H10558

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-10-8-94

Registry No. H-10558

LOCALITY

State NEW YORK

General Locality LONG ISLAND SOUND

Sublocality ECHO BAY TO RODMAN NECK

19 94

CHIEF OF PARTY

LCDR JAMES E. WADDELL JR., NOAA

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DATE OCT 22 1997

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NOAA FORM 76-35A

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

DESCRIPTIVE REPORT

Type of Survey .... BASIC HYDROGRAPHIC.....

Field No. ..... AHP-10-8-94.....

Office No. .....H-10558.....

LOCALITY

State .....NEW YORK.....

General Locality ....LONG ISLAND SOUND.....

Sublocality ....~~Larchmont Harbor~~ Echo Bay to Rodman Neck.....

.....

1994

CHIEF OF PARTY
LCDR James E. Waddell Jr., NOAA

.....

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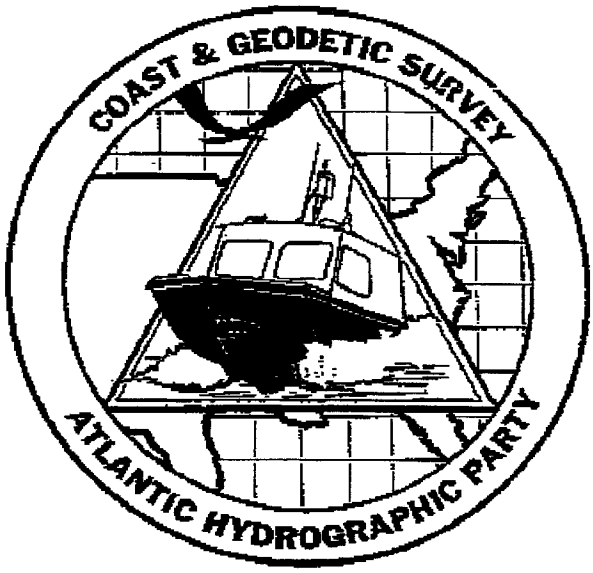
DATE .....

OPR-B285-AHP



Descriptive Report to Accompany
Hydrographic Survey
H-10558

NOAA FORM 77-28 (11-72)

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

HYDROGRAPHIC TITLE SHEET

REGISTER NO.: H-10558

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-10-8-94

State: New York

General locality: ~~Western~~ Long Island Sound

Locality: ~~Larchmont Harbor~~ Echo Bay to Rodman Neck

Scale: 1:10,000 Date of survey: August 1 - 25, 1994

Instructions dated: March 2, 1994 Project No.: OPR-B285-AHP

Vessel: 0518

Chief of party: LCDR James E. Waddell Jr.

Surveyed by: LTJG Ricardo Ramos, ST Dave B. Elliott

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

Graphic record scaled by: RR, DBE

Graphic record checked by: RR, DBE

Protracted by: _____ Automated plot by: Encad Novajet II Plotter (AHB) Bruning Zeta 824A (Field)

Verification by: _____

Soundings in ~~meters~~ feet at ~~MLW~~ MLLW

REMARKS: All times are in UTC.

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

AWOIS/SURF ✓ 10/9/97 SSV

☆ U.S. GOVERNMENT PRINTING OFFICE: 1978-665-010-1174

DESCRIPTIVE REPORT TO ACCOMPANY
HYDROGRAPHIC SURVEY H-10558
FIELD NO. AHP-10-8-94
SCALE: 1:10,000
1994
ATLANTIC HYDROGRAPHIC PARTY
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 "C" as specified by the project instructions.

B. AREA SURVEYED

The area surveyed for H-10558 covers the region from Sands Point west to Rodman Neck and north to Davenport Neck, near the western limits of Long Island Sound. The approximate survey limits are as follows:

North:	40°54'18"
South:	40°51'12"
East:	073°43'12"
West:	073°48'27"

This survey was conducted from August 1, 1994 (DN 213) to August 25, 1994 (DN 237).

C. SURVEY VESSELS

Vessel 0518, 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 in Appendix VI.* The NOS program VELOCITY (Ver. 2.10) and WordPerfect (Ver. 6.0) were also used during this survey.

*Data filed with field records

E. SONAR EQUIPMENT

Not Applicable.

F. SOUNDING EQUIPMENT

Innerspace depth sounder model 448, serial number 175, was used to collect all echo soundings on this survey.

A standard lead line calibrated in meters, S/N 0518, 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:

Velocity Table No.	Cast No.	Deepest Depth(m)	Applicable DN	Cast Position	Day
1	1	45.4	213-217	40°52'18"N 073°44'22"W	215
2	2	43.0	220-224	40°52'15"N 073°44'30"W	223
3	3	42.2	227-231	40°52'15"N 073°44'12"W	228
4	4	42.0	234-237	40°52'16"N 073°44'25"W	236

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 after 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 support documentation are in the "Survey Separates."

Lead line comparisons were taken when weather permitted to determine echo sounder error. No instrument error corrections were necessary. 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 0518. 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 using the HDAPS program REAPPLY. The draft was measured

* Data filed with field records.

by subtracting the difference from a punch mark on the side of launch 0518, 0.6 meters above the transducer, to the water surface.

Settlement and squat measurements for launch 0518 were determined on May 3, 1994 (DN 123). 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 plot using the HDAPS program REAPPLY.

Predicted tides for this project were provided on diskette by N/OES231 for the Willets Point, New York reference station number 851-6990. Correctors for this survey were used as designated in the project instructions. The correctors are as follows:

Time Correction		
High Water	Low Water	Range Ratio
-0.20 min	-0.20 min	x 1.02

All elevations and soundings on survey H-10558 are based on MLLW unless otherwise specified.

Predicted tides determined from Willets Point, New York, with correctors designated in section 5.9 of the project instructions, were used on the final sounding plot. Approved tide levels were requested from the Product and Services Branch, Datums Section, N/OES231, in a letter dated September 6, 1994. A copy is appended to this report. Approved tides and zoning were applied during office processing.

No bracketing levels were run at the completion of this survey because closing levels for the project will be conducted within an acceptable time frame to acquire smooth tides for processing.

H. CONTROL STATIONS See also Evaluation Report

The horizontal control datum for this project is the North American Datum of 1983. Initially, the USCG's DGPS radio beacon at Montauk Point, NY was used on days 213, 214, and 217. After day 217, the radio beacon was not operational due to storm damage. Since the USCG could not determine when the radio beacon would be permanently operational, it was decided to re-install the reference station on the Throgs Neck Light, station 001. The reference station was used for the remainder of the survey with the exception of days 236 and 237. The Montauk Radio Beacon was repaired and transmitting again, and was used on days 236 and 237. The positions for the stations used are shown in the Control Station list appended to this report.

* Data filed with field records.

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 at Throgs Neck Light. An Ashtech Sensor serial number 700417A1065, with antenna serial number 700378A0275, was used as the remote station on launch 0518. Maxon and TAD VHF radios were used as the data link between the reference station receiver and the launch sensor. The primary GPS reference station site (001) was set on the Throgs Neck Light. Program MONITOR was run prior to using this reference station, to check its susceptibility to multi-path problems. The test indicated 100% availability at 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 FPM 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 computes the acceptable error margin based on the HDOP and also the observed difference between our 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 shown on the final sounding plot was transferred by hand from TP-01266 and TP-01269. These manuscripts were compiled using NAD 1927 at 1:20,000 scale and enlarged to 1:10,000 scale for use with this survey. Shoreline verification was accomplished during inshore hydrographic data acquisition and by visual inspection. The shoreline manuscripts provided for this survey were not updated with currently charted items that were found to exist. The hydrographer recommends that these manuscripts be revised to reflect currently charted features that have been assigned reference numbers, or detached positions during survey H-10558. Concur

Shoreline shown on the final sounding plot for the following ledges is shown in red, since it constitutes a change when compared with the T-sheet shoreline. The shoreline was applied based on: 1) foul limit lines which were run around the ledges or 2) the charted depiction of the ledges, which accurately depicted them.

* Data filed with field records.

Ledge Name or Area Description	Lat. (N)	Long. (W)
Middle Ground	40°53'45"	073°45'33"
North of Davids Isl.	40°53'~~21~~23"	073°46'09"
NE of Davids Isl.	40°53'15"	073°46'00"
East of Davids Isl. - Group of 6 ledges within foul area that extends SW from Huckleberry Isl.	40°53'08"	073°45'57"
Group of 3 ledges	40°52'57"	073°45'09"
Columbia Isl.	40°52'39"	073°45'55"
Pea Isl.	40°52'39"	073°45'42"
Ledge (nondescript)	40°52'34"	073°45'34"
Machaux Rock	40°52'27"	073°46'30"
Ledge (nondescript)	40°52'27"	073°46'54"
Middle Reef	40°52'18"	073°46'15"
East Nonations	40°52'03"	073°46'00"
South Nonations	40°51'54"	073°46'10"
The Blauzes	40°51'42"	073°46'30"

The reference number descriptions, field notes, and explanations of new shoreline features are located on the graphic record or on the boat sheet. Photographs are included with the survey data as well. Photos filed with Field records

Foul limit lines were acquired on this survey, as per the Hydrographic Manual, section 7.3.6, in near-shore areas that delineate non-navigable areas of water due to numerous obstructions. These limits have been transferred to the field sheet as black dashed lines.

The hydrographer recommends that shoreline from TP-01266 and TP-01269 should supersede charted shoreline, with the exceptions shown in red on the final sounding plot. Concur

K. CROSSLINES

A total of 17.1 linear nautical miles of crosslines were run, which represents approximately 14.7% of the main scheme hydrography. Crossline soundings agree with the main scheme soundings within 0.2 to 0.4 meters, with the exception of areas where the bottom is irregular. Concur

L. JUNCTIONS See also Evaluation Report

This survey junctions with:

H-10346, 1990, 1:10,000 scale survey, to the southeast
H-10347, 1990, 1:10,000 scale survey, to the east

H-10541, 1994, 1:10,000 scale survey, to the southwest
H-10559, 1994, 1:10,000 scale survey, to the north

Junction soundings between this survey and those listed above agree within 0.2 to 1.5 meters. These differences should be reduced when smooth tides are applied.

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-5547	1:10,000 scale	dated 1934
H-5546	1:10,000 scale	dated 1934
H-5545	1:10,000 scale	dated 1934
H-5413	1:10,000 scale	dated 1933
H-5407	1:10,000 scale	dated 1933
H-5078WD	1:20,000 scale	dated 1930
H-2223	1:10,000 scale	dated 1895
H-1732	1:20,000 scale	dated 1886
H-1560a,b,c	1:10,000 scale	dated 1882-1906
FE-293-SS	1:10,000 scale	dated 1986
FE-303-SS	1:10,000 scale	dated 1988
BP 39371	COE Blueprint	dated 1944
BP 74424	COE Blueprint	dated 1964
BP 75540-43	COE Blueprint	dated 1968
BP-82719-20	COE Blueprint	dated 1967

Not available

None of the AWOIS items investigated originated from these prior surveys. Do not concur. See Evaluation Report

N. ITEM INVESTIGATION REPORTS · See Notes on Investigation Report sheets

All AWOIS reports are appended to this report. There were a total of 18 AWOIS items addressed on this survey. 4 additional AWOIS Items were overlooked that should have been addressed. (AWOIS # 1725, (4395, 6367, and 6544)

O. COMPARISON WITH THE CHART · See also Evaluation Report

Comparison is made with the following charts:

Chart No.	Edition	Edition Date
12366	23rd	March 27, 1993
12367	19th	August 17, 1991

Sounding data acquired on H-10558 shows agreement within 0.5-1.5 meters, with the current soundings being deeper than charted soundings. Minor inconsistencies seen are attributed to predicted tides used on the final sounding plot.

No dangers to navigation were identified on this survey.

The hydrographer recommends that all charted rocks be retained as charted. concur

The following are new features found on this survey:

DN	PN	Latitude N	Longitude W	Description
214	61-62	40°53'46.7"	073°46'38.9"	steel bulkhead-already charted
217	77	40°52'56.14"	073°46'04.43"	pier ruins - chart ruins
222	140	40°53'50.86"	073°46'09.41"	wood & steel pier (4.7m)-already charted
222	158	40°53'27.28"	073°46'53.34"	rock and pile (0.5m)-inside fed limits-Do not chart
223	224	40°51'27.18"	073°47'16.69"	pier (5.2m) - chart Pier
223	233	40°51'31.09"	073°47'28.46"	W end brkwater(2.5m)] chart bkw
223	234	40°51'29.34"	073°47'27.08"	E end brkwater(2.5m)
224	296	40°51'25.52"	073°43'40.29"	wooden pier (5.1m)-chart pier
224	297	40°51'31.22"	073°43'41.63"	mooring buoy charted as an obstruction Delete obstn.

The following are features which are currently charted as soundings, but should be revised to rocks:

223	192	40°52'31.76"	073°46'03.77"	rock (0.1m) Chart 2RK
223	196	40°52'24.08"	073°46'51.69"	rock (0.0m) Chart 2RK

The hydrographer recommends the above features be charted. Because they exist near-shore, these features are not considered dangers to navigation. concur

Two currently charted obstructions were found to be "No Wake Zone - 5 MPH" buoys at the following locations: Delete the obstn notes and symbols

DN	PN	Latitude	Longitude	Description
223	235	40°51'28.11"	073°47'37.02"	Seasonal buoy
223	236	40°51'30.87"	073°47'32.99"	Seasonal buoy

The following are comparisons of charted bulls eye or wire drag soundings. The charted positions were scaled from charts 12366 and 12367.

Surveyed Depth (Meters)	Charted Depth (ft/m)	Charted Position Lat. (N)	Long (W)	Recommendation
5.7	16/4.87	40°53'38.5"	073°45'14.5"	~~Retain as charted~~ update
2.8	9/2.74	40°53'42.5"	073°45'51.6"	~~Retain as charted~~ update
13.1	40/12.19	40°53'36.0"	073°45'26.0"	~~Retain as charted~~ update
13.4	41/12.49 obstr	40°53'12.0"	073°43'54.5"	Retain as charted-concur
8.1	21/6.40 RK	40°53'21.0"	073°44'02.0"	Retain as charted-concur
7.0	18/5.48	40°53'19.0"	073°44'10.0"	Retain as charted-concur
5.7	13/3.96	40°53'15.0"	073°44'08.0"	Retain as charted-concur
5.7	18/5.48	40°53'12.0"	073°44'07.0"	~~Retain as charted~~ update

4.2	17/5.18	40°53'10.0"	073°44'09.0"	Update sounding-concur
4.2	18/5.48	40°53'05.0"	073°44'11.0"	Update sounding -concur
3.6 Awois LSH	10/3.04	40°52'59.0"	073°44'10.0"	~~Retain as charted~~ update
3.5	11/3.35	40°52'56.0"	073°44'12.0"	~~Retain as charted~~ update
9.9	26/7.92 RK	40°53'16.0"	073°44'03.0"	Retain as charted- concur
11.4	32/9.75 RK	40°53'08.0"	073°44'02.0"	Retain as charted-concur
2.6	5/1.52 RK	40°52'51.0"	073°44'13.0"	Retain as charted- concur
1.1	5/1.52	40°52'45.0"	073°44'21.5"	Update sounding- concur
1.9	6/1.82	40°52'43.0"	073°44'16.0"	~~Retain as charted~~ update
1.7	6/1.82	40°52'34.0"	073°44'26.5"	Update sounding- concur
6.7	18/5.48	40°52'33.0"	073°44'15.0"	Retain as charted- concur
11.3	30/9.14	40°52'33.0"	073°44'04.0"	Retain as charted- concur
5.2	17/5.18	40°51'35.0"	073°44'14.0"	~~Retain as charted~~ update
3.4	6/1.82	40°51'17.0"	073°44'30.0"	Retain as charted -concur
2.3	9/2.74	40°51'17.0"	073°44'34.0"	Update sounding - concur
4.0	12/3.65	40°51'27.5"	073°44'45.0"	~~Retain as charted~~ update
5.7	16/4.87	40°53'38.0"	073°45'15.0"	~~Retain as charted~~ update
2.0	7/2.13	40°53'34.0"	073°45'21.0"	Update sounding - concur
6.4	7/2.13	40°53'30.0"	073°45'26.0"	~~Retain as charted~~ update
3.3	11/3.35	40°53'28.0"	073°45'24.0"	Update sounding- concur
8.9	1/0.3	40°53'10.0"	073°45'19.5"	~~Retain as charted~~ update
3.7	5/1.52 RK	40°53'01.5"	073°45'27.5"	Retain as charted concur
4.6	17/5.18	40°53'18.5"	073°45'53.5"	Update sounding concur
1.2	6/1.82	40°53'18.3"	073°45'48.0"	Update sounding concur
2.8	6/1.82	40°53'10.0"	073°45'46.0"	Retain as charted concur
4.6	6/1.82	40°53'05.0"	073°45'55.0"	Retain as charted concur
1.7	3/0.91	40°53'02.5"	073°45'59.0"	Retain as charted concur
5.1	6/1.82	40°52'53.0"	073°45'50.0"	Retain as charted concur
3.4	5/1.52	40°52'48.5"	073°45'53.5"	Retain as charted concur
3.9	6/1.82	40°52'49.5"	073°45'35.0"	Retain as charted concur
2.3	6/1.82	40°52'47.5"	073°45'39.0"	~~Retain as charted~~ update
1.3	5/1.52	40°52'46.0"	073°45'44.0"	Update sounding concur
2.3	2/0.6	40°52'45.5"	073°45'55.5"	Retain as charted concur
2.5	9/2.74	40°52'44.0"	073°45'37.0"	Update sounding concur
4.9	18/5.48	40°52'39.0"	073°45'33.0"	Update sounding concur
4.9	14/4.26	40°52'38.0"	073°45'31.5"	~~Retain as charted~~ update
1.2	2/0.6	40°52'35.0"	073°45'31.0"	~~Retain as charted~~ update
1.0	5/1.52	40°52'30.0"	073°45'36.0"	Update sounding concur
11.8	39/11.88 WK	40°51'54.5"	073°45'38.5"	Retain as charted concur
9.7	24 ~~29~~/8.83 RK	40°51'34.5"	073°45'59.0"	Retain as charted concur
3.7	14/4.26	40°53'34.0"	073°46'09.0"	Update sounding concur
2.8	11/3.35	40°53'32.5"	073°46'15.0"	Update sounding concur
2.2	6/1.82	40°53'23.0"	073°46'16.0"	~~Retain as charted~~ update
0.4	4/1.21	40°53'16.5"	073°46'24.0"	Update sounding concur
2.9	4/1.21	40°53'15.5"	073°46'20.0"	~~Retain as charted~~ update
2.2	6/1.82	40°52'43.0"	073°46'27.0"	~~Retain as charted~~ update
3.0	9/2.74	40°52'41.0"	073°46'03.5"	~~Retain as charted~~ update
3.4	9/2.74	40°52'37.5"	073°46'03.5"	~~Retain as charted~~ update
1.0	1/0.3	40°52'32.5"	073°46'04.0"	See New Feature (PN 192) chart 2 Rk
3.5	11/3.35	40°52'09.0"	073°46'16.5"	~~Retain as charted~~ update
5.4	10 ~~14~~/4.2	40°52'06.0"	073°46'14.0"	~~Retain as charted~~ update

3.3	~~10~~ 12/3.04	40°52'06.5"	073°46'22.0"	~~Retain as charted~~ update
9.1	22/6.7	40°52'00.0"	073°46'11.0"	Retain as charted- concur
2.1	6/1.82	40°51'54.5"	073°46'14.0"	~~Retain as charted~~ update
9.3	18/5.48 wdk	40°51'47.0"	073°46'16.0"	Retain as charted concur
2.8	6/1.82	40°52'47.0"	073°46'31.0"	~~Retain as charted~~ update
2.9	6/1.82	40°52'45.5"	073°46'52.0"	~~Retain as charted~~ update
2.8	8/2.43	40°52'27.0"	073°46'38.0"	~~Retain as charted~~ update
2.5	5/1.52	40°52'26.0"	073°46'57.0"	Retain as charted concur
2.1	1/0.3	40°52'13.5"	073°46'58.0"	Retain as charted- concur
5.2	10/3.04	40°51'49.0"	073°46'51.5"	Retain as charted- concur
5.5	5/1.52	40°51'45.0"	073°46'49.0"	Retain as charted- concur
5.7	6/1.82	40°51'43.0"	073°46'51.0"	Retain as charted- concur
3.8	15/4.57	40°51'33.5"	073°46'33.5"	Update sounding- concur
4.3	11/3.35	40°51'58.0"	073°47'08.0"	Retain as charted- concur
2.0	3/0.91	40°51'55.0"	073°47'14.0"	Retain as charted- concur
1.3	6/1.82	40°51'49.0"	073°47'07.5"	Update sounding- concur
6.6	12/3.65	40°51'36.5"	073°47'31.5"	Retain as charted- concur
1.8	9/2.74	40°51'33.0"	073°47'32.0"	Update sounding- concur

The controlling depth of the channel located within New Rochelle Harbor is charted as "5 ft for 120 width 1985." Survey depths range from ~~2.0~~ 1.8 to ~~6.6 meters~~ 1.4 fathoms. The controlling depth of the channel leading south from Davids Island is charted as "13 feet Aug 1949." Survey depths range from ~~3.7~~ 1.3 to ~~5.0 meters~~ 1.7 fathoms. These controlling depth legends should be updated to reflect soundings from this survey, after smooth tides are applied. Concur

P. ADEQUACY OF SURVEY See also Evaluation Report

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

Q. AIDS TO NAVIGATION See also Evaluation Report

The following aids to navigation are maintained by the U.S. Coast Guard and lie within the survey area. All of the aids serve their intended purpose. The Execution Rocks Light (USCGLL# 21440) position was compared with DGPS during hydrography as per section 4.2.4 of the project instructions. A detached position was not taken due to the survey launch's position outside of numerous rocks surrounding the lighthouse. The charted position was deemed accurate and on station. All other aids to navigation were positioned by DGPS during hydrographic operations. Resources were not available for 3rd order positions of all the non-floating navigational aids.

Fixed Aids:

Pos. No.	Name and USCGLL#	LL Position	Survey Pos.	Distance/Bearing from Charted Position
28	Glen Island Light ~~25~~ 13 (25965)	40°53.3'N 073°46.9'W	40°53'20.77"N 073°46'49.39"W	12m/233°
30	Aunt Phebe Rock Light 10 (25945)	40°53.2'N 073°46.5'W	40°53'08.08"N 073°46'30.67"W	16m/278°
50	Gangway Rock Light 27A (21480)	40°51.5'N 073°44.8'W	40°51'28.98"N 073°44'45.71"W	17m/267°
52	Sands Point Daybeacon (21470)	Not Listed	40°~~53'08.08~~ 52' 01.275"N 073°~~46'30.67~~ 43' 57.702"W	22m/311°

All floating aids to navigation were compared to the presently charted positions and found to be on station with the following exceptions:

Floating Aids:

Pos. No.	Name and USCGLL#	LL Position	Survey Pos.	Distance/Bearing from Charted Position
38	Glen Island Buoy 6 (25935)	N/A	40°52'59.55"N 073°47'14.67"W	35m northeast
49	Gangway Rock Gong Buoy 27 (21485)	N/A	40°51'30.68"N 073°44'48.64"W	40m north
58	Execution Rocks Shoal East Side Buoy 44 (21455)	N/A	40°52'47.58"N 073°44'07.05"W	30m north

The point of contact for information concerning aids to navigation for this survey was Master Chief Johnson, USCG ATON, (212) 668-6385.

The hydrographer feels that additional navigational aids should be placed between Hunter Island and Glen Island. This waterway has four buoys to mark the channel, however only one of these aids marks the green side. A ledge is charted extending north from Hog Island (See AWOIS # 7691) and should be marked with an aid to warn mariners of the offshore end of this ledge. An aid should also be placed near the charted rock that was located by position number 299 ~~on this survey~~. in the vicinity of Lat 40/52/54N Lon 73/47/10 W in vicinity of Lat 40/52/49.5N Lon 73/47/04.5 W in Lat 40/52/56.944N, Lon 73/47/15.628 W

Concur

All charted cable and pipeline crossing areas were verified within the survey limits.

All bridge clearances were checked, evaluated and found to be charted correctly.

R. STATISTICS

Description	Quantity
Total Number of Positions	1716
Total Lineal Nautical Miles of Hydrography	116.09
Total Lineal Nautical Miles of Cross Lines	17.11
Square Nautical Miles of Hydrography	7.5
Days of Production	16
Detached Positions	99
Bottom Samples	18
Tide Stations	3
Velocity Casts	4

S. MISCELLANEOUS See also Evaluation Report

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, which is 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 only taken at a number of selected and evenly dispersed locations. These locations were scaled from the previously charted bottom characteristics. This technique showed no evidence of change.

No predicted tidal anomalies were observed during this survey.

T. RECOMMENDATIONS See also Evaluation Report

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.

* Data Filed with Field Records

U. REFERRAL TO REPORTS

Title	Transmittal Information
Descriptive Report to Accompany Survey H-10346	Atlantic Hydrographic Section N/CG244, Norfolk, VA (1990)
Descriptive Report to Accompany Survey H-10347	Atlantic Hydrographic Section N/CG244, Norfolk, VA (1990)
Descriptive Report to Accompany Survey H-10541	Atlantic Hydrographic Section N/CG244, Norfolk, VA (1994)
Descriptive Report to Accompany Survey H-10559	Atlantic Hydrographic Section N/CG244, Norfolk, VA (1994)
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, Seattle, WA (11/94)
Coast Pilot Report	Atlantic Hydrographic Section N/CG245, Seattle, WA (11/94)

Respectfully Submitted,

Ricardo Ramos

Ricardo Ramos, LTJG, NOAA
Hydrographer-In-Charge
Atlantic Hydrographic Party

AWOIS NO: 6329

Item Description: Obstruction (Submerged Pile)

Source: Unknown

AWOIS Position: **Lat** - 40/53/18.35N **Lon** - 073/46/14.47W

Required Investigation: DI, BD -- 25m radius

Charts Affected: 12363, 12364 SC, 12366

INVESTIGATION

Date(s)/DN(s): 8/2/94 (DN:214)

Position Numbers: 75 **Launch Number:** 0518

Investigation Used: VS **Water Visibility:** 1.5m

Position Determined By: DGPS

Investigation Summary: The area was searched visually and with the echo sounder. The submerged pile was located visually, approximately nine meters from the position listed in the AWOIS listing. The pile was approximately ten inches in diameter and was 1.0 meter below the water at the time of positioning which equates to 0.5 meter below with ~~predicted~~ approved tides at MLLW.

CHARTING RECOMMENDATION

The hydrographer recommends that the charted submerged pile be retained as charted at the following location. DO NOT CONCUR

Recommended Position: **Lat** - 40/53/18.165N **Lon** - 073/46/14.150W

Recommended Least Depth: 0.~~5~~ 6 meters (2 ft) at MLLW, corrected for ~~predicted~~ actual tides.

****

COMPILATION NOTES

Chart a ⁂ obstn in the present survey location.
Delete charted ~~sumb~~ subm pile symbol.

AWOIS NO: 6330

Item Description: Obstruction (Rock Pile)

Source: LNM 34/80 - 3rd CGD

AWOIS Position: **Lat** - 40/53/06.25N **Lon** - 073/46/36.47W

Required Investigation: BD, DI -- 50m radius

Charts Affected: 12363, 12364 SC, 12366

INVESTIGATION

Date(s)/DN(s): 8/2/94 (DN:214)

Position Numbers: 60 **Launch Number:** 0518

Investigation Used: VS **Water Visibility:** 1.5m

Position Determined By: DGPS

Investigation Summary: This item was located with the help of the shellfish fishermen aboard the New York State licensed F/V *Peconic Pride*. The F/V *Peconic Pride* works this area regularly and was very familiar with the obstruction being investigated. The obstruction is very likely a pile of rocks lost during transit while constructing the circular rock jetty which is in very close proximity to this feature. The obstruction was 3.0 meters below the water at the time of positioning which equates to 1.0 meter below with ~~predicted~~ approved tides at MLLW. The jetty can be seen in the photograph submitted as Reference No. 18 - Goose Island and surrounding jetty.

CHARTING RECOMMENDATION

The hydrographer recommends that the charted obstruction be retained as charted at the following location. Concur with clarification

Recommended Position: **Lat** - 40/53/06.137N **Lon** - 073/46/35.964W

Recommended Least Depth: 1.0m (3ft) at MLLW, corrected for ~~predicted~~ actual tides.

Chart a 3: Obstn in the present survey location. Delete dangerous subm obstruction symbol and obstn rep note.

AWOIS NO: 6331

Item Description: Unknown (Submerged Wreck)

Source: CL 52/50 and CL 1354/71 - USPS

AWOIS Position: **Lat** - 40/52/41.95N **Lon** - 073/47/43.37W

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

Charts Affected: 12363, 12364 SC, 12366

INVESTIGATION

Date(s)/DN(s): 8/2/94 (DN:214)

Position Numbers: 72 **Launch Number:** 0518

Investigation Used: VS **Water Visibility:** 1.5m

Position Determined By: DGPS

Investigation Summary: The charted submerged wreck was located at the scaled position using the echo sounder and it is visible from the surface. The wreck was 3 meters below the water at the time of positioning which equates to 2.2 meters below with predicted tides at MLLW. The submerged wreck is approximately 8-meters long and 2-meters wide, lying NNE to SSW, and is 8-to 10-meters from shore.

CHARTING RECOMMENDATION

The hydrographer recommends that the charted submerged wreck be retained as charted at the following location. Concur with clarification

Recommended Position: **Lat** - 40/52/42.094N **Lon** - 073/47/42.651W

Recommended Least Depth: 2.~~7~~ 3 meters (7 Ft) at MLLW corrected for ~~predicted~~ actual tides.

****

COMPILATION NOTES

Chart a wk at the above present survey location.
Delete the charted subm wk w/ danger curve symbol.

AWOIS NO: 6332

Item Description: Obstruction (Submerged Pile)

Source: CL 31/65 - COE and Unknown source

AWOIS Position: **Lat** - 40/52/17.35N **Lon** - 073/48/00.47W

Required Investigation: BD, DI -- 50m radius

Charts Affected: 12363, 12364 SC, 12366

INVESTIGATION

Date(s)/DN(s): 8/2/94 (DN:214)

Position Numbers: 71 **Launch Number:** 0518

Investigation Used: VS **Water Visibility:** 1.5m

Position Determined By: DGPS

Investigation Summary: The submerged pile was located with the help of local rowers who transit the area daily. The pile was 1.2 meters below the water at the time of positioning which equates to 0.3 meters below with ~~predicted~~ actual tides at MLLW.

CHARTING RECOMMENDATION

The hydrographer recommends that the charted submerged pile be retained as charted at the following location. concur with clarification

Recommended Position: **Lat**-40/52/17.441N **Lon**-73/48/00.517W

Recommended Least Depth: 0.~~3~~ 5 meters (1 ft) at MLLW, corrected for ~~predicted~~ actual tides.

****

COMPILATION NOTES

Chart a 1: Obstn in the present survey location. Delete charted subm pile symbol and note.

AWOIS NO: 6333

Item Description: Obstruction (Rock)

Source: CL 1564/79 - USPS and LNM 24/80 - 3rd CGD

AWOIS Position: **Lat** - 40/51/32.36N **Lon** - 073/47/24.47W

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

Charts Affected: 12363, 12364 SC, 12366

INVESTIGATION

Date(s)/DN(s): 8/2/94 (DN:214)

Position Numbers: 74 **Launch Number:** 0518

Investigation Used: VS **Water Visibility:** 1.5m

Position Determined By: DGPS

Investigation Summary: A 5-meter diameter rock was found visually as described in the AWOIS listing. Numerous other rocks were visible in this area extending to shore. The rock described with detached position number 74 is believed to be the furthest offshore rock in the area. The rock was awash at the time of positioning which equates to -0.~~5~~4 meters with ~~predicted~~ actual tides at MLLW. (Photo submitted with reports).

CHARTING RECOMMENDATION

The hydrographer recommends that the charted note, "Rks rep", be revised to a rock symbol at the following location. Concur

Recommended Position: **Lat** - 40/51/33.853N **Lon** - 073/47/22.134

Recommended Least Depth: -0.~~5~~4 meters at MLLW, corrected for ~~predicted~~ actual tides. (2) ft

****

COMPILATION NOTES

Chart Rk awash symbol w/ (2) elevation and change note to Rks in present survey location. Remove Rks rep. note
*(2) Rks

AWOIS NO: 6366

Item Description: Swede (Submerged Wreck)

Source: LNM 41/59 - 3rd CGD and Unknown source

AWOIS Position: **Lat** - 40/52/33.55N **Lon** - 073/45/33.17W

Required Investigation: BD, DI -- 100m radius

Charts Affected: 12363, 12364 SC, 12366

INVESTIGATION

Date(s)/DN(s): 8/5/94 (DN:217)

Position Numbers: 76 **Launch Number:** 0518

Investigation Used: VS **Water Visibility:** 1.5m

Position Determined By: DGPS

Investigation Summary: The submerged wreck was located with the assistance of Captain Sal Gugliara, SeaTow Owner/Operator, City Island, NY (718-885-0101 or 914-698-6523). The wreck is marked with a small float and is surrounded by numerous rocks and lobster traps. The submerged wreck is approximately 10-meters long and 3-meters wide and is lying in a NNE to SSW orientation. The wreck was 5.1 meters below the water at the time of positioning which equates to 2.8 9 meters with ~~predicted~~ approved tides at MLLW.

CHARTING RECOMMENDATION

The hydrographer recommends that the charted wreck PA, be revised to a submerged wreck at the following location. The PA notation should be deleted. Concur

Recommended Position: **Lat** - 40/52/35.60N **Lon** - 073/45/33.21W

Recommended Least Depth: 2.8 9 meters at MLLW, corrected for ~~predicted~~ approved tides. (9 ft)

Chart a 9: wk in the present survey location.
Delete charted dangerous subm wk symbol.

AWOIS NO: 6515

Item Description: Unknown ~~(Steel Bulkhead)~~

Source: CL 1286/66 - COE

AWOIS Position: **Lat** - 40/53/48.35N **Lon** - 073/46/38.47W

Required Investigation: VS, BD -- 50m radius

Charts Affected: 12363, 12364 SC, 12366

INVESTIGATION

Date(s)/DN(s): 8/2/94 (DN:214)

Position Numbers: 61 - 62 **Launch Number:** 0518

Investigation Used: VS **Water Visibility:** 1.5m

Position Determined By: DGPS

Investigation Summary: The position for the wreck shown on the AWOIS listing falls behind a steel bulkhead that was positioned with detached positions 61 and 62. (See photo submitted with reports). The area seaward of the bulkhead was searched and nothing was found. Floating piers are depicted on the T-sheet, but they have been removed. The hydrographer believes that the wreck may have been removed when the bulkhead was constructed and backfilled with dirt.

CHARTING RECOMMENDATION

The hydrographer recommends that the charted wreck be removed from the chart. Concur

Recommended Position:
N/A

Recommended Least Depth: N/A

****

COMPILATION NOTES

Remove the charted wreck and chart a bulkhead in the present survey location of Lat 40/53/48.35N Lon 73/46/38 W.

AWOIS NO: 6516

Item Description: Obstruction (Piles)

Source: Unknown

AWOIS Position: **Lat** - 40/53/01.35N **Lon** - 073/47/28.47W

Required Investigation: VS, BD -- 100m radius

Charts Affected: 12363, 12364 SC, 12366

INVESTIGATION

Date(s)/DN(s): 8/2/94 (DN:214)

Position Numbers: 63 - 64 **Launch Number:** 0518

Investigation Used: VS **Water Visibility:** 1.5m

Position Determined By: DGPS

Investigation Summary: The area was searched visually and the feature was discovered. Position number 63 was taken at the eastern end of the row of seven twelve inch diameter piles, which parallel the shoreline. Position number 64 was taken at the western end of the piles. The piles were 2.0 meters above the water at the time of positioning which equates to 3.8 meters with ~~predicted~~ actual tides at MLLW. There was no evidence of the pier as described in the AWOIS listing. The hydrographer believes that the pier may have been a floating pier and was removed. (Photo submitted with reports).

CHARTING RECOMMENDATION

The hydrographer recommends that the charted piles be retained as charted between the following locations. ~~Do not concur~~ Concur with Clarification

Recommended Position: 63 **Lat** - 40/53/00.429N **Lon** - 073/47/26.779W
64 **Lat** - 40/53/01.214N **Lon** - 073/47/28.350W

Recommended Least Depth: 3.~~8~~7 meters above MLLW, corrected for ~~predicted~~ actual tides. (12 FT)

Retain CHARTED Piles, Change labels to subm. piles. Remark Charted pier between the visible piles

AWOIS NO: 6517

Item Description: Obstruction (Rowing Course Lane Maker)

Source: CL 31/65 - COE and TP 01269/84 -Rev--Class III

AWOIS Position: **Lat** - 40/52/46.35N **Lon** - 073/47/40.47W

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

Charts Affected: 12363, 12364 SC, 12366

INVESTIGATION

Date(s)/DN(s): 8/2/94 (DN:214)

Position Numbers: 65 **Launch Number:** 0518

Investigation Used: VS **Water Visibility:** 1.5m

Position Determined By: DGPS

Investigation Summary: A cement and steel lane marker was found within the search area, just above the high water line. The area offshore of the lane marker was searched visually and with the echo sounder. Tall grass prevented a detailed search for the reported pile. Local rowers who transit the area daily could not confirm or deny the existence of the pile. The pile may have been located within a tall bed of grass. The lane marker is above the high water line and it is not considered a danger to navigation. (Photo submitted with reports).

CHARTING RECOMMENDATION

The hydrographer recommends that the charted pile be retained as charted at the following location. [redacted] Concur, OAB Concur.

Recommended Position: **Lat** - 40/52/46.864N **Lon** - 073/47/41.805W

Recommended Least Depth: Height of onshore lane marker is 4.7 meters above MLLW, corrected for ~~predicted~~ actual tides.
(8 Ft)

****

COMPILATION NOTES

~~Supercede with survey data.~~ OAB
Chart at present survey location

AWOIS NO: 6518

Item Description: Obstruction (Submerged Pile)

Source: CL 31/65 - COE and TP 01269/84 -Rev--Class III

AWOIS Position: **Lat** - 40/52/44.35N **Lon** - 073/47/35.47W

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

Charts Affected: 12363, 12364 SC, 12366

INVESTIGATION

Date(s)/DN(s): 8/2/94 (DN:214)

Position Numbers: 66 **Launch Number:** 0518

Investigation Used: VS **Water Visibility:** 1.5m

Position Determined By: DGPS

Investigation Summary: The area was search visually and with the echo sounder. A pile was located with the help of local rowers who transit the area daily. The submerged pile was 0.6 meter below water at the time of positioning which equates to 1.0 meter above the water with ~~predicted~~ approved tides at MLLW. This pile is located near the high water line and it is not considered a danger to navigation.

CHARTING RECOMMENDATION

The hydrographer recommends that the pile be retained as charted at the following location. Concur

Recommended Position: **Lat** - 40/52/44.506N **Lon** - 073/47/36.048W

Recommended Least Depth: 1.0 meters above MLLW, corrected for ~~predicted~~ actual tides. (4Ft)

****

COMPILATION NOTES

Chart at present Survey location

AWOIS NO: 6519

Item Description: Obstruction (Rowing Course Lane Maker)

Source: CL 31/65 - COE and TP 01269/84 -Rev--Class III

AWOIS Position: **Lat** - 40/52/32.35N **Lon** - 073/47/50.47W

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

Charts Affected: 12363, 12364 SC, 12366

INVESTIGATION

Date(s)/DN(s): 8/2/94 (DN:214)

Position Numbers: 67 **Launch Number:** 0518

Investigation Used: VS **Water Visibility:** 1.5m

Position Determined By: DGPS

Investigation Summary: A cement and steel lane marker was found within the search area, above the high water line. The area offshore of the lane marker was searched visually and with the echo sounder. Tall grass prevented a detailed search for the reported pile. Local rowers who transit the area daily could not confirm or deny the existence of the pile. The pile may have been located within a tall bed of grass. The lane marker is well above the high water line and it is not considered a danger to navigation. (Photo submitted with reports).

CHARTING RECOMMENDATION

The hydrographer recommends that the pile be retained as charted at the following location. Concur

Recommended Position: **Lat** - 40/52/31.880N **Lon** - 073/47/49.747W

Recommended Least Depth: Height of onshore lane marker is 4.2' (14 ft) meters above MLLW, corrected for ~~predicted~~ actual tides.

****

COMPILATION NOTES

Chart at Present survey location

AWOIS NO: 6520

Item Description: Obstruction (Unknown Obstruction)

Source: CL 31/65 - COE and TP 01269/84 -Rev--Class III

AWOIS Position: **Lat** - 40/52/30.35N **Lon** - 073/47/45.47W

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

Charts Affected: 12363, 12364 SC, 12366

INVESTIGATION

Date(s)/DN(s): 8/2/94 (DN:214)

Position Numbers: 68 **Launch Number:** 0518

Investigation Used: VS **Water Visibility:** 1.5m

Position Determined By: DGPS

Investigation Summary: The submerged obstruction was located with the help of local rowers who transit the area daily. The area was searched visually using the echo sounder, while probing the bottom with the sounding pole. The hydrographer, using the sounding pole, was able to make contact with a feature that felt like a sumbmerged pile. A positive identification could not be made because probing with the sounding pole stirred up the bottom and caused reduced water visibility.

CHARTING RECOMMENDATION

The hydrographer recommends that the pile be retained as charted at the following location. Do not Concur.

Recommended Position: **Lat** - 40/52/31.101N **Lon** - 073/47/45.845W

Recommended Least Depth: 0.1 meters above MLLW, corrected for ~~predicted~~ actual tides. (0.5) ft

****

COMPILATION NOTES

Chart 1/2: Obstn in the present survey location
Remove charted unknown obstn. symbol

AWOIS NO: 6521

Item Description: Obstruction (Pile)

Source: CL 31/65 - COE and TP 01269/84 -Rev--Class III

AWOIS Position: **Lat** - 40/52/04.86N **Lon** - 073/48/11.48W

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

Charts Affected: 12363, 12364 SC, 12366

INVESTIGATION

Date(s)/DN(s): 8/2/94 (DN:214)

Position Numbers: 69 **Launch Number:** 0518

Investigation Used: VS **Water Visibility:** 1.5m

Position Determined By: DGPS

Investigation Summary: The area was searched visually and the feature was discovered. The pile, approximately ten to twelve inches in diameter, was awash at the time of positioning which equates to ~~1.0~~ 0.8 meter above the water with ~~predicted~~ approved tides at MLLW. (Photo submitted with reports).

CHARTING RECOMMENDATION

The hydrographer recommends that the pile be retained as charted at the following location. concur

Recommended Position: **Lat** - 40/52/04.018N **Lon** - 073/48/10.785W

Recommended Least Depth: ~~1.0~~ 0.8 (3ft) meters above MLLW, corrected for ~~predicted~~ actual tides.

****

COMPILATION NOTES

Chart pile at present survey location. Add note pile

AWOIS NO: 6522

Item Description: Obstruction ~~(Pile)~~ (Row of piles)

Source: CL 31/65 - COE and TP 01269/84 -Rev--Class III

AWOIS Position: **Lat** - 40/51/59.86N **Lon** - 073/48/09.48W

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

Charts Affected: 12363, 12364 SC, 12366

INVESTIGATION

Date(s)/DN(s): 8/2/94 (DN:214)

Position Numbers: 70 **Launch Number:** 0518

Investigation Used: VS **Water Visibility:** 1.5m

Position Determined By: DGPS

Investigation Summary: The area was searched visually and the feature was discovered. The pile, approximately ten inches in diameter, was awash at the time of positioning which equates to ~~1.0~~ 0.8 meter above the water with ~~predicted~~ approved tides at MLLW.

CHARTING RECOMMENDATION

The hydrographer recommends that the pile be retained as charted at the following location. Concur

Recommended Position: **Lat** - 40/51/59.832N **Lon** - 073/48/09.689W

Recommended Least Depth: ~~1.0~~ 0.8 meter above MLLW, corrected for ~~predicted~~ approved tides. (3 ft)

****

COMPILATION NOTES

There are six piles charted. Only one was investigated by the field. It is recommended that all 6 piles remain as charted with the note subm piles added.

AWOIS NO: 6539

Item Description: Obstruction (Onshore Pier Ruins)

Source: Unknown

AWOIS Position: **Lat** - 40/52/56.35N **Lon** - 073/46/05.47W

Required Investigation: VS, BD, DI, ## -- 25m swath for the full length of and along both sides of the charted position of the pier.

Charts Affected: 12363, 12364 SC, 12366

INVESTIGATION

Date(s)/DN(s): 8/5/94 (DN:217)

Position Numbers: 77 **Launch Number:** 0518

Investigation Used: VS **Water Visibility:** 1.5m

Position Determined By: DGPS

Investigation Summary: The area was searched visually and evidence of the feature was discovered. Concrete and wooden debris is visible onshore near an abandoned brick house. There is no visual indication that the pier ruins extend offshore. A swath drag, as described in the survey requirements section of the AWOIS listing, was not possible due to numerous rocks at this location. Detached position number 77 was taken as close as possible to the onshore ruins as the tide would allow. The ruins were 1.0 meter above the water at the time of positioning which equates to 3.3 meters with ~~predicted~~ actual tides at MLLW. (Photo submitted with reports).

CHARTING RECOMMENDATION

The hydrographer recommends that the charted pier be removed from the chart. Concur

Recommended Position: N/A

Recommended Least Depth: N/A

Remove pier charted in Lat 40/52/56.7N, Lon 73/46/04.5W and chart ruins

AWOIS NO: 7688

Item Description: Unknown (Submerged Wreck)

Source: Mr. Richard Taracka, Greenwich, CT, Police Dept.

AWOIS Position: **Lat** - 40/53/29.96N **Lon** - 073/45/26.33W

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

Charts Affected: 12363, 12364 SC, 12366

INVESTIGATION

Date(s)/DN(s): 8/5/94 (DN:217)

Position Numbers: 78 **Launch Number:** 0518

Investigation Used: VS **Water Visibility:** 1.5m

Position Determined By: DGPS

Investigation Summary: The submerged wreck was located with the assistance of Captain Sal Gugliara, SeaTow Owner/Operator, City Island, NY (Ph. # 718-885-0101 or 914-698-6523). According to Mr. Gugliara, the wreck was a wooden vessel and was scuttled to provide a fishing reef. The wreck is marked with a float and is surrounded by lobster traps. The submerged wreck is approximately 10-meters long and 3-meters wide and is lying in a N/S orientation. The wreck was 8.3 meters below the water at the time of positioning which equates to 6.1 meters with ~~predicted~~ actual tides at MLLW. An attempt was made to contact Mr. Taracka, the originator of this AWOIS investigation, however, he has since retired and moved to Florida.

CHARTING RECOMMENDATION

The hydrographer recommends that the submerged wreck be charted at the following location. concur

Recommended Position: **Lat** - 40/53/30.063N **Lon** - 073/45/24.856W

Recommended Least Depth: 6.1 meters below MLLW, corrected for predicted tides. (19 ft)

Chart a 19 wk at the above present survey location.

AWOIS NO: 7689

Item Description: Unknown

Source: LNM 1/87 - 1st CGD

AWOIS Position: **Lat** - 40/52/00.36N **Lon** - 073/47/16.47W

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

Charts Affected: 12363, 12364 SC, 12366

INVESTIGATION

Date(s)/DN(s): 8/5/94 (DN:217)

Position Numbers: Local Knowledge **Launch Number:** 0518

Investigation Used: VS **Water Visibility:** 1.5m

Position Determined By: DGPS

Investigation Summary: Interviews were conducted on DN 217 with Officer Paul Bodnarchuk, New York City Police Dept., Harbor Patrol (Ph.# 718-993-0950) and Captain Sal Gugliara, SeaTow Owner/Operator, City Island, NY (Ph.# 718-885-0101 or 914-698-6523). According to Officer Bodnarchuk and Mr. Gugliara, a 30-foot boat ran aground on rocks near this location in 1986 and was salvaged within 3 or 4 weeks of the grounding. The NYPD patrols this area regularly and Officer Bodnarchuk acknowledged that no wreck of any kind exists in this area.

CHARTING RECOMMENDATION

The hydrographer recommends that the charted wreck be removed from the chart. concur

Recommended Position: N/A

Recommended Least Depth: N/A

****

COMPILATION NOTES

AWOIS NO: 7691

Item Description: Obstruction (Rock) PA

Source: LNM 31/88 - 1st CGD

AWOIS Position: **Lat** - 40/52/52.35N **Lon** - 073/47/06.47W

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

Charts Affected: 12363, 12364 SC, 12366

INVESTIGATION

Date(s)/DN(s): 8/2/94 (DN:214)

Position Numbers: 73 **Launch Number:** 0518

Investigation Used: VS, ES **Water Visibility:** 1.5m

Position Determined By: DGPS

Investigation Summary: An echo sounder search was conducted using 10-meter line spacing. A submerged rock, approximately 7-meters in diameter, was discovered. The submerged rock was 1.0 meter below the water at the time of positioning which equates to 0.45 meters with ~~predicted~~ approved tides at MLLW. The hydrographer believes the submerged rock is an extension of the charted ledge which projects due north of Hog Island. Soundings within the AWOIS search area range from -1.0 to 4.7 meters at MLLW. The search area occupies the narrowest section of the channel entrance between Hog Island and Glen Island. The restrictive nature of this waterway and its poorly marked channel, with three red buoys and only one green buoy requires the placement of additional navigational aids. See the Descriptive Report of H-10558, Section T: Recommendations. (Photo submitted with reports).

CHARTING RECOMMENDATION

The hydrographer recommends that the charted obstruction (rock) PA be retained at the following location. Do not concur

Recommended Position: **Lat** - 40/52/51.889N **Lon** - 073/47/06.188W

Recommended Least Depth: 0.4 meters below MLLW, corrected for ~~predicted~~ actual tides. (1.64ft)

****

COMPILATION NOTES

Chart a subm RK symbol in the present survey location ~~OBD~~

Remove the obstr symbol and PA note.

The new symbol falls within the new fairsh limits

APPROVAL SHEET

BASIC HYDROGRAPHIC SURVEY
OPR-B285-AHP
AHP-10-8-94
H-10558
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. LCDR, NOAA

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-10558

LOCALITY: New York, Long Island Sound, Larchmont Harbor to Rodman Neck

TIME PERIOD: August 1 - 25, 1994

TIDE STATION USED: 851-8490 New Rochelle, N.Y.
Lat. 40°53.6'N Lon. 73° 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

Times and heights are direct on New Rochelle, N.Y. (851-8490).

Note: Times are tabulated in Greenwich Mean Time.

William M. Stevenson

CHIEF, DATUMS SECTION

NOAA FORM 76-155
(11-72)

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

SURVEY NUMBER

H-10558

GEOGRAPHIC NAMES

Name on Survey

Page 1 of 2

Name on Survey	A ON CHART NO. 12364, 12366, 12367	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 RAND MCNALLY ATLAS	H U.S. LIGHT LIST	K	
AUNT PHEBE ROCK	X		X							1
BLAUZES, THE	X		X							2
CHIMNEY SWEEPS ISLAND	X		X							3
CITY ISLAND	X		X							4
COLUMBIA ISLAND	X		X							5
DAVENPORT NECK	X		X							6
DAVIDS ISLAND	X		X							7
EAST NONATIONS	X		X							8
ECHO BAY (title)	X		X							9
EMERALD ROCK	X		X							10
EXECUTION ROCKS	X		X							11
GANGWAY ROCK	X		X							12
GLEN ISLAND	X		X							13
GOOSE ISLAND	X		X							14
GREEN FLATS	X		X							15
HART ISLAND	X		X							16
HIGH ISLAND	X		X							17
HOG ISLAND	X		X							18
HUCKLEBERRY ISLAND	X		X							19
HUNTER ISLAND	X		X							20
LONG ISLAND SOUND (title)	X		X							21
MACHAUX ROCK	X		X							22
MIDDLE GROUND	X		X							23
MIDDLE REEF	X		X							24
NEPTUNE ISLAND	X		X							25

NOAA FORM 76-155 SUPERSEDES C&GS 197

NOAA FORM 76-155
(11-72)

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

GEOGRAPHIC NAMES

SURVEY NUMBER

H-10558

Page 2 of 2

Name on Survey	A ON CHART NO.	B ON PREVIOUS SURVEY NO. (12361, 12366, 12367)	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	
NEW ROCHELLE HARBOR	X		X							1
NEW YORK (title)	X		X							2
ORCHARD BEACH	X		X							3
PEA ISLAND	X		X							4
PINE ISLAND	X		X							5
RAT ISLAND	X		X							6
RODMAN NECK (title)	X		X							7
SANDS POINT	X		X							8
SOUTH NONATIONS	X		X							9
SPINDLE ROCK	X		X							10
STEVENS ROCK	X		X							11
SUCCESS ROCK	X		X							12
TITUS MILLPOND	X		X							13
TRAVERS ISLAND	X		X							14
TWIN ISLAND	X		X							15
										16
										17
										18
										19
										20
										21
										22
										23
										24
										25

Approved:

Chief Geographer

APR 3 1995

NOAA FORM 76-155 SUPERSEDES C&GS 197

NOAA FORM 61-29
(12-71)

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

REFERENCE NO.

N/CS33-41-97

LETTER TRANSMITTING DATA

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

AUG 26, 1997

NUMBER OF PACKAGES

ONE TUBE AND ONE ENVELOPE

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-10558

NEW YORK, LONG ISLAND SOUND, ECHO BAY TO RODMAN NECK

1 (ONE) TUBE CONTAINING THE FOLLOWING:

SMOOTH SHEET (H-10588)
COMPOSITE DRAWINGS FOR NOS CHART 12366
1 H-DRAWING FOR NOS CHART 12366
1 COMPOSITE DRAWING FOR NOS CHART 12367
1 H-DRAWING FOR NOS CHART 12367

1 (ONE) ENVELOPE CONTAINING THE FOLLOWING:

1 ORIGINAL DESCRIPTIVE REPORT
1 DRAWING HISTORY FORM #76-71 FOR NOS CHART 12366
1 DRAWING HISTORY FORM #76-71 FOR NOS CHART 12367
1 RECORD OF APPLICATION TO CHARTS FORM FOR SURVEY H-10558

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

08/27/97

HYDROGRAPHIC SURVEY STATISTICS
REGISTRY NUMBER: H-10558

NUMBER OF CONTROL STATIONS	2
NUMBER OF POSITIONS	1716
NUMBER OF SOUNDINGS	8580

	TIME-HOURS	DATE COMPLETED
PREPROCESSING EXAMINATION	18	02/24/95
VERIFICATION OF FIELD DATA	412	08/07/97
QUALITY CONTROL CHECKS	57	
EVALUATION AND ANALYSIS	226.50	
FINAL INSPECTION	118.50	05/08/97
COMPILATION	241	08/07/97
TOTAL TIME	1073	

ATLANTIC HYDROGRAPHIC BRANCH APPROVAL 08/01/97

ATLANTIC HYDROGRAPHIC BRANCH
EVALUATION REPORT FOR H-10558 (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 0.359 seconds (11.084 meters or 1.11 mm at the scale of the survey) north in latitude, and 1.524 seconds (35.686 meters or 3.57 mm at the scale of the survey) east longitude.

J. SHORELINE

The shoreline originates with photogrammetric manuscripts TP-01266 (1984-87) and TP-01269 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-10346	(1990)	1:10,000	to the southeast
H-10347	(1990)	1:10,000	to the east
H-10541	(1994)	1:10,000	to the southwest
H-10559	(1994)	1:10,000	to the north

Standard junctions were effected between surveys H-10541 (1994) and H-10559 (1994) and the present survey.

A standard junction could not be effected with surveys H-10346 (1990), and H-10353 (1990). These junctional 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-1560a	(1882-1906)	1:10,000
H-1560b	(1882-1906)	1:10,000
H-1560c	(1882-1906)	1:10,000
H-1623	(1886)	1:10,000
H-1683b	(1886-1901)	1:10,000
H-1683c	(1914)	1:10,000
H-5407	(1933)	1:10,000
H-5413a	(1933)	1:10,000
H-5545	(1934)	1,10,000
H-5546	(1934)	1,10,000
H-5547	(1934)	1:10,000

H-1560 (1882-1906) depths compare favorably and show a general trend of being 1 to 2 feet (0^3 to 0^6 m) deeper than the present survey depths. The following should be noted:

A charted 1-ft (0^3 m) depth, in the vicinity of Latitude 40°52'13.4"N, Longitude 73°46'58.1"W, originating with the prior survey was not disproved by the field unit. No change in charting status is recommended.

A charted 7-ft (2^1 m) depth, in the vicinity of Latitude 40°53'30.4"N, Longitude 73°45'25.4"W, originating with the prior survey was not disproved by the field unit. No change in charting status is recommended.

H-1623 (1886) depths compare favorably and show a general trend of being 1 to 2 feet (0^3 to 0^6 m) deeper than the present survey depths. The following should be noted:

A charted 21-ft (6^4 m) depth, in the vicinity of Latitude 40°54'07.6"N, Longitude 73°44'30"W, originates with the prior survey and was not disproved by the field unit. No change in charting status is recommended.

H-1683b (1886-1901) covers the present survey in the area north of Latitude 40°52'50"N and east of Longitude 73°47'00"W. Depths compare favorably with prior survey depths, differing plus or minus (±) 0 to 11 feet ($\pm 0^3$ to 3^3 m).

H-1683c (1914) covers the present survey in the area north of Latitude 40°53'00"N and east of Longitude 73°46'00"W. Depths compare favorably with prior survey depths, differing plus/minus (±) 0 to 3 feet ($\pm 0^3$ to 0^9 m). The following should be noted:

A charted 16-ft (4^9 m) depth, in the vicinity of Latitude 40°54'11"N, Longitude 73°45'38"W, is shown on the chart markup as originating with the prior survey. H-1683c is not the source of this depth. It appears that the 16 foot depth was erroneously charted. The source is a 16 position number on the prior survey. This depth was not found by the present survey; therefore, it is recommended that the depth be deleted from the chart and the area be charted as shown on the present survey.

H-5407 (1933) covers the present survey in the area south of Latitude 40°54'00"N and west of Longitude 73°45'00"W. Depths compare favorably with prior survey depths, differing plus or minus (±) 0 to 3 feet ($\pm 0^3$ to 0^9 m). The following should be noted:

Depth/Feature	LATITUDE (N)	LONGITUDE (W)
22	40°52'00"	73°46'11"
5	40°52'23"	73°46'55.5"
5	40°52'26"	73°46'57"
59	40°52'24.3"	73°45'18.7"
2	40°52'45.4"	73°45'55"
5	40°52'48.4"	73°45'53.7"
5 Rk	40°53'01.2"	73°45'27"

The above soundings and feature were neither investigated nor disproved by the field unit and have been brought forward from the prior survey to supplement the present survey. It is recommended that these features be

retained as charted.

H-5413a (1933) covers the present survey in the area south of Latitude 40°53'10"N and east of Longitude 73°44'00"W. Depths compare favorably with prior survey depths, differing plus or minus (±) 0 to 6 feet (±0^3 to 1^8 m).

H-5545 (1934) covers the present survey in the area south of Latitude 40°53'10"N and east of Longitude 73°44'00"W. Depths compare favorably with prior survey depths, differing plus or minus (±) 0 to 6 feet (±0^3 to 1^8 m).

H-5546 (1934) covers the present survey in the area south of Latitude 40°54'20"N and east of Longitude 73°46'00"W. Depths compare favorably with prior survey depths and generally tend to differ by plus or minus (±) 0 to 6 feet (±0^3 to 1^8 m). The following should be noted:

Automated Wreck and Obstruction Information System (AWOIS) Item #1725, a charted dangerous sunken wreck, in Latitude 40°52'44.65"N, Longitude 73°44'18.47"W, originates with the prior survey. The existence of this feature was neither verified nor disproved by the field unit. It is recommended that this feature be retained as charted.

H-5547 (1934) covers the present survey in the area south of Latitude 40°53'50"N. Depths compare favorably with prior survey depths and generally tend to differ by plus or minus (±) 0 to 6 feet (±0^3 to 1^8 m). In the vicinity of Latitude 40°52'15"N, Longitude 73°43'45"W present survey depths are 0 to 14 feet (0 to 4^3 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:

Depth/Feature	LATITUDE (N)	LONGITUDE (W)
3	40°51'54.8"	73°47'14"
11	40°51'58"	73°47'08.3"
6	40°51'42.7"	73°46'51"
5	40°51'45"	73°46'49"
10	40°51'48.9"	73°46'52"
39 Wk	40°51'53.6"	73°45'38.5"
18 Rky	40°52'32.6"	73°44'14.5"

These features were brought forward from the prior survey to supplement the present survey. It is recommended that these features be retained as charted.

In the vicinity of Pelham Bay from Latitude

40°51'30"N, Longitude 73°47'42"W, to Latitude 40°52'30"N, Longitude 73°47'09"W the land mass originating with the prior survey has been filled in to create a land mass now called Orchard Beach. The land masses called Rodman Neck, Hunter Island, and Twin Island are now all one land mass.

The differences between present and prior survey depths can be attributed to natural changes in the bottom configuration, cultural changes, and/or improved hydrographic surveying methods.

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

2. Wire Drag

H-2914WD	(1907)	1:10,000
H-5078WD	(1930)	1:20,000
H-5412bWD	(1933)	1:10,000
FE-9	(1957)	1:20,000

Prior survey depths from H-2914WD (1907) covers the present survey in the area south of Latitude 40°52'15"N east of Longitude 73°47'00"W and west of Longitude 73°45'45"W. The following charted depths and features originate with the prior survey and are not considered disproved by the present survey:

A charted, 22-ft (6^7 m) depth in a rocky area in the vicinity of Latitude 40°51'54"N, Longitude 73°46'24"W, originates with the prior survey and was not disproved by the field unit. No change in charting status is recommended.

A charted, wreck with a depth of 18 feet (5^5 m), in the vicinity of Latitude 40°51'47"N, Longitude 73°46'16.6"W, originates with the prior survey and was not disproved by the field unit. The prior survey shows the depth associated with a rocky area; the chart shows the depth associated with a wreck. No change in charting status is recommended.

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

H-5078WD (1930) covers the present survey in the area south of Latitude 40°52'30"N, and east of Longitude 73°47'00"W. The following charted depths and features originate with the prior survey and were neither investigated

nor disproved by the field unit. These depths and features have been brought forward from the prior survey to supplement the present survey. It is recommended that these features/depths be retained as charted:

Depth/Feature	LATITUDE (N)	LONGITUDE (W)
13 rky	40°54'11.2"	73°44'02"
19	40°53'22.8"	73°44'00"
38	40°53'58"	73°44'03"
21 rky	40°54'03.4"	73°44'34.5"
6	40°54'11.6"	73°45'08"

AWOIS Item #6544, a charted, 10-ft (3 m), in Latitude 40°52'58.35"N, Longitude 73°44'08.97"W, originates with the prior survey as a 10 foot grounding. Present survey depths in the area are 10 to 24 feet (3 to 7^3 m). This item was located in Latitude 40°52'55.7"N Longitude 73°44'11.5"W. It is recommended that the depth be charted as shown on the present survey.

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

H-5412b WD (1933) compares favorably with present survey depths in the common areas.

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

FE-9 (1957) depths compare favorably with present survey depths in the common areas. The following should be noted:

A charted, 6 foot hang (1^8 m), in the vicinity of 40°51'17"N Latitude, 73°44'30"W Longitude, originates with the prior survey and was not disproved by the field unit. No change in charting status is recommended.

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

3. Side Scan Sonar

FE-293SS (1986) 1:10,000

FE-293SS (1986) compares favorably with the present survey in the common areas. The following charted features originate with the prior survey and are not considered disproved by the present survey. These features have been

brought forward from the prior survey to supplement the present survey. It is recommended that these features be retained as charted.

Depth/Feature	LATITUDE (N)	LONGITUDE (W)
56 Wk	40°53'20"	73°43'15"
40 Wk	40°53'36.3"	73°43'24.3"

O. COMPARISON WITH CHARTS 12366 (23rd Edition, Mar 27/93) 12367 (19th Edition, Aug 17/91)

a. Hydrography

The charted hydrography within the common area originates with the previously discussed prior surveys and from sources not readily available. Numerous charted rocks were located by the field. It is recommended that they be retained as charted. Attention is directed to the following:

The following charted features and depths originate with an unknown source or sources not available for review, and were neither verified nor disproved by the field unit. It is recommended that these features/depths be retained as charted.

CHARTED FEATURE	LATITUDE (N)	LONGITUDE (W)
Sunken Wreck	40°51'46.2"	73°45'48"
24 Rk	40°51'34.8"	73°45'59"
26	40°51'48.8"	73°46'17.2"
22	40°51'47"	73°46'07.4"
12	40°51'36.6"	73°47'31.3"
Visible Wk PA	40°51'21"	73°46'49.7"
2	40°51'13"	73°46'01"
6	40°52'59.7"	73°44'07.2"
5 Rk	40°52'50.5"	73°44'12.3"
3 Rk	40°52'44"	73°44'07"
30	40°52'32.3"	73°44'03.5"
6	40°52'49"	73°45'34.5"
6	40°52'53"	73°45'50"
2	40°52'45.7"	73°47'01"
2	40°52'59.3"	73°47'14.5"
18 Obstr PA	40°52'26"	73°45'23.5"
Wreck	40°53'53.3"	73°46'34.8"
10	40°53'56.1"	73°45'36.3"
9	40°53'54"	73°45'33.3"
2	40°53'51.9"	73°46'34.8"
21 Rk	40°53'20.9"	73°44'00.8"

18	40°53'19.3"	73°44'09"
26 Rk	40°53'15.3"	73°44'02.1"
5	40°53'13.5"	73°44'07"
41 Obstr	40°53'12.7"	73°43'53.6"
32 Rk	40°53'07.4"	73°44'00.8"
7	40°53'01.7"	73°44'06.9"
Obstr rep	40°53'17.3"	73°46'39.3"
Obstrs rep	40°53'26.4"	73°46'22"
3	40°53'03.3"	73°45'58.7"
6	40°53'04.8"	73°45'54.7"
6	40°53'10.2"	73°45'46"
16	40°54'11.5"	73°45'38"

AWOIS Item # 6367, two charted rocks Rep, in Latitude 40°52'36"N, Longitude 73°44'20"W, originate with Chart Letter 1561 of 1975 (CL1561/75). Both rocks were located by the field unit. A dangerous submerged rock with a depth of 7 feet (2^1 m) was located in Latitude 40°52'36.9"N, Longitude 73°44'19"W. A dangerous submerged rock with a depth of 1 foot (0^3 m) was found in Latitude 40°52'36.05"N, Longitude 73°44'21.5"W. It is recommended that the area be charted as shown on the present survey.

Four piles and two privately maintained buoys are charted as obstructions in the vicinity of Latitude 40°51'27.5"N, Longitude 73°47'38. It is recommended that the obstructions be deleted and the piles charted in their present survey locations.

AWOIS Item #4395, a charted dangerous sunken wreck PA, in Latitude 40°51'53.36" Longitude 73°47'09.47", originates with CL1286/66 and falls within the present survey limits. The item was not investigated by the field unit. No change in charting status is recommended.

AWOIS Item #7688 is described as a dangerous sunken wreck charted in Latitude 40°53'29.96"N, Longitude 73°45'26.33"W originating with report from the Greenwich, CT Police Department. There is a shoal sounding with a depth of 7 feet (2^1 m) instead of a wreck charted in Latitude 40°53'30.4"N 73°45'25.4"W. The source of the 7 foot sounding was not available during the processing of this survey. The present survey found a dangerous sunken wreck with a depth of 19 feet (5^8 m) in Latitude 40°53'30.063"N, Longitude 73°45'24.856"W. It is recommended that the shoal sounding with a depth of 7 feet (2^1 m) remain as charted and that the dangerous sunken wreck with a depth of 19 feet (5^8 m) be added at the present

survey location.

An uncharted dangerous submerged obstruction with a depth of 21 feet (6^4 m) was found in Latitude 40°51'15"N Longitude 73°45'49.3"W by the present survey. It is recommended that a dangerous submerged obstruction with a depth of 21 feet (6^4 m) be charted in the above present survey location.

An uncharted dangerous rock awash was found in Latitude 40°51'22"N Longitude 73°44'34"W by the present survey. It is recommended that a dangerous rock awash be charted in the above present survey location.

An uncharted dangerous submerged rock with a depth of 8 feet (2^4 m) was found in Latitude 40°51'17"N Longitude 73°44'35"W by the present survey. It is recommended that a dangerous submerged rock with a depth of 8 feet (2^4 m) be charted in the above present survey location.

An uncharted dangerous submerged rock with a depth of 13 feet (3^9 m) was found in Latitude 40°51'16.3"N Longitude 73°44'27.3"W by the present survey. It is recommended that a dangerous submerged rock with a depth of 13 feet (3^9 m) be charted in the above present survey location.

A charted dangerous submerged rock with a depth of 2 feet (0^6 m) located in Latitude 40°52'23.5"N Longitude 73°46'51"W was found in Latitude 40°52'24"N Longitude 73°46'51.5"W by the present survey. It is recommended that a dangerous submerged rock with a depth of 2 feet (0^6 m) be charted in the above present survey location.

A charted dangerous rock awash located in Latitude 40°52'53"N Longitude 73°46'42.5"W was found in Latitude 40°52'23"N Longitude 73°46'43"W as a dangerous submerged rock with a depth of 2 feet (0^6 m) by the present survey. It is recommended that the charted dangerous rock awash be deleted. It is further recommended that a dangerous submerged rock with a depth of 2 feet (0^6 m) be charted in the above present survey location.

An uncharted dangerous submerged rock with a depth of 2 feet (0^6 m) was found in Latitude 40°52'31.5"N Longitude 73°46'03.7"W by the present survey. It is recommended that a dangerous submerged rock with a depth of 2 feet (0^6 m) be charted in the above present survey location.

An uncharted dangerous rock awash was found in Latitude 40°53'15"N Longitude 73°46'24"W by the present survey. It is

recommended that a dangerous rock awash be charted in the above present survey location.

A charted pier in Latitude 40°52'56.14"N Longitude 73°46'28.43"W was found in ruins by the present survey. It is recommended that pier ruins be charted in the above present survey location.

b. Dangers to Navigation

There were no dangers to navigation submitted by the field unit. No dangers were discovered during office processing.

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

c. Controlling Depths

The charted note, 5 FT FOR 120 FT WIDTH 1985, in the vicinity of Latitude 40°53'32"N Longitude 73°46'50"W is considered verified. Present survey depths range from 7 feet to 14 feet. No conflicts in controlling depths exist with the present survey. No changes in charting are recommended.

The charted note, 13 FEET AUG 1949, in the vicinity of Latitude 40°52'38" Longitude 73°46'50" is considered verified by the present survey. Present survey depths range from 13 feet to 17 feet. No conflicts in controlling depths exist with the present survey. No changes in charting are recommended.

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.

Q. Aids to Navigation

The hydrographer located fifty (50) aids to navigation on the present survey. One is a daybeacon, fourteen are lights, twenty-nine are buoys, and six are privately maintained markers. These aids were adequately discussed in the Descriptive Report and appear adequate to serve their intended purpose.

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.

WHITING/HECK Processing Teams

Robert Snow

Robert Snow
Cartographic Technician
Verification of Field Data

Deborah A. Bland

Deborah A. Bland
Cartographer
Evaluation and Analysis

APPROVAL SHEET
H-10558

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 Date: August 1, 1997
Deborah A. Bland
Cartographer,
Atlantic Hydrographic Branch

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 Date: August 1, 1997
Nicholas E. Perugini,
Commander, NOAA
Chief, Atlantic Hydrographic Branch

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Final Approval:

Approved: Andrew A. Armstrong III Date: Oct. 21, 1997
Andrew A. Armstrong, III
Captain, NOAA
Chief, Hydrographic Surveys Division

NOAA FORM 75-96
(10-83)

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

MARINE CHART BRANCH

RECORD OF APPLICATION TO CHARTS

FILE WITH DESCRIPTIVE REPORT OF SURVEY NO. H-10558

INSTRUCTIONS

A basic hydrographic or topographic survey supersedes all information of like nature on the uncorrected chart.
1. Letter all information.
2. In "Remarks" column cross out words that do not apply.
3. Give reasons for deviations, if any, from recommendations made under "Comparison with Charts" in the Review.

CHART	DATE	CARTOGRAPHER	REMARKS
12366	8/4/97	D.A. Bland	Full [redacted] After Marine Center Approval Signed Via
			Drawing No.
12367	8/6/97	D.A. Bland	Full [redacted] After Marine Center Approval Signed Via
			Drawing No.
			Full Part Before After Marine Center Approval Signed Via
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			Full Part Before After Marine Center Approval Signed Via
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SUPERSEDES C&GS FORM 8352 WHICH MAY BE USED.