of the two charted shoal soundings did not disclose anything unusual. No shoal soundings were found. No sea weed was found in dragging. The false shoal soundings on "r" day (6/23/52) may have been caused by uneven water temperature or sewage, possibly the same condition which existed during the survey on which the soundings originated.

* See Note below.

Captain Arthur Knight, Manager of the Wilson Line of Boston was consulted regarding these soundings. The Wilson Line operates excursion boats in summer from Boston to Nantasket, Massachusetts via the Weir River. These boats have a draft as great as 10 feet and operate even on minus tides. It is obvious that these charted shoal soundings do not exist. Captain Knight states that his boats do "smell the bottom" a little near the 12½ foot shoal charted farther northwest at latitude 42-16.44 N, longitude 70-52.57 W but do not have any unusual behaviour in passing the 9 and 10 foot charted soundings in question.

It is recommended that the* 9 foot sounding charted at latitude 42-16.34 N longitude 70-52.48 W and the* 10 foot sounding charted at latitude 42-16.22 N longitude 70-52.32 W be removed from the chart as non-existant. It is recommended that the 12½ foot sounding charted at latitude 42-16.44 N longitude 70-52.57 W be retained on the chart.

* deleted from chart

1/3

Clarence R. Reed

Clarence R. Reed
CDR, USC&GS

Inspection of the area prior to verif. reveals the 9 & 10 ft depths described do not exist. Recommend the deletion of the 9 ft sdgs. shown on Chart 246 (9-28-53) in lat 42°16.34', long 70°52.48', and lat. 42°16.22', long. 70°52.32', respectively. [redacted] (also see PP 7d of Report H-77N, 1948).

I.M.Z. 5/19/54

* Area in which 9ft & 13ft. sdgs. found on H-77N has been superseded by H-8005. 9ft sdgs. disproved on H-8005. 13ft. sdg. carried forward to H-8005.

I.M.Z. 4/8/57

ADDENDUM
To Accompany

HYDROGRAPHIC SURVEY H-8005 (Field No. CSP-1152)

CONTROL

Some weak fixes were used near Langlee Island, in Hingham Harbor, but it is believed a good adjustment has been obtained.

SOUNDINGS

This survey was assigned to a relatively inexperienced draftsman, due to the large amount of priority work in this Office. It is suggested that the verifier be particularly careful when checking the choice and spacing of the soundings.

careful check of sdgs and spacing made by verifier

DRAG INVESTIGATION

The marlin drag survey, done in weir River Channel on 16 July 1952, was not smooth plotted. The area covered is adequately shown on the sub-plan of the boat sheet.

Respectfully submitted,

Hugh L. Proffitt

Hugh L. Proffitt
Cartographer.

Norfolk, va.
9 March 1954

FORM 537a
(9-24-47)

DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

REGISTER NO. T -

TOPOGRAPHIC TITLE SHEET

FIELD NO. ECSP-Aa-52

Each Planetable and Graphic Control Sheet should be accompanied by this form, completed so far as practicable, when forwarded to the Washington Office.

STATE
Massachusetts

GENERAL LOCALITY
Boston Harbor

LOCALITY
Weymouth Fore River-Insert: Weir River

SCALE
1/10,000

DATE OF SURVEY
5-17 June, 1952

VESSEL
East Coast Shore Party

CHIEF OF PARTY
Clarence R. Reed

SURVEYED BY
Howland S. Foote

INKED BY
Howland S. Foote

HEIGHTS IN FEET ABOVE MHW OR ____ ☐ TO GROUND ☐ TO TOPS OF TREES

CONTOUR ——— APPROXIMATE CONTOUR ——— FORM LINE INTERVAL ——— FEET

PROJECT NUMBER
CS-246

REMARKS
Partially applied to H-8005(1952)

12136

FORM 537a
(9-24-47)

DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

REGISTER NO. T -

TOPOGRAPHIC TITLE SHEET

FIELD NO. ECSP-Ab-52

Each Planetable and Graphic Control Sheet should be accompanied by this form, completed so far as practicable, when forwarded to the Washington Office.

STATE
Massachusetts

GENERAL LOCALITY
Boston Harbor

LOCALITY
Weymouth Back River - Hingham Harbor

SCALE
1/10,000

DATE OF SURVEY **2-28 May**, 19 **52**

VESSEL
East Coast Shore Party

CHIEF OF PARTY
Clarence R. Reed

SURVEYED BY
Howland S. Foote

INKED BY
Howland S. Foote

HEIGHTS IN FEET ABOVE MHW OR ——— ☐ TO GROUND ☐ TO TOPS OF TREES

CONTOUR ——— APPROXIMATE CONTOUR - - - FORM LINE INTERVAL ——— FEET

PROJECT NUMBER
CS-246

REMARKS
Applied to H-8005 (1952) entirely and then destroyed.

12136

FORM 537a
(9-24-47)

DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

REGISTER NO. T -

TOPOGRAPHIC TITLE SHEET

FIELD NO. ECSP-Ba-52 (H-8007, 1952)

Each Planetable and Graphic Control Sheet should be accompanied by this form, completed so far as practicable, when forwarded to the Washington Office.

STATE
Massachusetts

GENERAL LOCALITY
Boston Harbor

LOCALITY
Town River Bay

SCALE
1/5,000

DATE OF SURVEY 19-20 June, 1952

VESSEL
East Coast Shore Party

CHIEF OF PARTY
Clarence R. Reed

SURVEYED BY
Howland S. Foote

INKED BY
Howland S. Foote

HEIGHTS IN FEET ABOVE MHW OR ____ ☐ TO GROUND ☐ TO TOPS OF TREES

CONTOUR ____ APPROXIMATE CONTOUR ____ FORM LINE INTERVAL ____ FEET

PROJECT NUMBER
CS-246

H-8007

REMARKS

ESCP-Ba-52 applied entirely to H-8007(1952) and then destroyed.

Magnetic declination at Lat. 42°15.1', Long. 70°58.75', 19 June 1952, at 1000 EST is 15°34' W.

ESCP-

12136

FORM 537a
(9-24-47)

DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY

REGISTER NO. T -

TOPOGRAPHIC TITLE SHEET

FIELD NO. ECSP-Bb-52 (H-8007, 1952)

Each Planetable and Graphic Control Sheet should be accompanied by this form, completed so far as practicable, when forwarded to the Washington Office.

STATE
Massachusetts

GENERAL LOCALITY
Boston Harbor

LOCALITY
Weymouth Fore River

SCALE
1/5,000

DATE OF SURVEY 23-26 June, 19 52

VESSEL
East Coast Shore Party

CHIEF OF PARTY
Clarence R. Reed

SURVEYED BY
Howland S. Foote

INKED BY
Howland S. Foote

HEIGHTS IN FEET ABOVE MHW OR ____ ☐ TO GROUND ☐ TO TOPS OF TREES

CONTOUR ——— APPROXIMATE CONTOUR ——— FORM LINE INTERVAL ——— FEET

PROJECT NUMBER
CS-246

REMARKS

ECSP-Bb-52 applied entirely to H-8007(1952) and then destroyed.

Magnetic declination at ⊙ Joe, 24 June 1952, at 1100 EDT. is 13°34' W. (Declination probably faulty; see ECSP Ba-52)

12136

DESCRIPTIVE REPORT
TO ACCOMPANY

GRAPHIC CONTROL SHEETS

SHEETS: FIELD NO. ECSP-Aa-52, 1:10,000 - 1952
FIELD NO. ECSP-Aa-52 insert, 10:10,000 - 1952
FIELD NO. ECSP-Ab-52, 1:10,000 - 1952
FIELD NO. ECSP-Ba-52, 1:5,000 - 1952
FIELD NO. ECSP-Bb-52, 1:5,000 - 1952

CONTROL:

The basic control for these graphic control sheets consisted of triangulation stations. The stations were plotted and checked by this party. On sheet Field No. ECSP-Ba-52 a recoverable topographic station was used as a basic control station. This station was located on sheet Field No. ECSP-Aa-52.

On sheet Field No. ECSP-Ab-52 it was necessary to use four U.S. Engineers marks. These stations were originally located on the Massachusetts State Coordinate system. The Washington office computed the geographic position in Latitude and Longitude for these stations. These stations were used independently for the location of signals in the Hingham Naval Ammuntion Depot area. The plane table was set up over one mark and oriented on another one. The resultant cuts to the desired object gave excellent intersections.

On sheet Field No. Bb-52 a stack transferred from topographic sheet T-5776 was used as the starting point for a traverse.

METHODS USED:

With one exception, all plane-table orientation was accomplished using a solution of the three-point problem. On sheet Field No.ECSP-Bb-52 a traverse was run. The error of closure on the 1,000 meter traverse was 4 meters. This error was distributed throughout the traverse in proportion to the distance from the origin. The lack of triangulation on this sheet made it necessary to transfer a stack from topographic sheet T-5776. This was used as the origin control for the traverse.

SHEET COVERAGE:

Each sheet covered an area as listed:

Sheet No. FIELD NO. ECSP-Aa, 1952 - Weymouth Fore River
FIELD NO. ECSP-Aa, insert, 1952 - Weir River
FIELD NO. ECSP-Ab, 1952 - Weymouth Back River - Hingham Harbor
FIELD NO. ECSP-Ba, 1952 - Town River Bay
FIELD NO. ECSP-Bb, 1952 - Weymouth Fore River

MISCELLANEOUS:

These graphic control sheets are considered complete and adequate. All discrepancies were resolved in the field.

Respectfully Submitted,

Howland S. Foote
ENS, USC&GS

Approved & Forwarded
Clarence R. Reed
Clarence R. Reed
CDR, USC&GS
OinC, East Coast Shore Party

WAR DEPARTMENT

MASSACHUSETTS U. S. ENGINEER OFFICE, BOSTON, MASS. Page

Subject WEYMOUTH BACK RIVER ABOVE LINCOLN ST. BRIDGE

Computation TABLE OF CO-ORDINATES LAMBERT

COPIED

Computed by W. Hansen Jr. Checked by Date APRIL 17, 1943

LINE		AZIMUTH	DIST	CO-ORDINATES		
				POINT	NORTH	EAST
Newall –	Stodder	174° 20' 09"	1512.04	Newall	454,872.85	754,104.40
	KARL	106-03-29	1487.82			
	Alpha	62-04-32	826.28			
	Beta	46-36-57	737.69			
	FENDER	113-21-22	278.23			
	X	7-26-58	839.39			
	Collis	346-08-06	1164.19			
Alpha –	Newall	242-04-32	826.28	Alpha	454,485.90	753,374.33
	X	302-32-01	840.78			
	Collis	306-22-38	1253.28			
Beta –	Newall	226-36-57	737.69	Beta	454,366.15	753,568.27
	X	302-50-45	612.87			
	Collis	307-25-01	1026.27			
	Goode	335-50-09	1427.48			
X –	Newall	181-26-58	839.39	X	454,033.73	754,083.17
	Beta	122-50-45	612.87			
	Alpha	122-32-01	840.78			
Collis –	Newall	166-08-06	1164.19	Collis	453,742.58	754,383.38
	Beta	127-25-01	1026.27			
	Alpha	126-22-38	1253.28			
	Goode	18-46-27	716.98			
	K+50	306-50-27	1142.94			
	Fish	3-27-13	1675.13			
Goode –	Beta	155-50-09	1427.48	Goode	453,043.75	754,152.62
	Collis	198-46-27	716.98			
	K+50	270-19-25	1145.47			
	Fish	352-33-05	1001.70			
K+50 –	Goode	90-19-25	1145.47	K+50	453,057.28	755,298.08
	Collis	126-50-27	1142.94			
	Fish	45-49-29	1416.04			
Fish –	Goode	172-33-05	1001.70	Fish	452,070.50	754,282.48
	K+50	225-49-29	1416.04			
	Collis	183-27-13	1675.13			

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
Form 742 b

GEODETIC POSITIONS FROM LAMBERT COORDINATES

(CALCULATING MACHINE COMPUTATION)

STATE – ZONE Massachusetts l = .6717286561

Station Beta

C	− 600,000.00	R_b	23,549,477.32
X	753,568.27	Y	− 454,366.15
$X' = X - C$	+ 153,568.27	$R_b - Y$	23,095,111.17
$\tan\theta = X' \div (R_b - Y)$	.0066493843	θ	1371.51375
θ	+ 0° 22' 51.51375	$\Delta\lambda = \theta \div l$	2041.7675'
$\cos\theta$	.9999778936	$\Delta\lambda$	0° 34' 01.768
$R = (R_b - Y) \div \cos\theta$	23,095,621.73	Central Meridian	71° 30' 00.000
ϕ	42° 14' 43.801	λ = C.M. − $\Delta\lambda$	70° 55' 58.232

Station Goode

C	−	R_b	23,549,477.32
X	754,152.62	Y	− 453,063.75
$X' = X - C$	+ 154,152.62	$R_b - Y$	23,096,413.57
$\tan\theta = X' \div (R_b - Y)$	.0066743098	θ	1376.6548
θ	+ 0° 22' 56.6548	$\Delta\lambda = \theta \div l$	2049.4210
$\cos\theta$	.9999777276	$\Delta\lambda$	0° 34' 09.421
$R = (R_b - Y) \div \cos\theta$	23,096,927.99	Central Meridian	° ' "
ϕ	42° 14' 30.897	λ = C.M. − $\Delta\lambda$	70° 55' 50.579

Station K + 50

C	−	R_b	23,549,477.32
X	755,298.08	Y	− 453,057.28
$X' = X - C$	+ 155,298.08	$R_b - Y$	23,096,420.04
$\tan\theta = X' \div (R_b - Y)$	.0067239027	θ	1386.8836
θ	+ 0° 23' 06.8836	$\Delta\lambda = \theta \div l$	2064.6486
$\cos\theta$	.9999773953	$\Delta\lambda$	0° 34' 24.649
$R = (R_b - Y) \div \cos\theta$	23,096,942.13	Central Meridian	° ' "
ϕ	42° 14' 30.757	λ = C.M. − $\Delta\lambda$	70° 55' 35.351

Station Fish

C	−	R_b	23,549,477.32
X	754,282.48	Y	− 452,070.50
$X' = X - C$	+ 154,282.48	$R_b - Y$	23,097,406.82
$\tan\theta = X' \div (R_b - Y)$	.0066796451	θ	1377.7552
θ	+ 0° 22' 57.7552	$\Delta\lambda = \theta \div l$	2051.0591
$\cos\theta$	.9999776919	$\Delta\lambda$	0° 34' 11.059
$R = (R_b - Y) \div \cos\theta$	23,097,922.09	Central Meridian	° ' "
ϕ	42° 14' 21.076	λ = C.M. − $\Delta\lambda$	70° 55' 48.941

M-2545-2

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY
Form 725 d

PLANE COORDINATES ON LAMBERT PROJECTION

(Condensed form for calculating-machine computation)

STATE Massachusetts ZONE Mainland

Station	Beta	Goode	K+50	Fish
ϕ	42 14 43.801	42 14 30.897	42 14 30.757	42 14 21.076
λ	70 55 58.232	70 55 50.579	70 55 35.351	70 55 48.941
R	23,095,621.77	23,096,927.97	23,096,942.15	23,097,922.11
θ	+0 22 51.5141	+0 22 56.6548	+0 23 06.8839	+0 22 57.7551
$\sin\theta$	.00664 92390	.00667 41613	.00672 37523	.00667 94956
$\cos\theta$	.99997 78936	.99997 77276	.99997 73952	.99997 76919
$R\sin\theta$				
C	2,000,000.00	2,000,000.00	2,000,000.00	2,000,000.00
X	753,568.31	754,152.62	755,298.12	754,282.47
$R\cos\theta$	23,095,111.21	23,096,413.55	23,096,420.05	23,097,406.84
y	454,366.11	453,063.77	453,057.27	452,070.48
Grid Az. to Az. Mk.				

Station				
ϕ				
λ				
R				
θ				
$\sin\theta$				
$\cos\theta$				
$R\sin\theta$				
C	2,000,000.00	2,000,000.00	2,000,000.00	2,000,000.00
X				
$R\cos\theta$				
y				
Grid Az. to Az. Mk.				

M-2493-2

$X = R\sin\theta + C$ $\quad y = R_o - R\cos\theta$ $\quad R_o =$ $\quad$ Grid Az. = Geod. Az. $- \theta$

GEOGRAPHIC NAMES

Survey No. H-8005

Name on Survey	A On Chart No.	B On previous survey No.	C On U. S. quadrangle Maps	D From local information	E On local Maps	F P. O. Guide or Map	G Rand McNally Atlas	H U. S. Light List	K	
Massachusetts									B G&Y	1
Boston Harbor		(for "General Locality" in title								2
Houghs Neck									B.G.&Y	3
Weymouth Fore River										4
King Cove										5
Eastern Neck										6
Weymouth Back River										7
Beal Cove										8
Hingham Bay										9
Crow Point										10
Hingham Harbor										11
Weir River									B&Y	12
										13
					Names approved					14
Any other names on					4-2-54 L. Heck					15
chart 246 are approved										16
if it should be desired										17
to use them. L. H.										18
										19
										20
										21
										22
										23
										24
										25
										26
										27

M 234

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. H-8005

Records accompanying survey:

Boat sheets 1; sounding vols. 6; wire drag vols. .....;

bomb vols. .....; graphic recorder rolls 11 Env.

special reports, etc. 1 Smooth Sheet; 1 Descriptive Report; 1 Cahier Tide Data;

.....

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

Number of positions on sheet		1090
Number of positions checked		82 (75% D.P.'s)
Number of positions revised		9
Number of soundings revised (refers to depth only)		137
Number of soundings erroneously spaced		16
Number of signals erroneously plotted or transferred		0
Topographic details	Time	24
Junctions	Time	24
Verification of soundings from graphic record	Time	8

Verification by C.R. Helmer Total time 208 Date 3/14/57

Reviewed by L.W. Jesbund Time 72 Date 4/8/57

M-2232-1

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-8005 FIELD NO. ECFP-1152

Massachusetts, Hingham Bay, Weymouth Back River and Vicinity

Project No. CS-246

Surveyed - April-July 1952 Scale 1:10,000

Soundings: Control:

808 Fathometer
Lead line

Sextant fixes on
shore signals

Chief of Party - C. R. Reed
Surveyed by - C. R. Reed and H. S. Foote
Protracted by - R. D. Lynn
Soundings plotted by - R. D. Lynn
Verified and inked by - C. R. Helmer
Reviewed by - I. M. Zeskind 4-8-57
Inspected by - R. H. Carstens

1. Shoreline and Signals

The shoreline originates with reviewed air-photographic survey T-5776 (1938-44), supplemented by revisions shown in red on a print of T-5776 (Bp. 48714). These revisions are from photographs of 1951 and are also shown in red color on the smooth sheet.

The source of the control 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.

This survey covers the following areas:

a. Weymouth Back River south of lat. 42°15.8'.

b. Weymouth Fore River between long. 70°57.0' and long. 70°57.8'.

c. Hingham Harbor.

d. The development of the channel in the vicinity of lat. 42°16.4', long. 70°56.7'.

e. The development of a portion of the channel in Weir River between lat. 42°16.1' and lat. 42°16.45'.

The channels referred to in sub-headings d and e above are privately maintained and their controlling depths are 8 ft. and 13 ft. respectively. Channels maintained by the U. S. Corps of Engineers are located in Weymouth Fore River, Weymouth Back River and Hingham Harbor. Here the bottom is fairly smooth and flats generally extend from shore to the channel edges. In Hingham Harbor, ledges, reefs and rocks are found in the foreshore and flats.

4. Junctions with Contemporary Surveys

Adequate junctions were effected with the following surveys in the areas indicated:

Weymouth Fore River

H-8007 (1952) on the southwest.
H-7715 (1948) on the northeast.

Weymouth Back River

H-7715 (1948) on the north.

Hingham Harbor

H-7715 (1948) on the north.

Channel in the vicinity of lat. 42°16.4', long. 70°56.7'

H-7715 (1948) overlaps present survey.

Channel in Weir River between lat. 42°16.1' and lat. 42°16.45'

A butt junction at the limits where the present survey supersedes H-7715 (1948)

5. Comparison with Prior Surveys

A. Misc. 97 (1863-64), 1:10,000
H-1021 (1869), 1:10,000
H-1960 (1817-46-53), 1:10,000

These early reconnaissance surveys fall within the area of the present survey. A comparison between the prior and present surveys reveals changes in shoreline and bottom

configuration. Except where channels have been dredged, a general shoaling of 1 - 4 ft. is noted. However, in several areas, greater changes in depths have occurred, as for example in lat. 42°15.52', long. 70°53.20', where a prior depth of 19 ft. falls in present depths of 8 ft. These changes in shoreline and bottom configuration are attributed to dredging operations, the reclaiming of land, sedimentation, the action of the current, and the construction and alteration of piers.

The present survey is adequate to supersede the prior surveys within the common area.

B. H-2162 (1893), 1:10,000
H-2163 (1893), 1:10,000

These surveys together cover the area of the present survey. A comparison between the prior and present surveys reveals changes in shoreline and bottom configuration, which are attributed to causes similar to those enumerated in paragraph A above. Except in the channels the present depths are generally 1 - 3 ft. deeper than the prior depths. New channels have been dredged and old channels have been extended with the resultant changes in bottom configuration, as for example, in the vicinity of lat. 42°16.3', long. 70°52.4', where a cut-off has been dredged and in Weymouth Back River, south of the bridge, where the channel has been extended about 0.5 mile.

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

C. H-6642 (1940), 1:10,000

This is an incomplete survey which, within the area of the present survey, shows inshore detail and a few soundings. The rock awash charted in lat. 42°14.95', long. 70°57.68' from H-6642 should be deleted from the chart. The rock awash is believed to be part of a groin which was constructed subsequent to 1940 and which is shown on the present survey.

Several rocks awash, a boiler and one sounding have been carried forward from the prior survey to the present survey. With the addition of the afore-mentioned hydrographic information, the present survey is adequate to supersede the prior survey within the common area.

6. Comparison with Chart 246 (Latest print date 9-3-56)

A. Hydrography

The charted hydrography originates with the prior surveys previously discussed which need no further consideration, supplemented by soundings from the present survey before verification and review. Only minor differences of 1 - 2 ft. between the charted and present survey depths occur.

The following discrepancies between the charted and present survey hydrographic information are noted:

1. The pier charted in lat. 42°14.95', long. 70°53.45', from air-photographic survey T-5776 (1938-44) is shown as being nonexistent on Bp. 48714 (revisions from 1951 photographs) and has not been transferred to the present survey.

2. The marine railway and piles charted in lat. 42°15.62', long. 70°54.90', from T-5776 (1938-44) no longer exists and should be deleted from the chart. A note on the boat sheet states "no trace of marine railway found".

B. 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 buoy "9" charted in lat. 42°16.10', long. 70°52.0', is located on the present survey 330 meters to the northwestward. The charted position of the buoy more adequately marks the feature intended.

2. Black buoy "C-5" charted in lat. 42°15.20', long. 70° 55.46', is located on the present survey 90 meters to the southwestward. The charted position of the buoy more adequately marks the feature intended.

3. Black buoy "C-11" charted in lat. 42°15.56', long. 70°53.33', is located on the present survey about 80 meters to the westerly of the charted position. The present survey position more adequately marks the feature intended.

C. Dredged Channels

The charted controlling depth of 15 ft. in Weymouth Back River channel originates with the present survey prior to verification and review. The controlling depth is in agreement with the present survey after verification.

Present survey depths in Weymouth Fore River channel are in harmony with the charted controlling depth of 26 and 26½ ft. (U. S. Corps of Engineers survey of November 1952, Bps. 49609 and 49610). The charted information is subsequent to and supersedes the present survey.

The controlling depth of the channel in Hingham Harbor shown on the present survey is 7 ft. The charted controlling depth in the channel is 5½ ft. and originates with a subsequent survey by the U. S. Corps of Engineers in 1954 (Bp. 51380).

7. Condition of Survey

a. The Descriptive Report and sounding records are complete and adequate.

b. The smooth plotting was accurately done, except that -0.2 ft. was occasionally erroneously plotted as 2 ft.

8. Compliance with Project Instructions

The survey adequately complies with the Project Instructions.

9. Additional Field Work Recommended

The surveys of Hingham Harbor and portions of Weymouth Fore River and Weymouth Back River are considered basic and no additional field work is recommended. The present survey together with survey H-7715 (1948) are considered to form a basic survey of the channel located in lat. 42°16.4', long. 70°56.7'. The present survey of the channel in Weir River between lat. 42°16.1' and lat. 42°16.45', supersedes the hydrography obtained on survey H-7715 (1948).

Examined and Approved:

Max G. Ricketts
Chief, Nautical Chart Branch

Charles A. Schanck
Chief, Division of Charts

Karl B. Jeffers
Chief, Hydrography Branch

Samuel B. Grenell
by J. Bowie
Chief, Division of Coastal Surveys

RMC

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

839

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Division of Coast and Surveys~~: 26 March 1954

Division of Charts: R. H. Carstens

Plane of reference approved in
6 volumes of sounding records for

HYDROGRAPHIC SHEET 8005

Locality Boston Harbor, Mass.

Chief of Party: C. R. Reed in 1952
Plane of reference is mean low water, reading
2.2 ft. on tide staff at Eastern Neck, Weymouth Back River
13.7 ft. below B. M. 1 (1952)

3.9 ft. on tide staff at Naval Depot, Weymouth Back River
19.0 ft. below B. M. 1 (1952)

1.9 ft. on tide staff at Hingham Town Wharf
16.9 ft. below B. M. 1 (1952)

1.8 ft. on tide staff at Crow Point, Hingham Harbor Entrance
14.3 ft. below B. M. 1 (1926)

~~Condition of records satisfactory except as noted below:~~
1.8 ft. on tide staff at Weymouth Fore River Bridge
16.2 ft. below B. M. 1 (1926)

3.0 ft. on tide staff at Whitehead (Cohasset Harbor)
18.3 ft. below B. M. 1 (1940)

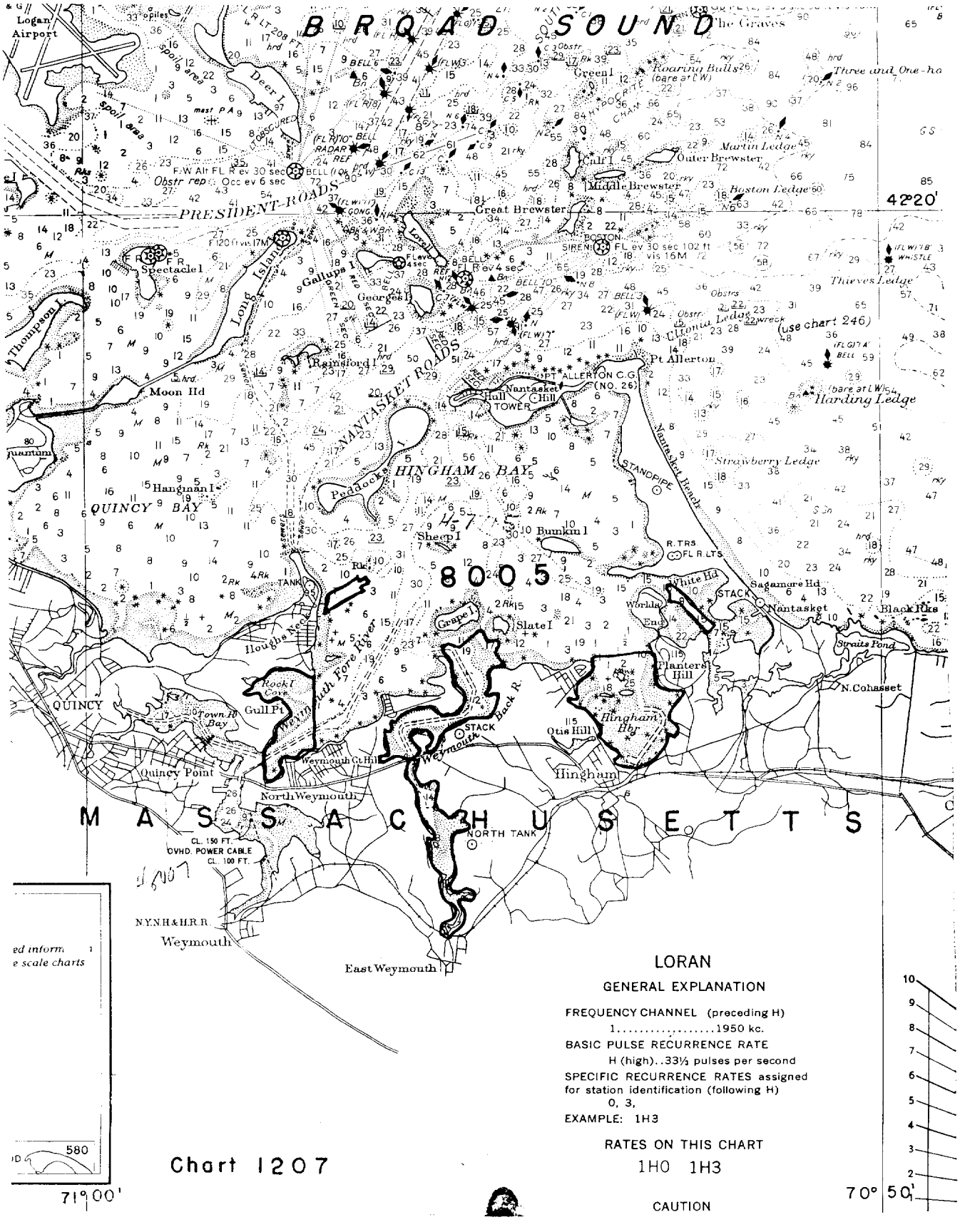
(OVER)

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

U. S. GOVERNMENT PRINTING OFFICE 877033

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

Eastern Neck, Weymouth Back River	=	9.4 feet
Naval Depot, Weymouth Back River	=	9.4 "
Hingham Town Wharf	=	9.5 "
Crow Point, Hingham Harbor Entrance	=	9.4 "
Weymouth Fore River Bridge	=	9.6 "
(Cohasset Hbr) Whitehead	=	8.8 "


BROAD SOUND
MASSACHUSETTS
PRESIDENT ROADS
NANTASKET ROADS
HINGHAM BAY
QUINCY BAY
Logan Airport
Deer I
Spectacle I
Long Island
Gallops I
Georges I
Thompson I
Moon Hd
Peddocks I
Hangman I
Sheep I
Bumkin I
Grape I
Slate I
Houghs Neck
Rock I
Gull Pt
Town Hill Bay
QUINCY
Quincy Point
North Weymouth
Weymouth
East Weymouth
Weymouth Fore River
Weymouth Back R.
Weymouth Ct. Hill
Hingham
Hingham Hbr
Otis Hill
Planters Hill
N. Cohasset
Straits Pond
Black Rks
Nantasket
Sagamore Hd
White Hd
Worlds End
Nantasket Hull
Hull TOWER
Pt Allerton
PT ALLERTON C.G. (NO. 26)
Nantasket Beach
STANDPIPE
STACK
NORTH TANK
TANK
R. TRS
FL R. LTS
Green I
Roaring Bulls
Three and One-ha
The Graves
Outer Brewster
Middle Brewster
Great Brewster
Boston Ledge
Martin Ledge
Thieves Ledge
Harding Ledge
Strawberry Ledge
Ultimus Ledge
(use chart 246)
BOSTON SIREN
FL ev 30 sec 102 ft vis 16M
F.W Alt FL R ev 30 sec
Obstr rep Occ ev 6 sec
CL. 150 FT. OVHD. POWER CABLE CL. 100 FT.
N.Y.N.H.&H.R.R.
42°20'
71°00'
70° 50'
8005
1207
Chart 1207
LORAN
GENERAL EXPLANATION
FREQUENCY CHANNEL (preceding H)
1.....1950 kc.
BASIC PULSE RECURRENCE RATE
H (high)..33⅓ pulses per second
SPECIFIC RECURRENCE RATES assigned for station identification (following H)
0, 3,
EXAMPLE: 1H3
RATES ON THIS CHART
1H0 1H3
CAUTION

H08005

VELOCITY CORRECTIONS

East Coast Shore Party
16 May - 14 October 1952

H08005

A Scale
16 May –
23 June

"A" Scale
24 June –
21 July

"A" Scale
22 July – 14 August

Fath. 150 SPX

"B" Scale
22 July – 14 August

Fath. 139 SPX

"B" Scale
15 August – 14 October

NAUTICAL CHARTS BRANCH

SURVEY NO. H-8005

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
5-20-54	1207	DH Benson	Before ~~After~~ Verification and Review Critical corrections only
7/7/54	246	JG McGann	Before ~~After~~ Verification and Review Part. applied.
3/30/55	246	W Evans Jr	Before ~~After~~ Verification and Review add'l part'l app'n.
1-21-58	246	R.K. DeLauder	~~Before~~ After Verification and Review Applied Completely SMA
3/17/60	1207	Helmer	~~Before~~ After Verification and Review Full application
			Hydro deleted from chart for this area.
10/26/64	246	h.j. keeler	~~Before~~ After Verification and Review add. part. app'd.
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review
			Before After Verification and Review

M-2168-1

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.