

7865

Diag. Cht. Nos. 1215-3 & 369-5

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey HYDROGRAPHIC

Field No. HI-1250 Office No. H-7865

LOCALITY

State NEW YORK

General locality JAMAICA BAY

Locality ROCKAWAY INLET AND ISLAND CHANNEL

1945

CHIEF OF PARTY

W. J. Chovan

LIBRARY & ARCHIVES

DATE AUGUST 31, 1951

B-1870-1 (1)

7865

W. J. Chovan

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-7865

Field No. Hi-1250

State New York

General locality Jamaica Bay, N.Y.

Locality Rockaway Inlet, ^{and Island Channel} ~~Plumb Beach Channel, Mill Creek & Gerritson Creek~~

Scale 1:10,000 Date of survey 10 May to 11 Oct. 1950

Instructions dated 11 Apr. 1950

Vessel Ship Hilgard & Skiff

Chief of party Walter J Chovan

Surveyed by Walter J. Chovan & Edward C. Maran

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

Fathograms scaled by Ships Personnel

Fathograms checked by " "

Protracted by W.W. Feazel

Soundings penciled by W.W. Feazel & S.M. Tarkenton

Soundings in ~~fathoms~~ feet at MLW ~~MLW~~ and are true depths

REMARKS: This survey was smooth plotted in the Hydrographic Section of the Norfolk Processing Office.

DESCRIPTIVE REPORT
TO ACCOMPANY
HYDROGRAPHIC SURVEY (FIELD NO. H-1250) REGISTRY NO. H-7865 (1950)
ROCKAWAY INLET, GERRITSEN BAY, MILL CREEK, & PLUM BEACH CHANNEL
JAMAICA BAY, NEW YORK

Scale 1:10,000
Ship HILGARD & Skiff, Walter J. Chovan, Chief of Party
Surveyed by Walter J. Chovan, CDR., Edward C. Maran, Ensign

A. PROJECT.- Project CS-337 - Director's supplemental instructions 22rrc, FP, Long Island, 11 April 1950.

B. SURVEY LIMITS AND DATES.- This survey joins with H-7863(1950), and H-7864(1950) on the west, extending from Rockaway Inlet and Sheepshead Bay, to the Marine Parkway Bridge on the east, joining with Hydrographic Survey H-5734(1934). This survey of Jamaica Bay includes all creeks, channels, and bays, except Sheepshead Bay. The south limit was the north shore of Rockaway, New York. Some development work was done east of the Marine Parkway Bridge to longitude $73^{\circ}51'30''W$ and north to include Paerdegat Basin.

Field work on this sheet began 10 May 1950 and ended 11 October 1950.

When weather prevented work on other sheets with the Ship HILGARD, work was done on this survey.

C. VESSELS AND EQUIPMENT.- The Ship HILGARD and Skiff 736 were used. The Ship HILGARD was used for two days while locating signals and sounding Rockaway Inlet Channel to the Marine Parkway Bridge. The remainder of the sheet was done by the Skiff. The Skiff operated from the Ship HILGARD which was tied up at Pier 2, U.S.M.S.T.S., Brooklyn 35, New York.

Two portable fathometers, Model 808a, numbers 58s and 67 were used in taking soundings. Depths varied from 0 to 55 feet, reduced to mean low water. Pole soundings were taken when fathometer initial obscured the echo soundings.

D. TIDES AND CURRENT STATIONS.- A portable automatic tide gage was installed and maintained at the west side of Marine Parkway bridge on the first pier off the north shore of the bridge, latitude $40^{\circ}34'63''N$, longitude $73^{\circ}53'26''W$. Except for clock repairs, this gage was in continuous operation throughout the field season, and was used for the reduction of soundings throughout this sheet with two exceptions.

1. For Plumb Beach Channel, Gerritsen Creek, Mill Creek an automatic portable tide gage was installed on a dock in Plumb Beach Channel at latitude $40^{\circ}35'12''N$, longitude $73^{\circ}55'61''W$. These records were used in reducing soundings in the Plumb Beach Channel, Gerritsen Creek, and Mill Creek and the locality north of the bridge joining Plumb Beach and Barren Island. This was maintained until the work in the above mentioned areas was completed.
2. Tide Staff, located at Carnarsie, latitude $40^{\circ}37'66''N$, Longitude $73^{\circ}53'10''W$ was read every fifteen minutes while Hydrography was in progress. The results were used in the reduction of soundings of the development work in that area.

MLW at Marine Parkway Bridge installation was 2 feet on the tide staff.

MLW at Plumb Beach Channel installation was 1.4 feet on the tide staff.

MLW at the Carnarsie Tide Staff is 1.0 feet on the tide staff.

No current observations were made.

E. SMOOTH SHEET.- To be processed in the Norfolk Processing Office.

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

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

G. SHORELINE AND TOPOGRAPHY.- The boat sheet H7865; the projection was prepared in Washington, D. C. Office and the shoreline was transferred by the Ship HILGARD from air photo compilations T-5093, T-5094, T-5334, T-5335, and ~~T-5615~~ correction sheets.

1933-34

See Review for source of smooth sheet shoreline.

Considerable changes in topography has been made, by the New York Park Commission, in the area just West of Flatbush Avenue (Marine Parkway) from Avenue U to the Marine Parkway Bridge. After all improvements are made this area will be a public park.

Dead Horse Bay has been deepened and enlarged by dredging for the purpose of making an anchorage for small craft.

The area West of Flatbush Avenue and north of Shore Parkway to Avenue U is now being filled with trash and debris and covered with sand taken from the stock pile. The stock pile was provided by dredging a channel in latitude $40^{\circ}35'95''N$ between Mill Creek and Gerritsen Creek.

All shoreline changes in this area were determined by sextant fixes and are shown on the boat sheet.

Along the shore at approximately latitude $40^{\circ}35'35''N$ and longitude $73^{\circ}54'74''W$ there are beached barges.

Ruins of a dock are located at latitude $40^{\circ}35'30''N$ and longitude $73^{\circ}54'90''W$. See p, q, and r days.

H. SOUNDINGS.— The portable fathometers, type 808a, numbers 58s and 67, were used in obtaining soundings for this survey. Transceiver units were mounted inboard against the hull of the vessels used.

Corrections to soundings were obtained from bar checks.

I. CONTROL OF HYDROGRAPHY.— The sounding lines were controlled by three point fixes to shore objects for the most part. When running between docks, where sextant fixes were unobtainable, landmarks were used for control.

J. ADEQUACY OF SURVEY.— The hydrography as shown on boat-sheet #7865 is completed within the area covered by this survey. It is adequate to supersede previous surveys of this area for the purposes of charting.

Around the locality of latitude $40^{\circ}34.60'N$ and longitude $73^{\circ}54.10'W$ an independent company has been dredging sand and has been moving around throughout the period that hydrography was performed.

The junctions with the adjoining surveys appear to be satisfactory on the boat-sheet. More definite comparison can be made after the smooth sheet is processed. No "Holidays" exist within the area surveyed. Depth curves can be adequately drawn at the junctions. *see review*

- K. **CROSSLINES.**- The area surveyed is crossed with several channels. The lines were run with the axis of the channel and serve as cross lines. 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. *see review*
- M. **COMPARISON WITH CHARTS.**- The comparison should be made with USC&GS Chart 542, after the smooth sheet has been processed. *see review*
- N. **DANGERS AND SHOALS.**- The west side of the Rockaway Breakwater appears to be shoaling.
- At latitude $40^{\circ}35.62'N$, longitude $73^{\circ}54.80'W$ a ~~sunken~~ barge *grounded* bares about 4 feet at mean low water.

(N. continued P. 5)

LIST OF CHARTED DANGERS AND SHOALS

Location Latitude Longitude	Charted Depth feet	Present Survey Least Depth Feet	Position Number	Recommendations	
✓ 40° 34.05' ✓ 73 55.98 ✓	4 Bp 35399 (1941)	6 5½	18y 59 to 54a	Delete 4 ft. sounding chart as 6 5½ ft.	2 ✓
✓ 40 34.27 73 55.602	5 H-6763 (1942)	4 5.5	11lx 62 to 69b	chart 4 Retain 5 ft. sounding on chart.	3 ✓
✓ 40 33.952 73 55.82	5 BP 37325	5.2	281	Plot 5 ft. on chart	4 ✓
✓ 40 34.6878 73 55.68	Wreck Bares at MLW	↔ 3 ↔	Vol. I H-7863 Index sig Irk	Chart as wreck charted from CL 350 (1950)	5 ✓
✓ 40 34.47 ✓ 73 54.95 ✓	6 CL 773 (1945)	6 not developed on present survey 7 ft. 50 m. SE.	29c	Retain 6 ft sounding on Chart	6 ✓
✓ 40 34.60 73 54.8072	5 H-6763 (1942)	7 5	83a 24 to 25 w	When the channel was dredged the shoal was slightly cut and extends SE to the major shoal. No change	
✓ 40 34.651 73 54.55	Log Bares at MLW H-8763 (1942)	No log- found at MLW	after 11y 9ly	Log to be deleted from Chart Not presently charted	8 ✓
✓ 40 34.55 ✓ 73 54.25 ✓	Wreck bares at MLW Bp 36839 (1942)	Wreck bares at LW	- - -	Retain on Chart Position of wreck was not determined on H-7865 See Review	9 ✓
✓ 40 35.14 73 54.5525	Wreck bares at MLW H-6763 (1942)	No wreck found at MLW	- - -	Wreck to be deleted from Chart Removed from chart by authority of CL 136 (1950)	10 ✓
✓ 40 33.78 73 55.152	Wreck H-5734 (1934) uncovers 2 ft.	No wreck found	52z Probable remains are indicated on bathogram 52 to 533, uncovers ½ ft., projects 2 ft above bottom.	Delete from Chart as stranded wreck	11 ✓
✓ 40 34.402 73 53.720	18 Bp 37325 (1943)	15 14	45y 46 to 47y	Change to 15 14 ft. MLW cht. 542 revised 9-13-51	12 ✓
✓ 40 34.60 ✓ 73 53.70 ✓	Wreck H-5734 (1934)	No wreck	38y	Delete wreck from chart	13 ✓
✓ 40 33.98 ✓ 75 54.50 ✓	18 Bp 41204 (1946)	17 ✓	122y	Plot on chart as 17 feet. A 12 ft. sdg. is shown on the smooth sheet 50 m. northeast, See Review -	14 ✓
✓ 40 34.48 ✓ 73 53.43 52.43	18	21 ✓	56aa	Plot on chart as 21 feet.	15 ✓

(N. DANGERS AND SHOALS.- Cont.)

Location Latitude Longitude	Charted Depth Feet	Present Survey Least Depth Feet	Position Number	Recommendations	
✓ 40° 34.93' 73 52.41	17 <i>same shoal</i>	17	27ea	Retain on chart as 17 feet	✓ 16 ✓
✓ 40 34.92 95 73 52.45 40	14½	17.2 16	42 ca 119aa	Delete 14½ foot sounding Replot as 17 16 feet.	✓ 17 ✓
✓ 40 34.98 ✓ 73 52.53 ✓	18½ <i>Bp 37325 (1943)</i>	48.8 ✓	64ca	Delete 18½ feet sounding from chart. <i>CHT 542 revised 9-13-51</i>	✓ 18 ✓
✓ 40 35.21 ✓ 73 52.49 ✓	30 31 <i>Bp 37186 (1944)</i>	30 ✓	125-126 22 28ea	Retain on Chart 30 feet	✓ 19 ✓
✓ 40 35.27 30 73 52.60	31 0 <i>Bp 41205 (1946)</i>	33 29.2	15+16 ca 4-5 ca	Retain on Chart 29 feet	✓ 20 ✓
✓ 40 36.15 ✓ 73 52.73 ✓	22 rep. Shoaling <i>CL 128 (1947)</i>	32 ✓	<i>{ 16-470-ba 165-166-ba</i> 140 & 146ba	<i>note of 22 ft. Sdg.</i> No signs of shoaling Delete from Chart. <i>"Note" removed from ch. 542 9-13-51</i>	✓ 21 ✓
✓ 40 36.39 ✓ 73 53.40 ✓	15½ <i>Bp 37610 (1942)</i>	15.6 17	122-123 ba 130ba	Retain as plotted on Chart. <i>Chart 16 ft depths 100 meters NE.</i>	✓ 22 ✓
✓ 40 36.63 ✓ 73 53.00 ✓	18 <i>Bp 41205 (1946)</i>	16 ✓	92ba-93ba 98-99 ba	Replot with shoaler sounding of 16 feet.	✓ 23 ✓
✓ 40 36.49 ✓ 73 53.18 ✓	23 <i>Bp 41205 (1946)</i>	25 38	119ba-120ba 111-112 ba	Retain as plotted <i>Chart 18 ft. Sdg 100 meters southwest</i>	✓ 24 ✓
✓ 40 37.14 ✓ 73 53.52 ✓	Investigation Required	31.4 ✓	64ba	Plot as 31 feet on Chart.	✓ 25 ✓
✓ Paerdegat 16 Oct. 1934 Basin		10 ✓	8ba	Replot with 10 feet as controlling depth.	✓ 26 ✓

O. COAST PILOT INFORMATION.- All Coast Pilot changes in this area were taken care of in Coast Pilot Survey of 1949. *CL. 136(1950)*

P. AIDS TO NAVIGATION.- No new fixed aids to navigation were found.

The Marine Parkway Bridge, Jamaica Bay, as obtained from the Bridge Book, revised to 1 July 1941 - has a vertical leftspan near the center. This span has a vertical clearance of 55 feet at HW, when in a lowered position, and 152 feet when in a raised position. The horizontal clearance is 503 feet.

Plumb Beach Channel Bridge as obtained from the Bridge Book, revised to 1 July 1941, is a fixed bridge with 3 spans. The center span has a horizontal clearance of 113.6 feet and a vertical clearance of 35.4 feet at HW.

see review

Q. LANDMARKS FOR CHARTS.- Landmarks for charts will be submitted in accordance with 8534 in the Hydrographic Manual. CL. 107 (1951)

R. GEOGRAPHIC NAMES. - The area Surveyed has been covered by aerial photographs. No special effort was made to check Geographic names.

Y. MISCELLANEOUS. - <sup>changed to "Bell 4A"
HON to M. 29-1950</sup> Rockaway Point Breakwater bell buoy 6 is off the end of breakwater (40°32.35'N - 73°56.47'W) is in the 1950 light-list of Atlantic and Gulf Coasts. Buoy 6 (40°33.23'N - 73°56.60'W) has the same markings on the USC&GS Chart 542 which was corrected up to 1 April 1950.

Z. TABULATION OF APPLICABLE DATA.-

Tide Staff record for Canarsie To be submitted with records.

Plan of docks in Plumb Beach Channel " " " " "
(40°35.25'N - 73°55.80'W) *(filed in this Descriptive Report)*

SENT TO WASHINGTON

15 May 1950	Form 258 (1)	Establishment of tide station at Marine Pkwy. Bridge, Jamaica Bay, New York (Barren Island)
23 Aug. 1950	Form 258 (1)	Establishment of Tide Station at Plumb Beach Channel, Jamaica Bay, New York.
	" 681 (1)	
	" 638 (3)	
	" 685 (2)	

Tide Marigrams - Barren Island, Jamaica Bay, N.Y.

24 May 1950	- Numbers 1 - 4 inclusive
25 May 1950	- " 5
26 Aug. 1950	- " 6 - 19 inclusive
12 Oct. 1950	- " 20 - 27 "

(#27 is last of series)

Tide Marigrams - Plumb Beach Channel, Jamaica Bay, N.Y.

26 Aug. 1950	- Numbers 1 - 3 inclusive
12 Sept. 1950	- " 4 - 5
3 Oct. 1950	- " 6 - 8 inclusive

(#8 is last of series)

3 Oct. 1950	Form 258 (1)	Leveling record for Tide Station at Plumb Beach Channel, Jamaica Bay, New York.
12 Oct. 1950	Form 258 (1)	Leveling record for Tide Station at Barren Island, Jamaica Bay, New York.

SENT TO NORFOLK FIELD OFFICE

2 Nov. 1950	T-5093	Film Positives
	T-5094	" "
	T-5334	" "
	T-5335	" "
	T-5615	" "

Report on Fathometer Corrections to be submitted.
(filed with H-7864)

STATISTICS FOR HYDROGRAPHIC
FIELD SURVEY H-1250; REGISTRY NO. H-7865

SHIP HILGARD: PROJECT CS-337

DATE	DAY LETTER	VOLUME	NO. OF POSITIONS	ECHO, POLE HAND LEAD-	ST. MI.-- SDG. LINE
SHIP HILGARD					
* 10 May	A	I	12 [✓]	-----	----
18 May	B	I	121 [✓]	CP	18.0
			TOTAL	133 [✓]	CP 18.0
SKIFF C&GS No. 736					
20 June	a	II	79 [✓]	CP	12.6
25 June	b	II	132 [✓]	CP	14.2
28 June	c	II & III	127 [✓]	CP	17.0
29 June	d	III	194 [✓]	CP	19.0
30 June	e	III & IV	104 [✓]	CP	13.0
6 July	f	IV	103 [✓]	CP	15.1
13 July	g	IV & V	152 [✓]	CP	20.5
14 July	h	V	81 [✓]	CP	13.5
* 17 July	j	V	2 [✓]	-----	----
28 July	k	V & VI	125 ¹¹⁹	CP & 16	17.6
31 July	l	VI	118 [✓]	CP	21.2
18 Aug.	m	VI & VIII	61 [✓]	CP & 48	7.3
23 Aug.	n	VIII	70 ⁷⁶	CP	8.4
26 Aug.	p	VIII	50 [✓]	CP	4.6
29 Aug.	q	VIII	34 [✓]	CP	6.7
30 Aug.	r	IX	81 [✓]	CP	9.7
31 Aug.	s	IX	45 [✓]	CP	4.8
8 Sept.	t	IX	39 [✓]	CP	2.7
14 Sept.	u	IX	161 [✓]	CP	19.4
15 Sept.	v	X	75 [✓]	CP & 59	0.8
21 Sept.	w	X	109 [✓]	CP	15.6
29 Sept.	x	X	164 ¹⁶²	CP	26.3
2 Oct.	y	XI	126 [✓]	CP	19.9
3 Oct.	z	XI	93 [✓]	CP	13.4
5 Oct.	aa	XI	132 [✓]	CP	20.5
6 Oct.	ba	XII	194 [✓]	CP & 26	22.5
9 Oct.	ca	XII	66 [✓]	CP	11.2
10 Oct.	da	XII	3 [✓]	--- & 3	----
11 Oct.	ea	XIII	34 ³⁵	CP	2.3
			TOTAL	2654	2653 CP & 152 359.8
			GRAND TOTAL	2787	2786 CP & 152 377.8

Square Statute Miles: 5.67

* Asterisk indicates signal locations only.

LIST OF SIGNALS

Hi-1250 H-7865

Triangulation Stations

NOR BRIDGE NORTH, 1940
 SOW BRIDGE SOUTH, 1940
 BUS✓ BROOKLYN, FLOYD BENNET AIRPORT AERO BEACON, 1931
 CAT BROOKLYN, SHEEPSHEAD BAY, ST. MARKS CATHOLIC CH., SQUARE TR.,
 CROSS, SP., 1930-32
 ION CARNARSIE, BROOKLYN UNION GAS CO., CHIMNEY, 1931
 CIN EAST FLATBUSH, FLATLANDS INCLINATOR, NORTH CHY., 1931
 BUN JAMAICA BAY, BURNS BROTHERS COAL CO., ELEVATOR, 1931-48
 CHY MILL BASIN, BRISLIN LUMBER CO., CHY., 1920-30
 --- PUBLIC SCHOOL NO. 115, 1931-32
 JUT✓ ROCKAWAY JETTY, BEACON, 1934-40
 TOM ROCKAWAY POINT, CATHOLIC CHURCH, CROSS, 1919-31
 OBI ROCKAWAY POINT, TALL TOWER, 1930-31

Topographic Stations

Quo Source T-5093
 Dek Source T-5094
 Jap - Out/- REED Source T-5334
 HEAD - Owl/- Pea - Spy✓ Source T-5335
 Dio (See letter 15 May 1951)

Hydrographic Stations

Bed	Vol 1 pg. 7,9 from Survey H-7864	Gus	Vol 1 pg. 4,6,7 from Survey H-7863
Ben	Vol 9 pg. 27	Hod	Vol 1 pg. 8 from Survey H-7864
Cop	Vol 1 pg. 6,7	Irk	Vol 1 pg. 7,8 from Survey H-7863
Cra	Vol 9 pg. 27	Jer	Vol 8 pg. 3,4,5
Cry	Vol 1 pg. 4,5,6 from Survey H-7863	Kam	Vol 8 pg. 5
Cur	Vol 1 pg. 4 from Survey H-7863	Lee	Vol 11 pg. 56, 63, 64
Dag	Vol 8 pg. 4	Lig	Vol 8 pg. 39
Dol	Vol 8 pg. 3,4,6	Loc	Vol 9 pg. 28
Elf	Vol 1 pg. 7, 8, 9 from Survey H-7864	Log	Vol 1 pg. 5,7 from Survey 7864
Gul	Vol 8 pg. 39	Mar	Vol 8 pg. 3,4,5

Hydrographic Stations Cont'd

Min✓	Vol 8 pg. 5, 19, 20, 22	Rat✓	Vol 1 - pg. 5, 6 & 11
Mop	Vol 2 pg. 70	Roy	Vol 1 pg. 7
Peg	Vol 8 pg. 38	Tes	Vol 8 pg. 38
Pin	Vol 1 pg. 7, 6	Use	Vol 8 pg. 3,5 (H-7864 Vol 1 pg. 5, 6,7) (H-7863)
Pole	Vol 12 pg. 6	WAR	Vol 1 pg. 3,4,5 (also Survey H-7863)
Pom	Vol 8 pg. 3		

Photogrammetric Stations (Green) Source T-5335

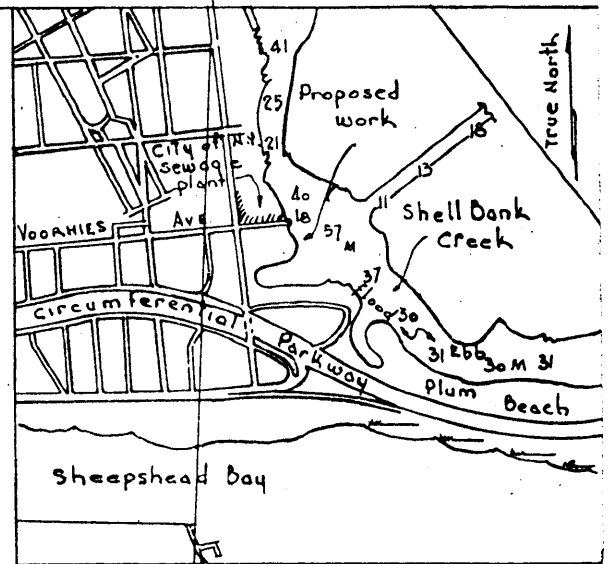
Doc Fall In Sew

LIST OF FLOATING AIDS

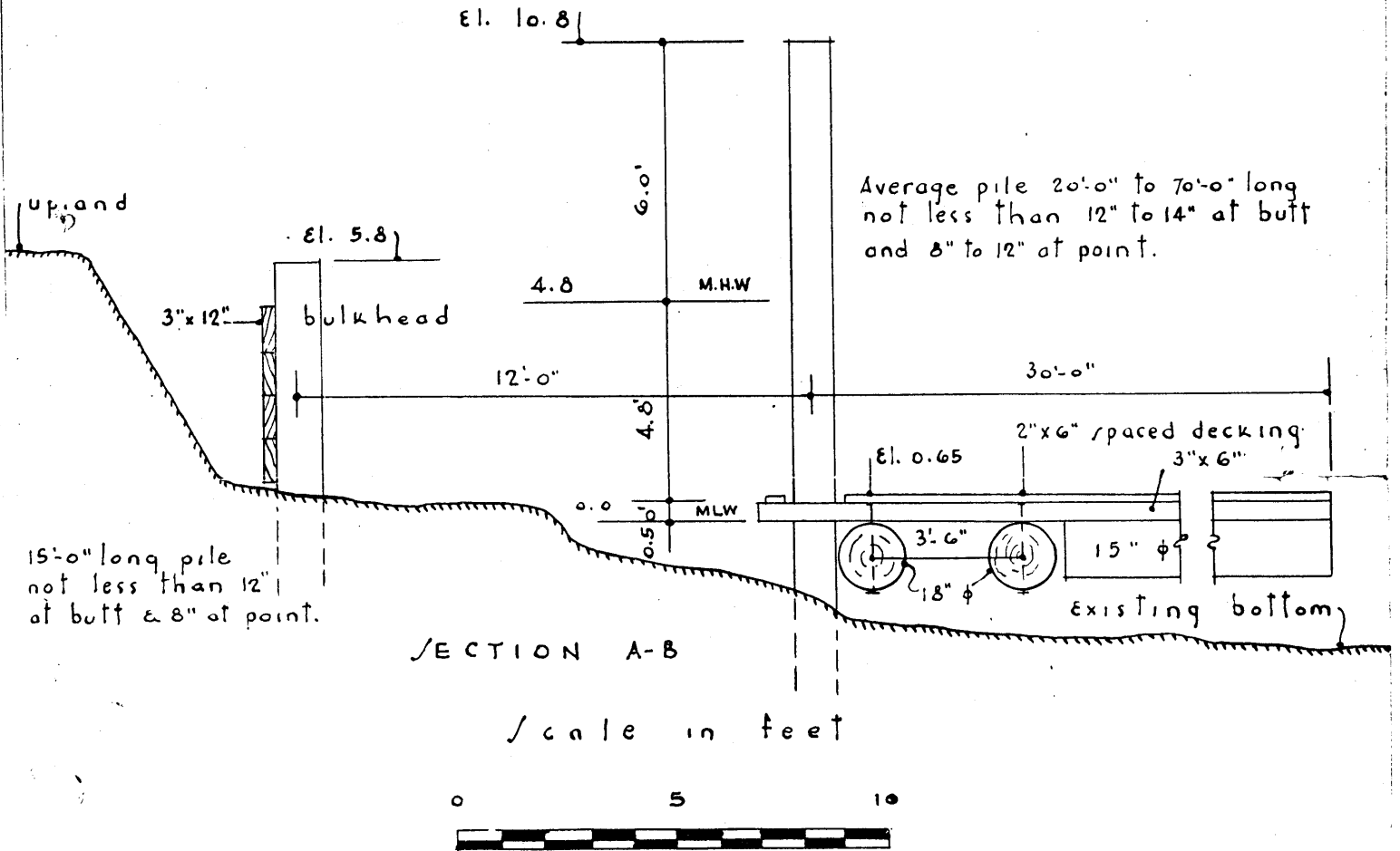
Hi-1250 H-7865

From Light List	Lat.	m	Long.	m	Depth Water	Pos. No.	Date of Location
Sheepshead Bay Approach Channel, Lighted Bell Bouy "2A"	40°34'	580	73°55'	1061	20½	1v	9-15-50
Sheepshead Bay Approach Bouy "3"	40°34'	597	73°55'	1390	25½	2v	"
" " " " "2"	40°34'	064	73°56'	163	13	3v	"
" " " " "1"	40°34'	146	73°56'	301	13	4v	"
Rockaway Inlet, Main Chan. Bell Bouy "5"	40°33'	409	73°56'	821	27½	5v	"
Rockaway Inlet, Main Chan. Bouy "8"	40°33'	926	73°56'	434	25	6v	"
Rockaway Inlet, Main Chan. Lighted Bell Bouy "10"	40°33'	1298	73°55'	1178	39	7v	"
Rockaway Inlet, Main Chan. Bouy "9"	40°33'	1521	73°55'	1308	35	8v	"
" " " " "12"	40°33'	1441	73°55'	707	43	9v	"
" " " " "13"	40°34'	100	73°55'	412	30½	10v	"
" " " " "14"	40°33'	1656	73°55'	071	44	11v	"
" " " " "16"	40°34'	103	73°54'	450	23	12v	"
" " " " "18"	40°34'	209	73°53'	1165	27½	13v	"
Gerritsen Inlet (Marker) Buoy "2"	40°34'	406	73°55'	085	22	14v	"
Gerritsen Inlet Lighted Bouy "2"	40°34'	377	73°55'	089	23½	15v	"
Gerritsen Inlet Bouy "1"	40°34'	345	73°55'	231	19½	16v	"
Gerritsen Inlet Lighted Bouy "4"	40°34'	918	73°55'	081	18	17v	"
Gerritsen Inlet Bouy "5"	40°34'	1024	73°55'	112	10	19v	"
" " " " "7"	40°34'	1183	73°54'	1177	15½	20v	"
" " " " "10"	40°34'	1460	73°54'	708	10	21v	"
Gerritsen Inlet Lighted Bouy "9"	40°34'	1493	73°54'	796	17	23v	"
Island Channel Lighted Bouy "16"	40°37'	103	73°53'	461	30½	39ba	10-6-50
Island Channel Bouy "21"	40°37'	1151	73°53'	272	26	68ba	"
do "20"	40°37'	981	73°52'	1293	29½	69ba	"
do "19"	40°37'	904	73°53'	437	26	70ba	"
do "18"	40°37'	519	73°53'	364	24	71ba	"
do "17"	40°37'	581	73°53'	989	21	72ba	"
do "15"	40°37'	065	73°53'	806	34	73ba	"
do "13"	40°36'	1629	73°53'	617	34	74ba	"
do "14"	40°36'	1502	73°53'	213	31	75ba	"
do "11"	40°36'	1338	73°53'	452	31½	76ba	"
Mill Basin Junction Bouy	40°36'	1033	73°53'	298	31	77ba	"
Mill Basin Channel Bouy "2"	40°36'	946	73°53'	451	15	78ba	"
Mill Basin Channel Bouy "4"	40°36'	869	73°53'	620	3½	79ba	"
Island Channel (Marker) Bouy "9"	40°36'	737	73°53'	171	37½	80ba	"
Island Channel Lighted Bouy "9"	40°36'	756	73°53'	152	29½	81ba	"
Island Channel Bouy "12"	40°36'	1092	73°53'	003	30½	82ba	"
do "10"	40°36'	807	73°52'	1267	36½	186ba	"
do "7"	40°36'	566	73°52'	1390	26½	187ba	"
Island Channel Lighted Bouy "5"	50°36'	008	73°52'	1186	12½	188ba	"
Runway Lighted Bouy "A"	40°35'	1589	73°52'	774	19	189ba	"
Big Fishkill Channel Lighted Bouy "3"	40°35'	1380	73°52'	251	11½	190ba	"
Runway Lighted Bouy "B"	40°35'	1016	73°52'	278	12	191ba	"
Island Channel Lighted Bouy "6"	40°35'	659	73°52'	526	20½	192ba	"
Fourteen Foot Spot Lighted Bouy	40°34'	1649	73°52'	613	31½	193ba	"
Nova Scotia Bar Lighted Bouy	40°34'	1260	73°52'	167	24½	194ba	10-6-50
Beach Channel Bouy "1A"	40°35'	176	73°51'	573	21	1da	10-10-50
Runway Lighted Bouy "D"	40°35'	766	73°51'	252	9½	2da	"
Runway Lighted Bouy "C"	40°35'	382	73°51'	003	14½	3da	"

Soundings are in feet & refer to mean low water.
No harbor lines established.



From C & G.S. chart No. 542
Scale 500 YD.



Application by
EDWARD SCHATZ, DEC. 10 1949.

PROPOSED BOAT SLIPS & BULKHEAD IN
SHELLBANK CREEK IN VICINITY OF
VOORIES AVE., BROOKLYN, N.Y. *Sheet 2*

C O P Y

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

WASHINGTON 25

Refer to No. 222/MEK
D-1-SE

15 May 1951

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

Subject: Positions of Radio Towers

With reference to your request of 4 May 1951 for geographic positions of the three radio towers shown on the north end of Barren Island on chart 542, the only information available are the following scaled positions:

Latitude	40° 36' 244 Meters
Longitude	73 53 877 "
Latitude	40 36 290 "
Longitude	73 53 990 "
Latitude	40 36 168 "
Longitude	73 53 969 "

These positions were scaled by the Nautical Chart Section from a Public Works blueprint and are considered to be of only fourth-order accuracy.

Acting Director

T I D E N O T E

TO ACCOMPANY DESCRIPTIVE REPORT,
FOR FIELD SURVEY H-7865

JAMAICA BAY, NEW YORK

Barren Island, Flatbush Ave, Jamaica Bay, New York tide station was used for the reduction of soundings on this sheet from Island Channel to Rockaway Inlet.

Latitude $40^{\circ}34.63'N$ ✓
Longitude $73^{\circ}53.26'W$ ✓
M.L.W. on staff is 2.0 ft. ✓

Plumb Beach Channel, Jamaica Bay, New York tide station was used to reduce soundings in Plumb Beach Channel, Gerritsen Creek, Mill Creek, and the vicinity immediately north of the Plumb Beach Channel Bridge.

Latitude ~~$40^{\circ}37.66'N$~~ $40^{\circ}35.12'$
Longitude ~~$73^{\circ}53.10'W$~~ $73^{\circ}55.61'$
M.L.W. on staff is 1.4 ft. ✓

Carnarsie Tide staff was established by the Long Island Shore Party. The record for the tide staff of Carnarsie Beach Park Wharf was used to reduce soundings in Island Channel and Paerdegat Basin. Only one day's observation was necessary.

Latitude $40^{\circ}37.68'N$ ✓
Longitude $73^{\circ}53.10'W$ ✓
M.L.W. on staff is 1.0 ft. ✓

APPROVAL SHEET

TO ACCOMPANY

HYDROGRAPHIC SURVEY NO. H-7865
FIELD NO. HI-1250 -

* - - - - - *

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.



Walter J. Chovan
Commander, C&GS
Cdg. Ship HILGARD

ADDENDUM
To Accompany

HYDROGRAPHIC SURVEY H-7865 (Field No. HI-1250)

DISCREPANCIES

Lat. 40-34.28 Long. 73-56.32 Soundings between positions
~~1 & 91~~ ^{1l 2l} (Skiff) average about one foot deeper than surrounding hydrography. It
appears that rejected bar check, taken in the A.M., should be considered in
reducing these soundings. *Conflict resolved by using A.M. bar check*

Lat. 40-35.4 Long. 73-54.8 Position 29r (Skiff) appears
to be displaced. Accompanying overlay # 1 shows position plotted on course and
hydrography. *Pos 29r plotted on time and course, agrees with adjacent hydrography.*

Lat. 40-35.52 Long. 73-54.80 $1\frac{1}{2}$ foot sounding between
positions 10 & 11s (Skiff) appears to be displaced. Poor fixes on a two position
line prevented an accurate determination of the position of this sounding.
*Plotted as accidental in volume - extensive dredging in this area.
Sounding not inked - adjusted spacing puts sounding at edge of islet.*

Respectfully submitted,

Hugh L. Proffitt
Hugh L. Proffitt
Cartographer.

Norfolk, Va.
29 Aug. 1951

Approved & Forwarded:

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

24C

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~Hydrographic and Topographic~~

12 September 1951

Division of Charts: R. H. Carstens

Plane of reference approved in 12
volumes of sounding records for

HYDROGRAPHIC SHEET 7865

Locality Jamaica Bay, Long Island, New York

Chief of Party: W. J. Chovan in 1950

Plane of reference is mean low water, reading
2.0 ft. on tide staff at Barren Island (Flatbush Ave.)
14.2 ft. below B. M. 2 (1928)

1.4 ft. on tide staff at Plumb I. Marina Boat Basin
11.5 ft. below B. M. 1 (1950)

1.0 ft. on tide staff at Carnarsie Beach
11.1 ft. below B. M. 2 (1928)

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

Barren Island (Flatbush Ave.)	=	5.0 feet
Plumb I. Marina Boat Basin	=	4.9 feet
Carnarsie Beach	=	5.2 feet

Condition of records satisfactory except as noted below:

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

GEOGRAPHIC NAMES

Survey No. H-7865

Name on Survey										
	A	B	C	D	E	F	G	H	K	
New York ✓			(Avr title)							1
Jamaica Bay ✓			(" ")							2
										3
Rockaway Point ✓										4
Rockaway Inlet ✓										5
Dead Horse Bay ✓										6
Deep Creek ✓		10-21-53	Delete, as feature no longer exists							7
Barren Island ✓				(tide gage location)						8
Island Channel ✓										9
Plumb Beach Channel ✓				(tide Gage location)						10
Gerritsen Creek ✓										11
Mill Creek ✓										12
Paerdegat Basin ✓										13
Canarsie ✓				(tide gage location)						14
Canarsie Pol ✓										15
Ruffle Bar ✓										16
Nova Scotia Bar ✓										17
Sheepshead Bay (town) ✓				Names underlined in red are approved.						18
Sheepshead Bay (bay) ✓							9-14-57.			19
Manhattan Beach (town) ✓							L. Heck			20
Gerritsen Inlet ✓			(see chart 542 for application of names)							21
Rockaway Beach (town) ✓										22
										23
										24
										25
										26
										27

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. *H-7865*

Records accompanying survey:

Boat sheets *1*...; sounding vols. *12*...; wire drag vols.;
 bomb vols.; graphic recorder rolls *14 Env.*;
 special reports, etc. *1 smooth sheet, 1 Descriptive Report*
1 Cahier of fathometer corrections filed with H-7864

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

Number of positions on sheet		<i>2786</i>
Number of positions checked		<i>380</i>
Number of positions revised		<i>59</i>
Number of soundings revised (refers to depth only)		<i>332</i>
Number of soundings erroneously spaced		<i>29</i>
Number of signals erroneously plotted or transferred		<i>4</i>
Topographic details	Time	<i>50 hrs</i>
Junctions	Time	<i>23 hrs</i>
Verification of soundings from graphic record	Time	<i>28 hrs</i>
Verification by <i>C. R. Helmer</i>	<i>144 hrs.</i>		<i>11-29-51</i>
Verification by <i>G. J. Thompson</i>	<i>207 hrs.</i>		<i>3-2-53</i>
Verification by	Total time	<i>351 hrs.</i>	Date
Reviewed by <i>R. E. Elkins</i>	Time	<i>60 hr</i>	Date <i>11-30-53</i>

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-7865

FIELD NO. HI-1250

New York, Jamaica Bay, Rockaway Inlet and Island Channel

Project No. CS-337

Surveyed - May and October 1950

Scale 1:10,000

Soundings:

Control:

808 Fathometer

Sextant fixes on
shore signals

Chief of Party - W. J. Chovan
Surveyed by - W. J. Chovan, E. C. Maran
Protracted by - W. W. Feazel
Soundings plotted by - W. W. Feazel, S. M. Tarkenton
Verified and inked by - C. R. Helmer, G. J. Thompson
Reviewed by - R. E. Elkins 7-4-53
Inspected by - R. H. Carstens

1. Shoreline and Signals

The shoreline originates with reviewed planimetric maps and revision sheets as follows:

T-5093 (1934), RS-209 (1940)
T-5094 (1933-34), RS-207 (1943)
T-5334 (1934), RS-208 (1944)
T-5335 (1933-34), RS-206 (1943)

The shoreline shown in red on the smooth sheet originates with the present survey and the contemporary survey H-7863 (1950). Shoreline sections shown in solid red were located by sextant and tape traverse; sections shown by a dashed red line were sketched by the hydrographer from sextant fixes.

2. Sounding Line Crossings

Depths at crossings are in good agreement.

3. Depth Curves and Bottom Configuration

The usual depth curves are adequately delineated.

The bottom is irregular as the result of extensive dredging and current action.

4. Adjoining Surveys

Adequate junctions were effected with the contemporary surveys H-7863 (1950) and H-7864 (1950) on the west. On the east, no contemporary surveys by this Bureau adjoin the present survey; however, the charted information, originating principally with Corps of Engineers surveys, adequately joins the present survey. The present survey extends to the shoreline on the north and the south.

5. Comparison with Prior Surveys

- a. Early surveys covering the period 1835 to 1928 have been compared with and superseded by surveys of 1934 and 1942 which are discussed in the following paragraph. Further consideration of these early surveys is, therefore, unnecessary in the present review
- b. H-5733 (1934) 1:10,000
H-5734 (1934) 1:10,000
H-6763 (1942) 1:10,000

These prior surveys taken together cover the area of the present survey. A comparison of the prior and present surveys reveals extensive changes in both the bottom and the shoreline in some areas. The more extensive changes are the diversion of Gerritsen Creek, and the dredging of adjoining creeks to the east in the reclamation of marsh areas along the west part of Barren Island. Other important changes include the 400 meter eastward shift of Rockaway Inlet at the south end of the jetty, the seaplane runways dredged across and west of Nova Scotia Bar, improvements in Mill Basin, and construction of new bridges.

Because of the major changes that have taken place in the area as a result of improvement projects, and the fact that the prior surveys have been almost entirely superseded for charting purposes by later surveys made by the Corps of Engineers, the Navy and others, a more detailed comparison of the prior and present surveys would serve no useful cartographic purpose.

The present survey supplemented by several charted items discussed in the following comparison, is adequate to supersede the prior surveys for charting purposes within the common area.

6. Comparison with Chart 542 (Print date 5-25-53)

A. Hydrography

The charted hydrography originates principally with the present survey before verification, and a survey by the Corps of Engineers in 1952 (Bps. 49292-93), subsequent to the present survey. Several critical items are charted from miscellaneous sources as follows:

1. The wreck charted in lat. $40^{\circ}34.55'$, long. $73^{\circ}54.24'$ from a wreck investigation survey by the Corps of Engineers in 1942 (Bp. 36839) was not located on the present survey; however the wreck should be retained as charted, in accordance with the Hydrographer's recommendation on page 5 of the Descriptive Report.
2. The obstruction reported charted in lat. $40^{\circ}35.10'$, long $73^{\circ}55.55'$, from H.O. Notice to Mariners 29 (July 1950) is supplemented by the 12-ft. sounding charted in the above position from present survey sounding lines run August 1950, subsequent to the Notice to Mariners report. The exact nature and extent of the obstruction is not known; therefore, the note "obstruction reported" should be retained as charted.
3. The submerged sewer line charted at the east side of Sheepshead Bay approach channel originates with information of 1935-36 and is probably in present use although not shown on the present survey.

The soundings charted from the present survey are in general agreement with smooth sheet depths; however, several differences in depths and curves are noted. An uncharted 13-ft. sounding falls in lat. $40^{\circ}35.22'$, long. $73^{\circ}54.90'$ on the present survey. The 6-ft. sounding charted in lat. $40^{\circ}35.04'$, long. $73^{\circ}53.94'$ is a stray on the fathograms and has been removed from the smooth sheet.

B. Aids to Navigation

The charted positions of several floating aids differ as much as 150 meters with the present survey positions; however, both the charted and the present survey positions adequately mark the features intended.

C. Bridge Clearances

The charted bridge clearance values were not re-determined on the present survey and have been added from the Corps of Engineers "List of Bridges over the Navigable Waters, 1941" and supplement of 1948.

7. Condition of Survey

- a. The sounding records are complete, except that the boat sheet is illegible in many areas because of surface break-down of the paper. The Descriptive Report covers all matters of importance except for the obstruction discussed in paragraph 6A-2 of this review.
- b. The smooth plotting was well done.
- c. Verification of the least depth on the 18-ft. shoal in lat. $40^{\circ}34.01'$, long. $73^{\circ}54.45'$ by handlead would have been desirable inasmuch as traces interpreted as strays occurred on a fathogram crossing the shoal.

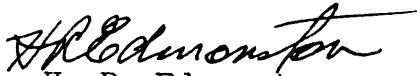
8. Compliance with Project Instructions


This survey adequately complies with the Project Instructions except as noted in paragraph 7c.

9. Additional Field Work Recommended

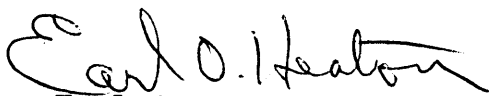
This survey is an adequate basic survey, and no additional field work is required. The Corps of Engineers make periodic surveys of the more important channels in this area. As a matter of record it is noted that the least depth on the shoal mentioned in paragraph 7c was determined from a fathogram profile containing strays. The least depth should have been verified with the handlead.

Examined and approved


H. R. Edmonston
Chief, Nautical Chart Branch


H. Arnold Karo
Chief, Division of Charts


G. R. Fish
Chief, Section of Hydrography


Earl O. Heaton
Chief, Division of Coastal Surveys

