

7800

Diag. Cht. No. 1215-3

Form 504

U. S. COAST AND GEODETIC SURVEY
DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey HYDROGRAPHIC

Field No. LISP-1550 Office No. H-7800

LOCALITY

State NEW YORK

General locality GREAT SOUTH BAY

Locality FIRE ISLAND INLET

194 50

CHIEF OF PARTY

I. T. Sanders

LIBRARY & ARCHIVES

DATE AUGUST 6, 1951

7800
0082

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-7800

Field No. LISP-1550

State NEW YORK

General locality Great South Bay
~~LONG ISLAND~~

Locality Fire Island Inlet
~~GREAT SOUTH BAY~~

Scale 1:10,000 Date of survey 28 Aug. - 29 Oct. 1950

Instructions dated 7 March 1949; Supp. 11 Apr. and 9 May 1950

Vessel Hydro skiff; C.G. Picket Boat # 30343; C.G. Life Boat #36471

Chief of party Ira T. Sanders

Surveyed by John Laskowski and M.E. Natto

Soundings taken by ~~#####~~, graphic recorder, hand lead, ~~###~~ pole

Fathograms scaled by Party personnel

Fathograms checked by Norfolk Processing Office & Field Personnel

Protracted by A. Kaupa

Soundings penciled by A. Kaupa

Soundings in ~~#####~~ feet at MLW ~~#####~~

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

DESCRIPTIVE REPORT

TO ACCOMPANY

HYDROGRAPHIC SHEET H-7800 (FIELD NO. LISP-1550)

GREAT SOUTH BAY LONG ISLAND NEW YORK

LONG ISLAND SHORE PARTY IRA T. SANDERS, CHIEF OF PARTY

PROJECT CS-337 1950 SCALE 1:10,000

PROJECT: This survey was accomplished under Instructions dated 7 March 1949, S-2-WA, FP-Long Island, and Supplemental Instructions of 11 April and 9 May 1950. These instructions call for a basic hydrographic survey.

SURVEY LIMITS AND DATES: This survey covers that portion of Great South Bay extending westward from W. Long. $73^{\circ} 17.7'$ to W. Long. $73^{\circ} 22.0'$, including the seaward entrance at Fire Island Inlet. The northern limit extends to the head of navigation in the various rivers and streams. Junctions were made at the western limit with Hydrographic Sheet H-7799, 1950, Scale 1:10,000 and at the eastern limit with Hydrographic Sheet H-7801, 1950, Scale 1:10,000. The field work was accomplished between 26 August and 29 October. Work on other sheets was carried on in conjunction with this survey. *with H-7876 (1950) on the south.*

VESSELS AND EQUIPMENT: Hydrographic Skiff No. 717, propelled by two Johnson 10 H.P., outboard gearshift motors; C. G. Picket Boat No. 30343 and C. G. Life Boat No. 36471, were used for sounding. The Coast Guard furnished two men to operate their boats. The Coast Guard boats were used to sound part of the seaward entrance to Fire Island Inlet. The hydrographic skiff, used on the rest of the survey, was equipped with Fathometer No. 139 SPX. Fathometer No. 138 SPX was used with the Coast Guard boats. The transmitters and receivers were mounted inboard.

TIDES AND CURRENTS: The Tide Note is attached to this report. Currents were not observed.

SMOOTH SHEET: The smooth sheet ^{was} ~~will be~~ plotted by the Norfolk Processing Office.

CONTROL STATIONS: Triangulation as previously established was used for control. Several triangulation stations were reworked on account of their poor condition. Photogrammetric stations were transferred from Air Compilation Sheets T-9298 and T-9300. Hydrographic stations were established as necessary. Their positions were determined by sextant fixes at each station site.

SHORELINE AND TOPOGRAPHY: The shoreline and topographic details were transferred from Air Compilation Sheets T-9298 and T-9300. Changes in shoreline are shown on the boat sheet by a dotted ink line. It is suggested that the Long Island State Park Commission be requested to furnish some photographic prints from their 1950 files, showing the missing shoreline details eastward of Democrat Point.

SOUNDINGS: Soundings were obtained with the fathometer, hand lead, and pole. Bottom samples were taken with an armed lead or pole.

CONTROL OF HYDROGRAPHY: The three-point sextant fix method was used to control most of the survey. In the upper reaches of creeks and channels, where control was lacking, positions of sounding lines were referred to distinctive topographic details. Appropriate notes in such cases were entered in the sounding records.

ADEQUACY OF SURVEY: This survey is complete and considered adequate to supersede prior surveys. The junctions with adjoining surveys are satisfactory. The depth curves also join satisfactorily.

CROSSLINES: Crosslines were run as required by the instructions.

COMPARISON WITH PRIOR SURVEYS: Comparison with a recent print of the largest-scale chart of the area follows:

COMPARISON WITH CHART: #578 (Print date 2-6-50)

<u>Latitude</u>	<u>Longitude</u>	<u>1950 Survey Feet</u>	<u>Charted Feet</u>	<u>Remarks</u>
40° 40.05'	73° 21.30'	6-10 4-8	3	Dredged channel into Neguntatogue Creek. <i>See P 5 B-3 of Review.</i>
40 40. ¹⁵ 20	73 20. ⁸ 75	4	✓ Wreck	Delete. Nonexistent. <i>See P 5 B-2 of Review.</i>
40 40.48	73 20.27	4 ²	✓ Wreck	Delete. Nonexistent. <i>See 6 A-1 of Review.</i>
40 39.6 ⁷ 5	73 20. ⁴⁸ 50	4	2	Also area to eastward on 1950 survey shows 4-5-ft. depths where 2-3-foot depths are charted. <i>See P 5 B-4 of Review.</i>
40 38.80	73 20.10	Channel 6-ft. depth	--	Dredged channel. Outer sdg. lines approx. 3 m. from channel sides.
40 37.60	73 18.37	Wreck	--	Barges at ^{3 ft.} M.H.W. <i>See P 5 B-4 of Review.</i>
40 37.18	73 19.10	Submerged wreck	--	Coast Guard stated wreck was barge with 8 ft. water over it. Approx. 50 m. N. of buoy. <i>See P 7 C of Review.</i>

Changes at Fire Island Inlet and approaches have been so extensive that no comparison is made with the chart.

DANGERS AND SHOALS: None to report.

COAST PILOT INFORMATION: Submitted to the office at the close of the field season.

AIDS TO NAVIGATION: Submitted to the office as a special report. A copy of the list of aids on this sheet is appended to this report.

LANDMARKS FOR CHARTS: Landmarks for charts were submitted to the office at the close of the field season.

MISCELLANEOUS: Vessels should not attempt to enter Fire Island Inlet without prior local knowledge. In rough weather breakers extend across the whole entrance. The bottom of the inlet is composed of fine, yellow sand.



John Laskowski,
Cdr., C&GS

STATISTICS TO ACCOMPANY

HYDROGRAPHIC SHEET H-7800 (FIELD NO. LISP - 1550)

SKIFF NO. 717

<u>Date</u> 1950	<u>Day</u> <u>Ltr.</u>	<u>Vol. No.</u>	<u>H.L. and</u> <u>Pole Sdgs.</u>	<u>No. of</u> <u>Positions</u>	<u>Stat. Miles</u> <u>Sdgs.</u>
9 Aug.-7 Nov.	a	1	57	56	----
29 Aug.	b	2	--	47	7.8
30 "	c	2	--	74	7.1
31 "	d	2&3	--	78	11.8
1 Sept.	e	3	--	78	12.8
5 "	f	3&4	--	151	24.1
6 "	g	4	--	105	14.9
7 "	h	5	--	48	7.2
8 "	i	5	--	129	17.9
13 "	k	6	--	129	17.3
14 "	l	6&7	1	103	10.3
18 "	m	7	--	29	4.3
19 "	n	7	--	39	4.8
20 "	p	7	2	2	0.0
21 "	q	7	--	45	4.7
22 "	r	8	--	13	2.2
25 "	s	8	10	88	9.8
26 "	t	8	--	41	6.3
27 "	u	8&9	--	59	8.3
28 "	v	9&10	1	176	26.0
29 "	w	10	--	11	2.2
2 Oct.	x	10	--	14	1.9
4 "	y	10&11	116	110	15.5
5 "	z	11	124	190	30.2
6 "	aa	12	--	35	4.2
9 "	ba	12	--	40	2.7
10 "	ca	12&13	--	117	18.5
19 "	da	13	--	25	2.5
20 "	ea	13	--	4	0.8
23 "	fa	13&14	--	119	18.5
27 "	ga	14	--	140	17.9
30 "	ha	14	--	22	3.0
1 Nov.	ja	15	--	15	1.4
"	ka	15	--	97	12.3
Totals	34	15	311	2429	329.2

U. S. COAST GUARD RESCUE BOAT #30343

<u>Date</u> <u>1950</u>	<u>(Blue</u> <u>Day</u> <u>Ltr.)</u>	<u>Vol. No.</u>	<u>H. L. and</u> <u>Pole Sdgs.</u>	<u>No. of</u> <u>Positions</u>	<u>Stat. Miles</u> <u>Sdgs.</u>
16 Oct.	a	16	--	69	13.5
17 "	b	16&17	--	118	21.7
Totals	2		--	187	35.2

U. S. COAST GUARD LIFEBOAT #36471

26 Oct.	c	17	--	70	12.1
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Grand Totals	37	17	311	2686	376.5
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FLOATING AIDS TO NAVIGATION

H-7800

<u>Name</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Depth</u>	<u>Pos. No.</u>	<u>Date</u>
Oak Island Channel Entrance Ltd. Buoy 7	40-40.14	73-18.25	7½ ft.	1 l	9/14/50
Fire Island Inlet Buoy 12	40-38.21	73-18.56	15	1 p	9/20/50
Fire Island Inlet Ltd. Buoy 10	40-37.98	73-19.05	15	2 p	"
Fire Island Inlet Buoy 8	40-37.67	73-18.78	11	16 s	9/25/50
Fire Island Inlet Buoy 5	40-37.62	73-18.78	15	17 s	"
Fire Island Inlet Ltd. Buoy 6	40-37.58	73-18.71	18	18 s	"
Fire Island Inlet Buoy 3	40-37.36	73-18.86	20½	19 s	"
Fire Island Inlet Buoy 4	40-37.21	73-18.82	15½	20 s	"
Fire Island Inlet Buoy 2	40-37.03	73-18.85	16½	21 s	"
Fire Island Inlet Ltd. Buoy 1	40-37.00	73-18.93	24½	22 s	"
Fire Island Inlet Ltd. Bell Buoy	40-36.78	73-18.98	37½	23 s	"
Fire Island Breakwater Gong Buoy 4A	40-37.10	73-18.42	25½	24 s	"
Fire Island Inlet Ltd. Wreck Buoy WRI	40-37.15	73-19.12	23	80 s	"

TIDE NOTE TO ACCOMPANY

HYDROGRAPHIC SURVEY H-7800 (FIELD NO. LISP-1550)

Portable automatic tide gages were maintained at five stations. The limits of the areas in which tides of different stations were used for reducing soundings are outlined in blue ink on the boat sheet. The locations of the stations are shown on the sheet. No differences in time or height were applied to the observed tides. Planes of reference were furnished from the Washington Office.

<u>STATION</u>	<u>LATITUDE</u>	<u>LONGITUDE</u>	<u>MLW ON STAFF</u>
Babylon	40° 41.10'	73° 18.90'	2.8 Feet
Gilgo Heading	40 37.16	73 23.73	4.6 "
Neguntatogue Creek	40 40.16	73 21.41	2.8 "
Oak Beach (Fire Id. Inlet)	40 38.28	73 17.54	2.0 "
Oak Beach (Great South Bay)	40 38.43	73 17.87	2.2 "

A P P R O V A L S H E E T
to
A C C O M P A N Y
D E S C R I P T I V E R E P O R T
FOR
S H E E T H-7800
P R O J E C T CS-337
1950

This boat sheet and its accompanying records were examined and approved by me daily during the progress of the field work.

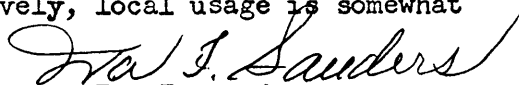
The smooth sheet ^{was} ~~will be~~ plotted by the Norfolk Processing Office.

From close examinations of the sheet, including the drawing of depth curves, it is believed that the survey of the area covered is complete and adequate. The seaward approaches of Fire Island Inlet, as outlined in the Instructions, are shown on this sheet. This area is subject to constant change, often rapid and radical during storms. The beach-erosion study sponsored by the Long Island State Park Commission includes several profiles from the low-water line to the 5- and 10-fathom curves in this area. It is suggested that these additional data be considered when the results of this survey are shown on the charts.

The commercial and party-boat fishermen operating from South Oyster Bay and Great South Bay ports complain bitterly about the condition of Fire Island Inlet and its approaches.

Triangulation Station DRAKE 1933, which had been destroyed during the construction of Captree State Park Highway was re-established as DRAKE 2, 1933-1950. Two of the original reference marks had not been disturbed, and were used for references to the new station.

For a general description of the terrain covered by this sheet reference is made to the Field Inspection Report Project Ph-54(49)C dated January 1950. It should be noted that this report emphasizes that the strip of barrier sand beach extending eastward from Democrat Point has become known locally as Fire Island. Because Chart No. 578 shows a group of islands, the largest of which are called East Fire Island and West Fire Island, respectively, local usage is somewhat confusing.


Ira T. Sanders
Chief of Party

LIST OF SIGNALS

HYDROGRAPHIC SHEET H-7800 (FIELD NO. LISP-1550)

TRIANGULATION STATIONS

BABY ----- BABYLON, TANK, 1933
CAP ----- CAP, 1933
COVE ----- BABYLON COVE, FLAG POLE, 1933
FLEET ----- FLEET, 1933
LIFE ----- LIFE, 1933
LIND ----- LINDENHURST, H.S., CUPOLA, 1933
OAK ----- OAK ISLAND SQUARE TOWER, 1933
SPIRE----- BABYLON, PRESB. CHURCH SPIRE, 1933
TANK ----- LINDENHURST, TANK, 1933

TOPOGRAPHIC STATIONS

ALP ----- Tower (flagstaff) 1949. Desc. (Form 524) Rec. Topo. Sta. D
✓ BUSS ~~(Buzz)~~ ----- Described (Form 524) Rec. Topo. Sta. 1950 DM
✓ CON----- R.M. #1, Conklin Pt. 3, 1933 DM
✓ DIPP----- Described (Form 524) Rec. Topo. Sta. 1950 DM
✓ FIRE----- Breakwater Light, 1950, Desc. (Form 524) Rec. Topo. Sta. D
✓ LET----- Fire Island Inlet Light 17, 1950. Desc. (Form 524) Rec. Topo. Sta. D
RAT ----- B&W Banner - 15.35 meters toward Topo. Sta. ALP from
Triangulation Sta. DEMOCRAT, 1949 (Vol. 1, page 5)
✓ TOW ----- Tower, 1949 (Wood Tower, 50 ft. high) T-9300 c

TOPOGRAPHIC (PHOTOGRAMMETRIC) STATIONS

	<u>Sheet No.</u>	<u>No.</u>
DOC -----	9298	025
EVA -----	9300	053
INK -----	9298	033
IVY -----	9298	024
LEO -----	9300	034
LIZ -----	9300	051
OLD -----	(Vol. 1, p. 5)	On T-9300 as control without number or description. (Wreckage pg. 5, Vol. 1)
POT -----	9300	052
PEP -----	9298	032
VEX -----	9298	030

PHOTOGRAMMETRIC STATIONS

(Selected by Hydrographic Party from Sheets T-5605, T-9300, T-0298)

CUE -----	S. gab., White ho., Green roof
ADD -----	So. Gable yellow house, dark roof
ANT -----	N.E. Gable white house, green roof
ASK -----	E. Gable white shack, dark roof
BAT -----	E. Flagpole, Cedar Beach bathhouse (Vol. 1, p. 7)
BOB -----	S. Gable, white house, blue roof.
BOX -----	W. Gable, white house, green roof
BUT -----	N.W. Gable, gray house, red roof
CAB -----	Chimney W. end house, white sides, dark top
COP -----	S. Gable, green shed, dark roof
END -----	Center, pyramid roof, green top, white sides
FAR -----	N. W. Gable, white house
FEZ -----	E. Gable, Brown house, white trim
FOX -----	S. W. Gable, Brown house, green trim
FUN -----	S. Gable House, dark roof white sides
GOB -----	Chimney center, dark house, top above tree tops
HIS -----	S. E. Gable, white building
HOE -----	Easterly corner of bulkhead
IDA -----	Chimney center of house, shingle sides, green roof
JAP -----	Center pyramid roof, glass sides at top
JIM -----	B&W Banner, N. corner Finger pier
JOE -----	S. Gable brown house, White trim
KID -----	Chimney, W. end white house, dark roof
NEW -----	N.W. Gable, brick house, dark roof
PIN -----	Black and white banner, south end bulkhead
ROY -----	" " " " , E. corner bulkhead
SIR -----	S.E. Gable, shingle house
SIS -----	W. Gable, yellow shed, green roof
SKY -----	S. Gable, seaplane hanger, wind sock
SUE -----	S. Gable, white house, green trim
TAX -----	W. Gable, shingle house, orange trim
VET -----	Black and white banner, S. corner bulkhead
WHO -----	Oak Beach Inn, chimney east end white building, red roof
WAR -----	Chimney, center of yellow house
YES -----	N. E. corner Cedar Beach Bath House
ZOO -----	S. E. Gable, brown house, yellow trim
EGG -----	E. Gab. Wh. shed, green trim

HYDROGRAPHIC STATIONS

AMY -----	Located on Sheet H-7799 (Vol. 1, page 9)
ART -----	" " " " (" " " 8)
DUB -----	Vol. 1, page 16, Center of comfort station.
EAR -----	" " " 8, rear range, white slats
GAS -----	" " " 15, southwest corner of bulkhead
IRA -----	" " " 5, temporary black and white tripod
JIG -----	" " " 6, red rear range
MAN -----	" " " 16, black and white banner on E. side slip entrance (temporary)
NUT -----	" " " 6, Red rear range
ODD -----	" " " 16, Black and white front range
PUP -----	" " " 14, Channel marker, no number
SAD -----	Located on Sheet H-7799 (Vol. 1, page 15)
TOM -----	Vol. 1, page 8, Front range, red slats

FATHOMETER CORRECTIONS

HYDROGRAPHIC SURVEY H-7800 (FIELD NO. LISP-1550)

The corrections are based on an INITIAL of 0.0 feet on the fathograms. Where this varies the proper corrections should be applied to bring the recorded depths to 0.0 feet INITIAL. All depths have been recorded on the FOOT SCALE.

HYDRO SKIFF

FATHOMETER NO. 139 SPX

29 August - 6 November

Corr.	Depth	
	From	To
. . .	Feet.
+1.0 - - -	0 -	3.0
+0.8 - - -	3.1 -	6.2
+0.6 - - -	6.3 -	8.9
+0.4 - - -	9.0 -	23.0
+0.2 - -	23.1 -	35.5
0.0 - -	35.6 -	Sdg limit

C.G. BOAT NO. 30343

FATHOMETER NO. 138 SPX

16 - 17 October

+0.4 - - -	0 -	20.0
+0.2 - -	20.1 -	35.0
0.0 - -	35.1 -	Sdg limit

C.G. BOAT NO. 36471

FATHOMETER NO. 138 SPX

26 October

+0.4 - - -	2.0 -	2.5
+0.6 - - -	2.6 -	4.2
+0.8 - - -	4.3 -	5.4
+1.0 - - -	5.5 -	6.3
+1.2 - - -	6.4 -	7.1
+1.4 - - -	7.2 -	7.9
+1.6 - - -	8.0 -	9.1
+1.8 - - -	9.2 -	17.8
+2.0 - -	17.9 -	21.4
+1.8 - -	21.5 -	25.0
+1.6 - -	25.1 -	27.7
+1.4 - -	27.8 -	Sdg limit

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

TO BE CHARTED
~~DELETED~~ STRIKE OUT ONE

I recommend that the following objects which have (~~been~~) been inspected from seaward to determine their value as landmarks be charted on (~~charts~~) the charts indicated.
The positions given have been checked after listing by J. Laskovsk

Roanoke, Virginia 5 January 1945

STATE New York, Long Island SOUND N-7000 (115-1560) Ir. F. Sanders Chief of Party

CHARTING NUMBER XXXX	DESCRIPTION	SIGNAL XXXX	POSITION		DATUM	METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
			LATITUDE	LONGITUDE							
9 a	GN 1 arrow		40 - 37	73 - 21	1093	"	"				570
10 a	GN 1 arrow		40 - 38	73 - 21	527	"	"				570
11 a	GN 1 arrow		40 - 38	73 - 21	119	"	"				570
12 a	GN 2 arrows		40 - 38	73 - 20	1010	"	"				570
13 a	GN (M.R.) 1 arrow		40 - 38	73 - 20	612	"	"				570
18 a	GN 1 arrow		40 - 38	73 - 20	169	"	"				570
19 a	GN 2 arrows		40 - 38	73 - 19	1376	"	"				570
21 a	GN 1 arrow		40 - 38	73 - 19	65	"	"				570
22 a	GN 1 arrow		40 - 38	73 - 19	943	"	"				570
23 a	GN 1 arrow		40 - 38	73 - 19	714	"	"				570
24 a	GN 1 arrow		40 - 38	73 - 19	495	"	"				570
25 a	GN (M.R.) 1 arrow		40 - 38	73 - 19	263	"	"				570

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and nonfloating aids to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

TO BE CHARTED

STRIKE OUT ONE

Norfolk, Virginia

5 January, 19

I recommend that the following objects which have ~~(have not)~~ been inspected from seaward to determine their value as landmarks be charted on ~~(deleted from)~~ the charts indicated.

The positions given have been checked after listing by

J. Laskowski

2 of 4

SHEET H-7800 (LISP-1550)

Ira T. Sanders

Chief of Party.

STATE	DESCRIPTION	Depth Water Ft.	POSITION			N.A. DATUM 1927	METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION 1950	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
			LATITUDE	LONGITUDE								
Pos. No.			° ' D.M. METERS	° ' D.P. METERS								
27 a	CM	1 arrow	40 - 38 1754 ⁵¹	73 - 18 1401 ⁰²	Sextant Fix	28 7 Sept	X				578	
28 a	CM	1 arrow	40 - 38 1799 ¹⁸⁰⁰	73 - 18 1099 ¹⁰⁹⁸	"	"	X				578	
29 a	CM	1 arrow	40 - 38 1800	73 - 18 855 ⁸⁴³	"	"	X				578	
30 a	CM	1 arrow	40 - 38 1798	73 - 18 538 ⁵³⁷	"	"	X				578	
31 a	CM	1 arrow	40 - 38 1783	73 - 18 219 ²²¹	"	"	X				578	
32 a	CM	1 arrow	40 - 38 1780 ⁹⁰	73 - 17 1290 ⁹⁶	"	"	X				578	
33 a	CM	1 arrow	40 - 38 1761	73 - 17 912 ⁹⁰⁴	"	"	X				578	
34 a	CM	1 arrow	40 - 39 599 ⁵⁹⁸	73 - 17 1067 ⁶⁵	"	"	X				578	
35 a	CM	1 arrow	40 - 39 418 ⁴¹⁶	73 - 17 937 ⁹⁴²	"	"	X				578	
36 a	CM	1 arrow	40 - 39 358 ³⁶¹	73 - 17 958 ⁹⁶⁰	"	"	X				578	
37 a	CM	1 arrow	40 - 39 135 ¹³³	73 - 17 814 ⁸¹⁶	"	"	X				578	
38 a	CM (FLG)	2 arrows	40 - 38 1847 ⁵⁰	73 - 17 752 ⁷⁴⁸	"	"	X				578	
39 a	CM	2 arrows	40 - 39 5 ⁰³	73 - 17 844 ⁸⁴¹	"	"	X				578	
40 a	CM	1 arrow	40 - 38 1759 ⁶²	73 - 17 814 ⁸⁰⁵	"	"	X				578	

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and nonfloating aids to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

TO BE CHARTED

STRIKE OUT ONE

Morfolk, Virginia

5 January, 19

I recommend that the following objects which have (~~have not~~) been inspected from seaward to determine their value as landmarks be charted on (~~deleted from~~) the charts indicated.

The positions given have been checked after listing by

J. Laskowski

3 of 4

SHEET H-7800 (LISP-1550)

Ira T. Sanders

Chief of Party.

STATE	DESCRIPTION	Depth in Fathoms or Meters	POSITION				M.A. DATUM 1927	METHOD OF LOCATION AND SURVEY No.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
			LATITUDE		LONGITUDE								
Pos. No.		FT.	° ' "	D.M. METERS	° ' "	D.P. METERS							
	New York, Long Island												
41 a	CM 1 arrow	6.4	40 - 38	1659 ⁶⁵	73 - 17	594 ⁵⁹³	"	Sextant Fix	1950 7 Sept.	X			578
42 a	CM 1 arrow	4.9	40 - 38	1725 ³⁹	73 - 17	499 ⁴⁹⁶	"	"	"	X			578
43 a	CM 1 arrow	7.6	40 - 38	1519 ²⁴	73 - 17	272 ²⁶⁹	"	"	"	X			578
44 a	CM 1 arrow	7.2	40 - 38	1396 ⁹⁴	73 - 17	6 ⁰²	"	"	"	X			578
45 a	CM 1 arrow	5.3	40 - 38	1427 ³⁶	73 - 16	1294 ⁸⁹	"	"	"	X			578
46 a	CM 1 arrow	4.8	40 - 38	1255 ⁵⁹	73 - 16	1141 ⁴⁴	"	"	"	X			578
47 a	CM 1 arrow	5.4	40 - 38	1254 ⁵⁹	73 - 16	875	"	"	"	X			578
48 a	CM 1 arrow	6.2	40 - 38	1134	73 - 16	863 ⁸⁶³	"	"	"	X			578
49 a	CM (FLG) 1 arrow	8.6	40 - 38	1115 ²⁴	73 - 16	582 ⁵⁹⁰	"	"	"	X			578 ✓
20 a	CM (FLG) 2 arrows	7.1	40 - 38	1202 ⁰⁵	73 - 19	1395 ⁸⁹	"	"	"	X			578 ✓
26 a	CM (FLG) 2 arrows	6.2	40 - 38	1825 ¹⁴	73 - 19	100 ¹⁰⁶	"	"	"	X			578 ✓
LIGHT MOUNTED ON 6" SQ. PILE, ABOUT 10 FT. ABOVE HIGH WATER - MAINTAINED BY TOWN OF BABYLON.													
30 v	CARLL RIVER LT. FLG ev 3 sec. L.L. #1113.3	5.2	40 - 40	929 ³⁰	73 - 19	1135 ³⁴	"	"	28 Sept.	X			578 ✓
16 a	FLG ev. 3 sec.	4.2	40 - 39	1166 ⁷⁰	73 - 20	989 ⁹⁸⁵	"	"	5 Sept.	X			578 ✓

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and nonfloating aids to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

~~NON~~FLOATING AIDS OR LANDMARKS FOR CHARTS

TO BE CHARTED

STRIKE OUT ONE

~~TO BE DELETED~~

Norfolk, Virginia

5 January, 19 51

I recommend that the following objects which have (~~been~~) been inspected from seaward to determine their value as landmarks be charted on (~~deleted from~~) the charts indicated.

The positions given have been checked after listing by J. Laskowski

1 of 1

SHEET H-7800 (LISP-1550)

Ira T. Sanders

Chief of Party.

STATE	DESCRIPTION	XPOSED MARK Pos. No.	POSITION				DATE OF LOCATION 1950	Depth METERS AND FATHOMS Water Ft.	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED	
			LATITUDE		LONGITUDE								DATUM N.A.
			° ' "	D. M. METERS	° ' "	D. P. METERS							
1950 Light List													
1114	Oak I. Ch. Ent. Lighted FL G "7" ev. 4 sec.	11	40 - 40	272	73 - 18	363	1927	7.3	14 Sept.	x		578	
P. 718	Nun "12"	1p	40 - 38	378	73 - 18	794	"	15.2	20 Sept.	x		"	
1059	Fire Id. Inlet Lighted FL R "10" ev. 3 sec.	2p	40 - 37	1825	73 - 19	83	"	15.2	"	x		"	
P. 718	Nun "8"	16s	40 - 37	1242	73 - 18	1099	"	11.2	25 Sept.	x		"	
P. 718	Can "5"	17s	40 - 37	1135	73 - 18	1092	"	15.2	"	x		"	
1058	Fire Id. Inlet Lighted FL R "6" ev. 3 sec.	18s	40 - 37	1084	73 - 18	1003	"	18.2	"	x		"	
P. 718	Can "3"	19s	40 - 37	662	73 - 18	1201	"	20.4	"	x		"	
P. 718	Nun "4"	20s	40 - 37	410	73 - 18	1128	"	15.4	"	x		"	
P. 718	Nun "2"	21s	40 - 37	60	73 - 18	1197	"	16.4	"	x		"	
1056	Fire Id. Inlet Lighted FL G "1" ev. 3 sec.	22s	40 - 37	4	73 - 18	1299	"	24.4	"	x		"	
1055	Fire Id. Inlet Lighted Bell S - L FL W	23s	40 - 36	1435	73 - 18	1374	"	37.4	"	x	x	578 1215	
P. 718	Fire Id. Breakwater Gong 4A	24s	40 - 37	188	73 - 18	596	"	25.4	"	x	x	578 1215	
-	FL G "NR 1" - Marks submerged wreck.	80s	40 - 37	284	73 - 19	151	"	22.8	"	x		578	

METHOD OF LOCATION - SEXTANT FIX

This form shall be prepared in accordance with Hydrographic Manual, pages 800 to 804. Positions of charted landmarks and nonfloating aids to navigation, if redetermined, shall be reported on this form. The data should be considered for the charts of the area and not by individual field survey sheets. Information under each column heading should be given.

BUOYS - USE AID PROOF POSITIONS

ADDENDUM
To Accompany

HYDROGRAPHIC SURVEY H-7800 (Field No. LISP-1550)

CONTROL

Hydrographic signal RAT was plotted on cuts taken while locating other signals. The position, as given on page 5, volume 1, does not check any of these cuts. All indications show the position of triangulation station Democrat, 1949 to be questionable. (See note page 5, volume 1)
Plots in accordance with published G.R.

*Position
adequate
for hydrog-
raphy*

SOUNDINGS

Contrary to weather notes as recorded in sounding volumes, all indications show the bottom irregularities on a, b & c days (blue) were mainly caused by wave action. These days were re-scanned by this Office and a mean of these irregularities was recorded.

Respectfully submitted,

Hugh L. Proffitt
Hugh L. Proffitt
Cartographer.

Norfolk, Va.
30 July 1951

Approved & Forwarded:

Earl O. Heaton
Earl O. Heaton
Supervisor, SE Dist.

Lew
CFJ

TIDE NOTE FOR HYDROGRAPHIC SHEET

~~DIVISION OF HYDROGRAPHY AND TOPOGRAPHY~~

14 August 1951

Division of Charts: R. H. Carstens

Plane of reference approved in 17
volumes of sounding records for

HYDROGRAPHIC SHEET No. 7800

Locality Great South Bay, Long Island

Chief of Party: I. T. Sanders in 1950
Plane of reference is mean low water, reading
4.6 ft. on tide staff at Gilgo Heading
14.0 ft. below B. M. 1 (1950)

2.8 ft. on tide staff at Neguntatogue Creek Entrance.
3.5 ft. below B. M. 1 (1950).

2.2 ft. on tide staff at Oak Beach, Great South Bay.
5.2 ft. below B. M. 3 (1936)

2.0 ft. on tide staff at Oak Beach, Fire Island Inlet.
6.3 ft. below B. M. 3 (1936)

2.8 ft. on tide staff at Babylon
15.3 ft. below B. M. R 37 (1932).
~~Condition of records satisfactory except as noted below~~

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

Gilgo Heading	=	1.1 feet
Neguntatogue Creek Entrance	=	0.9 foot
Oak Beach, Great South Bay	=	0.7 foot
Oak Beach, Fire Island Inlet	=	2.6 feet
Babylon	=	0.6 foot

E.C. McKay
Section

Chief, ~~Division of Tides and Currents.~~

GEOGRAPHIC NAMES

Survey No. H-7800

Name on Survey	On Chart No.		On previous survey No.		On U. S. quadrangle Maps		From local information		On local Maps		P. O. Guide or Map		Rand McNally Atlas		U. S. Light List	
	A	B	C	D	E	F	G	H	K							
<u>New York</u>			(for title)										USGB		1	
<u>Long Island</u>			"	"											2	
<u>Great South Bay</u>			"												3	
															4	
<u>Fire Island Inlet</u>															5	
<u>Democrat Point</u>															6	
<u>Oak Beach</u>			(tide gages - 2)												7	
<u>Oak Island</u>															8	
<u>Cedar Island</u>															9	
<u>East Fox Creek</u>															10	
<u>West Fox Creek</u>															11	
															12	
<u>Strongs Point</u>													USGB		13	
<u>Neguntatogue Creek</u>			(tide gage)												14	
<u>Santapogue River</u>															15	
<u>West Babylon Creek</u>													USGB		16	
<u>Carll River</u>															17	
<u>Sampawams Creek</u>													USGB		18	
<u>Babylon Cove</u>															19	
<u>Skookwams Creek</u>															20	
<u>Willet Creek</u>															21	
<u>Fleet Pt.</u>															22	
															23	
															24	
															25	
<u>Babylon</u>			(tide gage)												26	
<u>Gilgo Meading</u>			(" ")												27	

Names underlined in red are approved.

8-10-51. L. Heck

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. H-7800...

Records accompanying survey:

Boat sheets ..1...; sounding vols. .17...; wire drag vols.;
 bomb vols.; graphic recorder rolls 17 env.;
 special reports, etc. 1. Smooth Sheet; 1. Descriptive Report.....

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

Number of positions on sheet		2686
Number of positions checked		..29.
Number of positions revised	1.
Number of soundings revised (refers to depth only)		..46..
Number of soundings erroneously spaced	7.
Number of signals erroneously plotted or transferred	0.
Topographic details	Time	..32.
Junctions (Adjusted sdgs. on H-7870)	Time	..88.
Verification of soundings from graphic record	Time	...40.

Verification by *C.B. Samuel* Total time 313.. Date 1:21:52

Reviewed by *Jan Zeskind* Time 46 Date 3-7-52

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-7800

FIELD NO. LISP-1550

New York, Great South Bay, Fire Island Inlet

Project No. CS-337

Surveyed in Aug. - Oct. 1950

Scale 1:10,000

Soundings:

808 Fathometer
Handlead
Pole

Control:

Sextant fixes on shore signals

Chief of Party - I. T. Sanders
Surveyed by - J. Laskowski and M. E. Natto
Protracted by - A. Kaupa
Soundings plotted by - A. Kaupa
Verified and inked by - C. B. Samuel
Reviewed by - I. M. Zeskind, 7 March 1952
Inspected by - R. H. Carstens

1. Shoreline and Control

The shoreline originates with air-photographic surveys T-9298 (1949) and T-9300 (1950). Shoreline changes shown in red originate with the present survey.

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.

The present survey covers Great South Bay and Fire Island Inlet. The bottom in Great South Bay is smooth except for several canals and channels dredged through shoal areas.

Marshy islands and sand flats are found in the southern portion of the Bay. The bottom in Fire Island Inlet is very irregular in depths less than 24 ft. and smooth in greater depths.

4. Junctions with Contemporary Surveys

Adequate junctions were effected with H-7799 (1950) on the west, and with H-7870 (1950) and H-7947 (1951) on the south. The junction with H-7801 (1950) on the east will be considered in the review of that survey.

5. Comparison with Prior Surveys

A.	H-47 (1835) 1:40,000	H-3707 (1914) 1:20,000
	H-1481a (1880) 1:10,000	H-3720 (1914) 1:5,000
	H-1571b (1883) 1:80,000	H-4369 (1924) 1:10,000
	H-2995 (1909) 1:10,000	

These early surveys have been superseded by H-5368 (1933), H-5369 (1933), H-5370 (1933), H-5376 (1933) and H-6189 (1936) and are considered in the reviews of those surveys. Further consideration is, therefore, deemed unnecessary in the present review.

B.	H-5368 (1933) 1:20,000	H-5370a (1934) 1:10,000
	H-5369 (1933) 1:20,000	H-5376 (1933) 1:10,000
	H-5370 (1933) 1:10,000	H-6189 (1936) 1:40,000

A comparison between the prior and present surveys reveals major changes in depths to have occurred in the vicinity of Fire Island Inlet. Here Democrat Point has moved 800 meters southwestward with the resultant changes in shoreline and bottom configuration, as for example, in lat. $40^{\circ} 37.95'$, long. $73^{\circ} 18.41'$, where a prior depth of 18 ft. falls in present depths of 2 ft., and in the vicinity of lat. $40^{\circ} 37.8'$, long. $73^{\circ} 19.1'$, where a sand bar which formerly uncovered at mean low water, now is covered by 11-14 ft. of water. In depths greater than 30 ft. only minor differences of 1-2 ft. are noted. The north shore of Fire Island Inlet in the vicinity of lat. $40^{\circ} 38.25'$, long. $73^{\circ} 18.4'$, has eroded as much as 200 meters. In Great South Bay, the greatest changes in depths between the prior and present surveys are found in the canals and dredged channels as for example, the shoaling occurring in State Channel in lat. $40^{\circ} 38.66'$, long. $73^{\circ} 19.88'$, where a prior depth of 24 ft. falls in present depths of 18 ft. In other areas of the bay differences in depths between the prior and present surveys are within 1-2 ft., as for example, in lat. $40^{\circ} 39.75'$, long. $73^{\circ} 19.94'$, where a prior 2-ft. sounding on H-5368 falls in present depths of 4 ft.

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

6. Comparison with Chart 578 (C.P. Drawing 6/25/52)

A. Hydrography

The charted hydrography originates principally with the previously discussed prior surveys, with the U.S. Corps of Engineers surveys of 1940, 1945, and 1946 (Bps. 34333, 40105, 41069 and 41586), chart letters 105 (1948), 318 (1948) and 135 (1950), and with the present survey after verification and the preliminary writing of the review.

The following charted soundings originating with the U. S. Corps of Engineers surveys, fall in greater depths on the present survey in Fire Island Inlet where the bottom configuration is constantly changing. The present survey is adequately developed to discredit the existence of these soundings and they, therefore, should be disregarded.

<u>Charted</u> <u>depth ft.</u>	<u>Lat.</u>	<u>Long.</u>	<u>Present Survey</u> <u>depth ft.</u>	<u>Source</u>
4	40° 37.18'	73° 18.58'	11-12	Bp.34333(1940)
4	40° 37.26'	73° 18.95'	13-15	Bp.41586(1946)
6	40° 37.16'	73° 18.88'	14-15	Bp.40105(1945)

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

B. Aids to Navigation

The present survey positions of aids to navigation are in substantial agreement with the charted positions and adequately mark the features intended, except that lighted buoy No. 7, charted in lat. 40° 40.12', long. 73° 18.18', falls about 120 meters northwestward on the present survey.

7. Condition of Survey

- a. The sounding records and Descriptive Report are complete and comprehensive.
- b. The smooth plotting was accurately done.
- c. The sunken barge and lighted WR buoy No. 1 shown in lat. 40° 37.18', long. 73° 19.12', have been removed from the Inlet, as reported in H.O. N. to M. 47 (1950).

8. Compliance with Project Instructions


The present survey adequately complies with the Project Instructions.


9. Additional Field Work Recommended

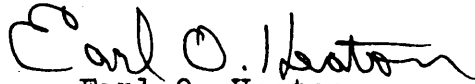
This is a very good basic survey and no additional field work is recommended.

Examined and approved:


H. R. Edmonston
Chief, Nautical Chart Branch


H. Arnold Karo
Chief, Division of Charts


L. S. Hubbard
Chief, Section of Hydrography


Earl O. Heaton
Chief, Division of Coastal Surveys

