

7640

Diag. Cht. No. 1210-3

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey HYDROGRAPHIC

Field No. GI-1148 Office No. H-7640

LOCALITY

State Rhode Island

General locality Point Judith

Locality Black Point to Matunuck Point

1948

CHIEF OF PARTY

F.B.Quinn

LIBRARY & ARCHIVES

DATE Mar. 31, 1949

B-1870-1 (1)

7640

MAR 31 1949

Form 537
(Ed. Nov. 1941)

DEPARTMENT OF COMMERCE
U. S. COAST AND GEODETIC SURVEY

H-
REG. NO. 7640

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-7640

Field No. GI-1148

State Rhode Island

General locality Point Judith

Locality BLACK POINT TO MATUNUCK POINT
Point Judith, Harbor of Refuge, and Point Judith Pond.

Scale 1:10,000 ✓ Date of survey 10 June to 14 August 1948

Instructions dated 12 February 1948

Vessel Ship GILBERT, P-Boat (USN), and Dinghy.

Chief of party F. B. Quinn

Surveyed by F. B. Quinn and J. Laskowski

Soundings taken by ~~echograph~~ graphic recorder, hand lead, ~~wire~~ and pole.

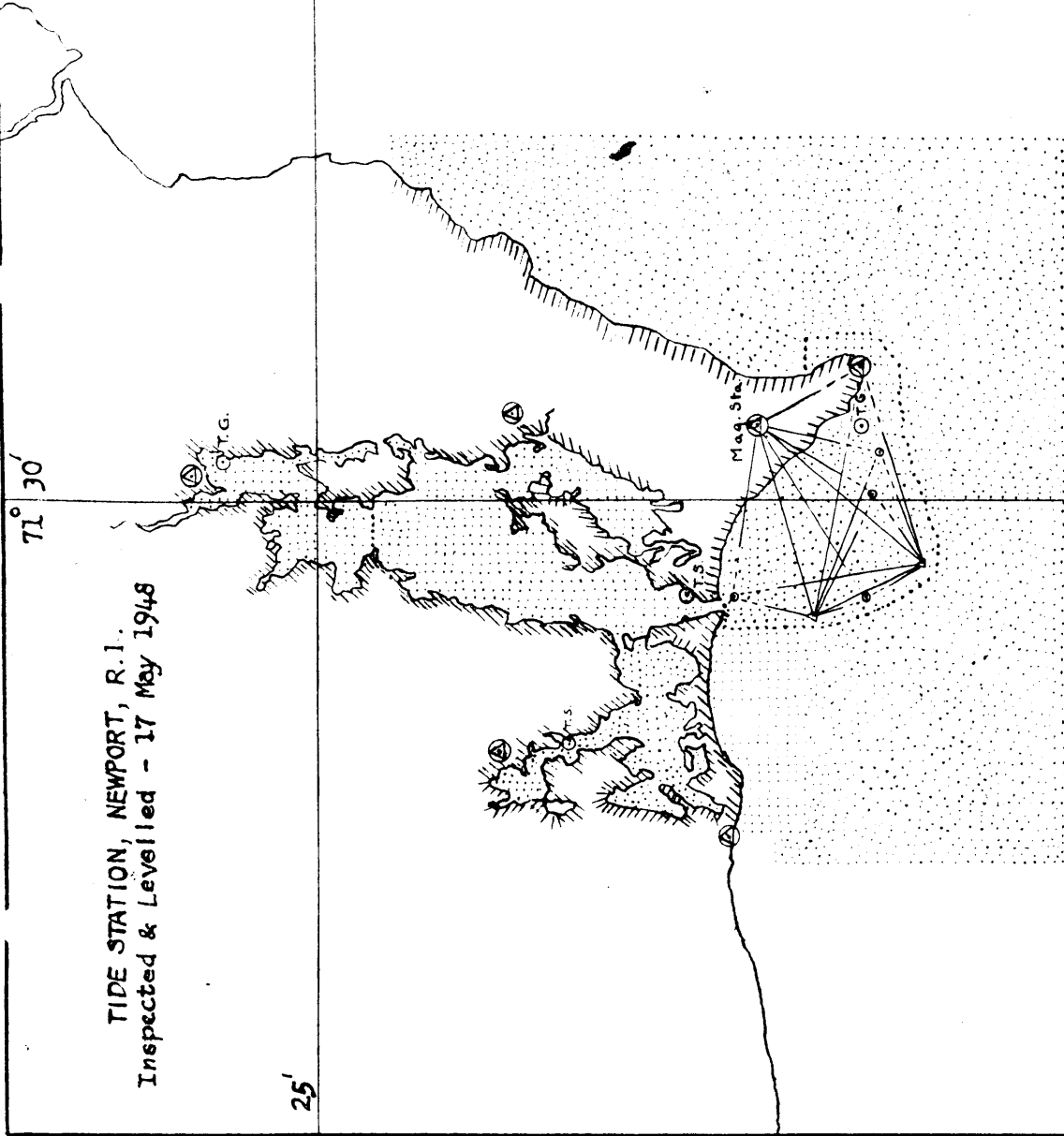
Protracted by W. W. Feazel

Soundings penciled by W. W. Feazel

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

REMARKS: Dredging of the channel in Point Judith Pond was planned by
the State of Rhode Island for August or September 1948. Data from this survey
was furnished the State. Results of the dredging and dumping should be
incorporated in the new chart.

TIDE STATION, NEWPORT, R.I.
Inspected & Levelled - 17 May 1948



25'

71° 30'

25'

25'

PROJECT CS-333

POINT JUDITH, RHODE ISLAND

MONTHLY PROGRESS SKETCH

SHIP GILBERT F.B. QUINN, Comdg

Scale of Chart No. 1210

1948

10 May - - 14 August

41° 20'

41° 20'

71° 30'

25'

DESCRIPTIVE REPORT

TO ACCOMPANY

HYDROGRAPHIC SHEET H-7640 (FIELD NO. GI-1148)

POINT JUDITH, HARBOR OF REFUGE, AND POINT JUDITH POND, RHODE ISLAND

USC&GS SHIP GILBERT

F. B. QUINN, COMMANDING

PROJECT GS-333

SCALE 1:10,000

A. PROJECT: This survey comprises the entire Project GS-333. It was accomplished under Director's INSTRUCTIONS, 22/MEK, S-2-GI, 12 February 1948, which called for a new basic survey.

B. SURVEY LIMITS AND DATES: This survey covers the water area of the proposed new harbor chart, to a maximum distance of about 2 miles offshore, from the vicinity of Narragansett Pier, southward to Point Judith, through Point Judith Harbor of Refuge, the entire area of Point Judith Pond, and westward to Matunuck Beach.

The survey was accomplished between 10 June and 14 August 1948, with progress in the early part of this period considerably slowed down by weather.

Satisfactory junctions were made with Charts 1210 and 1211 at the outer limits.

Previous surveys in this area appear on Sheets H-1789 (1887), H-2691 (1904), H-3521 (1913), H-4098 W.D. (1919) and H-3521a (1930). A closer approach to the shoreline was made in Sheet H-1789, and the depths close to shore may be used to supplement the 1948 survey on Sheet H-7640. Sheets H-2691, H-3521 and H-3521a were comprehensive surveys on a scale of 1:10,000, but they should be entirely superseded by 1948 Sheet H-7640 because of changes occurring around the breakwater and the more thorough development obtained with the fathometer.

Topographic Sheet T-1226, surveyed in 1871 on a scale of 1:10,000 covers the area of this survey, but the shoreline obtained in 1948 under Project Ph-31B should entirely supersede the previous survey.

T-5095 (1948)

C. VESSELS AND EQUIPMENT: The Ship GILBERT, a U.S. Navy P-Boat (plane personnel boat), and a ship's dinghy with outboard motor were used on this survey. The P-Boat was loaned for the survey by the Naval Air Station at Quonset Point, R.I., upon recommendation of the Operations Officer of the Naval Base at Newport, R.I.

808-Type fathometers Nos. 113-S and 53 were successively used on the P-Boat, and No. 53 was used on the Ship GILBERT. Inboard positions of the transducers were used on both vessels.

Sounding Poles were used almost exclusively with the dinghy in Point Judith Pond, but some handlead soundings were taken in depths greater than the poles.

Bottom samples were taken both with an armed lead in connection with bar checks, and with a snapper cup in a systematic coverage of the sheet.

D. TIDES AND CURRENTS: No current observations were taken. See the Tide Note attached to this report for information on four tide stations established.

E. SMOOTH SHEET: The projection was made by machine in the Washington Office and the sheet plotted by the Norfolk Processing Office.

Shoreline on the smooth sheet ^{from T-5095 (1948)} was supplied by the Washington Office from airphoto compilation accomplished in 1948 under field inspection Project Ph-31B. This is supplemented by short stretches of shoreline surveyed by this party on Topographic Sheet GI-A&B-48. T-7100a & b (1948) 1949 EHR

F. CONTROL STATIONS: Positions of 9 new Third-Order Triangulation Stations around the Harbor of Refuge were determined by this party in 1948, using stations Point Judith (U.S.E.) 1940 and Point Judith Lighthouse (1839-1940) as a baseline.

All other triangulation positions were taken from the litho-prints. All positions are on the 1927 North American Datum.

T-7100a & b Topographic Signals were obtained from aluminum Topographic Sheet GI-A(&B)-48, which was surveyed by this field party in 1948. Planetable methods were used to locate signals in the vicinity of the Harbor of Refuge and the main body of Point Judith Pond. All signals northward from Point Judith, in Potter's Pond, and at the western end of the Open Coast were located by fixes and cuts taken with a navigating sextant. These sextant positions are of accuracy equal to or stronger than planetable positions; particularly since a round of cuts was taken from the tops of Point Judith Tank (1940), Hazard Tower (1940), and Point Judith Lighthouse (1839-1940). Check cuts were taken to all visible stations when the sextant fixes were obtained. This method increased the efficiency of the party, since it was possible to operate the sextant party with one officer and one man, thus permitting the operation of two main parties even when two tide observers were in the field.

Seven
No Hydrographic Signals were established. (Review, par. 1.)

G. SHORELINE AND TOPOGRAPHY: See paragraph "E" of this report for source of shoreline. T-5095 (1948)

H. SOUNDINGS: Standard sounding methods were used throughout. Leadlines were checked, a sheave test was made, bar checks were taken, and sounding poles were carefully calibrated.

Foot-scale soundings, only, were recorded on the fathometers, both for ship and launch (P-Boat) work. All shoals were extensively covered with splits, crosslines and drift soundings, supplemented by handlead or pole soundings for least depths. ✓

The main bodies of Point Judith Pond and Potter's Pond were sounded with poles from a dinghy powered with an outboard motor. Areas of depths greater than the pole were sounded by handlead, and two fathometer lines were run with the P-Boat along the buoyed channel to give continuous profile. The irregular shoal depths of the ponds made regular fathometer sounding impracticable, even from a catamaran. ✓

At the entrance to Potter's Pond the Bridge Clearance^a of 5 feet at HW was determined, but the entrance cannot be used even by small motor launches. It is roughly estimated that Potter's Pond is 2 feet or more higher in elevation than the channel east of the bridge, at low stages of the tide. The current under the bridge probably reaches a velocity of 4 knots or more on the falling tide, and there are shifting sandbars in the vicinity of the bridge. ✓

The low water line on all bars in Point Judith Pond was determined from the soundings. ✓

I. CONTROL OF HYDROGRAPHY: Standard sextant fixes were used throughout, with the exception of a few places where distances and directions were estimated from nearby signals. All positions plotted readily. ✓

J. ADEQUACY OF SURVEY: This survey is complete and adequate to supersede prior surveys for charting. The close approach to the eastern shoreline north of Point Judith can be filled in from the ~~reconnaissance~~^{spars} lines run on sheet H-1789 (1887). Apparently weather conditions during that survey permitted a closer approach than was possible in 1948. | accomplished ✓

No "holidays" nor excessive differences exist, and satisfactory junction was made as noted in paragraph "B". ✓

All depth curves can be accurately drawn. ✓

K. CROSSLINES: Crosslines were run in accordance with manual specifications. ✓

L. COMPARISON WITH PRIOR SURVEYS: There was no prior Coast and Geodetic Survey hydrography in Point Judith Pond. Good agreement was obtained on the offshore and open coast areas, but the depth curves over the irregular bottom are more clearly defined on the present survey. There is considerable change in the shoaling within and near the Harbor of Refuge caused chiefly by currents around the breakwaters. | Review, par. 5.A. ✓

H.O. No. 40⁴¹ (1948)
M. COMPARISON WITH CHARTS: Notices to Mariners were published in August and September 1948, covering all critical depths affecting Charts 276, 1210 and 1211. Disregard, superseded by present survey after V. & R.

Spots marked on the boat sheet for field inspection and falling in critical areas are tabulated below. Where general shoals were found, tabulation is omitted.

<u>Latitude</u>	<u>Longitude</u>	<u>Survey Depth</u>	<u>Charted Depth</u>	<u>Remarks</u>
41°-22.76' ✓	71°-28.04' ✓	28 ✓	30 ✓	General Depths ✓
41°-22.10' ✓	71°-28.20' ✓	3 $\frac{1}{2}$ ✓	28 ✓	30 meters apart ^{28'} carried fwd. from H-1529b (1884) ✓
41°-21.87' ✓	71°-28.45' ✓	27 26 nearby ✓	29 ✓	Irregular bottom ✓
41°-21.81' ✓	71°-28.39' ✓	27 26 nearby ✓	29 ✓	do ✓
41°-21.55' ✓	71°-28.42' ✓	24 ✓	25 ✓	do ✓
41°-21.40' ✓	71°-28.42' ✓	36 29' sdg. 80 m. NW ✓	30 ✓	Appears out of position 50 meters ✓
41°-21.54' ✓	71°-28.86' ✓	-	Rk. awash. ✓	Not seen. Close to shore ✓
41°-21.54' ✓	71°-28.97' ✓	-	do ✓	do ✓
41°-20.89' ✓	71°-29.70' ✓	3 $\frac{1}{2}$ ✓	26 ✓	Appears out of position from H-1529b (1884) ✓
41°-20.96' ✓	71°-29.54' ✓	29 80 m. N.E. ✓	28 ✓	do (adequate for charting) ✓
41°-21.05' ✓	71°-29.56' ✓	32 30' 60 m. N.E. ✓	26 ✓	30 feet 60 meters carried fwd. away from H-1529b (1884) ✓
41°-21.58' ✓	71°-29.68' ✓	24 0 nearby ✓	20 ✓	Appears out of position ✓
41°-21.93' ✓	71°-29.78' ✓	11 ✓	Rk. awash. ✓	Shoal area. 1' sdg. on Rk. carried ✓
41°-21.35' ✓	71°-30.48' ✓	23 3 ✓	18 ✓	Appears out of Pos. fwd. from H-3521 (1913) ✓
41°-21.56' ✓	71°-30.47' ✓	23 4 ✓	23 ✓	Not indicated carried fwd. from H-2691 (1904) ✓
41°-21.72' ✓	71°-30.50' ✓	22 0 ✓	18 ✓	2 $\frac{1}{2}$ feet nearby. ✓
41°-21.82' ✓	71°-30.48' ✓	19 6 ✓	18 ✓	Shoal area ✓
41 -21.96 ² ' ✓	71 -30.58 ³ ' ✓	15 7 ✓	16 ✓	16 ⁵ feet nearby. ✓
				Shoal area ✓
				Shoal area ✓

N. DANGERS AND SHOALS: The shoreline at Point Judith and northerly to Black Point should be given a berth of at least 0.5 mile because of broken bottom and boulder-strewn condition. Several named rocks lie in this area, and Peaked Rock (one of this group) covers at high water.

Buoyed Fistraps are set to a distance of 0.7 mile offshore at Black Point and northward, and a short distance off the west side Harbor of Refuge breakwaters.

The northern part of the Harbor of Refuge and an area along the west side of the breakwater north of the angle are shoal.

A sandbar with depths as little as 4 and 6 feet extends southward from the pond entrance eastern breakwater, and reaches a position just north of the west entrance of the harbor.

Shoals with depths of ~~20~~²² and 21 feet lie 520 ^{meters} yards SE and ^{18-21 ft} 300 yards S of the main breakwater center light.

A shoal with depths of ~~22~~²³ to 26 feet lies 0.5 mile west of the south end of the main breakwater.

A breaking shoal extends 0.5 mile offshore one mile west of the Harbor of Refuge, with depths of 10 feet over 300 yards offshore.

A central shoal, just inside the Pond entrance may have been dredged out in August or September 1948. (See Bp. 44195, Oct. 1948) Review, par. 6 A.

O. COAST PILOT INFORMATION: Revision Notes for Section "B" of the Atlantic Coast have been submitted and a copy is appended to this report.

P. AIDS TO NAVIGATION: Copies of positions of Fixed and Floating Aids to Navigation furnished the 1st Coast Guard District and the Washington Office are appended to this report.

Q. LANDMARKS FOR CHARTS: Lists of Landmarks recommended for retention and deletion are appended to this report.

R. MAGNETIC OBSERVATIONS: Compass-Declinometer observations were made in two positions at Triangulation Station Point Judith (U.S.E.) 1940. They were forwarded to Washington on 15 September 1948.

S. DREDGING OPERATIONS: Dredging in the southern part of the channel in Point Judith Pond was planned by the State of Rhode Island after this hydrographic survey was completed. Data from this survey were supplied by the Washington Office to the State of Rhode Island, including a photostat of the Boat Sheet. Review, par. 6 A.

T - Z: There is nothing to report under these headings.

Forwarded: *F. B. Quinn*
F. B. Quinn,
Lt. Comdr., USC&GS
Comdg. Officer Ship GILBERT.

Francis B. Quinn
Francis B. Quinn,
Lt. Comdr., USC&GS

TIDE NOTE TO ACCOMPANY

HYDROGRAPHIC SURVEY H-7640 (FIELD NO. GI-1148)

Five Tide Stations were used in connection with this survey.

(1) The Primary Tide Station at the Naval Training Station, Newport, R.I. was checked as a Reference Station.

(2) A portable-automatic tide gage was kept in continuous operation at Point Judith Eastern Breakwater while hydrography was in progress.

(3) A tide staff was established and connected with bench marks at the U.S. Coast Guard Boathouse pier at Point Judith Pond Entrance. Readings were taken during sounding operations in the Lower pond, and for simultaneous comparison with the reference station.

(4) A portable-automatic tide gage was kept in continuous operation at Point Judith Pond (North End) while soundings were taken in the pond.

(5) A tide staff was established and connected with bench marks at a private pier in Point Judith Pond (Potter's Pond). Readings of high and low water were taken for simultaneous comparison with the reference station, and continuous readings for hydrography in Potter's Pond.

All soundings were referenced as follows:

(1) Open Coast and Harbor of Refuge referred directly to the Point Judith Eastern Breakwater Tide Station.

(2) Point Judith Pond Lower End, from the Breachway entrance to the group of islands near Jumping Hill, referred directly to the Point Judith Pond Entrance Tide Station.

(3) Point Judith Pond Upper End, north of the group of islands near Jumping Hill, referred directly to the Point Judith Pond (North End) Tide Station.

(4) Potter's Pond, entire area to entrance bridge, referred to Point Judith Pond (Potter's Pond) Tide Station.

Values of MLW for all four new stations were supplied by the Washington Office.

STATISTICS TO ACCOMPANY

HYDROGRAPHIC SHEET H-7640 (FIELD NO. GI-1148)

<u>Date</u> (1948)	<u>Day</u> (color)	<u>Vol. No.</u>	<u>H.L. & Pole Sdgs.</u>	<u>Pos.</u>	<u>Stat. Mi.</u> <u>Sdgs.</u>	<u>Total Stat.</u> <u>Miles Run</u>
<u>Launch (P-Boat) (Blue Day Color)</u>						
June 10	a	1	1	91	11.1	13.4
11	b	1&2	2	209	27.4	37.4
16	c	2&3	3	182	21.3	29.3
17	d	3	2	124	13.2	20.2
18	e	4	3	179	18.3	29.2
22	f	4&5	3	156	15.0	27.0
24	g	5	1	30	3.0	5.3
July 8	h	5&6	1	186	22.4	33.7
9	j	6	2	163	16.7	28.7
20	k	7	2	200	26.4	34.4
28	l	8	1	99	10.9	20.6
30	m	8&9	1	127	18.9	34.0

<u>Dinghy (Purple Day Color)</u>						
June 25	a	10	46	24	0.5	7.5
29	b	10	505	91	7.6	17.0
30	c	10	524	112	7.9	12.8
July 1	d	10&11	590	120	9.3	14.4
2	e	11	470	86	6.9	11.7
12	f	11	316	49	4.1	11.4
13	g	11&12	386	54	5.4	9.7
15	h	12	721	124	9.3	16.7
16	j	12	778	132	9.8	13.3
19	k	13	426	70	4.6	10.2
22	l	13	782	134	10.2	14.6
23	m	13&14	762	126	8.4	13.5
26	n	14	461	89	5.3	9.1
29	p	14	585	125	9.0	12.9
Aug. 2	q	15	101	21	0.7	4.8
11	r	15	142	92	1.6	3.0

<u>Ship GILBERT (Blue Day Color)</u>						
Aug. 3	A	16	2	119	25.4	28.5
4	B	16&17	2	235	47.0	50.7
5	C	17&18	-	163	34.1	38.1
6	D	18&19	1	251	51.9	57.8
11	E	19	1	35	6.7	15.3
13	F	20&21	5	285	60.8	65.9
14	G	21	9	158	28.8	36.8

<u>TOTALS</u>						
Launch	12	9	22	1746	204.6	313.2
Dinghy	16	6	7595	1449	100.6	182.6
Ship	7	6	20	1246	254.7	293.1

Sheet Totals	35	21	7,637	4,441	559.9	788.9
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APPROVAL SHEET

TO ACCOMPANY

HYDROGRAPHIC SURVEY H-7640 (FIELD NO. GI-1148)

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

The Report showing Fathometer Corrections has been examined and is approved.



F. B. Quinn,
Lt. Comdr., USC&GS
Commanding Officer Ship GILBERT.

FATHOMETER CORRECTIONS

HYDROGRAPHIC SURVEY H-7640 (FIELD NO. GI-1148) - - - USC&GS SHIP GILBERT

The Corrections Tabulated below are based on Standard Initials of "0.0"-feet on P-Boat fathograms; and "4.0"-feet on the Ship GILBERT fathograms. Where the Initials on the fathograms vary from these Standard Initials, INDEX CORRECTIONS must be entered in the sounding volumes.

<p align="center"><u>P-BOAT</u></p> <p><u>Fath. No. 113-S</u>, from "a"-day 10 June to "e"-day 18 June 1948.</p>	:	<p><u>Fath. No. 53</u>, from "f"-day, 22 June to "m"-day, 30 July 1948.</p>
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<u>A-Range Foot-Scale</u>			:	<u>A-Range Foot-Scale</u>		
<u>From</u>	<u>To</u>	<u>Correction</u>	:	<u>From</u>	<u>To</u>	<u>Correction</u>
0.0'	1.5'	0.0'	:	0.0'	16.7'	0.0'
1.6'	7.0'	-0.2'	:	16.8'	23.0'	+0.2'
7.1'	20.2'	-0.4'	:	23.1'	25.3'	+0.4'
20.3'	26.7'	-0.6'	:	25.4'	34.4'	+0.2'
26.8'	31.2'	-0.8'	:	34.5'	deeper	0.0'
31.3'	34.9'	-1.0'	:			
35.0'	38.6'	-1.2'	:			
38.7'	42.2'	-1.4'	:			

Ship GILBERT

Fath. No. 53 - - - All soundings

<u>A-Range Foot-Scale</u>			:	<u>B and C-Ranges Foot Scale</u>		
<u>From</u>	<u>To</u>	<u>Correction</u>	:	<u>From</u>	<u>To</u>	<u>Correction</u>
10.0'	19.7'	+1.6'	:	37.6'	41.5'	+2.4'
19.8'	38.9'	+1.8'	:	41.6'	46.0'	+2.6'
39.0'	42.5'	+2.8'	:	46.1'	54.2'	+2.8'
42.6'	46.0'	+2.2'	:	54.3'	59.2'	+2.6'
46.1'	49.5'	+2.4'	:	59.3'	66.2'	+2.4'
49.6'	53.7'	+2.6'	:	66.3'	73.2'	+2.2'
53.8'	60.0'	+2.8'	:	73.3'	82.8'	+2.4'
			:	82.9'	91.0'	+2.6'

(Comp. & checked by FBQ & JL)

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

Ship GILBERT

Bar Harbor, Maine

POST OFFICE ADDRESS:

TELEGRAPH ADDRESS:

EXPRESS ADDRESS:

20 September 1948

To: Commander, 1st Coast Guard District,
Room 1400, Customhouse,
Boston 9, Massachusetts.

Subject: Transmission of Charts for use in locating
Floating Aids to Navigation.

In compliance with instructions from the Director, U. S. Coast and Geodetic Survey, there is transmitted herewith a copy of Chart No. 276 for your use in locating Floating Aids to Navigation in the vicinity of Point Judith, Rhode Island.

Buoys falling within the limits of this chart were checked in June - August, 1948, and their positions have been corrected to those determined on the dates shown in red ink. Five buoys so checked are circled in red ink. Objects selected for your use in locating these buoys are indicated, and arrows in red ink connect the buoys with them.

Your attention is invited to the revised position of the Red Reflector on the Eastern Breakwater of the Point Judith Pond Entrance, and to the revised position of the Point Judith Harbor of Refuge Eastern Breakwater Light. The latter may be due to relocation of the light after the hurricane.

F. B. Quinn,
Lt. Commander, USC&GS,
Commanding Officer Ship GILBERT.

cc: Director, USC&GS.

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

Ship GILBERT

Bar Harbor, Maine

POST OFFICE ADDRESS:

TELEGRAPH ADDRESS:

EXPRESS ADDRESS:
20 September 1948

To: The Director,
U. S. Coast and Geodetic Survey,
Department of Commerce Building,
Washington 25, D. C.

Subject: Transmission of data to the U. S. Coast Guard
for use in locating Floating Aids to Navigation.

In accordance with paragraph 8533, Hydrographic Manual, a copy of Chart No. 276 has been forwarded to the Commander, 1st Coast Guard District, 1400 Customhouse, Boston 9, Massachusetts, showing objects selected for subject use in the vicinity of Point Judith, Rhode Island.

There are forwarded herewith:

- (1) Chart No. 276, showing data furnished the U. S. Coast Guard.
- (2) Tabulation on Form 567, "Floating Aids to Navigation", giving buoy positions determined in 1948 and depths found at these positions.
- (3) Tabulation on Form 567, with title cut off, listing positions of objects recommended to U. S. Coast Guard. All but one object, Elevated Tank (very prominent), already appear on Chart No. 276, but some position revision is indicated by the 1948 triangulation executed by this party.
- (4) Copy of transmitting letter to U. S. Coast Guard Commander.

All buoys falling within the surveyed areas were located. Those not covered by any existing chart (Point Judith Pond channel) were located, but not plotted in the data herewith. Comment on them appears on Form 567.

F. B. Quinn,
Lt. Commander, USCGS,
Commanding Officer Ship GILBERT.

DEPARTMENT OF COMMERCE - Coast and Geodetic Survey - Ship GILBERT, Bar Harbor, Me. 22 Sept. 1948 F.B. Quinn, Chief of Party.

STATE RHODE ISLAND - Chart 276 - Point Judith

CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION				DATUM	METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
			LATITUDE	D. M. METERS	LONGITUDE	D. P. METERS							
			OBJECTS FOR USE OF U.S. COAST GUARD										
	Large W.T. on high station tower.	Pt. Judith Light	41- 23	(1125.0) 928.0	71- 29	(1300.0) 3.0	H.L. 1927	Endeavour.	1940	X			
(2)	Octagonal tower, lower half white, upper half brown.	Pt. Judith Lighthouse	41- 21	(637.9) 1213.1	71- 28	(120.3) 1274.3	"	"	1839- 1940				ditto
(3)	Pt. Judith Harbor of Refuge East Breakwater Lt.	East	41- 21	(875.5) 975.5	71- 29	(553.0) 841.6	"	"	1948				ditto
(4)	Pt. Judith Harbor of Refuge Main Breakwater East Lt.	East	41- 21	(773.4) 1077.6	71- 29	(126.9) 1267.7	"	"	"				ditto
(5)	Pt. Judith Harbor of Refuge Main Breakwater Center Lt.	Main	41- 21	(1391.2) 459.8	71- 30	(744.6) 650.0	"	"	"				ditto
(6)	Pt. Judith Harbor of Refuge Main Breakwater West Lt.	West	41- 21	(598.5) 1252.5	71- 30	(246.8) 1147.8	"	"	"				ditto
(7)	Pt. Judith Harbor of Refuge West Breakwater Lt.	West	41- 21	(136.7) 1714.3	71- 30	(119.7) 1274.8	"	"	"				ditto
(8)	Pt. Judith Pond Entrance East Breakwater Reflector (Metal Triangle on Metal Pole)	Ref	41- 22	(1016.5) 834.5	71- 30	(241.7) 1152.6	"	"	"				ditto
<p>Note: All of above are "objects to be charted", and all except "Tank (Rev.)" appear on current issue of Chart 276.</p>													
#	Main Breakwater Center Lt. 2 (1948)												

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.

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

TO BE CHARTED

STRIKE OUT ONE

SHIP GILBERT - Bear Harbor, Maine. 22 September, 1948

I recommend that the following objects which have () 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 F. B. Allen, Lt. Comdr., USN

F. B. Allen,

Chief of Party.

STATE	RHODR ISLAND - Narragansett Pier to Point Judith	CHARTING NAME	DESCRIPTION	SIGNAL NAME	POSITION		D.A.T.U.M.	METHOD OF LOCATION AND SURVEY NO.	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
					LATITUDE	LONGITUDE							
		(1) Tower	Tall, square, grey stone	HAZARD TOWER	41-24	72-27	N.A. 1927	Triang.	1940	X			1210
		(2) Tank (Elev.)	Large W.T. on high skeleton tower	TANK	41-23	72-29	do	"	1940	X			ditto
		(3) Pt. Judith L.H.	Octagonal tower, lower half white, upper half brown.	PT. JUDITH LIGHTHOUSE	41-21	71-28	do	"	1839 - 1940	X	X		1210 & 121
		(4) Pt. Judith Harbor of Refuge	East Breakwater Lt., Pl. R-4 sec (#568, light 11st 1947)	RD	41-21	71-29	do	"	1948	do	do		do
		(5) Pt. Judith Harbor of Refuge	West Breakwater Lt., Pl. W., 4 sec. (#569, light 11st)	RD	41-21	71-29	do	"	do	do	do		do
		(6) Pt. Judith Harbor of Refuge	West Breakwater Lt., Pl. W., 6 sec. (#570, l.l.)	RD	41-21	71-30	do	"	do	do	do		do
		(7) Pt. Judith Harbor of Refuge	West Breakwater Lt., Pl. R., 4 sec. (#571, l.l.)	RD	41-21	71-30	do	"	do	do	do		do
		(8) Pt. Judith Harbor of Refuge	West Breakwater Lt., Pl. W., 4 sec. (No. 572, l.l.)	RD	41-21	71-30	do	"	do	do	do		do
		(9) Pt. Judith Ford	Reference East Breakwater Reflector, Red. (Metal Triangle on Metal Pole)	REF	41-22	71-30	do	"	do	do	do		do

Note: All of the above Non Floating Aids and Landmarks appear on existing charts. Due to lack of space above, detailed descriptions of lights have been omitted. Descriptions on pages 98 and 99 of light list, Atlantic and Gulf Coasts of the United States, 1947 have been examined and found to be correct.

* FAIRBANKS COAST LT. 2. (1945)

1733 (1947)

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.

NON-FLOATING AIDS FOR CHARTS

TO BE CHARTED } STRIKE OUT ONE
~~XXXXXXXXXXXX~~

Ship GILBERT, Bar Harbor, Maine, 22 September, 1948

had positions determined on Hydrographic Sheet H-7640

I recommend that the following objects which have
charted on ~~XXXXXXXXXXXX~~ the charts indicated.

The positions given have been checked after listing by F. B. Utim, Lt. Comdr., USCGAS

F. B. Utim, Chief of Party.

CHARTING NAME	DESCRIPTION	SIGNAL NAME	LATITUDE		POSITION		D.P. METERS	DATUM	METHOD OF LOCATION AND SURVEY	DATE OF LOCATION	HARBOR CHART	INSHORE CHART	OFFSHORE CHART	CHARTS AFFECTED
			°	'	°	'								
(1) Point Judith Lighted whistle buoy "2", Red, (Occ. W.), light 5 sec., ellipse 5 sec; in 52 feet.			41-20		71-28		(1818) 633 (948)	N.A. 1927	H-7640	8/13/48	X	X		276 Prop 2210 Prop
(2) Buoy, Bar, Red, for (1); in 52 feet.			41-20		71-28		(585) 902 (733)	"	"	"	"	"		"
(3) Point Judith Bell Buoy "4", Red, south of angle of main breakwater; in 43 feet.			41-20		71-30		(309) 1266 (729)	"	"	8/11/48	"	"		276
(4) Point Judith Harbor of Refuge, South Lamp Buoy, Red and Black Har. Bands, 2d-cl. Run; in 20 feet.			41-21		71-30		(1808) 1542 (185)	"	"	6/10/48 8/24/48	X	X		276 Prop
(5) Point Judith Harbor of Refuge, North Lamp Buoy "2", Red, 2d-cl. Run; in 14 feet.			41-22		71-30		43 1210	"	"	7/9/48	"	"		"
NOTE-- See "Light List, Atlantic and Gulf Coasts of the United States, 1947".														
(1) is no. 566, page 98 of Light List. Position given herein is 75 yards SW of Charted Position.														
(2) is a Buoy for (1). Position given herein is same as Charted Position.														
(3) is listed under "Point Judith Harbor of Refuge", page 666 of Light List. Position given herein is 500 yards S of Charted Position.														
(4) is listed same as (3), page 666 of Light List. Position given herein is 50 yards NE of Charted Position.														
(5) is listed same as (3), page 666 of Light List. Position given herein is 100 yards S of Charted Position.														

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.

REVISION NOTES FOR

"UNITED STATES COAST PILOT, ATLANTIC COAST, Section B, Cape Cod to Sandy Hook, Fourth (1940) Edition."

*Compared
with Coast Pilot
7115.*

Pages 125 to 131:- Notes from "EAST PASSAGE" to "EAST PASSAGE ABOVE NEWPORT" have been reviewed and no changes are recommended other than those carried in previous supplements.

Page 140, Lines 12 to 30: Delete and substitute the following.

"The Shoreline from Point Judith northerly to Black Point should be given a berth of at least 0.5 mile. The waters along this shoreline are boulder-strewn and shoal up gradually. League Rock, Little League Rock, Chaplin Rock and Peaked Rock are small, dangerous rocks in this area, lying from 0.1 mile to 0.25 mile offshore and surrounded by shallow water. All but Peaked Rock show above high water. From BLACK POINT (a rocky promintory), northerly to the easternmost point south of Narragansett Pier, the shoreline is rugged, rocky ledge with deep water close inshore. Fishtraps are set along these waters to a distance of 0.7 mile offshore.

Three very prominent Landmarks are POINT JUDITH LIGHTHOUSE, the ELEVATED WATER TANK 1.7 miles north of Point Judith, and the HIGH SQUARE STONE TOWER (HAZARD'S TOWER) 0.5 mile south of Narragansett Pier. Lesser landmarks, identified only from inshore waters are the stone bathing pavilion at the State-operated Scarborough Beach 0.5

mile southwest of Black Point, and an open stone tower on a house 0.4 mile north of Black Point.

Abreast Narragansett Pier there are shoals and rocks extending about 300 yards from shore. A rock, locally known as River Ledge, with 14 feet (4.3m.) over it, lying 0.8 mile southwestward from Whale Rock Lighthouse and 0.4 mile from shore, is marked by a buoy."

Named
on
current
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Page 158, Line 24: After "-- about 8 fathoms (14.6m.)." add "A Red Nun Marker Buoy lies about 75 yards north of the Whistle Buoy."

Page 158, Line 27: Change the period to a comma at the end of the sentence "-- the whistle buoy." and add "but some vessels make the whistle buoy eastbound."

Page 158, Line 45: Change "about 0.25 mile from shore" to read "about 0.3 mile from shore, except at the northwest corner where it reaches out 0.5 mile."

Page 158, Line 49: Change to read "A shoal spot with depths of 4 to 6 feet (1.2 to 1.8m.) lies 100 yards north of the buoy, and other shoal spots of 5 to 8 feet (1.5 to 2.4m.) extend northward to the east break-water at the pond entrance."

Page 158, Line 53: Change to read "- -depths of 15 to 18 feet (4.6 to 5.5m.)- -".

Page 159, Lines 1 and 2: Change to read "- -having depths of 16 to 19 feet (4.9 to 5.8m.)- -". Change the next sentence to read "The latter is marked by a Red and Black Horizontal Banded Buoy."

Page 159, Lines 3 to 14, inclusive: Delete entire paragraph and substitute the following.

"ANCHORAGE. The area within the main breakwater and south of a line joining its northern ends affords protected anchorage for small craft. The breakwater should be given a berth of 200 yards to avoid broken and hard bottom, and a rocky shoal area about 100 yards wide, paralleling the west side of the main breakwater northward from the angle should be specially avoided. A good berth for a large vessel is on a line between the East and West Main Breakwater Lights and midway between them, in 5 fathoms. This position falls on the edge of the east-west throughfare used by pleasure craft and fishing boats."

Page 159, Line 19: After "- -to Point Judith." add "A shoal with depths of 20 and 21 feet (6.1 and 6.4m.) lies 520 yards southeast of the Main Breakwater Center Light, and other 20 and 21 foot spots extend as far as 300 yards south of the same light."

Page 159, Line 26: After "-- from eastward" insert "and northeastward,"

Page 159, Line 27: Change "-- 0.5 mile--" to "-- 0.6 mile--".

Page 159, Line 30: Change "-- lying over 0.3--" to "-- lying 0.55--".

Page 159, Lines 37 to 49: Delete both paragraphs, and substitute "For gasoline, water and provisions, see POINT JUDITH POND."

Page 159, Line 51: Add "Spots of 17 feet (5.2m.) depth and less extend a distance of 150 yards south of the north side of the entrance, and spots of 18 feet (5.5m.) depth lie as far as 120 yards west and north-west of the south side. A shoal with depths of 22 to 26 feet (6.7 to 7.9m.) lies 0.5 mile west of the Main Breakwater Center Light."

Page 159, Line 52 to Page 160, Line 21: Delete entirely and substitute the following:

"POINT JUDITH POND is a salt water tidal pond extending $3 \frac{1}{3}$ miles northerly from the northwestern part of the Harbor of Refuge to the town of Wakefield. It is extensively used by small fishing boats and pleasure craft, and there are fishing cooperatives located inside its entrance.

The villages of Galilee on the east side of the entrance and Jerusalem on the west have State Piers and numerous small piers chiefly used by fishermen. A Life Boat Station is maintained at Galilee by the U.S. Coast Guard Station at Point Judith (radio call NMF-26). There is daily ferry service to Block Island from the State Pier at Galilee, with additional schedules during the summer months.

A small repair yard on the west side of the pond about $3/4$ mile from the entrance has a marine railway limited to small craft with a draft of not more than 3 feet (0.9m.). Light repairs to both hulls and motors can be obtained.

Hanson's Boat Yard at the north end of the pond (Wakefield), has several boat landings and a marine railway capable of handling yachts up to 68 feet in length and a draft of 5 feet (1.5m.).

The pond entrance is 75 yards wide, with rock jetties on both sides and depths from 10 to 19 feet (3.0 to 5.8m.). A large shoal area, with its south tip marked by a red buoy, lies just inside the entrance, between the State Piers. The shoal bares at low water, but there are depths of 8 to 12 feet (2.4 to 3.7m.) on both sides of it. A channel, marked by buoys, extends along the west side of the pond to the north end. A survey in 1948 showed channel depths of 4 to 8 feet (1.2 to 2.4m.), with sand bars of 3 feet (0.9m.) narrowing it on both sides in the area from 1.0 mile to 1.25 miles north of the entrance. Bids for dredging parts of the channel from the entrance northerly to Beef Island (approx. 1.3 miles from the entrance) were invited by the State of Rhode Island in August 1948.

The tides in the pond have a range of about 3 feet, and occur later than those in the Harbor of Refuge by approximately 15 minutes just inside the entrance and 50 minutes at north end. The currents in the entrance have a maximum velocity of about 3 knots and cause slight rips and overfalls at changes of tide.

DIRECTIONS. To enter Point Judith Pond, give the south end of the Western Breakwater a berth of 100 yards and enter about midway between this breakwater and Red Nun Buoy "2" located 190 yards north-northeast of the breakwater light. A minimum of 11 to 12 feet (3.3 to 3.7m.) may be carried by keeping the Western Breakwater about 60 yards on the port beam, and increasing this distance to 90 yards when passing the sharp northeast bend in the breakwater 300 yards from the breachway entrance. To approach the State Pier at Galilee, keep 50 to 75 yards off the eastern waterfront and avoid the center shoal marked by the buoy. To go up the pond from the entrance, head for the State Pier on the western waterfront until it is close by, then leave red buoys to starboard and black buoys to port a distance of about 50 feet. As a matter of precaution, a stranger should obtain local information at the wharves near the entrance.

SUPPLIES. Gasoline, water and provisions are available at Galilee and Wakefield, and repair parts are available at the latter. There is limited bus service from Galilee and Jerusalem, and railroad communication at Wakefield. ,

POTTER'S POND, a shoal landlocked pond, lies 1/2 mile west of Point Judith Pond and is connected with it by a narrow high tide channel suitable for rowboats and outboard motors only. The channel is

crossed by a highway with clearance of 5 feet (1.5m.) at high water and a current of more than 3 knots develops on ebb tides. The pond has general depths of 1 to 6 feet (0.3 to 1.8m.) and an arm at the north with depths to 26 feet (7.9m.). The mean range of tide is about 1 foot, and it occurs about two and a half hours later than in the Harbor of Refuge. Rowboats with outboard motors or sails are used for pleasure purposes by residents along the pond shores.

Page 160, Lines 32 to 35: Delete the reference to Matunuck Beach House. This building was torn down in 1947.

LIST OF SIGNALS

HYDROGRAPHIC SHEET: Reg. No. H-7640 Field No. GI-1148
 PT. JUDITH, RHODE ISLAND

TRIANGULATION STATIONS

AZA - - - - HAZARD TOWER, 1940
 CON - - - - SOUTH BEACON, 1912
 EAST - - - - E. BREAKWATER LT., 1948
 END - - - - MAIN BREAKWATER E. LT., 1948
 FARM - - - - POOR FARM (USE), 1909
 JUD - - - - PT. JUDITH LIGHTHOUSE, 1839
 MAIN - - - - MAIN BR. C. LT.2, 1948
 POTTER - - - - POTTER (USE), 1909-34
 RED - - - - MAIN BREAKWATER W. LT., 1948
 REF - - - - REFLECTOR, 1948
 SHE - - - - J.P.SHERMAN'S HOUSE CHIMNEY, 1871
 TANK - - - - PT. JUDITH TANK, 1940
 WEST - - - - W. BREAKWATER LT., 1948

TOPOGRAPHIC STATIONS

Abe - GI-B-48	Cry - GI-B-48	Fun - GI-B-48	Log -GI-B-48	Rim -GI-A-48
Ace - GI-A-48	Cue - GI-A-48	Gal - GI-A-48	Low -GI-A-48	Rot - "
Act - "	Cup - "	Gas - "	Lux - "	Roy - "
Add - "	Cut - GI-B-48	Gus - "	Mar - "	Rub - "
Aim - "	Day - GI-A-48	Guy - GI-B-48	Max - "	Sad -GI-B-48
Ann - GI-B-48	Dog - "	Her - "	Moo - "	Sir - "
Ant - GI-A-48	Don - "	Hid - GI-A-48	Ned - "	Sis -GI-A-48
Arm - "	Dot - GI-B-48	Hon - "	New -GI-B-48	Sky - "
Art - GI-B-48	Dud - GI-A-48	Hub - "	Nip - "	Sox - "
Ask - "	Ear - "	Hut - "	Nut - "	Sue -GI-B-48
Bat - GI-A-48	Eat - "	Ice - GI-B-48	Oak - "	Tax -GI-A-48
Bed - "	Ebb - "	Ida * GI-A-48	Odd -GI-A-48	Tom - "
Bib - "	Eel - GI-B-48	Irk - "	Oil - "	Toy - "
B.M. - "	Egg - GI-A-48	Jar * "	Old - "	T.G. - "
Beb - "	Ego - GI-B-48	Jib - "	Out - "	Use - "
Bex - GI-B-48	Elm - "	Jim - GI-B-48	Pal -GI-B-48	Vet - "
Bun - "	Eva - GI-A-48	Joe - "	Paw -GI-A-48	Vim - "
But - "	Far - GI-B-48	Joy * "	Pep - "	Wag - "
Cab - " <small>Not used</small>	Pat - "	Kid - GI-A-48	Pot -GI-B-48	Why - "
Car - "	Fez - GI-A-48	Lad - GI-B-48	Pup -GI-A-48	Win - "
Ced - "	Fly - "	Lax - GI-A-48	Rag - "	Wit - "
Cep - GI-A-48	For - "	Leo - "	Ram - "	Zig - "
Cow - "	Fox - "	Let * "	Rat -GI-B-48	Zoo - "

HYDROGRAPHIC STATIONS

Axe - Vol. 11, page 66	Jap - Vol. 11, page 45
Bet - " 10, " 13	Ora - " 11, " 45
Fig - " 14, " 43	War - " 11, " 66
Ivy - " 11, " 66	

ADDENDUM

To Accompany

HYDROGRAPHIC SURVEY H-7640 (Field No. G1-1148)

SOUNDINGS

Soundings around piers at Hanson's Boat Yard and at Galilee, R. I. were not plotted on smooth sheet as the positions were referenced off the piers. These are to be plotted when the air photo compilation of the shoreline has been completed. The soundings at Hanson's Boat Yard may be found in Vol. 10, pages 21, 22, and 23, Galilee, R. I. piers in Vol. 15, pages 9 and 10. plotted in Wash. office

Fathometer soundings on 1 day (blue) agreed very well with other fathometer soundings in the lower part of the inner harbor. However, in the northern part of the inner harbor, they ran shoaler by $\frac{1}{2}$ to 1 ft. than pole sounding. On the advice of the Officer-in-Charge, the fathometer soundings were disregarded where they did not check pole soundings.

Attention is directed to the following uncharted shoal soundings.

21' ✓	Lat. 41°-21.38' ✓ Long. 71°-29.40' ✓	18' ✓	Lat. 41°-21.24' ✓ Long. 71°-30.20' ✓	} uncharted on 27C Print date 10/3/49
18' ✓	Lat. 41°-21.92' ✓ Long. 71°-28.42' ✓	27' ✓	Lat. 41°-20.92' ✓ Long. 71°-30.35' ✓	

The following soundings were plotted on the smooth sheet, but may possibly be strays. (Accepted, considered to be side echoes from boulders)

14' ✓	Lat. 41°-22.80' ✓ Long. 71°-28.04' ✓	8' ✓	Lat. 41°-22.67' ✓ Long. 71°-28.39' ✓
-------	---	------	---

Peaked Rock, a position was not available for this rock. Approximate position as scaled from Chart 276. Smooth sheet position from T-5095 (1948)

Lat. 41°-22.35' ✓
Long. 71°-28.85' ✓

Respectfully submitted,

Hugh L. Proffitt
Hugh L. Proffitt
Cartographer

Norfolk, Virginia
25 March 1949

Approved and forwarded.

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

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. ^{H-7640}

Records accompanying survey:

Boat sheets .1...; sounding vols. .21...; wire drag vols.;
 bomb vols.; graphic recorder rolls 7 envel.;
 special reports, etc. 1 Cahier, Fath. Corrections

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

Number of positions on sheet		441
Number of positions checked		240
Number of positions revised		3
Number of soundings revised (refers to depth only)		167
Number of soundings erroneously spaced		35
Number of signals erroneously plotted or transferred		0
Topographic details	Time	82
Junctions	Time	0
Verification of soundings from graphic record	Time	40
Verification by <u>Robert C. Richards</u>	Total time	<u>627</u> ... Date <u>12/20/49</u>
Reviewed by <u>J. A. Winsmore</u>	Time	<u>40 hrs.</u> Date <u>1/19/50</u>

DIVISION OF CHARTS

REVIEW SECTION - NAUTICAL CHART BRANCH

REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-7640

FIELD NO. GI-1148

Rhode Island, Point Judith, Black Point to Matunuck Point
Surveyed in June - August, 1948 Scale 1:10,000
Project No. CS-333

Soundings:

808 Fathometer
Hand Lead
Pole

Control:

Sextant fixes on shore signals

Chief of Party - F. B. Quinn
Surveyed by - F. B. Quinn and J. Laskowski
Protracted by - W. W. Feazel
Soundings plotted by - W. W. Feazel
Verified and inked by - R. C. Richard
Reviewed by - T. A. Dinsmore, January 19, 1950
Inspected by - R. H. Carstens

1. Shoreline and Signals

The shoreline originates with the unreviewed manuscript of air-photographic survey T-5095 (1948).

The signals are from graphic control survey T-7100a & b (1948). The fixes for supplementary hydrographic signals are recorded in the sounding volumes of the present survey.

2. Sounding Line Crossings

Considering the irregularities of the bottom, depths at crossings are in good agreement.

3. Depth Curves and Bottom Configuration

The usual depth curves were adequately delineated except in foul inshore areas.

The bottom is very irregular inshore but fairly smooth offshore. Numerous pinnacles and rocks are revealed in the inshore areas.

4. Adjoining Surveys

No contemporary surveys adjoin the present survey. Charted depths at the limits of the present survey are in harmony with present depths.

5. Comparison with Prior Surveys

A. H-153 (1844)	1:20,000	H-1789 (1887)	1:10,000
H-1529a (1882)	1:40,000	H-2691 (1904)	1:10,000
H-1529b (1884)	1:10,000	H-3521 (1913)	1:5,000
<u>H-1787 (1887)</u>	<u>1:40,000</u>	<u>H-6443 (1939)</u>	<u>1:40,000</u>

These prior surveys cover the area of the present survey except for Potter Pond and Point Judith Pond. In these inland waters, there are no prior surveys by this Bureau.

The breakwaters, which form the Harbor of Refuge, first appeared complete on H-3521 (1913). A comparison between this large-scale survey and the present survey reveals considerable bottom changes in and adjacent to the Harbor of Refuge. For example, in lat. $41^{\circ} 22.08'$, long. $71^{\circ} 30.87'$, prior depths of 26 ft. are now superseded by depths of 5-6 ft. From here northward through the shoal area, present depths are from 5-15 ft. less than prior depths. Elsewhere within the harbor, there has been a general shoaling of from 1 to 3 ft. Considerable shoaling has also taken place adjacent to the breakwaters both in and outside of the harbor. These changes are attributed largely to the currents around the breakwaters.

Except for the above mentioned artificial and natural changes no other bottom changes of importance were noted elsewhere in the area. The following discrepancy was noted: The 10-ft. sounding (Chart 276) in lat. $41^{\circ} 22.45'$, long. $71^{\circ} 31.40'$, originating with H-3521 (1913) falls in 13-ft. depths on the present survey. The prior sounding is considered to be displaced in position and should actually fall about 100 meters further inshore where comparable depths occur on the present survey. Present development is adequate to disprove the prior 10-ft. sounding in its charted position.

In the vicinity of Point Judith and northward along the open coast, inshore hydrography has been added to the present survey from H-1789 (1887). Several critical soundings, rocks and bottom characteristics have also been carried forward to the present survey from the prior surveys. With the indicated additions, the present survey is adequate to supersede the prior surveys within the common area.

B. H-4098 W.D. (1919) 1:20,000

This wire-drag survey covers only two small portions of the present survey on the southwest. No conflicts are noted between the effective drag depths and depths on the present survey.

6. Comparison with Chart 276 (Latest print date 10/3/49)
Chart 1210 (Latest print date 8/1/49)

A. Hydrography

Charted hydrography within Point Judith Pond originates with surveys by the Corps of Engineers and the State of Rhode Island. Channel depths charted in the southern part of Point Judith Pond are from an after-dredging survey by the Department of Public Works, R. I. (Bp. 44195, October, 1948) which is subsequent to the present survey.

Charted hydrography throughout the remaining area of the present survey originates principally with the previously discussed prior surveys which need no further consideration. The present survey has been partially applied to the charts prior to verification and review. Numerous soundings have been revised during verification of the present survey. The following discrepancies with charted soundings were noted:

- (1) The 15- and 16-ft. soundings (Chart 276) in lat. $41^{\circ} 21.85'$, long. $71^{\circ} 31.21'$, and lat. $41^{\circ} 21.78'$, long. $71^{\circ} 31.18'$, falling in present depths of 24-26 ft. should be disregarded. Originating with Bp. 44014 (1948), which is a photographic copy of the present survey boat sheet, the 15 and 16 were revealed to be actually position numbers 15-B and 16-B (blue day) and were mistakenly charted as soundings. The 15 and 16 are also erroneously reported as soundings in H.O. Notice to Mariners 41 (1948).
- (2) The 7-ft. sounding (Chart 1210) in lat. $41^{\circ} 23.00'$, long. $71^{\circ} 28.25'$, the source of which could not be readily ascertained, should be disregarded. Falling on a 9-ft. sounding on the present survey, the 7-ft. sounding is probably out of position inasmuch as shoal spots appear on the present survey immediately north and south of the charted position.

The present survey supersedes the charted hydrography except the depths previously referred to in the southern part of Point Judith Pond.

B. Aids to Navigation

No buoys are charted in Point Judith Pond.

Buoy "N2" charted in lat. $41^{\circ} 22.07'$, long. $71^{\circ} 30.87'$, was located on the present survey about 80 meters south of its charted position. Either position adequately marks the shoal spots here. It is noted that the Light List of 1949 states that the buoy is in depths of 12 ft. whereas the charted position of the buoy actually falls in depths of 5-7 ft. on the present survey.

The bell buoy charted in lat. $41^{\circ} 20.93'$, long. $71^{\circ} 30.46'$, was located on the present survey about 450 meters south of its charted position. The buoy should be moved back to its charted position to most effectively serve the purpose intended. It is noted that the Light List of 1949 places the buoy in 22-ft. depths whereas depths on the present survey at the charted position of the buoy are about 36 ft.

The buoy charted in lat. $41^{\circ} 21.81'$, long. $71^{\circ} 30.50'$, was located on the present survey about 60 meters N.N.E. of its charted position. Either position appears to serve the purpose intended.

The lighted whistle buoy charted in lat. $41^{\circ} 20.48'$, long. $71^{\circ} 28.52'$, was located on the present survey about 70 meters south of its charted position. Either position is considered adequate.

Other aids to navigation on the present survey are in substantial agreement with the charted aids and adequately mark the features intended.

7. Condition of Survey

- a. The sounding records are complete; the Descriptive Report is particularly comprehensive.
- b. The smooth plotting was neat and carefully done.
- c. As noted by the hydrographer, inshore development along the open coast was not accomplished because of hazardous sea conditions.

8. Compliance with Project Instructions


The survey adequately complies with the Project Instructions.

9. Additional Field Work

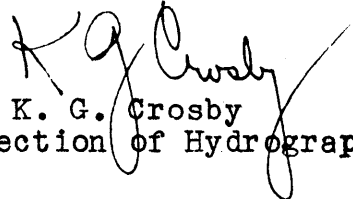
This is an excellent survey. With the retention of prior inshore hydrography along the outer coast and several detached soundings and rocks from the prior surveys, the present survey is considered to be basic and no additional hydrography is recommended.


As a matter of record, investigation of the many offshore pinnacles and shoal indications would be desirable during any future wire-drag operations in this area.

Examined and approved:


H. R. Edmonston
Chief, Nautical Chart Branch


Chief, Division of Charts


K. G. Crosby
Chief, Section of Hydrography


W. M. Scaife
Chief, Division of Coastal Surveys

TIDE NOTE FOR HYDROGRAPHIC SHEET

13 April 1949

~~Division of Hydrography and Topography:~~

Division of Charts: R. H. Carstens

Plane of reference approved in
21 volumes of sounding records for

HYDROGRAPHIC SHEET 7640

Locality Point Judith, Rhode Island

Chief of Party: F. B. Quinn in 1948

Plane of reference is mean low water, reading

0.6 ft. on tide staff at Point Judith (Eastern Breakwater)

15.4 ft. below B. M. 6 (1948)

3.8 ft. on tide staff at Point Judith Pond Entrance (Galilee)

9.2 ft. below B. M. 3 (1948)

2.7 ft. on tide staff at Point Judith Pond (North End)

7.3 ft. below B. M. 1 (1948)

2.0 ft. on tide staff at Point Judith Pond (Potters Pond)

36.3 ft. below B. M. 1 (1948)

~~Condition of records satisfactory except as noted below:~~

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

Point Judith (Eastern Breakwater)	=	3.1 feet
Point Judith Pond Entrance (Galilee)	=	3.0 feet
Point Judith Pond (North End)	=	2.9 feet
Point Judith Pond (Potters Pond)	=	1.0 feet

E. C. McKay
Section

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

NAUTICAL CHARTS BRANCH

SURVEY NO. H-7640

Record of Application to Charts

DATE	CHART	CARTOGRAPHER	REMARKS
4/21/49	1211	H.W. Burgeyne	Examined H-7640 for critical sdgs. only Before After Verification and Review
6-28-49	1210	M. Madros	Before After Verification and Review <i>Partially applied.</i>
8/17/49	276	Goodrich	Before After Verification and Review <i>Partially Applied</i> Before After Verification and Review
6-9-52	1210	E.W. Brogny	Before After Verification and Review <i>Partial appld</i> <i>only critical sdgs. see review</i> Before After Verification and Review
10-29-52	268	M. Madros	Before After Verification and Review <i>Fully applied.</i>
3-23-53	1210	C.B. Samuel	Before After Verification and Review <i>Fully applied</i> <i>thru Temporary Ed. of chart 268</i>
1-31-57	1211	R.K. DeLander	Before After Verification and Review <i>thru chart</i> <i>1210</i>
10-27-61	1210 Recorist	W.L. Rogers	Before After Verification and Review <i>Fully applied thru</i> <i>chart 268</i>
2-13-95	13221 (extension)	John Barber	Before After Verification and Review <i>Fully appld thru chart 13219</i>

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.