

H10559

NOAA FORM 76-35A

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE

DESCRIPTIVE REPORT

Type of Survey BASIC HYDROGRAPHIC
Field No. AHP-10-9-94
Registry No. H-10559

LOCALITY

State NEW YORK
General Locality LONG ISLAND SOUND
Sublocality PARSONAGE POINT TO
LARCHMONT HARBOR

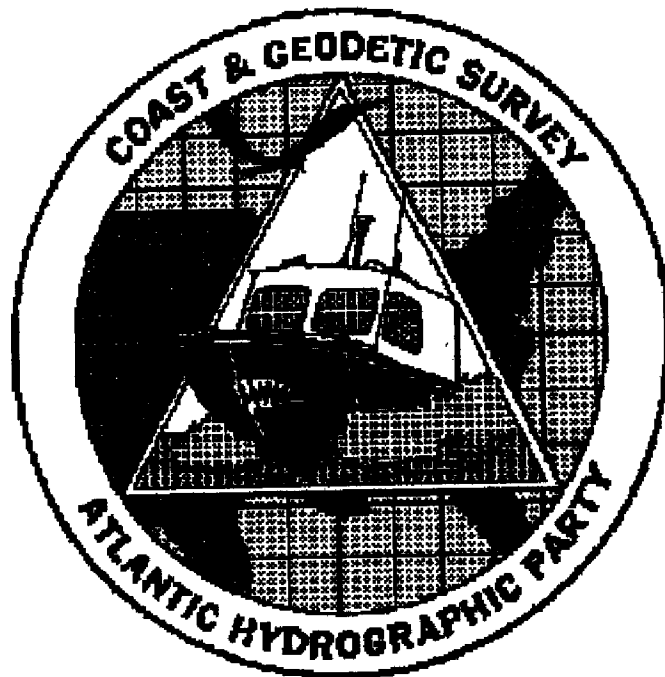
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CHIEF OF PARTY

..... LCDR JAMES E. WADDELL JR., NOAA

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DATE OCT 22 1997



**Descriptive Report to Accompany
Hydrographic Survey
OPR-B285-AHP
H-10559**

NOAA FORM 77-28

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

REGISTER NO. H-10559

HYDROGRAPHIC TITLE SHEET

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

FIELD NO. AHP-10-09-94

State: New York

General Locality: Western Long Island Sound

Locality: Parsonage Point to Larchmont Harbor

Scale: 1:10000

Date of Survey: August 1, 1994

September 12, 1994

Instructions Dated: March 2, 1994

Project No.: OPR-B285

Vessel: 0519

Chief of Party: LCDR James E. Waddell Jr.

Surveyed By: Castle Eugene Parker

Soundings taken by echo sounder, hand lead, pole: Innerspace Model 448

Graphic record scaled by: CEP, RWR, RR, RB

Graphic record checked by: CEP, RWR, RR, RB

Protracted by: _____

Automated plot by: HDAPS/BRUNNING ZETA

ENCAD NOAA IET Plotter (AHB)

Verification by: AHB (N/CS331)

Soundings in ^{Feet} ~~meters~~ at: MLLW By ^{Actual} ~~Projected~~ Tides

REMARKS: Notes in the original Descriptive Report were made in red during office processing.

CEP = Castle E. Parker

RWR = Robert W. Ramsey

RR = LTJG Ric Ramos

RB = LTJG Rick Brennan

AWB/SURFL 10/10/97 SJV

DESCRIPTIVE REPORT TO ACCOMPANY
HYDROGRAPHIC SURVEY H-10559
FIELD NO. AHP-10-9-94
SCALE: 1:10,000
1994
ATLANTIC HYDROGRAPHIC PARTY TWO
CHIEF OF PARTY: LCDR James E. Waddell Jr., NOAA

A. PROJECT

This survey was conducted according to Hydrographic Project Instructions OPR-B285-AHP, Western Long Island Sound, New York & Connecticut dated March 2, 1994.

This project is in response to requests from the U.S. Navy, as well as state and local governments, for updated hydrographic and bathymetric data of this area for use in proposed studies and in the construction of new charts. Prior surveys in this area were conducted in the 1930's.

The sheet letter is "D" as specified by the project instructions.

B. AREA SURVEYED

The area surveyed for H-10559 covers the region from the south end of Manursing Island and Playland southward to Echo Bay. The approximate survey limits are as follows:

North: 40°58.0'N
South: 40°54.0'N
East: 073°39.2'W
West: 073°46.6'W

This survey was conducted from August 1, 1994 (DN 213) to September 12, 1994 (DN 255).

C. SURVEY VESSELS

Vessel 0519, a 21-foot MonArk, was used to collect all survey data. There were no unusual vessel configurations nor problems encountered.

D. AUTOMATED DATA ACQUISITION AND PROCESSING *See also Evaluation Report*

Version 5.01 of the PC-DAS programs was used for on-line data acquisition. *A list of all HP-DPS programs and versions used for data processing can be found appended to this report. The NOS program VELOCITY (Ver. 2.10) and WordPerfect (Ver. 6.0) were also used during this survey.

*Data filed with original field records

E. SONAR EQUIPMENT

Not Applicable.

F. SOUNDING EQUIPMENT

An Innerspace depth sounder, model #448, serial number 186, was used to collect all echo soundings on this survey.

A standard lead line calibrated in meters, S/N 0519, was used during this survey for comparison readings with the echo sounder. In addition, a five-meter long, wooden sounding pole, constructed according to HSG No. 69, was used to obtain all pole soundings.

No problems were encountered with any of the sounding equipment.

G. CORRECTIONS TO ECHO SOUNDINGS

Correctors for the velocity of sound through water were determined from the casts listed below:

<u>Velocity</u> <u>Table No.</u>	<u>Cast</u> <u>No.</u>	<u>Deepest</u> <u>Depth(m)</u>	<u>Applicable</u> <u>DN</u>	<u>Cast</u> <u>Position</u>	<u>Day</u>
1	1	14.8	213-217	40°55'13"N 073°42'11"W	214
2	2	16.9	222-224	40°55'10"N 073°41'57"W	222
3	3	21.2	227-231	40°55'30"N 073°41'24"W	229
4	4	22.5	235-238	40°54'18"N 073°39'24"W	235
5	5	20.0	241-245	40°55'42"N 073°41'00"W	242
6	6	18.4	251-252	40°55'09"N 073°40'58"W	251
7	7	19.6	255	40°55'26"N 073°41'13"W	255

Corrections for the speed of sound through the water column were computed from data obtained with a Seabird SEACAT Sound Velocity Profiler, model 19-03, serial number 198671-1477. This instrument was calibrated by the manufacturer on September 15, 1993 and data quality assurance tests were performed prior to each cast. Program VELOCITY was used for computing the speed of sound correctors. Speed of sound corrections were applied to the sounding plot using the HDAPS program REAPPLY. Copies of the tables and the support documentation are in the "Survey Separates."

Lead line comparisons were taken daily to determine echo sounder error. No differences were observed. *The lead line comparison logs are in the "Survey Separates." The lead lines were calibrated using a steel tape on May 6, 1994 for Launch 0519. No corrections were necessary. *A copy of the calibration form is in the "Survey Separates."

A static draft of 0.3 meters was applied to the final sounding plot by the HDAPS program REAPPLY. The draft was measured by subtracting the difference from a punch mark on the side of launch 0519, 0.6 meters above the transducer, to the water surface.

Settlement and squat measurements for launch 0519 were determined on May 4, 1994 (DN 124). These measurements were conducted in Milton Harbor at Rye, New York, using the level method. Data from this test are included in the "Survey Separates." Settlement and squat correctors were applied to the final sounding sheet using the HDAPS program REAPPLY.

Predicted tides for the final sounding plot were provided on diskette by N/OES231 for the Willets Point, New York reference station number 851-6990. The following correctors for sheet "D" were used as designated in the project instructions:

	TIME CORRECTION		RANGE RATIO
	High Water	Low Water	
Tide Zone #2 West of 073°40.0'W	-20min	-20min	X1.02
Tide Zone #3 East of 073°40.0'W	-30min	-30min	X1.02

All elevations and soundings on survey H-10559 are at the sounding datum of MLLW unless otherwise specified.

Approved water levels were requested from the Product and Services Branch, Datums Section, N/OES231, in a letter dated September 20, 1994. A copy is appended to this report.

No bracketing levels were run for this survey. Closing levels were performed at the completion of this survey. The closing levels were conducted within an acceptable time frame to determine smooth tides for processing.

Opening and closing levels were waived for Willets Point, New York by N/OES231. This was due to the temporary status of the Next Generation Water Level Measurement System (NGWLMS) located at the Coast Guard station at Willets Point.

Approved tides and zoning were applied.

H. CONTROL STATIONS *See also Evaluation Report*

The horizontal control datum for this project is the North American Datum of 1983. Initially, the USCG DGPS Radiobeacon at Montauk Point, NY was used on days 213, 214, and 217. After day 217, the radiobeacon was not operational due to storm damage. Since the USCG could not determine when the radiobeacon would be

** Data filed with original ³ field records*

restored to service, the reference station on Throgs Neck Light was re-installed. This station was used for the remainder of the survey. Positions for the control stations used on this survey are shown in the Control Station list appended to this report.

I. HYDROGRAPHIC POSITION CONTROL

Differential GPS (DGPS) was used for all hydrographic data acquired on this survey. Ashtech M-XII receiver serial number 700157E1075 and antenna serial number 700228C1572, were used for the reference station on Throgs Neck Light. An Ashtech Sensor serial number 700417B1054 with antenna serial number 700378A0467, was used as the remote station on launch 0519. Maxon and TAD VHF radios were used as the datalink between the reference station receiver and the launch sensor. The primary GPS reference station site 001, was established on Throgs Neck Light. Prior to using this station, the program MONITOR was run at this site to check its susceptibility to multi-path problems. This test indicated 100% availability for a 1:10,000 survey scale. Results of this test are included in the "Survey Separates."

Daily DGPS performance checks were conducted in accordance with the Field Procedures Manual, section 3.4.4, by comparing the DGPS position of the vessel to our computed third-order position of "Cal 1 Rye." To obtain a performance check, the launch was brought alongside the checkpoint, and the easting, northing, number of SVs, HDOP, and time of observation were noted on the echogram. These values were then entered into a Lotus spreadsheet table which would compute the acceptable error margin, based on the HDOP, as well as our observed difference between the known and observed position. *The table of these comparisons is included in the "Survey Separates." All of our observed differences fell well within the allowable limit.

J. SHORELINE *See also Evaluation Report.*

This project was Team Processed with the Atlantic Hydrographic Section. Shoreline verification was accomplished during inshore hydrographic data acquisition and by visual inspection. TP-01269 (1987) and TP-01266, ^{the} the shoreline manuscripts provided for this survey, ~~was~~ ^{were} not updated with currently charted items which were found to exist. The hydrographer recommends that these manuscripts be revised to reflect currently charted features that were assigned reference numbers or detached positions on survey H-10559. The reference number descriptions, field notes, and explanations of new shoreline features are located on the graphic record and on the boat sheet. *Photographs are included with the survey data as well.

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* Data filed with original field records.

The hydrographer recommends that the shoreline from TP-01266 be superseded by charted shoreline, with the exceptions shown in red on the final sounding plot. *Concur*

There were foul limit lines acquired on this survey, as allowed by the Hydrographic Manual, section 7.3.6, in near shore areas to delineate areas with numerous obstructions. These limits have been transferred to the final sounding plot.

There is evidence of shoreline change in the area of 40°54'41.7"N, 073°45'31.6", position numbers 2278-2279. The shoreline in this area consists of a bridge and road on shore separating Echo Bay and Premium Mill Pond. This road connects the mainland south of Oak Island to Premium Point. This change is shown in red on the final sounding plot.

K. CROSSLINES

A total of 24.5 linear nautical miles of crosslines were run, which represents approximately 9% of the main scheme hydrography. Crossline soundings agree with the main scheme soundings within 0.2 to 0.5 meters with the exception of areas where the bottom is irregular.

L. JUNCTIONS *See also Evaluation Report*

This survey junctions with:

H-10542, 1994, 1:10,000 scale survey, to the North
H-10347~~53~~, 1990, 1:10,000 scale survey, to the East
H-10347, 1990, 1:10,000 scale survey, to the Southeast
H-10558, 1994, 1:10,000 scale survey, to the Southwest

Junction soundings between the present survey and H-10542 agree within 0.1m to 0.5m. Agreement with survey H-10347 is within 0.1m to 0.7m. Agreement with survey H-10558 is within 0.0m to 0.6m. Differences occur in areas of irregular bottom profile.

M. COMPARISON WITH PRIOR SURVEYS *See also Evaluation Report*

See the Atlantic Hydrographic Section's "Evaluation Report for H-10558", for a discussion of the comparison with prior surveys. The following prior surveys have areas common with this survey:

H-1623	dated 1886
H-1699	dated 1894
H-1683b	dated 1901
H-1732a	dated 1914
H-5078	dated 1931
H-5413a	dated 1933

AWOIS item 4408 originated from FE-17³¹⁷SS/88 and item 4415 originated from prior surveys H-5048/30WD, H-5413A/33, and FE-17SS/88. ₅₀₇₈

N. ITEM INVESTIGATION REPORTS

There were a total of 29 AWOIS items addressed on this survey. All AWOIS reports are appended to this report.

O. COMPARISON WITH THE CHART

Comparison was made with the following charts:

<u>Chart No.</u>	<u>Edition</u>	<u>Edition Date</u>
12364SC	28th ^{29th}	May 1993 Jul 23, 1974
12367	19th	August 17, 1993

Ten Dangers to Navigation were identified by this survey. They were reported to the USCG in a letter dated September 26, 1994. They are:

- The charted lighted beacon at Umbrella Rock (USCG Light List No. 2560) no longer exists. Charts 12364 and 12367 incorrectly indicate that a lighted beacon on Umbrella Rock is maintained by Larchmont Yacht Club. The yacht club no longer maintains this private aid to navigation. *Already charted. Retain as charted.*
- The charted lighted beacons at North Ledge (USCG Light List No. 25765 and No. 25770) are no longer lighted. The unlighted aids to navigation are white daybeacons warning of rocks located at 40°55'20.98"N, 073°44'32.86"W, (USCG Light List No. 25765) and 40°55'23.62"N, 073°44'33.57"W, (USCG Light List No. 25770). The Larchmont Yacht Club still maintains these two beacons. *- Already charted - Retain as charted.*
- An uncharted exposed rock was located at 40°55'32.7"N, 073°44'34.9"W. The rock is exposed 7.5^{1.0} feet at Mean Lower Low Water (MLLW), corrected for ~~predicted~~ *actual* tides. *Retain as charted. - Add elevation (L)*
- An uncharted submerged wreck 30-feet long by 10-feet wide, with a mast 1 foot above the surface at MLLW, corrected for predicted tides, was located at 40°56'35.83"N, 073°42'58.05"W. *Already charted - Retain as charted.*
- An uncharted wreck 36 feet long by 10-feet wide was located at 40°56'36.97"N, 073°42'39.89"W. The wreck is ~~exposed 1.9~~ *awash* feet above the surface at MLLW, corrected for ~~predicted~~ *actual* tides. *Revise charted wk mast symbol to Subm wk symbol*

- An uncharted rock was located at 40°56'17"N, 073°42'28"W. The rock is exposed ~~0.3~~^{1.4} feet above the surface at MLLW, corrected for ~~predicted~~^{actual} tides. Already charted - Retain as charted
- Three uncharted rocks were located at 40°56'24"N, 073°42'13"W. The rocks were exposed ~~0.6~~^{1.9} feet above the surface at MLLW, corrected for ~~predicted~~^{actual} tides. Already charted - Retain as charted
- An uncharted rock was located at 40°56'16.7"N, 073°42'18.5"W. The rock is exposed ~~6.6~~^{6.7} feet above the surface at MLLW, corrected for ~~predicted~~^{actual} tides. Already charted. Revise Elevation to []
- Two uncharted rocks were located at 40°56'13.0N, 073°41'52.9"W. The rocks are exposed ~~0.3~~^{1.1} feet at MLLW, corrected for ~~predicted~~^{actual} tides. ~~0.1 ft~~ Already charted - Retain as charted
- An uncharted submerged rock was located at 40°56'31"N, 073°41'05"W. The rock is ~~submerged 0.6~~^{1.4} feet at MLLW, corrected for ~~predicted~~^{actual} tides. Already charted. Retain as charted

Sounding data acquired on H-10559 agrees with data on chart 12367, 19th Edition, August 17, 1993, within 0.5-1.0m. *Concur*

Chart 12364 and chart 12367 have a mooring buoy charted at 40°54'35.486"N, 073°43'49.599"W. This mooring buoy does not exist. The hydrographer contacted Mr. Ken Cavanaugh of SEA TOW, Inc., phone 914-698-6523. Mr. Cavanaugh has worked this area for fifteen years and indicated that it has never existed at the charted location. The hydrographer also contacted Mr. John O'Neal from G&R Marine Repair Service, phone 914-632-4020, located in Echo Bay. Mr. O'Neal has performed salvage work in the area for fifty years and stated that the mooring buoy does not exist. The hydrographer recommends deleting the mooring buoy from charts 12364 and 12367. *Concur*

Chart 12367 has a 19-foot sounding charted at 40°55'39.3"N, 073°44'24.5"W. This survey found a 1.5m (~~4.9~~⁵ft) sounding at this position. The hydrographer recommends revising the 19-foot sounding to 5 feet. Because this sounding is an isolated deep within an area charted with 2 to 4 foot soundings, this is not a danger to navigation. *Concur*

Chart 12367 has a 20-foot sounding charted at 40°55'16.9"N, 073°44'14.7"W. This survey found a 3.5m (~~11.5~~^{11.8}ft) sounding at this position. The hydrographer recommends revising the 20-foot sounding to 11 feet. Because this sounding is in an isolated deep area within an area charted with 3 to 6 foot soundings, this is not a danger to navigation. *Concur*

A comparison of charted controlling channel depths with depths found on this survey are listed in the table below:

<u>CHANNEL</u>	<u>CHARTED DEPTH</u>	<u>SURVEY DEPTH</u>
1.) Milton Channel	⁶ 4.0ft	^{5.2} 6.5ft (^{1.4} 2.0m)
2.) Mamaroneck Channel		
A. Entrance to Junction	9.4ft	^{5.6} 9.2 ft (^{1.7} 2.8 m)
B. East Basin to Head of Project	9.5ft	^{4.6} 10.5 ft (^{1.4} 3.2 m)
C. Branch Channel North of East Basin	5.7ft	^{2.0} 5.2 ft (^{0.6} 1.6 m)
D. East Basin	5.7ft	^{4.3} 7.2 ft (^{1.3} 2.2 m)
E. West Branch Channel	6.0ft	^{4.6} 6.6 ft (^{1.4} 2.0 m)
F. West Basin	6.0ft	^{5.2} 5.9 ft (^{1.6} 1.8 m)
3.) Echo Bay		
A. Entrance Channel to Turning Basin at Beaufort Pt.	8.5ft	^{9.5} 8.2 ft (^{2.9} 2.5 m)
B. Turning Basin	7.0ft	7.2ft (2.2m) ✓

The hydrographer recommends revising all charted channel controlling depths to the controlling depths found by this survey. *COE controlling depths - Changes have to be made by COE*

All non sounding features agree with chart 12367 with the following exceptions:

- The breakwater located at 40°56'28"N, 073°43'12"W, along the north shore of Mamaroneck Harbor is charted as connecting to rocks that cover and uncover. This area is an entrance to the marina inside the breakwater and is marked by private maintained spherical entrance buoys. Soundings were acquired in this area and the buoys were positioned. The hydrographer recommends a revision to the chart in this area, showing this entrance channel. *Concur*
- Playland pier located at 40°57'45"N, 073°40'22"W, has suffered storm damage. The present existing structure is in ruins with the offshore limit located at position number 478, 40°57'45.03"N, 073°40'22.12"W. *See photograph for AWOIS 6597 and position number 478. Concur*

The following is a comparison of charted bulls eye or wire drag soundings. The charted positions were scaled from chart 12367:

CHARTED DEPTH (ft)	CHARTED Lat. (N)	CHARTED Long. (W)	SURVEY DEPTH (ft/m)	SURVEY Lat. (N)	SURVEY Long. (W)	Notes
4	40°56'52"	073°40'47"	5.9 / 1.8	40°56'52.8"	073°40'46.5"	Retain as charted
5	40°56'52"	073°40'33"	7.2 / 2.2	40°56'51.3"	073°40'32.8"	Retain "
2	40°56'32"	073°41'06"	1.6 / 0.5	40°56'31.4"	073°41'05.1"	Retain "
4	40°56'33"	073°41'28"	2.6 / 0.8	40°56'32.7"	073°41'28.8"	update
26	40°56'27"	073°40'57"	24.3 / 7.4	40°56'26.8"	073°40'58.5"	update
11	40°56'21"	073°41'21"	9.8 / 3.0	40°56'20.3"	073°41'19.9"	update
16	40°56'18"	073°41'16"	24.9 / 7.6	40°56'19.7"	073°41'17.1"	update
16	40°56'17"	073°41'21"	19.7 / 6.0	40°56'17.1"	073°41'20.6"	update
18	40°56'15"	073°41'15"	30.2 / 9.2	40°56'15.3"	073°41'14.2"	Retain as charted
34	40°56'15"	073°41'09"	34.4 / 10.5	40°56'15.2"	073°41'09.6"	update
25	40°56'17"	073°41'08"	40.7 / 12.4	40°56'17.5"	073°41'08.7"	update
12	40°56'12"	073°41'28"	14.1 / 4.3	40°56'10.7"	073°41'28.2"	Retain
14	40°56'07"	073°41'27"	18.3 / 5.6	40°56'05.9"	073°41'25.6"	Retain
27	40°56'01"	073°41'26"	24.6 / 7.5	40°56'00.9"	073°41'26.5"	update
9	40°56'15"	073°41'44"	6.9 / 2.1	40°56'14.5"	073°41'43.8"	update
4	40°56'12"	073°41'55"	4.6 / 1.4	40°56'09.2"	073°41'54.8"	update
10	40°56'09"	073°41'35"	10.5 / 3.2	40°56'09.2"	073°41'34.7"	update
11	40°56'00"	073°41'46"	19.2 / 5.8	40°56'00.6"	073°41'45.3"	update
10	40°55'58"	073°41'56"	9.8 / 3.0	40°55'57.5"	073°41'55.6"	update
26	40°55'39"	073°41'57"	35.5 / 10.8	40°55'38.1"	073°41'58.5"	update retain
24	40°55'57"	073°41'24"	31.8 / 9.7	40°55'57.6"	073°41'24.2"	retain
6	40°55'53"	073°42'03"	7.8 / 2.3	40°55'52.5"	073°42'02.7"	update
9	40°55'51"	073°42'11"	16.9 / 5.1	40°55'50.9"	073°42'11.2"	update
7RK	40°55'51"	073°42'24"	9.2 / 2.8	40°55'51.4"	073°42'21.4"	retain
13	40°55'46"	073°42'12"	13.4 / 4.1	40°55'46.2"	073°42'12.5"	update
12	40°55'42"	073°42'12"	11.5 / 3.5	40°55'43.0"	073°42'12.6"	update
29	40°55'39"	073°42'05"	26.6 / 8.1	40°55'38.2"	073°42'04.1"	update
18	40°55'37"	073°42'18"	18.7 / 5.7	40°55'36.8"	073°42'17.0"	update
29	40°55'30"	073°42'15"	22.1 / 6.7	40°55'30.1"	073°42'15.9"	retain
27	40°55'30"	073°42'12"	32.8 / 10.0	40°55'30.3"	073°42'10.1"	update
27	40°55'27"	073°42'13"	25.6 / 7.8	40°55'28.5"	073°42'14.9"	update
35	40°55'24"	073°42'24"	30.5 / 9.3	40°55'23.6"	073°42'23.2"	See B+A-3c.
31	40°55'20"	073°42'24"	33.5 / 10.2	40°55'20.7"	073°42'24.4"	retain
12	40°55'48"	073°42'57"	12.1 / 3.7	40°55'49.7"	073°42'58.7"	update
26RK	40°54'58"	073°42'34"	28.2 / 8.6	40°54'57.6"	073°42'33.7"	retain
28	40°54'51"	073°42'36"	27.2 / 8.3	40°54'51.1"	073°42'36.2"	See H-10612
29	40°54'46"	073°42'38"	29.2 / 8.9	40°54'46.4"	073°42'37.8"	See H-10618
17	40°55'44"	073°43'05"	17.4 / 5.3	40°55'43.0"	073°43'06.0"	update
9	40°55'37"	073°43'11"	12.5 / 3.8	40°55'36.6"	073°43'13.5"	retain
10	40°55'35"	073°43'12"	19.7 / 6.0	40°55'34.7"	073°43'12.1"	retain
12RK	40°55'21"	073°43'21"	12.5 / 3.8	40°55'20.4"	073°43'19.1"	retain
29	40°54'49"	073°43'22"	32.8 / 10.0	40°54'49.5"	073°43'23.0"	update
15	40°55'03"	073°43'55"	16.1 / 4.9	40°55'02.2"	073°43'55.9"	update
34WK	40°54'35"	073°43'33"	35.4 / 10.8	40°54'34.8"	073°43'33.5"	See B+A Sect. 31
16	40°54'26"	073°43'54"	19.0 / 5.8	40°54'25.0"	073°43'56.2"	retain

13	40°54'12"	073°44'02"	21.3/6.5	40°54'12.3"	073°44'00.8"	See H-1068
16	40°54'16"	073°44'15"	16.7/5.1 ³	40°54'16.8"	073°44'15.9"	update
4	40°54'33 ⁴	073°44'21 ⁴	4.9/1.5 ⁷	40°54'33.1"	073°44'20.3"	Retain
6	40°54'48"	073°44'16"	10.5/3.2	40°54'47.8"	073°44'17.1"	Retain
3	40°54'50"	073°44'18"	4.2/1.3 ⁵	40°54'49.3"	073°44'17.9"	Retain
8	40°54'52"	073°44'17"	12.1 ⁸ /3.7 ⁹	40°54'52.2"	073°44'16.8"	Retain
14	40°54'55"	073°44'09"	15.4/4.7	40°54'55.9"	073°44'08.5"	update
15	40°54'57"	073°44'17"	15.4/4.7 ⁸	40°54'57.5"	073°44'16.7"	update
8	40°54'57"	073°44'16"	26.6/8.1 ²	40°54'57.4"	073°44'13.6"	retain
16	40°55'00"	073°44'02"	15.1/4.6 ⁷	40°55'02.2"	073°44'01.3"	update
18	40°54'32"	073°44'57"	14.4/4.4 ⁶	40°54'31.5"	073°44'57.9"	update
6	40°54'12"	073°45'09"	9.2/2.8 [✓]	40°54'11.4"	073°45'07.4"	Retain
16	40°54'11"	073°45'38"	21.0/6.4 ⁴	40°54'10.3"	073°45'37.0"	Retain
4	40°57'47"	073°39'51"	2.3/0.7 ⁸	40°57'46.7"	073°39'52.3"	update
4	40°57'12"	073°40'12"	7.2/2.2 [✓]	40°57'12.1"	073°40'13.6"	Retain
11	40°57'18 ³	073°40'24"	13.4/4.1 ²	40°57'14.0"	073°40'23.6"	Retain
15	40°57'20"	073°40'27"	15.4/4.7 ⁸	40°57'20.4"	073°40'28.9"	update
8RK	40°51'19"	073°40'34"	13.4/4.1 ²	40°57'20.3"	073°40'34.8"	Retain
9	40°57'08"	073°40'44"	12.8/3.9 ⁴⁰	40°57'07.6"	073°40'45.0"	Retain
16	40°57'06"	073°40'39"	20.3/6.3 ⁵	40°57'06.0"	073°40'39.3"	Retain

The hydrographer recommends retaining all charted soundings which were found deeper on this survey and revising all soundings which were found shoaler on this survey. A determination as to whether any of the soundings which were found shoaler constitute a danger to navigation, should be made after smooth tides are applied to the sounding data. *Concur w/ conditions. See individual Recommendations*

The following table is a list of new features found by this survey and which were not considered dangers to navigation because of there proximity to shore:

DAY	PN	LATITUDE (N)	LONGITUDE (W)	DESCRIPTION
213	59	40°57'12.762"	073°40'44.514"	Priv. Maintained Buoy <i>concur</i>
214	478	40°57'45.034"	073°40'22.121"	Dolphin and Pier Ruins <i>concur</i> (-4.3m) 9#W
214	483	40°57'44.972"	073°40'16.677"	Submerged Obstruction <i>concur</i> (3.2m) 11 Obstr
217	484	40°57'29.405"	073°41'26.455"	Pier (-2.6m) <i>concur</i>
244	3420	40°56'47.582"	073°41'52.354"	Milton Harbor GC "7" <i>concur</i>
228	989	40°56'37.315"	073°42'08.578"	Floating Pier/Ramp <i>concur</i> (-4.0)
228	990	40°56'36.423"	073°42'08.829"	Floating pier/Ramp <i>concur</i> (-4.0m)
224	712	40°56'34.817"	073°42'10.035"	Floating Pier/Ramp <i>no charting changes</i> (-3.0m)
224	721	40°56'24.069"	073°42'13.333"	Rock (-0.2m) already charted - <i>no change</i>
224	722	40°56'24.166"	073°42'13.308"	Rock (0.2m) same Rk as above
224	735	40°56'41.568"	073°42'13.416"	Rock (-0.1m) <i>concur</i> - Rk wash
224	800	40°56'28.993"	073°43'00.584"	Rock (0.6m) Chart 3 Rk

245	3493	40°56'30.728"	073°43'09.622"	Priv. Maintained Buoy	concur
245	3494	40°56'30.043"	073°43'10.150"	Priv. Maintained Buoy	
227	919	40°56'26.751"	073°43'29.376"	Pile/Floating Pier (-6.0m)	concur
227	920	40°56'27.374"	073°43'31.361"	Pile/Floating Pier (-6.0m)	
244	3378	40°56'45.698"	073°43'45.850"	White/Orange Rock Buoy	concur
244	3379	40°56'45.271"	073°43'45.117"	White/Orange Rock Buoy	
227	933	40°56'52.719"	073°43'43.935"	Pile/Floating Pier (-3.7m)	concur
227	934	40°56'52.419"	073°43'45.059"	Pile/Floating Pier (-3.7m)	
230	1566	40°56'31.632"	073°43'43.248"	Pile/Floating Pier (-5.3m)	
230	1567	40°56'32.102"	073°43'43.172"	Pile/Floating Pier (-5.3m)	
230	1568	40°53'31.664"	073°43'43.996"	Pile/Floating Pier (-5.3m)	concur
230	1569	40°56'32.394"	073°43'43.396"	Pile/Floating Pier (-5.3m)	
223	645	40°55'57.188"	073°43'23.424"	Pier Ruins (-2.3m)	concur
222	623	40°55'48.710"	073°43'28.930"	Floating Pier Ruins (-0.5m)	no charting change
222	624	40°55'45.427"	073°43'28.144"	Pier Ruins (-2.5m)	concur
222	625	40°55'38.009"	073°43'32.758"	Pier Ruins (-5.1m)	concur
227	957	40°55'29.513"	073°43'52.539"	Rocks (-2.1m)	no charting change
222	587	40°55'41.216"	073°44'05.135"	Pile (-4.6m)	concur
222	585	40°55'41.283"	073°44'11.889"	Dolphin (-4.6m)	concur
228	1008	40°55'56.662"	073°44'08.058"	Obstruction/Fence (-2.9m)	no charting change
222	573	40°55'43.864"	073°44'22.193"	Dolphins (-5.7m)	concur
227	978	40°55'42.358"	073°44'25.258"	Rock (-0.6m)	concur
227	977	40°55'32.760"	073°44'34.976"	Rock w/Metal Pipe (-2.3m)	no charting change
228	1033	40°54'48.119"	073°45'16.936"	Obstruction/Fence (-3.1m)	no charting change
228	1036	40°54'40.737"	073°45'56.278"	Bridge/S. End (Clearance -2.5m)	
228	1037	40°54'41.344"	073°45'55.780"	Bridge/N. End	
228	1038	40°54'38.371"	073°45'58.096"	Bridge/N. End	concur
228	1039	40°54'37.868"	073°45'58.316"	Bridge/S. End	
228	1035	40°54'41.536"	073°46'04.404"	Wreck (-2.5m)	concur
222	522	40°54'34.383"	073°46'00.049"	Floating T Pier (-5.0m)	concur
251	3756	40°56'21.149"	073°41'35.579"	Orange "E" Buoy	concur
224	881	40°56'37.590"	073°41'28.331"	Pier Ruins (-2.0m)	no charting change
251	3750	40°56'30.447"	073°41'18.211"	Priv. Maintained GC "3"	concur
251	3751	40°56'32.778"	073°41'17.860"	Priv. Maintained RN "2"	concur
251	3752	40°56'30.595"	073°41'24.692"	Priv. Maintained GC "5"	concur
251	3753	40°56'32.235"	073°41'30.578"	Priv. Maintained RN "6"	concur
251	3754	40°56'35.615"	073°41'31.538"	Priv. Maintained RN "8"	concur
251	3755	40°56'32.120"	073°41'31.753"	Priv. Maintained GC "7"	concur

The hydrographer recommends these features for charting. *concur w/ conditions*
See individual recommendations.

P. ADEQUACY OF SURVEY

This survey is a complete basic hydrographic survey and is adequate to supersede all prior surveys within the common area.

Q. AIDS TO NAVIGATION

Chart 12367 has lighted buoy "R4" positioned at 40°55'24"N, 073°42'35"W, and can buoy "G1" positioned at 40°55'57"N, 073°42'30"W. These two aids to navigation have been replaced with lighted buoy RG "MM" (USCG Light List No. 25595), positioned at 40°55'52.104"N, 073°42'45.165"W. *No change in charting*

All of the aids to navigation located on this survey serve their intended purpose. The only USCG maintained fixed aid to navigation was Larchmont Harbor Light 2 (USCGLL# 25720). The position for this light was compared with the DGPS position acquired during hydrography, per section 4.2.4 of the Project Instructions. A detached position was taken, with an offset used due to the numerous rocks surrounding the light on the breakwater. The charted position was deemed accurate and on station. All other aids to navigation were positioned by DGPS during hydrographic operations. *Concur*

Fixed Aids:

Pos. No.	Name and USCGLL#	LL Position	Survey Pos.	Distance/Bearing from Charted Position
608	Larchmont Harbor Lt 2 No. 25720	40°55.1'N 073°43.9'W	40°55.085'N 073°43.874'W	On Station ✓
	Umbrella Rock Light, No. 25760			No longer exists ✓
3356	North Ledge S. Beacon No. 25765	N/A	40°55'20.976"N 073°44'32.862"W	On Station (Not Lighted) Priv Maint ✓
3357	North Ledge N. Beacon No. 25770	N/A	40°55'23.620"N 073°44'33.570"W	On Station (Not Lighted) Priv Maint ✓

A comparison of all floating aids to navigation located on this survey with the presently charted positions is shown in the table below. All were found serving their intended purpose.

Floating Aids:

Pos. No.	Name and USCGLL#	LL Position	Survey Pos.	Dist./Bearing from Charted Position
3442	Milton Pt. Buoy "40A", No.21425	N/A	56'07.6" 40°54'34.737"N 073°43'32.462"W	10m NE ✓
3364	Scotch Caps Lighted Bell Buoy "42" No.21430	N/A	40°55'28.452"N 073°42'09.095"W	On Station ✓
15	Forbes Rocks Outer Buoy "1", No. 25560	N/A	40°57'12.656"N 073°40'08.767"W	10m W ✓
13	Forbes Rock North Gong Buoy "1A" No. 25565	N/A	40°57'30.385"N 073°40'08.369"W	20m N ✓
12	Transport Rock Buoy "2" No. 25570	N/A	40°57'35.516"N 073°40'05.850"W	10m N ✓
14	Forlies Rock Buoy "2" No. 25575	N/A	40°57'26.633"N 073°40'29.727"W	On Station ✓
3362	Entrance Buoy "1" No.25580	40°55.3'N 073°43.3'W	40°55'19.750"N 073°43'16.147"W	10m NNE ✓
3363	Entrance Buoy "3" No. 25585	N/A	40°55'34.233"N 073°43'07.467"W	10m ESE ✓
3365	Entrance Buoy "2" No. 25590	40°55.8'N 073°42.4'W	40°55'49.369"N 073°42'24.063"W	On Station ✓
3366	Lighted Buoy "MM" No. 25595	N/A	40°55'52.104"N 073°42'32.075"W	New on Chart No. 12367 ✓
3367	Buoy "6" No. 25600	N/A	40°56'16.679"N 073°42'45.165"W	10m NE ✓
3369	Channel Lighted Buoy "5" No. 25605	N/A	40°56'13.655"N 073°43'01.240"W	On Station ✓
3368	Buoy "8" No. 25610	N/A	40°56'19.193"N 073°42'53.670"W	On Station ✓
3371	Channel Buoy "7" No. 25615	N/A	40°56'23.831"N 073°43'19.771"W	35m E ✓
3370	Channel Lighted Buoy "10" No. 25620	N/A	40°56'25.044"N 073°43'16.841"W	70m E ✓

3372	Little Nanhook Obst. Buoy No. 25625	40°56.4'N 073°43.4'W	40°56'24.178"N 073°43'21.884"W	30m E ✓
3373	Channel Buoy "12" No. 25630	N/A	40°56'29.835"N 073°43'35.484"W	35m ESE ✓
3374	Junction Buoy "A" NO. 25635	N/A	40°56'30.205"N 073°43'37.529"W	45m E ✓
3375	Buoy "9" No. 25640	N/A	40°56'36.974"N 073°43'41.436"W	85m SE ✓
3380	Channel Buoy "11" No. 25645	N/A	40°56'40.619"N 073°43'43.036"W	35m SE ✓
3376	Channel Buoy "14" No. 25650	N/A	40°56'43.380"N 073°43'43.727"W	20m SSE ✓
3377	Channel Buoy "16" No. 25655	N/A	40°56'45.830"N 073°43'46.376"W	30m SE ✓
3415	West Rock Obst. Buoy No.25660	N/A	40°55'54.621"N 073°42'08.015"W	60m S ✓
3416	Buoy "3" No. 25665	N/A	40°56'06.757"N 073°42'22.016"W	20m SE ✓
3417	Buoy "5" No. 25670	N/A	40°56'32.194"N 073°41'59.799"W	15m N ✓
3418	Buoy "6" No. 25675	N/A	40°56'32.123"N 073°41'56.648"W	10m NNE ✓
3419	Buoy "8" No. 25680	N/A	40°56'47.191"N 073°41'50.724"W	On Station ✓
2	Buoy "9" No. 25685	N/A	40°57'03.244"N 073°41'46.200"W	35m NNE ✓
1	Buoy "10" No. 25690	N/A	40°57'02.490"N 073°41'44.548"W	15m N ✓
4	Buoy "11" No. 25695	N/A	40°57'13.331"N 073°41'44.459"W	On Station ✓
3	Buoy "12" No. 25700	N/A	40°57'13.314"N 073°41'42.531"W	15m N ✓
6	Buoy "13" No. 25705	N/A	40°57' ^{25.412} 23.277 "N 073°41'31.705"W	55m NE ✓

5	Buoy "14" No. 25710	N/A	40°57'25.526"N 073°41'31.062"W	30m NNE ✓
3333	Hen and Chickens NE Lighted Bell Buoy "1" No. 25715	40°54.8'N 073°44.1'W	40°54'48.810"N 073°44'04.838"W	On Station ✓
3334	Dauntless Rock Buoy "3" No. 25725	N/A	40°54'59.647"N 073°44'11.247"W	20m ENE ✓
3331	Hen and Chickens Lighted Buoy "2" No. 25730	N/A	40°54'10.741"N 073°44'19.648"W	On Station ✓
3329	Hicks Ledge Junction Buoy "HL" No.25735	40°54.2'N 073°44.4'W	40°54'10.549"N 073°45'07.959"W	On Station ✓
3330	Table Rock Buoy "3" No. 25740	N/A	40°54'29.771"N 073°45'01.781"W	15m SE ✓
3332	Hen and Chickens West Buoy "4" No. 25745	N/A	40°54'36.336"N 073°44'35.704"W	10m SSE ✓
3335	Hen and Chicken North Buoy "6" No. 25750	N/A	40°54'58.484"N 073°44'19.035"W	15m E ✓
3336	Umbrella Rock Buoy "7" No. 25755	N/A	40°55'04.580"N 073°44'24.051"W	10m E ✓
3328	Bailey Rock Lighted Buoy "3BR"	N/A	40°54'13.440"N 073°45'42.268"W	On Station ✓
3327	Premium Point Buoy "4" No. 25785	N/A	40°54'21.475"N 073°45'41.208"W	20m SE ✓
3326	Channel buoy "5" No. 25790	N/A	40°54'24.336"N 073°46'00.590"W	10m SE ✓
3325	Channel Buoy "6" No. 25795	N/A	40°54'25.516"N 073°45'58.637"W	10m NNE ✓
3324	Channel Buoy "8" No. 25800	N/A	40°54'31.584"N 073°46'01.014"W	10m NE ✓
3323	Channel Buoy "10" No. 25805	N/A	40°54'33.798"n 073°46'06.059"W	20M ESE ✓

Lighted Buoy "MM", USCG Light List No. 25595, is presently shown on chart 12364. Lighted buoy "MM" is not shown on chart 12367. Chart 12367 has Ship Rock Lighted Buoy "4" and Green Can "1", instead. The hydrographer recommends that Lighted Buoy "MM" be

charted on 12367 and Ship Rock Lighted Buoy "4" and Green Can "1" be deleted from chart 12367. *No change in charting*

Master Chief Johnson from the USCG ATON office, phone 212-668-6385, was the contact for all questions concerning aids to navigation on this survey.

R. STATISTICS

<u>Description</u>	<u>Quantity</u>
Total Number of Positions	4130
Total Lineal Nautical Miles of Hydrography	252.76
Total Lineal Nautical Miles of Cross Lines	24.47
Square Nautical Miles of Hydrography	14
Days of Production	21
Detached Positions	158
Bottom Samples	55
Tide Stations	3
Velocity Casts	7

S. MISCELLANEOUS

Bottom samples were taken as directed in Section 6.7 of the Project Instructions. Bottom sample positions and descriptions can be found on the DP editor printout appended to this report. The Oceanographic Log Sheet-M, NOAA Form 75-44, is included in the "Survey Separates." Due to the abundance of bottom characteristics shown on the chart, bottom samples were taken at a number of randomly selected and evenly dispersed locations. There have been changes of sediment type in several areas. Echo Bay, Larchmont Harbor, Mamaroneck Harbor, and Milton Harbor have soft black mud as the bottom sediment. The following table is provided for comparison of bottom samples acquired and charted descriptions.

POSITION NUMBER	GEOGRAPHIC POSITION		CHARTED CHARACTERISTIC	SURVEY CHARACTERISTIC
	Lat. (N)	Long. (W)		
3786	40°54'34.8"	073°45'47.4"	M	blk M ✓
3785	40°54'20.4"	073°45'54.6"	hrd	sft blk M, brk sh
3783	40°54'34.4"	073°45'18.7"	sft	gy S, crs P ✓
3781	40°54'35.3"	073°44'53.2"	hrd	sft blk M, brk sh ✓
3779	40°54'11.6"	073°44'09.9"	rky	hrd ✓
3778	40°54'35.7"	073°44'09.3"	rky	hrd ✓ } No sample
3777	40°55'08.1"	073°44'10.0"	rky	sft blk M ✓

3776	40°55'32.1"	073°44'12.0"	sft	sft blk M ✓
3773	40°54'12.7"	073°43'26.7"	sft	sft blk M, brk Sh <i>See H-1061B</i>
3775	40°55'07.3"	073°43'28.6"	rky	sft blk M, blk S, ✓ crs P
3787	40°55'39.6"	073°43'10.6"	rky	sft blk M, brk Sh <i>hd - No sample</i>
3769	40°55'40.6"	073°42'45.8"	M	gy M, gy crs S ✓
3770	40°55'07.6"	073°42'45.1"	rky	sft blk M ✓
3771	40°54'38.6"	073°42'45.5"	rky	sft blk M - <i>See H-1061B</i>
3766	40°55'39.4"	073°42'02.5"	rky	blk crs S, brk Sh ✓
3792	40°56'13.0"	073°42'13.5"	sft	sft blk M, brk Sh ✓
3757	40°56'11.6"	073°41'20.7"	rky	crs P, blk S, M ✓
3747	40°56'12.8"	073°40'37.9"	sft	sft blk M ✓
3746	40°55'41.0"	073°40'37.6"	sft	sft blk M <i>See H-1061Z</i>
0009	40°57'17.3"	073°39'56.7"	rky	blk M, S ✓
0007	40°57'12.6"	073°41'42.2"	Grs	Grs ✓

The hydrographer recommends revising charted characteristics to the sediment type found during this survey.

No predicted tidal anomalies were observed during this survey.

No charted cables or cable crossings were located within the survey limits. Although they were not verified, pipelines charted within the survey limits should be retained as charted.

There are no bridges charted within the survey limits. Two bridges were found and positioned in Echo Bay connecting Clifford Island to an unnamed island and connecting the unnamed island to Harrison Island. Refer to position numbers 1036-1039. The bridge clearances were measured with a steel tape and determined to be ~~2.5m~~ ^{3.7m} above the water surface at the time of survey. Corrected clearance is ~~4.0m~~ ^{3.8m} above MLLW based on ~~predicted~~ ^{actual} tides. The bridges are a part of Westchester County Park System and are designed for foot traffic. *Concur*

T. RECOMMENDATIONS

No additional field work was identified after field processing was completed. Specific recommendations are made on the Item Investigation Reports appended, and in sections J., O., and Q. of this report.

U. REFERRAL TO REPORTS

<u>Title</u>	<u>Transmittal Information</u>
Descriptive Report to Accompany Survey H-10347	Atlantic Hydrographic Section N/CG244, Norfolk, VA (1990)
Descriptive Report to Accompany Survey H-10542	Atlantic Hydrographic Section N/CG244, Norfolk, VA (9/94)

Descriptive Report to Accompany Survey H-10558	Atlantic Hydrographic Section N/CG244, Norfolk, VA (11/94)
Horizontal Control Report for OPR-B285-AHP	Field Photogrammetry Section N/CG23322, Norfolk, VA (8/94)
Chart Sales Agent Report	Atlantic Hydrographic Section N/CG244, Norfolk, VA (11/94)
User Evaluation Report	Atlantic Hydrographic Section N/CG244, Norfolk, VA (11/94)
Coast Pilot Report	Atlantic Hydrographic Section N/CG245, Norfolk, VA (11/94)

Respectfully Submitted,

Castle Eugene Parker
Hydrographer-In-Charge
Atlantic Hydrographic Party

AWOIS NO: 2644

Item Description: Unknown/ Submerged Wreck

Source: LNM14/87--3rd CGD

AWOIS Position: Lat - 40/54/35.85N Lon - 073/46/07.47W

Required Investigation: VS, ES, BD, DI, SD 100m Radius

Charts Affected: 12364, 12367

INVESTIGATION

Date(s)/DN(s): 08/16/94 (DN:228)

Position Numbers: 1040

Launch Number: 0519

Investigation Used: Salvage Documentation Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: A bottom drag in the search area was not feasible because of several moored boats in the immediate area. Talks with the local police and the harbor master led the hydrographer to Mr. John O'Neal, G & R Marine Repair Service, 22 Pelham Rd., New Rochelle, NY 10805, 914-632-4020. Mr O'Neal indicated that the submerged wreck had been salvaged when he had been contracted to remove other items in Echo Bay prior to placing mooring buoys. The wrecks in this area were dragged to Tank Island and burned. Items that did not burn completely have been position and reported in AWOIS reports for items 6574, 6599, and 6638.

CHARTING RECOMMENDATION

The hydrographer recommends that the charted submerged wreck be deleted from the chart. *Cmur*

Recommended Position: Lat -

Lon -

Recommended Least Depth:

COMPILED NOTES

Delete wksymbol & PA

AWOIS NO: 4408

Item Description: Submerged Wreck

Source: LNM43/73, FE317SS/88--OPR-B660-RU-88

AWOIS Position: Lat - 40/56/24.35N Lon - 073/41/09.45W

Required Investigation: ES,S2,DI,SD 300m radius

Charts Affected: 12364, 12367

INVESTIGATION

Date(s)/DN(s): 08/16/94 (DN:228)

Position Numbers: 1130-1240

Launch Number: 0519

Investigation Used: ES

Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: An echo sounder search with 20-meter line spacing was conducted, covering a 300-meter radius. No significant contacts were found indicating a submerged wreck. The area within the search radius was found to be a foul rocky bottom. Due to the rocky nature of the bottom a chain drag was not feasible. Search efforts support the findings of OPR-B660-RU-88. Neither divers or side scan sonar was available for this item investigation.

CHARTING RECOMMENDATION

The hydrographer recommends that the charted submerged wreck PA be retain. *CMAR*

Recommended Position: Lat- 40/56/24.35N Lon - 073/41/09.46W

Recommended Least Depth: Not Applicable

COMPILATION NOTES

No charting change recommended

AWOIS NO. 4415

Item Description: Obstruction/ Submerged Wreck

Source: H5078/30WD, H5413A/33, FE17SS/88

AWOIS Position: Lat- 40/54/34.69N Lon - 073/43/32.17W

Required Investigation: SD,S2,DI -- 100m radius

Charts Affected: 12364, 12367

INVESTIGATION

Date(s)/DN(s): 09/02/94 (DN:245)

Position Numbers: 3562-3622

Launch Number: 0519

Investigation Used: ES

Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: An echo sounder search with 10-meter line spacing was conducted, with a search radius of 100 meters. No significant contacts were made during this search. At the end of sounding line development, the survey vessel went to the target position and began searching with the echo sounder in an outward spiraling direction. A contact was acquired at PN 3622. Local knowledge from Mr. Lida Simek indicated that the wreck is present. (Lida Simek, 914-941-0610, 57 South Highland Ave., Ossining, New York 10562). The graphic record indicates the wreck rises approximately 0.75 meters off the bottom. Position 3622 is 7 meters away from the Easting value and 1.1 meters away from the Northing value of the position found by NOAA Ship Rude, in a 1988 FE survey.

CHARTING RECOMMENDATION

The hydrographer recommends that the charted submerged wreck be retained as charted. *Concur w/condition*

Recommended Position: Lat - 40/54/34.⁷³⁷~~69~~N Lon - 073/43/32.⁴⁶²~~17~~W

Recommended Least Depth: ^{10.5 (34.74)}~~11.1~~m below MLLW (^{Actual}~~Predicted~~ Tides)

COMPILATION NOTES

more charted (34) wk to present survey location

AWOIS NO: 6574

Item Description: Visible Wreck

Source: CL301/84, TP01266/87

AWOIS Position: Lat - 40/54/39.35N Lon - 073/46/05.47W

Required Investigation: VS, BD, SD -- 25m radius

Charts Affected: 12364, 12367

INVESTIGATION

Date(s)/DN(s): 08/16/94 (DN:288)

Position Numbers: 1034

Launch Number: 0519

Investigation Used: VS

Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: The wreck was visually verified at low tide. The survey crew returned to the area during a higher tide to position the wreck. It is buried in soft muddy sediment. The wreck is 10-meters long by 5-meters wide, with a NE-SW axis. The wreck is not a hazard to navigation as it rests in very shallow water near Tank Island in Echo Bay, and is only visible at low tide.


CHARTING RECOMMENDATION

The hydrographer recommends that the charted wreck be retained at the survey position number 1034. *under w/c condition*

Recommended Position: Lat - 40/54/39.52⁴N LON- 073/46/05.55⁴⁷W

Recommended Least Depth: 0.8^{7 (2.3 ft)}m above at MLLW (*Actual* Predicted Tides)

COMPILATION NOTES

Chart  (3) in present survey location

AWOIS NO: 6575

Item Description: Obstruction/Pier Ruins

Source: TP5257/1933

AWOIS Position: Lat - 40/54/47.35N Lon - 073/45/18.47W

Required Investigation: VS, BD, DI -- 25m Swath on each side

Charts Affected: 12364, 12367

INVESTIGATION

Date(s)/DN(s): 08/16/94 (DN:228)

Position Numbers: 1033

Launch Number: 0519

Investigation Used: BD, VS

Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: A bottom drag was conducted in the search area. The chain drag had 20-meters of chain stretched between the otter doors with 18-meters of drag line. No snags were encountered. An obstruction was visually sighted within the search area. The obstruction sighted was a chain link fence. Detached position 1033 was taken as close to the item as the survey vessel could get to the offshore end of the fence, because of shallow water. The axis of the fence is from NNE (onshore) to SSW (offshore). The fence rises 1.5m above water level at the time of survey. PN 1033 was taken 20 meters from the target position of AWOIS 6575.

CHARTING RECOMMENDATION

The hydrographer recommends that the charted pier ruins be deleted and an obstruction (fence) be charted at position 1033.

Concur w/condition
Recommended Position: Lat- 40/54/48.¹¹⁹2N Lon- 073/45/16.9³⁶W

Recommended Least Depth: 3.1m^{102ft} Above MLLW (~~Predicted~~^{Actual} Tides)

COMPILATION NOTES

Delete charted pier Ruins. Do not chart fence

AWOIS NO: 6576

Item Description: Obstruction (Pier)

Source: CL45/75 US Army Permit

AWOIS Position: Lat - 40/55/21.35N Lon - 073/44/38.47W

Required Investigation: VS

Charts Affected: 12364, 12367

INVESTIGATION

Date(s)/DN(s): 08/10/94 (DN:222)

Position Numbers: 568

Launch Number: 0519

Investigation Used: VS

Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: A metal pier ramp (walkway with floating pier attached) was located by detached position 568. (See Photo) The pier ramp extends 70 meters from shore and rises 2.0m above the water surface. The pier axis lies from NE (offshore) to SW (onshore).

CHARTING RECOMMENDATION

The hydrographer recommends that the charted pier be retained as charted. *emur*

Recommended Position: Lat- 40/55/22.15¹N Lon- 073/44/38.38³W

Recommended Least Depth: 4.5³m Above MLLW (~~Predicted~~ ^{Actual} Tides)

COMPILATION NOTES

Retain pier as charted

AWOIS NO: 6577

Item Description: Obstruction, Pier Ruins

Source: CL222/54--COE Permit

AWOIS Position: Lat - 40/55/26.35N Lon - 073/43/58.47W

Required Investigation: VS, BD, DI -- 25m Swath on each side
of charted ruins

Charts Affected: 12364, 12367

INVESTIGATION

Date(s)/DN(s): 08/15/94 (DN:227)

Position Numbers:957

Launch Number: 0519

Investigation Used: VS

Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: During the investigation of AWOIS 6577, the survey crew found that PN 957 was the closest that the survey vessel could get to the listed AWOIS position. Numerous rocks were exposed in the search area, but no pier ruins were visible. The AWOIS position was still 160 meters ahead at a bearing of 233°, which placed the item onshore.

CHARTING RECOMMENDATION

The hydrographer recommends that the charted pier ruins be deleted. *Concur w/ conditions*

Recommended Position: Lat -

Lon -

Recommended Least Depth:

COMPILATION NOTES

*No pier ruins charted at this location.
No change in charting recommended.*

AWOIS NO: 6578

Item Description: Sounding

Source: CL1152/70 COE Permit

AWOIS Position: Lat - 40/55/32.35N Lon - 073/44/32.47W

Required Investigation: ES

Charts Affected: 12364, 12367

INVESTIGATION

Date(s)/DN(s): 08/15/94 (DN:227)

Position Numbers: 962-976

Launch Number: 0519

Investigation Used: ES

Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: Sounding lines were run in the area of Larchmont Yacht Club marina. One sounding line run on the north side of the north pier showed a 1.0m (3.3 ft) depth. This 1.0m sounding is at the end of the sounding line approaching shore. Sounding lines south of this pier showed depths in the range of 1.1m (3.6 ft) to 1.4m (4.6 ft), using predicted tides to correct to MLLW. Soundings increase in depth farther offshore. The offshore area is filled with moored boats and there is no private maintained markers for approaches to the yacht club's marina. This area appears to be accumulating sediment from the sewer located to the northwest of the marina. Approaches to the other pier fingers has a controlling depth of 1.1m (3.6ft) MLLW.

CHARTING RECOMMENDATION

The hydrographer recommends that the charted "8 ft Rep Sept 1970" note, be revised to a controlling depth of 1.0m (3.6 ft) at MLLW (predicted tides). Cmcwr

Recommended Position: Lat - 40/55/35.35N Lon - 073/44/32.47W

Recommended Least Depth: 1.1m (3.6 ft) at MLLW (Actual Tides).

COMPILATION NOTES

Revise note to read 4 Ft 1994

AWOIS NO: 6579

Item Description: Obstruction, Pier Ruins

Source: T-6024(1933)

AWOIS Position: Lat - 40/55/40.35N Lon - 073/43/32.47W

Required Investigation: VS, BD, 25m Swath on each side of charted item.

Charts Affected: 12364, 12367

INVESTIGATION

Date(s)/DN(s): 08/10/94 (DN:222)

Position Numbers: 625

Launch Number: 0519

Investigation Used: VS

Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: During shoreline verification of existing features, masonry stone pier ruins were visually identified. The pier ruin base is composed of stone masonry, 7-meters wide by 7-meters long and rising above the water surface 3.0 meters. The remainder of the ruins extend into shore on a bearing of 330° true. Position number 625 was taken on the offshore middle end of the structure. No pier ruins were observed at the AWOIS position, which is 55 meters to the north of position 625. There are many rocks along shore in this area were located inside of a foul limit line.

CHARTING RECOMMENDATION

The hydrographer recommends charting pier ruins at survey position 625, and deleting the charted pier at this geographic position. The pier ruins charted at the AWOIS position should be deleted. *Concur*

Recommended Position: Lat- 40/55/38.01⁰⁹N Lon- 073/43/32.76⁵⁸W

Recommended Least Depth: 5.1⁵ meters Above at MLLW (*Actual* ~~Predicted~~ Tides)

COMPILATION NOTES

Delete charted pier ruins. Revise pier charted south of ruins to ~~at~~ pier ruins.

AWOIS NO: 6580

Item Description: Obstruction/Pier Ruins

Source: CL222/54--COE

AWOIS Position: Lat - 40/55/43.35N Lon - 073/44/26.47W

Required Investigation: VS, BD, DI -- 25m Swath on both sides of
charted ruins

Charts Affected: 12364, 12367

INVESTIGATION

Date(s)/DN(s): 08/10/94 (DN:222)

Position Numbers: 574

Launch Number: 0519

Investigation Used: VS

Water Visibility: 2m

Position Determined By: DGPS

Investigation Summary: A visual search indicated no evidence of pier ruins at this items location. Steps were seen leading down the waters edge, with rocks near the shoreline. It had the appearance that a pier existed at this location at one time. The hydrographer talked with the property gardener, Mr. Juan Garcia, who indicated that the owners had the ruins removed.

CHARTING RECOMMENDATION

The hydrographer recommends that the pier ruins be deleted from the chart. *Concur*

Recommended Position: Lat -

Lon -

Recommended Least Depth:

COMPILATION NOTES

Remove charted ruins

AWOIS:6581

Item Description: Obstruction/Pier Ruins

Source: T-6024(1933)

AWOIS Position: Lat - 40/55/45.35N Lon - 073/43/30.47W

Required Investigation: VS, BD 25m Swath on either side of
charted pier ruins

Charts Affected: 12364, 12367

INVESTIGATION

Date(s)/DN(s): 08/10/94 (DN:222)

Position Numbers: 623

Launch Number: 0519

Investigation Used: VS

Water Visibility: 2m

Position Determined By: DGPS

Investigation Summary: A visual search was conducted in the AWOIS area. Floating pier ruins were located on shore above the tide line. It appeared that the floating pier platform had become unfastened and washed ashore during a storm or abnormal high tide. High tide had just occurred at the time of survey and the survey vessel was positioned as close to the item as possible (PN 623, offset distance of 30 meters at 260°T bearing). Visual identification of pier ruins onshore is revealed in included photograph. There were numerous rocks visually located along the shoreline, all within a foul limit line which was run.

CHARTING RECOMMENDATION

The hydrographer recommends that the pier ruins be retained as charted. *concur*

Recommended Position: Lat - 40/55/48.35 Lon - 073/43/30.47W

Recommended Least Depth: 0.5m above MLLW (Predicted Tides)

COMPILATION NOTES

No change in charting.

AWOIS NO: 6582

Item Description: Obstruction/ Visible Pier

Source: UNKNOWN

AWOIS Position: Lat - 40/55/56.35N Lon - 073/44/07.47W

Required Investigation: VS, BD, DI -- 15 meters on each side of
charted pier

Charts Affected: 12364, 12367

INVESTIGATION

Date(s)/DN(s): 08/16/94 (DN:228)

Position Numbers: 1002-1008

Launch Number: 0519

Investigation Used: VS, BD

Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: A bottom drag search was conducted at the AWOIS position. The chain drag had a scope of 12-meters of towline and 20-meters of chain between the otter doors. No snags were encountered and no piers were sighted at the AWOIS location. A fence with fence stakes was found extending 5 meters offshore on a north to south axis. The fence is 1.0m above the water surface.

CHARTING RECOMMENDATION

The hydrographer recommends that the charted pier be deleted from the chart and an obstruction (fence) be charted. *concur w/condition*

Recommended Position: Lat - 40/55/56.66²N Lon - 073/44/08.06⁵⁸W

Recommended Least Depth: 2.9m Above MLLW (*Actual* ~~Predicted~~ Tides)

COMPILATION NOTES

Remove charted fence pier -

AWOIS NO: 6583

Item Description: Submerged Dangerous Rock (PA)

Source: CL651/74 -- Citizen

AWOIS Position: Lat - 40/56/05.35N Lon - 073/43/17.46W

Required Investigation: BD, DI -- 100m radius

Charts Affected: 12364, 12367

INVESTIGATION

Date(s)/DN(s): 08/15/94 (DN:227)

Position Numbers: 938-955

Launch Number: 0519

Investigation Used: VS, ES

Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: A bottom drag was not feasible because of moored boats in the immediate search area. A visual search of the area located two submerged rocks at positions 938 and 939. An echo sounder search was conducted in the search area between the moored vessels. Detached positions 938 and 939 were the only evidence of rocks in the area.

CHARTING RECOMMENDATION

The hydrographer recommends that the charted rock be revised to position 938 and recommends charting a second rock at position 939. *concur w/ condition.*

Recommended Position: Lat- 40/56/05.82N Lon- 073/43/17.35W (938)

40/56/06.08⁷⁹N 073/43/17.27⁴W (939)

Recommended Least Depth: 0.4⁴ (1.3 ft) ^{Actual} MLLW (Predicted Tides)

COMPILATION NOTES

Delete (7) PA. Chart (7) in present survey location

AWOIS: 6584

Item Description: Unknown/ Submerged Obstruction/ Wreck

Source: UNKNOWN

AWOIS Position: Lat - 40/56/10.35N Lon - 073/43/21.46W

Required Investigation: VS, SD, DI -- 100m radius

Charts Affected: 12364, 12367

INVESTIGATION

Date(s)/DN(s): 08/15/94 (DN:227)

Position Numbers: 936

Launch Number: 0519

Investigation Used: VS

Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: The center of the AWOIS item is located at the end of Dolphin Yacht Club pier. This area has several moored vessels within the search area. Therefore, a bottom drag was not feasible. The depth of the water at the time of survey was 0.9 meters (near low tide) at the AWOIS position. No wrecks were visible. Rocks are present within the search area. A submerged rock, position 936, 2.1 meters above the surface was verified near this items location (see AWOIS No. 6586) and another rock was positioned nearby at position 647, which was 2.6m above at MLLW, corrected with predicted tides. Several rocks exist within a 10-meter radius of position 647.

CHARTING RECOMMENDATION

The hydrographer recommends that the charted wreck be deleted and a rock be charted at the recommended position below.

Recommended Position: Lat - 40/56/10.³¹³00N Lon - 073/43/^{19.836}20.02W

Recommended Least Depth: ^{1.9 (6ft)} 2.6m Above MLLW (Predicted Tides)

COMPILATION NOTES

Delete the w and wk - Chart a ~~(*)~~ (6) in present survey location

AWOIS: 6585

Item Description: Obstruction/ Square object with Pier

Source: BP126663/82, TP01266/84-87

AWOIS Position: Lat - 40/56/10.27N Lon - 073/43/22.42W

Required Investigation: BD, VS, DI -- 25m Swath

Charts Affected: 12364, 12367

INVESTIGATION

Date(s)/DN(s): 08/15/94 (DN:227)

Position Numbers: 937

Launch Number: 0519

Investigation Used: VS

Water Visibility: 1m

Position Determined By : DGPS

Investigation Summary: A visual search of the AWOIS area found a concrete platform at the end of what appears to be a concrete platform resting on top of very large rocks onshore. A bottom drag was not feasible due to the steep rocky shoreline. The platform was 290° true and 20 meters from where position 937 was taken. (see photo for PN 937).

CHARTING RECOMMENDATION

Since the obstruction was found well up on shore, the hydrographer recommends that it not be charted *CANCAR*

Recommended Position: Lat-

Lon-

Recommended Least Depth:

COMPILATION NOTES

Remove at end of charted pier

AWOIS: 6586

Item Description: Obstruction/ Submerged Rock (PA)

Source: CL651/74-- Citizen

AWOIS Position: Lat - 40/56/11.35N Lon - 073/43/18.46W

Required Investigation: BD, DI -- 100m radius

Charts Affected: 12364, 12367

INVESTIGATION

Date(s)/DN(s): 08/15/94 (DN:227)

Position Numbers:936

Launch Number: 0519

Investigation Used: VS

Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: A bottom drag was not feasible because of moored vessels within the search area. A large exposed rock was located by detached position 936. The rock has a diameter of 15 meters and was 1.5 meters above the water surface at the time of survey. The rock at position 936 is 50-meters northeast of the AWOIS position, but within the AWOIS search radius.

CHARTING RECOMMENDATION

The hydrographer recommends that the charted rock be revised to the recommended position below.

Recommended Position: Lat- 40/56/10.31³N Lon - 073/43/19.84³⁶W

Recommended Least Depth: 1.9 (6ft) ^{Actual} Above MLLW (~~Predicted~~ Tides)

COMPILATION NOTES

Delete charted' Rk PA + chart (*) (6) in present
survey location

AWOIS NO: 6587

Item Description: Sounding

Source: BP73388/67--COE

AWOIS Position: Lat - 40/56/26.35N Lon - 073/41/53.46W

Required Investigation: ES

Charts Affected: 12364, 12367

INVESTIGATION

Date(s)/DN(s): 08/15/94 (DN:227)

Position Numbers: 901-911

Launch Number: 0519

Investigation Used: ES

Visibility: 2m

Position Determined By: DGPS

Investigation Summary: An echo sounder search yielded soundings ranging from 2.4m to 2.8m on the western offshore pier facing. Between pier fingers on the inshore side, soundings range from 2.2m to 2.7m. The soundings near shore naturally start to decrease in depth. However, these soundings should not be considered when determining controlling depth. The hydrographer feels that the 2.2m (7.2 ft) sounding on the inside of the south pier finger should be used as the controlling depth.

CHARTING RECOMMENDATION

The hydrographer recommends that the charted 6 ft. controlling depth be revised to 5 ft. controlling depth. Concur

Recommended Position: Lat - 40/56/26.35N Lon - 073/41/53.46W

Recommended Least Depth: 2.2m (7.216ft) MLLW (Predicted Tides)

COMPILATION NOTES

note
Revise to read 5 ft 1994

AWOIS NO: 6588

Item Description: Sounding

Source: CL737(83)--USPS

AWOIS Position: Lat - 40/56/27.35N Lon - 073/43/36.47W

Required Investigation: ES

Charts Affected: 12364, 12367

INVESTIGATION

Date(s)/DN(s): 08/15/94 (DN:227)

Position Numbers: 921-932

Launch Number: 0519

Investigation Used: ES

Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: An echo sounder search was conducted at the AWOIS item position. It should be noted that the area has four piers in the immediate vicinity. Sounding lines showed a least depth of 1.0m (3.3ft) in the area identified by the eastern identification leader, and 1.1m (3.6ft) for the area identified by the western identification leader.

CHARTING RECOMMENDATION

The hydrographer recommends that the charted controlling depth be revised to 1.0m (3.3ft) MLLW for the eastern area and 1.1m (3.6ft) MLLW for the western area. *concur*

Recommended Position: Lat- 40/56/28.91N Lon- 073/43/38.20W
Recommended Controlling Depth: 1.1m (3.6ft) MLLW (~~Predicted~~ *Actual* Tides)

Recommended Position: Lat- 40/56/28.245N Lon-073/43/36.434W

Recommended Controlling Depth: 1.0m (3.3ft) MLLW (Predicted Tides)

COMPILATION NOTES

Revise note to read 3ft 1994

AWOIS NO: 6589

Item Description: Rock Awash

Source: CL991/67--USPS

AWOIS Position: Lat - 40/56/34.35N Lon - 073/42/01.46W

Required Investigation: VS, BD, DI -- 100m radius

Charts Affected: 12364, 12367

INVESTIGATION

Date(s)/DN(s): 08/12/94 (DN:224)

Position Numbers: 708-711

Launch Number: 0519

Investigation Used: VS, ES

Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: This item was initially verified visually. Using an echo sounder, a foul limit line was run around the rock. At the time of survey, the rock was 0.3m above the water surface. The position on the center of rock was determined by using the center of the foul limit line which circled the rock.

CHARTING RECOMMENDATION

The hydrographer recommends that the charted rock be retained at the revised geographic position below. *concur w/conditions*

Recommended Position: Lat - 40/56/33.75²N Lon - 073/42/00.9¹⁸W

Recommended Least Depth: 0.3^{5 (11.6 FT)}m Above MLLW (*Actual* Predicted Tides)

COMPILATION NOTES

*Retain charted RK + revise elevation to (2)
(*) (2)*

AWOIS:6590

Item Description: Obstruction/Visible Pier

Source: CL1341/79--USPS

AWOIS Position: Lat - 40/56/35.35N Lon - 073/43/09.46W

Required Investigation: VS, BD, DI

Charts Affected: 12364, 12367

INVESTIGATION

Date(s)/DN(s): 08/15/94 (DN:227)

Position Numbers: 912

Launch Number: 0519

Investigation Used: VS

Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: This item was visually verified. The pier is a seasonal floating pier with a metal ramp walkway extending from the masonry bulkhead. The ramp is 1-meter wide by 10-meters long with a 4-meter square floating platform at the end. The ramp was 2.0m above the water surface at the time of survey. Contact: Bob Stark, Mamaroneck Beach and Yacht Club, 914-698-1130.

CHARTING RECOMMENDATION

The hydrographer recommends that the visible pier be charted at the geographic position below. *Concur w/conditions*

Recommended Position: Lat- 40/56/35.27⁷N Lon- 073/43/09.89⁴W

Recommended Least Depth: Floating

COMPILATION NOTES

NO charting changes

AWOIS NO: 6591

Item Description: Obstruction/Pier Ruins

Source: Unknown

AWOIS Position: Lat - 40/56/41.35N Lon - 073/41/31.46W

Required Investigation: VS, BD, DI -- 25m Swath

Charts Affected: 12364, 12367

INVESTIGATION

Date(s)/DN(s): 08/12/94 (DN:223)

Position Numbers: Reference #81

Launch Number: 0519

Investigation Used: VS

Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: A visual search of the AWOIS position was performed at low tide. The hydrographer found evidence of pier ruins with a new pier built on top of the ruins at the AWOIS position. The chart shows two features at this location, pier ruins and a pier. The only ruins which exist, are those located under the charted pier which was assigned reference number 81. A bottom drag was not feasible because the area is foul with rocks.

CHARTING RECOMMENDATION

The hydrographer recommends that the charted pier ruins at the AWOIS position be deleted and the pier at reference number 81 be retained as charted. *Cmcur*

Recommended Position: Lat- 40/56/38.9N Lon- 073/41/30.8W

Recommended Least Depth: 2m above MLLW, corrected for ^{actual} predicted tides.

COMPILATION NOTES

Delete pier ruins

AWOIS: 6593

Item Description: Obstruction/ Visible Pier

Source: Unknown

AWOIS Position: Lat - 40/56/51.35N Lon - 073/41/39.46W

Required Investigation: VS, BD, DI -- 25 m Swath

Charts Affected: 12364, 12367

INVESTIGATION

Date(s)/DN(s): 08/15/94 (DN:227)

Position Numbers: 897-900

Launch Number: 0519

Investigation Used: VS, BD

Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: A chain drag search was performed on both sides of the AWOIS position. The drag had 20-meters of chain between the otter doors and a scope of 25-meters of tow line. No snags were encountered. Steps leading down to the rocky shore from the bluff onshore were located in this area. Reference Number 91, an existing pier, is located south of this AWOIS item location by approximately 30 meters.

CHARTING RECOMMENDATION

The hydrographer recommends that the charted visible pier at AWOIS 6593 position be deleted from the chart. *CANCUR*

Recommended Position: Lat -

Lon -

Recommended Least Depth:

COMPILATION NOTES

Delete visible pier

AWOIS NO: 6594

Item Description: Obstruction/ Visible Pier

Source: Unknown

AWOIS Position: Lat - 40/56/54.35N Lon - 073/41/37.46W

Required Investigation: VS, BD, DI -- 25m Swath

Charts Affected: 12364, 12367

INVESTIGATION

Date(s)/DN(s): 08/15/94 (DN:227)

Position Numbers:892-896

Launch Number: 0519

Investigation Used: VS, BD

Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: A floating pier was identified and detached position 892 was taken. The floating pier has a metal ramp walkway extending from a wooden platform on shore. The pier axis is due East and the pier is 2.0m above the water surface. A bottom drag was also conducted. The drag had 20m of chain between the otter doors and 25m of tow line. Swaths were run on either side of the pier, and no snags were encountered. AWOIS 6594 was determined to be the existing floating pier.

CHARTING RECOMMENDATION

The hydrographer recommends charting a pier at the recommended position below. *concur w/conditions*

Recommended Position: Lat- 40/56/54.33N Lon- 073/41/37.93W

Recommended Least Depth: 3.4m Above MLLW (Predicted Tides)

COMPILATION NOTES

No charting changes recommended.

AWOIS NO:6597

Item Description: Obstruction/Dolphin (PA)

Source: LNM15/79-- 3rd USCG District

AWOIS Position: Lat - 40/57/40.35N Lon - 073/40/19.46W

Required Investigation: VS,BD,DI -- 200m radius

Charts Affected: 12364, 12367

INVESTIGATION

Date(s)/DN(s): 08/02/94 (DN:214)

Position Numbers: 478

Launch Number: 0519

Investigation Used: VS

Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: Visual identification of a dolphin in ruins was made within the search radius. The dolphin ruin was situated at the SW corner of pier ruins located at Playland Park pier. Further investigation with Playland Amusement Park personnel revealed that the pier ruins were previously a T-pier. A winter storm on December 11, 1992 damaged the pier by removing a portion of it. Park officials and Westchester County officials contracted a private firm to remove the damaged sections affected by the storm. The existing pier ruins were left in, and deteriorated since 1992. Contacts: Tony Aurrichio and Bill Barnard, Park Superintendent, Playland Park, Rye, New York (914-921-0370).

CHARTING RECOMMENDATION

The hydrographer recommends that the charted "Dolphin Rep PA" be deleted and a dolphin and pier ruins be charted at survey position 478. *Concur*

Recommended Position: Lat- 40/57/45.03⁴N Lon - 073/40/22.1²¹W

Recommended Least Depth: 4.5⁹m Above MLLW (*Actual* Predicted Tides)

COMPILATION NOTES

*Remove ^oDol rep PA. Revise pier to ruins and add
a dol at end of ruins --- ^{Dol}o*

AWOIS NO: 6599

Item Description: Obstruction/ C&GS Platform

Source: BP48583/1952

AWOIS Position: Lat - 40/54/23.35N Lon - 073/45/50.47W

Required Investigation: VS, BD, DI -- 50m radius

Charts Affected: 12364, 12367

INVESTIGATION

Date(s)/DN(s): 08/16/94 (DN:228)

Position Numbers:

Launch Number: 0519

Investigation Used: Salvage Documentation Water Visibility: 2m

Position Determined By: DGPS

Investigation Summary: Contact was made with the New Rochelle Harbor Police. They had no knowledge of the platform. Pat Barret, the harbor master at New Rochelle Municipal Marina (914-235-6930) had no knowledge of the platform and referred the hydrographer to John O'Neal. Mr. O'Neal works for G & R Marine Repair Service (914-632-4020). Mr. O'Neal reported that the platform had been removed by himself and his crew when they had been contracted to salvage items in Echo Bay when establishing mooring buoys in the area. He also mentioned the removal of AWOIS Item 2644 at the same time. The items were removed from the water and place on Tank Island and burned. Contact's address: John O'Neal, G & R Marine Repair Service, 22 Pelham Rd., New Rochelle, New York 10805, (914-632-4020).

CHARTING RECOMMENDATION

The hydrographer recommends that the charted C&GS platform be deleted from the chart. *Concur*

Recommended Position: Lat - Lon -

Recommended Least Depth:

COMPILATION NOTES

Delete platform

AWOIS NO: 6638

Item Description: Unknown/Visible Wreck

Source: T5257/1933--NOS

AWOIS Position: Lat - 40/54/42.35N Lon - 073/46/06.47W

Required Investigation: VS, BD, DI -- 75m radius

Charts Affected: 12364, 12367

INVESTIGATION

Date(s)/DN(s): 08/16/94 (DN:228)

Position Numbers: 1035

Launch Number: 0519

Investigation Used: VS

Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: A wreck was visually identified and detached position 1035 was taken. The wreck is partially buried on the NW corner of Tank Island. The wreck rises 1.0 meter above the water surface at the time of survey. According to John O'Neal of G & R Marine Repair Service (914-632-4020) 22 Pelham Rd., New Rochelle, NY 10805, this item was a barge, which he and his salvage crew placed on Tank Island and burned, however, the item did not burn completely. The barge is 4-meters wide by 15-meters long with several beams exposed. See photo for AWOIS 6638. Mr. O'Neal stated that all wrecks and obstructions were salvaged and placed on Tank Island and burned when placing mooring buoys in Echo Bay.


CHARTING RECOMMENDATION

The hydrographer recommends that the charted sunken wrecks northwest of Tank Island, at the AWOIS position, be deleted and a visible wreck charted at the geographic position below.

Recommended Position: Lat- 40/54/41.54³⁶N Lon- 073/46/04.40⁴W

Recommended Least Depth: 2.5m Above MLLW (Actual tides)
↓ (7.9)ft
(Predicted tides)

COMPILATION NOTES

Chart  (B) in present survey location
Remove $\#H$ in 40/54/42.35N, 73/46/06.47W
 $\#ED$ in 40/54/44.10N, 73/46/06.8W

AWOIS NO: 6639

Item Description: Obstruction/ Sewer

Source: CL96/56--COE Permit

AWOIS Position: Lat - 40/55/34.35N Lon - 073/44/37.47W

Required Investigation: VS, ES

Charts Affected: 12364, 12367

INVESTIGATION

Date(s)/DN(s): 08/16/94 (DN:228)

Position Numbers: 1009-1023

Launch Number: 0519

Investigation Used: VS, ES

Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: An echo sounder search was conducted at the AWOIS and charted positions. The first echo sounder line was a center line, while the second line followed a zig-zag pattern. The graphic record indicated no abnormal bottom features which would indicate the presence of a sewer line. At low tide on day number 227, the area was noted to have the appearance of being inundated with sediment smelling of sulfides. It appears as if the sewer pipe has been silted. Upon evaluation of soundings, the area is very shallow with soundings less than one meter, several in the negative range. At the west end of this area, round drains are present. The hydrographer could not positively determine whether these drains were sewer or storm drains.

CHARTING RECOMMENDATION

The hydrographer recommends that the charted sewer be retained as charted. *Concur*

Recommended Position: Lat - 40/55/34.35N Lon - 073/44/37.47W

Recommended Least Depth: None obtained

COMPILATION NOTES

No changes recommended

AWOIS NO: 7680

Item Description: City of Hartford

Source: Greenwich, CT Police Dept.

AWOIS Position: Lat - 40/56/43.14N Lon - 073/41/02.50W

Required Investigation: VS, SD, DI, S2 100m radius

Charts Affected: 12364, 12367

INVESTIGATION

Date(s)/DN(s): 08/16/94 (DN:228)

Position Numbers: 1119-1126

Launch Number: 0519

Investigation Used: VS, Local Knowledge

Water Visibility: 1m

Position Determined By: DGPS

Investigation Summary: A chain drag was not feasible in this area due to close proximity to a foul rocky area. An echo sounder search was conducted in the area. No evidence on the graphic record indicates a wreck. The bottom profile indicates many rocks and rock piles and a steep sloping bottom. Contact was made with the Greenwich, CT Police Department to speak with Mr. Richard Taracka, who is referred to in the item description. Mr. Taracka is retired and now lives in Florida, and could not be reached. The hydrographer spoke with Officer Jeffery Caldwell, a member of the police dive team. He was not familiar with this wreck, as it is out of their jurisdiction. The hydrographer then contacted local diver and instructor Mr. Lida Simek, 57 S. Highland Ave., Ossining, NY 10562. Mr Simek visited the AHP office and indicated on chart 12367 where the wreck is located and offered local knowledge of the wreck. Mr. Simek indicated the position to be 40/56/36N, 073/41/05W and verified the same LORAN coordinates that are listed on AWOIS 7680 and AWOIS 7696 report. Sounding lines were run in this area on DN 252 (PN 3809-3816) to try and get a graphic record of the wreck. No evidence of wreck was found. This area is also rocky with a steep sloping bottom. It should be noted that Mr. Simek indicated that the "City of Hartford" is the same vessel as the "Capitol City". The vessel went through a refurbishing period and changed the name once the vessel came out of the shipyard. The vessel went down in April 1888. The vessel was 205 feet and long and made of wood. The least depth is based upon information obtained from by Mr. Simek, and then corrected for predicted tides..

CHARTING RECOMMENDATION

The hydrographer recommends that the charted wreck at AWOIS 7680 position be deleted and a submerged wreck (PA) be charted at the position listed below. *unclear w/condition*

Recommended Position: Lat - 40/56/36.0N Lon - 073/41/05.0W

Recommended Least Depth: 5.0m MLLW (^{Actual} Predicted Tides)

COMPILATION NOTES

Delete charted wk

AWOIS NO: 7696

Item Description: Capitol City

Source: CL1095/86--Private Diver

AWOIS Position: Lat - 40/56/57.78N Lon - 073/40/44.28W

Required Investigation: ES,SD,BD, DI -- 100m radius

Charts Affected: 12364, 12367

INVESTIGATION

Date(s)/DN(s): 08/16/94 (DN:228)

Position Numbers: 1049-1118

Launch Number: 0519

Investigation Used: ES, Local Knowledge
1m

Water Visibility:

Position Determined By: DGPS

Investigation Summary: An echo sounder search was performed with 10-meter line spacing. The graphic record indicated no traces of a submerged wreck. Bottom drag was not feasible due to rocky area with steep sloping bottom and no available divers. Contact with Mr. Lida Simek, 57 S. Highland Ave., Ossining, NY 10562, indicated that the wreck is located at Parsonnage Point, partially buried underneath the rock jetty. Mr. Simek indicated the position to be 40/56/36N and 073/41/05W and verified the same LORAN coordinates listed for AWOIS 7696 and AWOIS 7680. Mr. Simek indicated the wreck to be in approximately 16ft to 18ft of water, with wooden beams extending upward 0.5 ft to 1.0 ft off the bottom. Sounding lines in this area (Dn 252 PN 3809-3816) found no positive evidence of the "Capitol City" wreck. Mr. Simek stated that the "Capitol City" and the "City of Hartford" were the same vessel. Least depth is based upon information obtained from Mr. Simek, and then corrected for predicted tides.

CHARTING RECOMMENDATION

The hydrographer recommends that the charted wreck at the AWOIS 7696 position remain as charted and a submerged wreck (PA) be charted at the position listed below. Do not cancel

Recommended Position: Lat - 40/56/36.0N Lon - 073/41/05.0W

Recommended Least Depth: 5.0m MLLW (^{Actual} Predicted Tides)

No NK is charted at AWOIS 7696 position. New wk falls inside foul limits. No charting changes are recommended.



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
Coast and Geodetic Survey
Norfolk, Virginia 23510-1114

Atlantic Hydrographic Party
439 West York St.
Norfolk, VA 23510-1114

September 26, 1994

Commander
First U.S. Coast Guard District
408 Atlantic Avenue
Boston, MA 02110-3350

Dear Sir,

While conducting a basic hydrographic survey, Registry No. H-10559, of Long Island Sound, New York, from Parsonage Point to Larchmont Harbor, the following items were identified as dangers to navigation and are recommended for inclusion in the Local Notice to Mariners:

A) The charted lighted beacon at Umbrella Rock (USCG Light List No. 25760) no longer exists. Charts 12364 and 12367 incorrectly indicate that a lighted beacon on Umbrella Rock is maintained by the Larchmont Yacht Club. The yacht club no longer maintains this private aid to navigation.

B) The charted lighted beacons at North Ledge (USCG Light List No. 25765 and No. 25770) are no longer lighted. The unlighted aids to navigation are white daybeacons warning of rocks located at 40°55'20.98"N, 073°44'32.86"W, (USCG Light List No. 25765) and 40°55'23.62"N, 073°44'33.57"W, (USCG Light List No. 25770). The Larchmont Yacht Club still maintains these two beacons.

C) An uncharted exposed rock was located at 40°55'32.7"N, 073°44'34.9"W. The rock is exposed 7.5 feet at Mean Lower Low Water (MLLW).

D) An uncharted submerged wreck 30-feet long by 10-feet wide, with a mast 1 foot above the surface at MLLW, was located at 40°56'35.83"N, 073°42'58.05"W.

E) An uncharted wreck 36-feet long by 10-feet wide, was located 40°56'36.97"N, 073°42'39.89"W. The wreck is exposed 1.3 feet above the surface at MLLW.

F) An uncharted rock was located at 40°56'17"N, 073°42'28"W. The rock is exposed 0.3 feet at MLLW.

G) Three uncharted rocks were located at 40°56'24"N, 073°42'13"W. The rocks are submerged 0.6 feet at MLLW.



H) An uncharted rock was located at 40°56'16.7"N, 073°42'18.5"W. The rock is exposed 6.6 feet at MLLW.

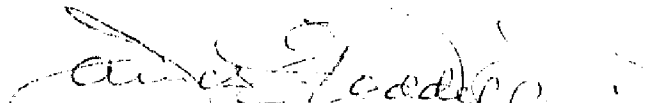
J) Two uncharted rocks were located at 40°56'13.0"N, 073°41'52.9"W. The rocks are exposed 0.3 feet at MLLW.

K) An uncharted submerged rock was located at 40°56'31"N, 073°41'05"W. The rock is submerged 0.6 feet at MLLW.

The positions are in NAD 83 datum. The soundings were reduced to Mean Lower Low Water using predicted tides. This information affects Charts 12364, 28th Edition/May 1993, and 12367, 19th Edition/Aug. 17, 1991, both NAD 83 datum. All items were located using Differential Global Positioning System.

This is advance information, which is subject to office review. A chart section of this area, showing the location of these dangers, is also included. Questions concerning this report should be directed to me at (203)783-4287 or to CDR Nicholas Perugini of the Atlantic Hydrographic Section at 804-441-6746.

Sincerely,



LCDR James E. Waddell, Jr., NOAA
Chief, Atlantic Hydrographic Party

Attachment

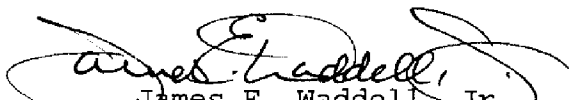
cc: N/CG221
N/CG244
DMAHTC

APPROVAL SHEET

BASIC HYDROGRAPHIC SURVEY
OPR-B285-AHP
AHP-10-9-94
H-10559
1994

This basic hydrographic survey was conducted in accordance with the project instructions for OPR-B285-AHP, the Hydrographic Manual, the Hydrographic Survey Guidelines, and the Field Procedures Manual. All reports were reviewed by Mr. Brian Link, Assistant Chief of Party. The descriptive report was reviewed and approved by LCDR James E. Waddell, Jr., Chief of Party. All supporting data and records were approved through Team Processing with the Atlantic Hydrographic Section in Norfolk, Virginia.

This survey is a complete basic hydrographic survey for the area described in Section B of this report.


James E. Waddell, Jr.
Lieutenant Commander, NOAA
Chief, Atlantic Hydrographic Party



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
Office of Ocean and Earth Sciences
Silver Spring, Maryland 20910

TIDE NOTE FOR HYDROGRAPHIC SURVEY

DATE: March 30, 1995

HYDROGRAPHIC SECTION: Atlantic

HYDROGRAPHIC PROJECT: OPR-B285

HYDROGRAPHIC SHEET: H-10559

LOCALITY: New York, Long Island Sound, Parsonage Point to
Larchmont Harbor

TIME PERIOD: August 1 - September 12, 1994

TIDE STATION USED: 851-8091 Rye Beach, N.Y.
Lat. $40^{\circ}57.7'N$ Lon. $73^{\circ}40.4'W$

PLANE OF REFERENCE (MEAN LOWER LOW WATER): 1.65 ft.
HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 7.5 ft.

TIDE STATION USED: 851-8490 New Rochelle, N.Y.
Lat. $40^{\circ}53.6'N$ Lon. $73^{\circ}46.9'W$

PLANE OF REFERENCE (MEAN LOWER LOW WATER): 5.27 ft.
HEIGHT OF HIGH WATER ABOVE PLANE OF REFERENCE: 7.5 ft.

REMARKS: RECOMMENDED ZONING

1. West of $73^{\circ}44.0'W$, times and heights are direct on Rye Beach, N.Y. (851-8091).
2. East of $73^{\circ}44.0'W$, times and heights are direct on New Rochelle, N.Y. (851-8490).

Note: Times are tabulated in Greenwich Mean Time.

William M. Adams
CHIEF, DATUMS SECTION



GEOGRAPHIC NAMES

Name on Survey	A ON CHART NO. 12367, 12364, 12363 B ON PREVIOUS SURVEY NO. C ON U.S. QUADRANGLE MAPS D FROM LOCAL INFORMATION E ON LOCAL MAPS F P.O. GUIDE OR MAP G GRAND McNALLY ATLAS H U.S. LIGHT LIST K									
	A	B	C	D	E	F	G	H	K	
BAILLEY ROCK	X		X							1
BEAUFORT POINT	X		X							2
BLACK TOM (bar)	X		X							3
CEDAR ISLAND	X		X							4
CLIFFORD ISLAND	X		X							5
CRAB ISLAND	X		X							6
CRANE ISLAND	X		X							7
DAUNTLESS ROCK	X									8
DAVENPORT NECK	X		X							9
DELANCEY COVE	X		X							10
DELANCEY POINT	X		X							11
DUCK POINT	X		X							12
EAST BASIN (harbor)			X							13
ECHO BAY	X		X							14
ECHO ISLAND	X		X							15
EDGEWATER POINT	X		X							16
FERRIS CREEK			X							17
FORBES ROCKS	X		X							18
FORLIES ROCKS	X		X							19
GREACEN POINT	X		X							20
GUION CREEK	X		X							21
HARBOR ISLAND	X		X							22
HARRISON ISLAND	X		X							23
HEN AND CHICKENS (bar)	X		X							24
HEN ISLAND	X		X							25

GEOGRAPHIC NAMES

Name on Survey

Page 2 of 3

A ON CHART NO. 12367, 12364, 12363
B ON PREVIOUS SURVEY
C ON U.S. QUADRANGLE MAPS
D FROM LOCAL INFORMATION
E ON LOCAL MAPS
F P.P. SLIDE OR MAP
G RAND McNALLY ATLAS
H U.S. LIGHT LIST
K

Name on Survey	A	B	C	D	E	F	G	H	K
HICKS LEDGE	X		X						1
HORSESHOE HARBOR	X		X						2
LARCHMONT (pp1)	X		X						3
LARCHMONT HARBOR	X		X						4
LITTLE HARBOR SOUND	X		X						5
LONG ISLAND SOUND	X		X						6
MAMARONECK (pp1)	X		X						7
MAMARONECK HARBOR	X		X						8
MARIES NECK	X		X						9
MILTON (pp1)	X		X						10
MILTON HARBOR	X		X						11
MILTON POINT	X		X						12
NEW ROCHELLE (pp1)	X		X						13
NEW YORK (title)	X		X						14
NORTH LEDGE	X		X						15
OAKLAND BEACH	X		X						16
ORIENTA (pp1)			X						17
ORIENTA POINT	X		X						18
OTTER CREEK	X		X						19
OUTER STEAMBOAT ROCK	X		X						20
PARSONAGE POINT	X		X						21
PENINGO NECK	X		X						22
PINE ISLAND	X		X						23
PINE ISLAND			X		(Near Milton Harbor)				24
PLAYLAND (locale)	X		X						25

GEOGRAPHIC NAMES

Name on Survey

Page 3 of 3

A ON CHART NO. 12364, 12365
 B ON PREVIOUS SURVEY
 C ON U.S. QUADRANGLE MAPS
 D FROM LOCAL INFORMATION
 E ON LOCAL MAPS
 F P.O. GUIDE OR MAP
 G RAND McNALLY ATLAS
 H U.S. LIGHT LIST
 K

Name on Survey	A	B	C	D	E	F	G	H	K	
POPS ROCKS	X		X							1
PORGY SHOAL	X		X							2
PREMIUM POINT	X		X							3
RYE BEACH	X		X							4
SATANS TOE (cape)	X		X							5
SCOTCH CAPS (bar)	X		X							6
SEDGE ISLAND			X							7
SHIP ROCK	X		X							8
SHOOTFLY ISLAND			X							9
SHORE ACRES (pp1)	X		X							10
SOUTH LEDGE	X		X							11
SPIKE ISLAND	X		X							12
TABLE ROCK	X		X							13
TANK ISLAND			X							14
TRANSPORT ROCK	X		X							15
TURKEY ROCK	X		X							16
UMBRELLA POINT	X		X							17
UMBRELLA ROCK	X		X							18
VAN AMRINGE MILLPOND	X		X							19
WEST BASIN (harbor)			X							20
WEST ROCK	X		X			Approved				21
						<i>Ante C. Coy</i>				22
						Chief Geographer				23
						DEC 4 1995				24
										25

LETTER TRANSMITTING DATA

N/CS33-55-97

DATA AS LISTED BELOW WERE FORWARDED TO YOU BY
(Check):

ORDINARY MAIL AIR MAIL

REGISTERED MAIL EXPRESS

GBL (Give number) _____

TO:

CHIEF, DATA CONTROL GROUP, N/CS3x1
NOAA/NATIONAL OCEAN SERVICE
STATION 6815, SSMC3
1315 EAST-WEST HIGHWAY
SILVER SPRING, MARYLAND 20910-3282

DATE FORWARDED

SEP 26, 1997

NUMBER OF PACKAGES

ONE TUBE AND ONE BOX

NOTE: A separate transmittal letter is to be used for each type of data, as tidal data, seismology, geomagnetism, etc. State the number of packages and include an executed copy of the transmittal letter in each package. In addition the original and one copy of the letter should be sent under separate cover. The copy will be returned as a receipt. This form should not be used for correspondence or transmitting accounting documents.

H-10559

NEW YORK, LONG ISLAND SOUND, PARSONAGE POINT TO LARCHMONT HARBOR

1 (ONE) TUBE CONTAINING THE FOLLOWING:

- 1 SMOOTH SHEET (H-10559)
- COMPOSITE DRAWINGS FOR NOS CHART 12367
- H-DRAWING FOR NOS CHART 12367

1 (ONE) BOX CONTAINING THE FOLLOWING:

- 1 ORIGINAL DESCRIPTIVE REPORT
- 1 DRAWING HISTORY FORM #76-71 FOR NOS CHART 12367
- 1 RECORD OF APPLICATION TO CHARTS FORM FOR SURVEY H-10559

FROM: (Signature)

Deborah A. Bland

Deborah A. Bland

RECEIVED THE ABOVE

(Name, Division, Date)

Return receipted copy to:

ATLANTIC HYDROGRAPHIC BRANCH
N/CS33
439 WEST YORK STREET
NORFOLK, VA 23510-1114

09/26/97

HYDROGRAPHIC SURVEY STATISTICS
REGISTRY NUMBER: H-10559

NUMBER OF CONTROL STATIONS	2
NUMBER OF POSITIONS	4130
NUMBER OF SOUNDINGS	22261

	TIME-HOURS	DATE COMPLETED
PREPROCESSING EXAMINATION	134	03/08/95
VERIFICATION OF FIELD DATA	544	08/05/97
QUALITY CONTROL CHECKS	0	
EVALUATION AND ANALYSIS	336	
FINAL INSPECTION	46	04/29/96
COMPILATION	227	09/19/97
TOTAL TIME	1287	
ATLANTIC HYDROGRAPHIC BRANCH APPROVAL		09/24/97

**ATLANTIC HYDROGRAPHIC BRANCH
EVALUATION REPORT FOR H-10559 (1994)**

This Evaluation Report has been written to supplement and/or clarify the original Descriptive Report. Sections in this report refer to the corresponding sections of the Descriptive Report.

D. AUTOMATED DATA ACQUISITION AND PROCESSING

The following software was used to process data at the Atlantic Hydrographic Branch:

Hydrographic Processing System
NADCON, version 2.10
AutoCAD, Release 12
QUICKSURF, version 5.1
MicroStation 95, version 5.05
I/RAS B, version 5.01

The smooth sheet was plotted using an ENCAD NovaJet III plotter.

H. CONTROL STATIONS

Horizontal control used for this survey during data acquisition is based upon the North American Datum of 1983 (NAD 83). Office processing of this survey is based on these values. The smooth sheet has been annotated with ticks showing the computed mean shift between the NAD 83 and the North American Datum of 1927 (NAD 27).

To place this survey on the NAD 27, move the projection lines 0.356 seconds (10.967 meters or 1.10 mm at the scale of the survey) north in latitude, and 1.531 seconds (35.828 meters or 3.58 mm at the scale of the survey) east in longitude.

All geographic positions listed in this report are on the NAD 83 datum unless otherwise specified. Items brought forward from prior sources have been converted to the NAD 83 datum.

J. SHORELINE

The shoreline originates with photogrammetric manuscripts TP-01266 and TP-01267 of 1984-87. The manuscripts were digitized by Atlantic Hydrographic Branch personnel. The digitized file has been inserted into the smooth sheet drawing file.

Shoreline revisions originating with the present survey are shown in red on the smooth sheet.

The zero depth contour was not completely delineated on this survey due to the hazardous foul areas along the shoreline.

L. JUNCTIONS

H-10347	(1990)	1:10,000	to the south
H-10353	(1990)	1:10,000	to the northeast
H-10542	(1994)	1:10,000	to the north
<u>H-10558</u>	<u>(1994)</u>	<u>1:10,000</u>	<u>to the southwest</u>

Standard junctions were effected between surveys H-10558 (1994) and H-10542 (1994) and the present survey. Depths are in adequate agreement with surveys H-10558 (1994) and H-10542 (1994).

A standard junction could not be effected with surveys H-10347 (1990) and H-10353 (1990). These surveys are archived at National Ocean Service (NOS) headquarters in Silver Spring, Maryland. The note "ADJOINS" is shown on the present survey in the junctional areas. Depths are in adequate agreement. Any adjustments to the depth curves will have to be made by the compilers in Silver Spring during chart compilation.

M. COMPARISON WITH PRIOR SURVEYS

1. Hydrographic

H-1683	(1884)	1:10,000
H-1683a	(1894)	1:10,000
H-1683c	(1914)	1:10,000
H-1699b	(1914)	1:10,000
H-1732a	(1914-16)	1:10,000
<u>H-5413a</u>	<u>(1933)</u>	<u>1,10,000</u>

The prior surveys listed above cover the present survey area in its entirety.

H-1683 (1866) covers the nortcentral and northeastern areas of the present survey. The present survey is in good agreement with the prior survey with present survey depths 0 to 5 feet (0 - 1⁵ m) shoaler than prior survey depths.

The following charted depths and features originate with the prior survey and are not considered disproved by the present survey:

<u>Depth/Feature</u> (ft/m)	<u>Latitude (N)</u>	<u>Longitude (W)</u>
25/7 ⁶	40°54'54.5"	73°44'06.5"
7/2 ¹	40°54'35"	73°44'29"
28/8 ⁵	40°54'49"	73°43'40.5"
4/1 ²	40°54'43.5"	73°44'17"

These depths have been brought forward from the prior survey to supplement the present survey. It is recommended that these depths be retained as charted. Additional field work is recommended to verify or disprove the existence of these features.

H-1683a (1894) covers the northern portion of the present survey area. Generally, the prior survey is in very good agreement with the present survey. Present survey depths vary plus or minus 0 to 4 feet (0 - 1² m) from prior survey depths. In the vicinity of Latitude 40°54'45"N, Longitude 73°42'40"W, prior survey depths range from 36 to 44 feet (11 - 13⁴ m); present survey depths range from 23 to 30 feet (7 - 10⁹ m).

H-1683c (1914) covers the southwestern and northeastern portion of the present survey. The prior survey is in good agreement with the present survey. Present survey depths are 0 to 3 feet (0 - 0³ m) shoaler than prior survey depths. In the vicinity of Larchmont Harbor, Latitude 40°55'00"N, Longitude 73°44'00"W, present survey depths are 5 to 10 feet (15 - 3 m) shoaler than prior survey depths.

The following charted depths and features originate with the prior survey and are not considered disproved by the present survey:

<u>Depth/Feature</u> (ft/m)	<u>Latitude (N)</u>	<u>Longitude (W)</u>
7/2 ¹ Rk	40°55'42"	73°43'15.5"
14/4 ³	40°56'53.8"	73°40'30.4"
5/1 ⁵	40°54'41"	73°45'20.5"

These depths and features have been brought forward from the prior survey to supplement the present survey. It is recommended that these features be retained as charted. Additional field work is recommended to verify or disprove the existence of these features.

H-1699b (1914) covers the northeastern portion of the

present survey. The prior survey is in very good agreement with the present survey. Present survey depths are 0 to 2 feet (0 - 0⁶ m) shoaler than prior survey depths in the common area.

H-1732a (1914) covers the present survey between Longitudes 73°39'20"W and 73°44'00"W. The prior survey is in very good agreement with the present survey. Present survey depths are 0 to 3 feet (0 - 0⁹ m) shoaler than prior survey depths in the common area.

H-5413a (1933) covers the northern portion of the present survey. The prior survey is in very good agreement with the present survey. Present survey depths are 0 to 3 feet (0 - 0⁹ m) shoaler than prior survey depth in the common area.

Numerous charted rocks and shoreline features originating with the prior survey were neither verified nor disproved by the present survey. It is recommended that these features remain as charted.

The following charted depths and features originate with the prior survey and are not considered disproved by the present survey:

<u>Depth/Feature</u> (ft/m)	<u>Latitude(N)</u>	<u>Longitude(W)</u>
2/0 ⁶	40°55'37"	73°44'26"
4/1 ²	40°55'32.7"	73°44'25.5"
4/1 ²	40°55'34.3"	73°44'21"
5/1 ⁵	40°55'33"	73°44'17"
4/1 ²	40°55'36.5"	73°44'15"
2/0 ⁶	40°55'40"	73°44'13"
4/1 ²	40°55'36.3"	73°44'07"
3/0 ⁹	40°55'34"	73°44'32"
rky	40°55'39"	73°43'16"
9/2 ⁷	40°55'24"	73°43'24"
2/0 ⁶	40°56'18"	73°43'13"
2/0 ⁶	40°56'21.7"	73°43'18"
3/0 ⁹	40°56'13.4"	73°43'02.5"
30/9 ¹	40°57'02.5"	73°39'47"
26/7 ⁹	40°57'29.6"	73°39'32"
15/4 ⁶	40°57'38.2"	73°39'46.8"
*awash	40°57'45.8"	73°39'52.7"
11/3 ⁴	40°57'29.3"	73°40'37.5"
11/3 ⁴	40°57'25.8"	73°40'12.6"
* (1)	40°57'15"	73°40'17"
7/2 ¹	40°57'15"	73°40'10.2"

11/3 ⁴	40°57'10.8"	73°40'18"
11/3 ⁴	40°57'05"	73°40'47"
4/1 ²	40°56'41.3"	73°40'58.5"
3/0 ⁹	40°56'34"	73°41'04"
2/0 ⁶	40°55'55"	73°42'34"
* (1)	40°57'09.4"	73°40'47"
3/0 ⁹	40°57'36"	73°40'05.3"
rky	40°57'11"	73°40'22.5"
6/1 ⁸ Rk	40°54'13.5"	73°45'49"
2/0 ⁶	40°54'38.6"	73°45'12.5"
4/1 ²	40°55'27.6"	73°44'37.8"
5/1 ⁵	40°55'29"	73°44'16.8"
1/0 ³	40°55'28.5"	73°44'11"
16/4 ⁹	40°54'53.8"	73°44'13.5"
9/2 ⁷	40°54'47.5"	73°44'13.5"
7/2 ¹	40°54'48"	73°44'20"
rky	40°54'41"	73°44'15"
8/2 ⁴	40°54'44"	73°44'13"
5/1 ⁵	40°54'36"	73°44'25"
rky	40°54'16"	73°44'20"
9/2 ⁷	40°55'27"	73°43'21"
18/5 ⁵	40°55'11.5"	73°43'27"
13/4	40°55'09"	73°43'27"
2/0 ⁶ Rk	40°55'18.5"	73°43'59"
10/3	40°54'39"	73°44'26.7"
2/0 ⁶ Rk	40°55'21"	73°43'58"
25/7 ⁶	40°55'33.5"	73°42'19"
12/3 ⁷ Rk	40°56'01"	73°42'55"
6/1 ³	40°56'08.7"	73°42'26.6"
4/1 ²	40°56'08"	73°42'24.5"
2/0 ⁶	40°55'52.5"	73°43'14.7"
4/1 ³	40°55'46.5"	73°43'26.5"
1/0 ³	40°55'43.5"	73°44'20.2"
2/0 ⁷	40°55'42.5"	73°44'24.5"
3/0 ⁹	40°56'25.6"	73°41'55"
3/1	40°56'07"	73°41'52"
1/0 ⁴	40°56'08.6"	73°41'47.5"
4/1 ²	40°56'19"	73°41'32.3"
4/1 ³	40°56'27"	73°41'38.7"
4/1 ⁴	40°56'28"	73°41'34"
3/1	40°56'37"	73°42'59.4"

These depths and features have been brought forward from the prior survey supplement the present survey. It is recommended that these features be retained as charted. Additional field work is recommended to verify or disprove the existence of these features.

The present survey is considered adequate to supersede

the prior surveys except as noted in this report.

2. Wire Drag Surveys

H-5078WD	(1930)	1:20,000
<u>H-5142WD</u>	<u>(1931)</u>	<u>1:20,000</u>

The prior surveys listed above cover the present survey area in its entirety.

The following charted depths or features originating with H-5078WD (1930) are not considered disproved by the present survey.

<u>Depth/Feature</u> <u>(ft/m)</u>	<u>Latitude(N)</u>	<u>Longitude(W)</u>
18/5 ⁵	40°55'42"	73°42'39"
rky	40°55'26"	73°43'26"
22/6 ⁷	40°56'25"	73°40'45"
19/5 ⁸	40°54'11.6"	73°45'32.7"
13/4	40°54'18"	73°44'21.5"
9/2 ⁷ Rk	40°55'12"	73°43'45.7"
26/7 ⁹	40°54'54"	73°43'47"

These depths and features have been brought forward from the prior survey supplement the present survey. It is recommended that these features be retained as charted. Additional field work is recommended to verify or disprove the existence of these features.

There are no conflicts between prior survey effective clearance depths and present survey depths.

Two charted depths or features originating with H-5142WD (1931) are not considered disproved by the present survey.

<u>Depth/Feature</u> <u>(ft/m)</u>	<u>Latitude(N)</u>	<u>Longitude(W)</u>
16/4 ⁹	40°57'30.7"	73°39'45.5"
rky	40°57'25.5"	73°40'09"

These depths and features have been brought forward from the prior survey to supplement the present survey. It is recommended that these features be retained as charted. Additional field work is recommended to verify or disprove the existence of these features.

There are no conflicts between prior survey effective clearance depths and present survey depths.

3. Side Scan Sonar Surveys

FE-317SS (1988) 1:10,000

The present survey is common to FE-317SS (1988) in the vicinity of Automated Wreck and Obstruction Information System (AWOIS) Items #4408 and #4415. The following should be noted:

a) AWOIS Item #4408, a charted dangerous sunken wreck, PA, in Latitude 40°56'24.35"N, Longitude 73°41'09.46"W, originates with Local Notice to Mariners 43 of 1973 (LNM 43/73). This item was subsequently investigated by prior survey FE-317SS (1988). The item was not considered disproved. An echo sounder search during the present survey found no indication of the wreck. The item is not considered disproved. No change in charting status is recommended.

b) AWOIS Item #4415, a charted wreck with a depth of 34 feet (10⁴ m), in Latitude 40°54'34.69"N, Longitude 73°43'32.17"W, originates with the prior survey. This item was investigated and a wreck with a depth of 34-ft (10⁴ m) was located in Latitude 40°54'34.73"N, Longitude 73°43'32.46"W. It is recommended that the charted wreck be deleted and a wreck be charted as shown on the present survey.

c) A charted obstruction with a depth of 35 feet (10⁷ m), in Latitude 40°55'23.55"N, Longitude 73°42'23.53"W, originates with the prior survey. This item was investigated and a 31 foot depth (9⁵ m) was located in Latitude 40°55'23.594"N, Longitude 73°42'23.223"W. It is recommended that the obstruction be deleted from the chart, and a 31 foot depth (9⁵ m) be charted as shown on the present survey.

*AWOIS
#7517*

d) A charted rock with a depth of 33 feet (10 m), in Latitude 40°57'09.21"N, Longitude 73°39'59.99"W, originates with the prior survey. This item was investigated and a depth of 32 feet (9⁸ m) was located in Latitude 40°57'09.092"N, Longitude 73°39'59.829"W. It is recommended that the rock be deleted from the chart and the 32 foot depth (9⁸ m) be charted as shown on the present survey.

e) The following charted depth and features originate with the prior survey and were neither verified nor disproved by the present survey:

<u>DEPTH/FEATURE</u> <u>(ft/m)</u>	<u>LATITUDE (N)</u>	<u>LONGITUDE (W)</u>
31/9 ⁴ Rk	40°55'20.18"	73°42'24.5"
27/8 ²	40°55'27.6"	73°42'22.8"
31/9 ⁴ Rk	40°57'09"	73°39'54.3"

These depths and features were brought forward from the prior survey to supplement the present survey. It is recommended that these features be retained as charted. It is also recommended that additional work be performed at an opportune time.

The present survey is adequate to supersede the prior survey in the common area, except as noted in this report.

O. COMPARISON WITH CHARTS 12364SC (29th Edition, Jul. 23/94)
12367 (20th Edition, Feb. 18/95)

Hydrography

The charted hydrography within the common area originates with the previously discussed prior surveys and from sources not readily available. The previously addressed prior surveys require no further consideration. Attention is directed to the following:

1) The following charted depths and features originating with unknown sources are not considered disproved:

<u>DEPTH/FEATURE</u> <u>(ft/m)</u>	<u>LATITUDE (N)</u>	<u>LONGITUDE (W)</u>
1/0 ³	40°56'21"	73°41'36"
3/0 ⁹	40°55'42"	73°44'09"
rock awash	40°57'03"	73°40'57"
rock awash	40°57'16"	73°40'59"
23/7	40°54'47.4"	73°44'04.7"
3/0 ⁹	40°57'29.5"	73°40'12"
17/5 ²	40°55'16.6"	73°43'00"
15/4 ⁵	40°55'11.3"	73°42'59.3"
22/6 ⁷	40°55'10.3"	73°43'03.5"
6/1 ⁸	40°55'54.5"	73°42'10"
rky	40°55'18"	73°42'57.2"
rky	40°56'54.5"	73°40'35"
rky	40°56'25"	73°40'41"

rky	40°56'13.7"	73°41'11.5"
rky	40°56'02.5"	73°41'41"
2/0 ⁶	40°56'34.8"	73°43'37.5"
2/0 ⁷	40°56'44"	73°43'42.7"
1/0 ³	40°57'28"	73°41'30.5"
3/0 ⁹	40°57'29.5"	73°40'11"
6/1 ⁸	40°56'27"	73°43'15"
Obstn rep	40°57'32"	73°40'09"

It is recommended that these depths and features be retained as charted.

The present survey is adequate to supersede the charted hydrography within the common area, except as noted in this report.

P. ADEQUACY OF SURVEY

This is an adequate hydrographic survey and should supersede all prior surveys within the common areas except as noted in the Descriptive Report or in this report.

S. MISCELLANEOUS


Chart compilation using the present survey data was done by Atlantic Hydrographic Branch personnel, in Norfolk, Virginia. Compiled data will be forwarded to Marine Chart Division, Silver Spring, Maryland.

T. RECOMMENDATIONS


It is recommended that additional field work be done at an opportune time to verify or disprove those items that were not resolved by the present survey.

U. ADEQUACY OF SURVEY

This is an adequate hydrographic survey and should supersede all prior surveys within the common areas except as noted in the Descriptive Report or in this report.



Douglas V. Mason
Cartographic Technician
Verification of Field Data



Deborah A. Bland
Cartographer
Evaluation and Analysis

APPROVAL SHEET
H-10559

Initial Approvals:

The completed survey has been inspected with regard to survey coverage, delineation of depth curves, development of critical depths, cartographic symbolization, and verification or disproval of charted data. The digital data have been completed and all revisions and additions made to the smooth sheet during survey processing have been entered in the digital data for this survey. The survey records and digital data comply with NOS requirements except where noted in the Evaluation Report.

Deborah A. Bland

Deborah A. Bland
Cartographer,
Atlantic Hydrographic Branch

Date: SEPT 19, 1997

I have reviewed the smooth sheet, accompanying data, and reports. This survey and accompanying digital data meet or exceed NOS requirements and standards for products in support of nautical charting except where noted in the Evaluation Report.

Nicholas E. Perugini

Nicholas E. Perugini,
Commander, NOAA
Chief, Atlantic Hydrographic Branch

Date: Sept 24, 1997

Final Approval:

Approved: Andrew A. Armstrong, III

Andrew A. Armstrong, III
Captain, NOAA
Chief, Hydrographic Surveys Division

Date: Oct 23, 1997

