

7937

Diag. Cht. No. 1212-2

CS-345

Form 504

U. S. COAST AND GEODETIC SURVEY

DEPARTMENT OF COMMERCE

DESCRIPTIVE REPORT

Type of Survey **HYDROGRAPHIC**

Field No. **LISP - 05151** Office No. **H-7937**

LOCALITY

State **NEW YORK**

General locality **LONG ISLAND**

Locality **PORT JEFFERSON HARBOR**

19451

CHIEF OF PARTY

J. Laskowski

LIBRARY & ARCHIVES

DATE **MAY 8, 1952**

B-1870-1 (1)

7937
2362

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-7937

Field No. LISP-05151

State NEW YORK

General locality Long Island

Locality Port Jefferson Harbor

Scale 1:5000 Date of survey 13 Aug - 8 Oct 1951

Instructions dated 18 July 1951

Vessel Launch No. 168 (Long Island Shore Party)

Chief of party John Laskowski

Surveyed by J.A.Roulier

Soundings taken by fathometer, graphic recorder, hand lead, wire & pole

Fathograms scaled by PARTY PERSONNEL

Fathograms checked by PERSONNEL OF NORFOLK PROCESSING OFFICE

Protracted by S.M. TARKENTON

Soundings penciled by S.M. TARKENTON

Soundings in fathoms feet at MLW MLW

REMARKS:

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DESCRIPTIVE REPORT

TO ACCOMPANY

HYDROGRAPHIC SHEET H-7937 (FIELD NO. LISP-05151)

PORT JEFFERSON HARBOR

LONG ISLAND, NEW YORK

LONG ISLAND SHORE PARTY

JOHN LASKOWSKI, CHIEF OF PARTY

PROJECT CS-345

1951

SCALE 1:5000

PROJECT: The survey was accomplished under Instructions dated 18 July 1951. The instructions called for a basic survey.

SURVEY LIMITS AND DATES: The project includes Port Jefferson Harbor, Setauket Harbor, Conscience Bay and the approach to Port Jefferson south of latitude 40° 58' 35". The work began on 2 August with the installations of tide stations and building of signals. The hydrography was accomplished during the period of 13 August to 8 October 1951. A few days were spent on other surveys. A junction was made at the approaches to Port Jefferson with Sheet H-7938 (LISP-1251), Scale 1:10,000.

VESSEL AND EQUIPMENT: Aluminum Launch No. 168 was used for all of the sounding. The launch was operated from a shore base located at Port Jefferson, N. Y. All echo soundings were obtained with Graphic Recorder No. 139SPX. The transducers were mounted inboard.

TIDE AND CURRENT STATIONS: The tide note is attached to this report. No currents were observed.

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

CONTROL STATIONS: Existing triangulation was used for control. Photogrammetric stations were transferred from Air Compilation Sheets T-9844 and T-9845¹. Five hydrographic stations were established and their positions were determined by taking a sextant fix at each of the station sites. The hydrographic position of TEM #3 (OSIS, Lat. 40° 57' 10.47m, Long. 73° 07' 30m), was determined to be 25 meter south of the position shown on Air Compilation Sheet T-9844, 1951.

SHORELINE AND TOPOGRAPHY: The shoreline and topographic details were transferred from Air Compilation Sheets T-9844 and T-9845, 1951.

SOUNDINGS: Echo soundings were obtained with Graphic Recorder No. 139SPX. The handlead or pole was used for sounding alongside piers or at buoys. A dredge removing gravel for commercial use was anchored in approximate Lat. 40-58.3, Long. 73-05.75 while sounding on b-day. When the dredge was moved to a location within the harbor the area was resurveyed on p-day and r-day. The soundings on these two days should be given preference over b-day soundings in this locality. *See letter dated 4 Feb 1952*

p & r days were given preference over smooth b-day

CONTROL OF HYDROGRAPHY: The survey was controlled by sextant fixes using shore signals.

ADEQUACY OF SURVEY: The survey is complete and considered adequate to supersede prior surveys for charting. There are no holidays and the depth curves can be adequately drawn at the junctions.

See Review TP 3415

CROSSLINES: The survey is covered by a sufficient number of crosslines.

COMPARISON WITH PRIOR SURVEYS: No comparison is made with prior surveys but a comparison with the latest print of Chart 361 is listed.

COMPARISON WITH CHART 361 (Print date 5-4-51)

Latitude	Longitude	1951 Survey	Chart	Remarks
40-56.87	73-04.38	5 ft.	Wreck	Recommend deletion <i>{ Deleted on chart 361 dated 9-1-52</i>
40-56.93	73-04.20	Dolphin	--	Not shown on T-9845 ✓
40-56.92	73-04.19	"	--	" " " " ✓
40-56.91	73-04.18	"	--	" " " " ✓
40-57.17	73-04.21	1-4 ft.	Wreck	Wreck covered with sand. <i>see 542</i> Small spit extending to NW. First location.
40-57.72	73-06.29	RK	awash --	Recommend deletion. Dredge operated as near to wreck as possible and wreck is sinking to deeper water.
40-57.97	73-05.26	7 ft.	Wreck	Recommend retention. Same comment as above. Still danger to navigation. <i>Retain on chart</i>
40-58.05	73-05.09	4 ft.	Wreck	Change probably due to dredging
40-57.95	73-05.18	4 ft.	1 ft.	Dredged area.
40-58.07	73-05.25	2 ft.	2 ft.	This shoal area was built up by the waste from the washing of
40-58.33	73-05.83	5 ft.	18 ft.	A small dredge goes over the area and removes the "humps". However, this was not accomplished during the time the party was at Port Jefferson. <i>Charted on chart 361 (9-1-52) in accordance with depths shown on 4-7937</i>

There are no previous surveys of the dredged area at Lat. 40-58.15, Long. 73-04.55). It is used as a harbor of refuge during northly blows.

There are numerous changes in the depths of the channel that leads to Conscience Bay. The sand and gravel company has dredged in the area. *4 Feb. 1952*

See Review TP 3415


DANGERS AND SHOALS: Letter to Director reporting shoal attached to this report.

COAST PILOT INFORMATION: To be submitted to Washington Office under separate cover.

AIDS TO NAVIGATION: Copy of aids submitted to office appended to this report.

LANDMARKS FOR CHARTS: There are no landmarks to report. The photographs of the area were field inspected in June 1951 for the compilation of Sheets T-9844 and T-9845. The report of the photogrammetric party no doubt covers this topic.

MISCELLANEOUS: The depths will change as long as the sand and gravel dredging company operates in the area.


John Laskowski
Comdr. C&GS
Chief of Party

STATISTICS TO ACCOMPANY

HYDROGRAPHIC SHEET H-7937 (FIELD NO. LISP-05151)

LAUNCH NO. 168

<u>Date</u> <u>1951</u>	<u>Vol.</u> <u>No.</u>	<u>Day</u> <u>Ltr.</u>	<u>HL & Pole</u> <u>Sdgs.</u>	<u>No. of</u> <u>Pos.</u>	<u>Stat. Mi.</u> <u>Sdgs.</u>
13 Aug	1	a	8	177	18.3
15	2	b	-	195	15.2
16	2 & 3	c	-	165	16.3
17	3	d	1	130	11.1
20	3	e	53	53	0.7
22	3	f	9	118	9.4
23	4 & 5	g	-	218	23.3
24	5 & 6	h	-	196	22.9
27	6	j	-	172	12.3
29	6	k	-	38	2.4
30	7	l	2	180	15.8
31	7	m	1	117	9.1
4 Sept	8	n	-	187	12.4
5	8	p	-	72	4.0
7	8 & 9	q	-	242	20.8
10	9 & 10	r	14	240	15.0
11	10	s	23	175	9.1
13	10 & 11	t	4	83	2.8
24	11	u	-	22	1.0
26	11	v	19	19	0.3
8 Oct	11	w	1	1	- -
<hr/>					
TOTALS	11	21	136	2791	222.2

Area in square statute miles 2.8

LIST OF SIGNALS

HYDROGRAPHIC SHEET H-7937 (FILED NO. LISP-05151)

TRIANGULATION STATIONS

BAPT . . . BAPTIST, 1931
 COMB . . . PORT JEFFERSON, NEWCOMB BROS. GARAGE CUPOLA, 1939
 CON . . . CONSCIENCE, 1931
 EAST . . . JETTY (PORT JEFFERSON EAST BREAKWATER LIGHT), 1931-39
 JEF . . . JEF, 1931-39
 OLD . . . OLD FIELD POINT LIGHTHOUSE, 1882-1948
 QUEEN . . . QUEEN, 1951
 RANG . . . EAST RANGE, 1948
 VANE . . . VANE, 1931
 WEST . . . PORT JEFFERSON WEST BREAKWATER LIGHT (NEW), 1951

TOPOGRAPHIC STATIONS

STACK . . . Stack, 1951 (Sheet T-9845)
 TAUK . . . R.M. # 1, TAUK 1931

PHOTOGRAMMETRIC STATIONS

	<u>Sheet</u>	<u>No.</u>		<u>Sheet</u>	<u>No.</u>
ACE . . .	T-9845	510	KEN . . .	T-9844	423
ART . . .	"	512	LAM . . .	T-9845	507
BAR . . .	T-9844	414	NAT . . .	T-9844	419
BAT . . .	"	403	NUP . . .	"	405
BIL . . .	"	415	PAR . . .	T-9845	508
BOB . . .	T-9845	509	PIE . . .	T-9844	404
CAN . . .	T-9844	402	PIN . . .	"	407
CAT . . .	T-9845	505	POT . . .	"	410
COP . . .	"	513	RIM . . .	T-9845	504
DOG . . .	T-9844	417	TAP . . .	T-9844	412
DOT . . .	T-9845	506	TAR . . .	"	409
EGG . . .	T-9844	421	TIM . . .	"	424
END . . .	"	413	TOM . . .	"	416
GAS . . .	"	411	TOY . . .	"	401
GIN . . .	T-9845	502	VET . . .	T-9845	503
IVY . . .	"	501	WAR . . .	T-9844	408
JAM . . .	T-9844	406	WIT . . .	"	418
JAR . . .	T-9845	511			
JIM . . .	T-9844	420			

PHOTOGRAMMETRIC STATIONS

(Selected by Hydrographic Party from Sheets T-9844 & T-9845)

	<u>Sheet</u>	
CAP . . .	T-9844	S gable of white two-story house
FIG . . .	T-9845	Hatch on sunken barge (See Vol. 1, p. 7)
HOP . . .	T-9844	10 inch iron pipe, awash at MHW
PEN . . .	"	S gable of two-story house
SAM . . .	"	E gable of house

HYDROGRAPHIC SIGNALS

FAT . . . Vol. 1, p. 8 - Boulder at HWL
 FOX . . . " " " 5 - Temporary banner
 LOT . . . " " " 8 - Boulder on ruins of bridge approach
 MAR . . . " " " 7 - Temporary tripod
 SIS . . . " " " 8 - B.M.# 3, 1931-Conscience Bay, Port Jefferson Hbr.

TIDAL NOTE TO ACCOMPANY

HYDROGRAPHIC SHEET H-7937 (FIELD NO. LISP-05151)

Observations were obtained at four tide stations. Portable automatic tide gages were installed at two of the stations while direct staff readings were recorded as required at the other two. The locations of the stations are shown on the boat sheet and the limits of the area in which the tides of each were used for reducing the soundings are outlined in blue ink. 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>DESCRIPTION</u>	<u>LAT.</u>	<u>LONG.</u>	<u>MLW ON STAFF</u>
Port Jefferson Harbor	Tide Gage	40-56-55	73-04-13	1.9 ft
Port Jefferson Harbor Entrance	" "	40-58-21	73-05-32	2.1 ft
Conscience Bay Entrance	Tide Staff	40-58-10	73-07-01	- 0.8 ft
Setauket Harbor	" "	40-56-53	73-06-12	0.7 ft

VELOCITY CORRECTIONS

HYDROGRAPHIC SHEET H-7937 (FIELD NO. LIST-05151)

LONG ISLAND SOUND PARTY

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The corrections tabulated below are based on an INITIAL of 1.0 - Launch NO. 168. Where the INITIAL on the fathograms vary from 1.0 an INDEX correction must be applied. All soundings recorded on FOOT SCALE - A RANGE.

LAUNCH NO. 168

RECORDER NO. 139 SPX
(Use for all echo soundings)

Correction ft	From	To
- 1.0	0	- 2.1
- 0.8	2.2	- 2.9
- 0.6	3.0	- 3.7
- 0.4	3.8	- 5.3
- 0.2	5.4	- 20.4
0	20.5	- Sdg depth

LEADLINE CORRECTION


- 0 to 13 ft.
- 0.1 for all soundings over 13 ft.

APPROVAL SHEET

TO ACCOMPANY

HYDROGRAPHIC SHEET H-7937 (FIELD NO. LISP-05151)

The boat sheet and records were examined daily. The survey is considered adequate and no additional work is recommended.


John Laskowski
Cdr. C&GS
Chief of Party

4 February 1962

To: The Director
U.S. Coast & Geodetic Survey

Subject: Shoal area

During the recent survey (Sheet H-7957 LIND-05151) of the approaches to Port Jefferson Harbor, N.Y. a shoal area of depths of 5 to 7 ft. was found in approximate lat. 40 - 58.33, Long. 73 - 05.85. These shoals were built up by the discharge of the washing of the gravel brought up by a dredge. A small dredge is supposed to remove the "muds" but to my knowledge this was not accomplished prior to departure of the party.

The boat sheet was forwarded to the office for reproduction during late 1961 as I presume a copy of the boat sheet is available for inspection.


John Laskowski
Cdr. USCG
Chief of Party

ADDENDUM
To Accompany

HYDROGRAPHIC SURVEY H-7937 (Field No. LISP-05151)


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

Respectfully submitted,


Hugh L. Proffitt
Cartographer.

Norfolk, Va.
1 May 1952

Approved & Forwarded:


Earle A. Deily
Supervisor, SE Dist.

GEOGRAPHIC NAMES

Survey No. H-7937

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)						1
<u>Long Island</u> ✓				"	"					2
<u>Port Jefferson Harbor</u> ✓				"	"					3
										4
<u>Belle Terre</u>										5
<u>Port Jefferson</u> ✓ (town)										6
<u>East Setauket</u> ✓										7
<u>Setauket</u> ✓										8
<u>Setauket Harbor</u> ✓										9
<u>Conscience Bay</u> ✓										10
<u>Strongs Neck</u> ✓										11
<u>Old Field</u> ✓										12
<u>Old Field Point</u> ✓										13
<u>Setauket Beach</u> ✓										14
										15
										16
										17
										18
										19
										20
										21
										22
										23
										24
										25
										26
										27

Names approved
11-8-54 L. Heck
(see chart 361)

Hydrographic Surveys (Chart Division)

HYDROGRAPHIC SURVEY NO. H-7937...

Records accompanying survey:

Boat sheets ...; sounding vols. ...; wire drag vols.;
 bomb vols.; graphic recorder rolls ...
 special reports, etc. 1. Descriptive Report; 1. Smooth Sheet; 1. Overlay;
 1. Cahier, Velocity Corrections Filed under 7801.....

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

Number of positions on sheet	.....	2791	
Number of positions checked	.....	150	
Number of positions revised	.....	5	
Number of soundings revised (refers to depth only)	.....	21	
Number of soundings erroneously spaced	.....	3	
Number of signals erroneously plotted or transferred	.....	5	
Topographic details	Time	3 hrs	
Junctions	Time	8 hrs	
Verification of soundings from graphic record	Time	30 hrs	
Verification by <i>I. M. Zoskind</i>	Time	40	10-8-54
Verification by <i>O. Svendsen</i>	Total time	294	Date 10-16-54
Reviewed by <i>I. M. Zoskind</i>	Time	80	Date 10-2-54

12 hrs Stini (1-July)

DIVISION OF CHARTS
REVIEW SECTION - NAUTICAL CHART BRANCH
REVIEW OF HYDROGRAPHIC SURVEY

REGISTRY NO. H-7937

FIELD NO. LISP-05151

New York, Long Island, Port Jefferson Harbor

Project CS-345

Surveyed - Aug. - Oct., 1951

Scale 1:5,000

Soundings:

Control:

808 Fathometer
Handlead
Pole

Sextant fixes on
shore signals

Chief of Party - J. Laskowski
Surveyed by - J. A. Roulier
Protracted by - S. M. Tarkenton
Soundings plotted by - S. M. Tarkenton
Verified and inked by - O. Svendsen and I. M. Zeskind
Reviewed by - I. M. Zeskind 10/25/54
Inspected by - R. H. Carstens

1. Shoreline and Control

The shoreline originates with unreviewed air-photographic surveys T-9844 and T-9845 of 1951.

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 were adequately delineated. Portions of the 3-ft. curve were drawn to better delineate the channel in Setauket Harbor.

The bottom is very irregular in that portion of the present survey which lies approximately north of lat. $40^{\circ}57.65'$, and extending through the entrance to port Jefferson. Elsewhere the

bottom is generally smooth. The bottom irregularity is attributed to dredging operations, the depositing of silt, and the action of the current on the bottom.

4. Junctions with Contemporary Surveys

The junction with H-7938 (1951) at the entrance to Port Jefferson will be considered in the review of that survey.

5. Comparison with Prior Surveys

- A. H-30 (1883) 1:20,000
 H-31 (1883) 1:10,000
 H-1283a (1874) 1:5,000/H-1283b (1874) 1:10,000
 H-1731 (1886) 1:40,000
H-1734 (1886) 1:10,000

A comparison between the prior and present surveys reveals that considerable change in bottom configuration and shoreline has occurred in that portion of the present survey which lies north of lat. $40^{\circ}57.6'$. Changes in shoreline to a lesser extent are noted in the harbor of the city of Port Jefferson. These changes in bottom configuration and shoreline are attributed to natural and artificial causes, such as the action of the current on the bottom, dredging operations, the construction of jetties, bulkheads and piers, and the reclaiming of land. Depths in the northern portion of the survey including the entrance to Port Jefferson Harbor are from 5-30 ft. deeper than prior depths. Several marshy islands in the vicinity of lat. $40^{\circ}57.9'$, long. $73^{\circ}06.0'$ no longer exist. A boat harbor has been dredged and a lake has been filled in the vicinity of lat. $40^{\circ}58.2'$, long. $73^{\circ}04.7'$. Elsewhere in the area surveyed, only minor differences of 1-3 ft. depths are noted, the present depths generally being shoaler than the prior depths.

Several rocks shown on prior surveys from early topographic surveys of the same period have been carried forward to the present survey. With the addition of these rocks the present survey is adequate to supersede the prior surveys within the common area.

- B. H-5132 (1931) 1:5,000
 H-5136 (1931) 1:10,000
H-6560 (1940) 1:10,000

A comparison between the prior and present surveys shows that the principal changes in bottom configuration have occurred in the entrance to and in the northern portion of Port Jefferson Harbor. The changes here are due principally to dredging operations, the action of current on the bottom and the reclaiming of land. The area northeast of Strongs

Neck where prior depths varied from 1 to 4 ft and where several marshy islands also were located is now dredged to depths of 2-34 ft. A small boat harbor has been dredged in the vicinity of lat. $40^{\circ}58.2'$, long. $73^{\circ}04.65'$ in an area which was formerly above high water. The lake formerly located in the vicinity of lat. $40^{\circ}58.15'$, long. $73^{\circ}04.85'$, has been filled in. Depths through the entrance to Port Jefferson Harbor have changed as much as 15 ft., as for example, in lat. $40^{\circ}58.1'$, long. $73^{\circ}05.51'$, where a prior depth of 40 ft. falls in present depths of 25-33 ft. In the harbor of the city of Port Jefferson, only minor changes of 1-3 ft. in depths are noted. However, the shoreline delineation has changed in several places due to the construction of piers and bulkheads. In other areas of the survey only differences of 1-2 ft. in depths are noted.

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

C. Topographic Surveys

The following old piling and pier remains which originate with prior topographic surveys are not shown on the present survey or contemporary air photographic surveys T-9844 and T-9845 of 1951. These features which fall within the limits of the low-water line, are considered to be non-existent and should, therefore, not be charted.

<u>Object</u>	<u>Charted Location</u>		<u>Source</u>
	<u>Latitude</u>	<u>Longitude</u>	
1 dolphin	$40^{\circ}56.90'$	$73^{\circ}04.46'$	T-6739 (1940)
Pier remains	$40^{\circ}57.10'$	$73^{\circ}04.80'$	T-4625 (1931)
Pier remains	$40^{\circ}58.27'$	$73^{\circ}06.97'$	(CS-244 of 1943 (Bp-37916)

The islet charted in lat. $40^{\circ}57.92'$, long. $73^{\circ}07.12'$, from T-4625 (1931), falls on the present survey in an area which uncovers 0-3 ft. at M L W. The feature is not shown on contemporary air-photographic survey T-9844 (1951) and no reference to the islet is made in the sounding volumes of the present survey. The islet is considered to no longer exist and should, therefore, be deleted from the chart.

6. Comparison with Chart 361 (Latest print date 9-1-52)

A. Hydrography

The charted hydrography originates principally with the present survey before verification and review and the prior

surveys previously discussed which need no further consideration. Only minor differences of 1-2 ft. between the charted and present depths were noted.

The 2 dolphins charted in lat. $40^{\circ}57.98'$, long. $73^{\circ}04.74'$, from the U. S. Corps of Engineers' survey of 1941 (Bp-36080) are not shown on the present survey. The existence of the dolphins is not considered disproved by the present survey and the dolphins should, therefore, be retained on the chart.

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 buoy N 2 R E F and Bell buoy No. 1 at the entrance to Port Jefferson Harbor, and buoys C 5 and N 6 at the entrance to Setauket Harbor are located on the smooth sheet as much as 100 meters from their charted positions. The charted positions of these buoys more adequately mark the features intended.

7. Condition of Survey

- a. The sounding records and Descriptive Report are complete and comprehensive.
- b. The smooth plotting was accurately done.
- c. The charted features mentioned in paragraph 5C and 6A above were not verified or disproved by the present survey.

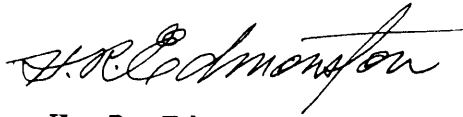
8. Compliance with Project Instructions

The present survey adequately complies with the Project Instructions.

9. Additional Field Work Recommended

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

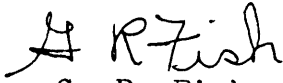
Examined and Approved:



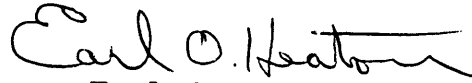
H. R. Edmonston
Chief, Nautical Chart Branch



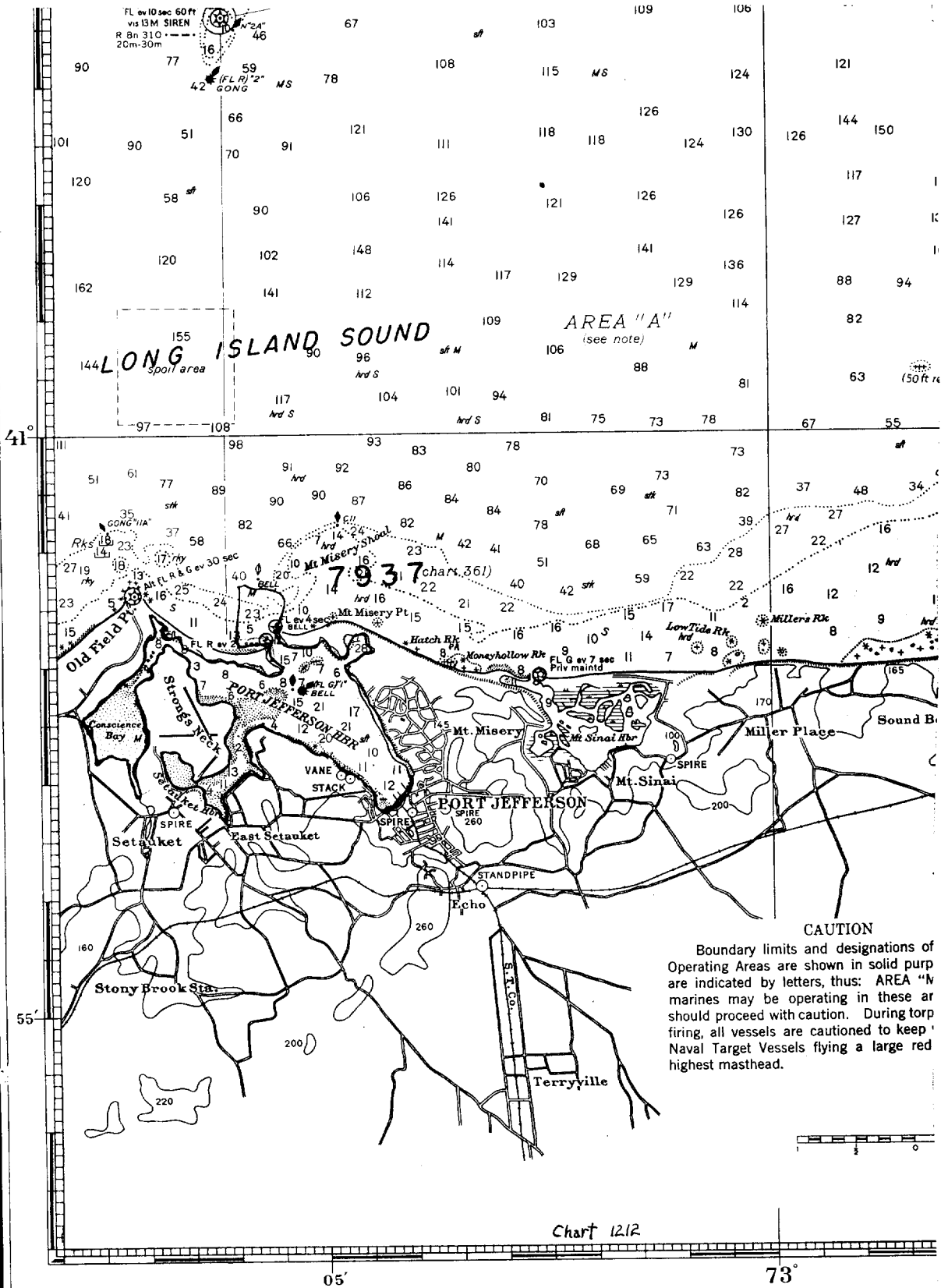
E. R. McCarthy
Acting Chief, Division of Charts



G. R. Fish
Chief, Hydrography Branch



Earl O. Heaton
Chief, Division of Coastal Surveys



FL ev 10 sec 60 ft
 vis 13 M SIREN
 R Bn 310
 20m-30m

LONG ISLAND SOUND
 144
 155
 90
 96
 117
 104
 101
 94
 81
 75
 73
 78
 67
 55

AREA "A"
 (see note)

7937
 charts 361)

CAUTION
 Boundary limits and designations of Operating Areas are shown in solid purple are indicated by letters, thus: AREA "N" marines may be operating in these areas should proceed with caution. During torp firing, all vessels are cautioned to keep Naval Target Vessels flying a large red highest masthead.

Chart 1212

05'

73°

