

10245

Diagram No. LS-2

NOAA FORM 76-35A

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

DESCRIPTIVE REPORT

Type of Survey ... Hydrographic
Field No. HFP-10-3-87
Registry No. H-10245

LOCALITY

State New York
General Locality ... Lake Ontario
Sublocality Irondequoit Bay

1987

CHIEF OF PARTY
LCDR. K.W. Perrin.....

LIBRARY & ARCHIVES

DATE March 31, 1988

10245

☆U.S. GOV. PRINTING OFFICE: 1985-566-054

Area 7
cht
14804 } TO SIGN OFF, SEE
14800 } RECORD OF APPLICATION
14800m }

HYDROGRAPHIC TITLE SHEET

H-10245

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.

HFP-10-3-87

State New York

General locality Lake Ontario

Locality Irondequoit Bay

Scale 1:10,000 Date of survey June 1 thru July 9, 1987

Instructions dated March 10, 1987 * Project No. OPR-V215-HFP

Vessel HFP-3, Launch 0517

Chief of party LCDR Kenneth W. Perrin

Surveyed by LT Kenneth P. Peters, OIC; DBE, MJM, JPO, ATS, EAL **

Soundings taken by echo sounder, ~~XXXXXX~~ pole

Graphic record scaled by KPP, DBE, MJM, JPO, ATS, EAL

Graphic record checked by KPP, DBE, MJM, JPO, ATS, EAL

Protracted by PDP/8e (HFP-3, Field Sheet) Automated plot by AMC (Smooth Sheet)

SYNETICS 1201 Plotter

Verification by Atlantic Marine Center *F.L. Saunders*

Soundings in ~~XXX~~ feet at ~~MLW~~ ~~MLWSX~~ Low Water Datum (*IGLD 1955: 242.8 Ft.*)

REMARKS: * Change No. 1 - May 8, 1987 ** DBE - David B. Elliott

MJM - Mark J. McMann

JPO - John P. Oswald

ATS - Anthony T. Sesse

EAL - Elizabeth A. Lake

Notes in red were made during office processing

3-25-97

AWOIS and SURF ✓ 2/89 sDB

PROGRESS SKETCH

OPR - V215

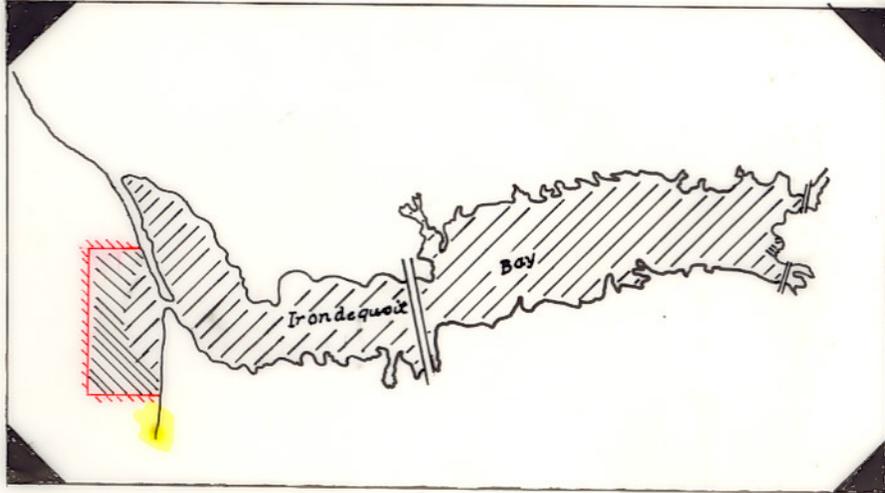
IRONDEQUOIT BAY

JUNE '87-

HFPS HFP 3

Lcdr Kenneth W. Perrin (COMDG)

from Chart 1404 (1:80,000 Scale)



LEGEND

Month	JUNE	JULY	AUGUST
Sq NMSdg	2.6	1.0	
LNM Sdg	89.3	11.8	
LNM to/from	44.0	15.0	
LNM misc.	48.0	9.0	
DP/BS	200/13	33/2	
Cont. Sta. Set/Rec.	0	0	
Tide Sta.	0	0	

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* filed with original field records.

DESCRIPTIVE REPORT
TO ACCOMPANY
HYDROGRAPHIC SURVEY H-10245
HFP-10-3-87

Scale: 1:10,000
Chief of Party: Lt. Cdr. Kenneth W. Perrin
Officer in Charge: Lt. Kenneth P. Peters
Hydrographic Field Parties Section
Hydrographic Field Party 3
Launch 0517

A. PROJECT

This survey was accomplished under Project Instructions OPR-V215-HFP, Irondequoit Bay, Lake Ontario, New York, dated 10 March 1987, and amended by CHANGE NO. 1, dated 8 May 1987.

The sheet letter specified in the project instructions is "A".

The purpose of this project is to provide contemporary hydrography for Irondequoit Bay and the Irondequoit Bay entrance channel.

B. AREA SURVEYED

The project area includes all Irondequoit Bay and the approaches to the bay defined by the area in Lake Ontario contained by the following points:

Lat. 43°14'07.5"N, Long. 77°32'45.0"W
Lat. 43°14'¹⁴36.0"N, Long. 77°32'³⁷45.0"W
Lat. 43°14'¹⁶36.0"N, Long. 77°31'³⁸30.0"W
Lat. 43°14'¹⁰15.0"N, Long. 77°31'²30.0"W

Irondequoit Bay is oriented north-south, is approximately 3.5 miles long and is generally 0.5 miles wide. Depths north of lat. 43°13'39.0"N and south of lat. 43°11'21.0"N are generally shoal, less than six feet and the bottom is composed of dark brown gritty mud. These shoal areas were frequently fouled with aquatic vegetation. The middle section of the bay, between the latitudes above, is characterized by rapidly increasing depth contours from the shoreline and has depths as great as 77 feet. The bottom in these deeper areas is comprised of gelatinous black mud.

The shoreline inside the bay is generally steep having cliffs that abruptly drop 60 feet to the waters edge. Overhanging trees and floating debris make access to the shore from seaward difficult.

The shoreline outside the bay, in Lake Ontario, is generally a sandy beach. Depths uniformly increase to ~~about 30~~²⁷ feet at the offshore limits of the survey area. The bottom is composed of sand.

The survey was conducted from 1 June 1987 (DN 152) to 9 July 1987 (DN 190).

C. SOUNDING VESSEL

All soundings were obtained with NOAA Launch 0517 (EDP# 0517). Launch 0517 is a 21-foot MonArk. All records are annotated with the vessel number.

D. SOUNDING EQUIPMENT AND CORRECTIONS TO ECHO SOUNDINGS

The following sounding equipment was used on this survey:

MANUFACTURER	MODEL #	SERIAL #	LAUNCH	PERIOD
Raytheon	719-C	5799	0517	6/1/87 - 6/3/87
Raytheon	719-C	9955	0517	6/4/87 - 7/9/87

A graduated sounding pole was used for soundings taken in shoal waters (two feet or less) with launch 0517. Otherwise, the electronic equipment listed in the table was used to obtain all sounding data.

Raytheon Model 719-C Fathometer, S/N 5799, failed 4 June 1987 and was replaced with S/N 9955 which was used for the remainder of the survey.

When using a Raytheon Model 719-C Fathometer, calibration checks were made at frequent intervals on each day of hydrography. Any necessary adjustments were made and noted on the fathogram. Any departure of the trace from the initial zero was corrected during the scanning process.

~~Two~~^{Three} velocity correction tables were generated for this survey. Velocity Table One was generated from bar check data for Fathometer S/N 5799 to be used between DN 152 and 154, 1987. Velocity Table Two ^{Three} was generated from bar check data for Fathometer S/N 9955 to be applied to the remainder of the survey. *All Tables were revised during office processing*

A Martek was not available for taking a TDC; therefore, there is no velocity data for depths beyond the range of the bar check data.

Bar checks were taken on each day of hydrography, two whenever conditions permitted. Bar check chains for ~~all~~ launches⁵¹⁷ were measured to insure the five-foot interval marks were accurate prior to the start of this project. No corrections were necessary for this survey.

Settlement and squat correctors were determined on 29 May 1987 for launch 0517 using the level method. A copy of the field data and graphs of the settlement and squat correctors vs. RPM for launch 0517 is included in the appendix. These correctors will be applied via the TC/TI tape during processing of the smooth sheet at AMC.

The final field sheet was plotted with water level corrections provided by N/OMA1211 from telemetry data from the water level station at Rochester, NY (Station Number 905-2058).

Smooth water levels were requested from the Sea and Lake Levels Branch, N/OMA12 in a letter dated 15 July 1987.

E. HYDROGRAPHIC SHEETS (field)

The field sheets were prepared in the field using a PDP/8e computer and Houston Instrument Complot DP3 plotter to monitor and evaluate the survey data. Submitted with the survey are: one work sheet; one semi-smooth sheet; one field smooth sheet; one field smooth overlay sheet. Mainscheme hydrography, shoreline, and signals are plotted on the smooth field sheets. Crosslines, detached positions, developments, bottom samples, presurvey review items, and aids to navigation are shown on the smooth overlays.

Soundings on the final field sheets are corrected for transducer draft and water levels from Rochester, NY (Station Number 905-2058). Depths are not corrected for sound velocity in water. All field records and the following tapes have been forwarded to the Atlantic Marine Center:

Generated Master Tapes
Electronic Corrector Tapes
Velocity Corrector Tapes
ASCII Signal Tapes
TC/TI Tapes

Projection parameter tape listings for the field sheets are included in the appendix of this report. All field records are forwarded to the Atlantic Marine Center for verification and smooth sheet plotting on the Harris/7 computer and Xynetics 1201 plotter.

F. CONTROL STATIONS *See section 2. a. of the Evaluation Report.*

Fifteen monumented control stations (signals 104, 107, 108, 109, 110, 112, 113, 114, 116, 117, 118, 119, 120, 121, 122, 123) and three fixed aids to navigation (signals 127, 129, 132) were used to control this survey. The three aids were used only as initials and were not occupied. All stations were established to meet Third-order, Class I standards.

All stations were established in 1987 by personnel from AMC, Photogrammetry Branch and by field party personnel. The horizontal control report for this work will be submitted by N/MOA2222.

The signal list is appended.

G. HYDROGRAPHIC POSITION CONTROL *See section 2. a. of the Evaluation Report.*

Range/Azimuth and See-Field-Sheet methods were used to control this survey. During Range/Azimuth, initial azimuth checks were obtained and recorded at the beginning of each applicable day. An initial azimuth of 000°00'0", used in all cases, was checked and recorded at frequent intervals throughout the day.

The following equipment was used to control this survey:

EQUIPMENT	MANUF.	MODEL #	S/N	VESSEL
RPV	Motorola	Falcon 484	E0147	0517
CDU	Motorola	Falcon 484	E0007	0517
R/T	Motorola	Falcon 484	D2123	0517
R/S	Motorola	Falcon 484	E2913	Code 7
Theodolite	Nikon	NT2D20"	031045	
Total	Hewlett	HP3808A	723A00727	
Station	Packard			

Motorola Falcon 484 equipment was calibrated over a baseline of 1438 meters in accordance with AMC OpOrder 86, dated 11/20/86.

Daily critical checks of the equipment were performed prior to every day of hydrography and again after hydrography except when precluded by rough seas and/or a long run to the check site. Attachment "12" reflects the mean corrector of the system checks and is included in the appendix of this report. *Attachment 12 is SYSTEM CHECK CORRECTOR ABSTRACT and filed with original field records.*

Daily critical system check correctors were observed within rejection limit tolerances when compared with true distance values and were used on corrector tapes. The daily values agreed well with the baseline correctors obtained during calibration. True distances for both the baseline and daily checks were obtained by inverse computation between Third-order positions.

Attachments "1" and "2" are included in the fan folder for survey H-10245. *Attachment "1" is BASELINE CALIBRATION LOG SHEET. Attachment "2" is Baseline Calibration Graph. Both are filed with the original field records.*

H. SHORELINE *See section 2.6. of the Evaluation Report*

Shoreline shown on the final field sheet was transferred from TP-01067, a 1:10,000-scale manuscript compiled from a June 1980 photograph.

The shoreline was verified by detached position or by the junction with shore of mainscheme hydrography. The shoreline is accurately shown on the manuscript with the following exceptions (where shoreline change was noted, shoreline from the manuscript is shown in blue on the final field sheet and the surveyed shoreline appears in red):

-- Shoaling is occurring in the northwest area of the bay between lat 43°13'45.2"N, long. 077°32'29.2"W and lat. 43°13'53.1"N, long. 077°32'23.7"W. This is a spoil area for dredged material from the channel and is marked by detached positions 1479 through 1487. *Chart as shown on present survey smooth sheet.*

--Shoaling is occurring at the shoreline adjacent to the newly constructed breakwaters at the entrance to the bay. The junction of the shoreline on the west side of the western breakwater is 70 meters north of the manuscript shoreline and is marked by detached position 821. The junction of the shoreline on the eastern side of the eastern breakwater is 80 meters north of the manuscript shoreline and is marked by detached position 822. *Consent. Revised on 1986 photo revised manuscript. Chart shoreline as shown on the present survey smooth sheet.*

Shoreline details were verified or disproved visually or by detached position. These features were transferred to the final field sheet in black ink when verified, red if not shown on the manuscript, blue if shown on the manuscript but non-existent. The following recommendations are made: *See also section 6.6. of the Evaluation Report*

-- Details not shown on the manuscript that should be charted: *(Shown on revised manuscript T-01067 with NOS photography 31 Oct. 1986 as not visible)*

ITEM	LAT (N)	LONG (W)	POS
Piles in Ruins	43°11'13.90"	077°31'43.70"	990 - AWOIS #4567
Floating Pier	43°11'11.93"	077°31'44.94"	992
Floating Pier	43°11'10.02"	077°31'40.96"	996
Floating Piers	43°10'37.50"	077°31'09.34"	1000-1004
Fixed Pier	43°11'39.95"	077°31'05.53"	1036
(AWOIS # 4574) - <i>See section 6.3.6) of the Evaluation Report.</i>			
Fixed Wood Pier	43°11'40.60"	077°31'05.44"	1037
w/ Hoist			

ITEM	LAT (N)	LONG (W)	POSA
Fixed Wood Pier	43°11'40.94"	077°31'05.21"	1038
Fixed Wood Pier	43°11'41.33"	077°31'05.43"	1039
Fixed Wood Pier	43°11'41.96"	077°31'04.75"	1040
(AWOIS # 4577 4575)			
Floating Piers	43°12'33.83"	077°32'10.06"	1063-1070
Fixed Wood Pier	43°13'30.90"	077°32'01.09"	1130
Aluminum L Pier	43°13'33.93"	077°32'01.09"	1131
Fixed Wood/Steel Pier	43°13'35.48"	077°32'01.86"	1133
Fixed Wood T Pier	43°14'10.68"	077°31'17.89"	1138
Fixed Wood Pier	43°14'10.61"	077°31'22.48"	1140
Fixed Wood/Aluminum T Pier	43°14'11.00"	077°31'25.71"	1141
Fixed Wood/Steel Pier	43°14'10.12" ⁴	077°31'32.36" ³	1143 - see section 6.b.11) of the Evaluation Report.
Fixed Wood Pier	43°14'09.70"	077°31'32.64"	1144
(AWOIS # 4592) NOT AN AWOIS item			
Fixed Wood Pier	43°14'09.61"	077°31'33.49"	1145
3 Fixed Wood Piers	43°14'08.47" ⁷	077°31'43.58" ⁶³	1150-1151 - see section 6.b.9) of the Evaluation Report.

-- Details shown on the manuscript which no longer exist and should not be charted:

ITEM	AWOIS #	LAT (N)	LONG (W)
Pier	4565	43°10'37.0"	077°31'02.0"
Pier	4569	43°11'17.0"	077°31'46.0"
Pier (Floating Dock)		43°11'19.0"	077°31'44.0"
Pier	4573	43°11'38.0"	077°31'57.0"
Pier	4576	43°11'43.0"	077°32'01.0"
Pier		43°11'55.0"	077°31'59.0"
Pier		43°12'53.0"	077°32'24.0"
Pier		43°13'10.0"	077°32'26.0"
Pier		43°13'12.0"	077°32'27.0"
Pier		43°13'13.0"	077°32'26.0"
Pier		43°13'28.0"	077°32'26.0"
Pier		43°14'08.0"	077°31'49.0"
Pier	4583	43°12'38.0"	077°31'37.0" ⁵ - see section 6.b.5) of the Eval. Report.
Pier		43°12'21.0"	077°31'17.0"
Pier	4582	43°12'20.0"	077°31'16.0" - see section 6.b.4) of the Eval. Report.
Pier		43°12'18.0"	077°31'15.0"
Pier		43°11'40.0"	077°31'05.0"
Pier		43°11'25.0"	077°31'00.0"

The following control stations were located seaward of the shoreline:

SIGNAL #	NAME
=====	=====
125	Irondeq. Bay, E. Brk. Lt. 3 1987
126	Irondeq. Bay, W. Brk. Lt. 2 1987
126 7	Irondeq. Bay, Lt. 4 1987
127 8	Irondeq. Bay, R/G Lt. 1987
128 9	Irondeq. Bay, Lt. 6 1987
129 30	Irondeq. Bay, Lt. 5 1987
130 1	Irondeq. Bay, Lt. 7 1987
131 2	Irondeq. Bay, Lt. 8 1987

Positions for all signals used on the survey can be found on the appended signal list.

I. CROSSLINES *See section 3.2. of the Evaluation Report.*

Crosslines run accounted for 13.0% of the total miles of hydrography. Comparison of crosslines shows excellent agreement, within \pm one foot when there is little or no displacement of soundings compared. The excellent agreement applies throughout the survey area.

J. JUNCTIONS *See section 5. of the Evaluation Report.*

This survey does not junction with any contemporary surveys.

K. COMPARISON WITH PRIOR SURVEYS *See section 6. of the Evaluation Report.*

This survey was compared with prior survey I163, a 1:10,000-scale survey from 1875. There were no presurvey review items originating from this prior survey. While contour lines continue to follow similar patterns, depths are generally shoaler on the present survey inside Irondequoit Bay. Depths within the survey area in Lake Ontario have exhibited very little change other than those caused by man's activities.

Depths everywhere in Irondequoit Bay are consistently two to ten feet shoaler than those observed in 1875. Shoaling probably began with the construction of the dike at the north end of the bay sometime prior to the 1875 survey. The dike was built to facilitate the laying of railroad tracks. It's construction probably interrupted the natural flow of sediments allowing the accumulation of organic material and man-made wastes.

The greatest shoaling is seen at the southern end of the bay (south of lat. 45°12'00.0"N) where the predominately northerly winds would cause the greatest build up. At the extreme southern end of the bay, areas that are presently baring at LWD previously had depths as great as ~~eleven~~ ^{fourteen} feet.

Elsewhere in the bay, depths are consistently ~~three~~ ^{2 to 3} feet shoaler than those shown on the prior survey.

Comparison was made with the following non-NOAA surveys from the U.S. Army Corps of Engineers, Buffalo District:

Soundings Before Contract Dredging 1985

Date Soundings Taken: Oct. 85

Drawing Number: 85S-IRB1/1

Soundings After Contract Dredging 1986

Date Soundings Taken: May 1987

Drawing Number: 86S-IRB1/1

Soundings from these surveys were limited to the dredged channel at the north end of the bay between the entrance breakwaters at lat. 43°14'18.0"N, long. 077°32'⁰⁰12.0"W to the southern limit of the marked channel inside the bay at lat. 43°13'33.0"N, long. 077°32'12.0"W. The purpose of these surveys was to monitor the contracted dredging of the Irondequoit Bay entrance channel.

Soundings taken before the dredging of the channel were zero to four feet at LWD. The controlling depth during dredging was eight feet and soundings taken after contracted dredging show depths generally ~~nine~~ ^{eight} feet or greater within the channel. The present survey agrees within ± one foot with the Corps of Engineer's later survey.

L. COMPARISON WITH THE CHART *See section 7.a. of the Evaluation Report.*

One presurvey review item (No. 4594) and 29 AWOIS items assigned to OPR-V219 lie within the limits of H-10245 and were resolved during the course of this survey. A complete discussion of these items on the Item Investigation Reports is included in the appendix of this report.

This survey was compared with Chart 14804, 21st Ed., May 23/81. This is a 1:80,000-scale chart. A 1:10,000-scale enlargement of the area covered by this survey was supplied for field comparison.

A Danger to Navigation Letter dated 14 July 1987 addressing chart deficiency was sent to the Commander, Ninth Coast Guard District, Cleveland, Ohio and to N/CG222, Chart Information Section. The letter (a copy of which is appended) describes the following dangers:

A ~~submerged~~ log was located at lat. 43°14'09.¹⁷2"N, long. 077°31'34.6"W. The log has a 24-inch diameter and is lying in water having depths of two feet at LWD. *Concur. Chart as a SNAG having 3ft. at LWD.*

A charted seven-foot depth at lat. 43°12'28.5"N, long. 077°31'49.0"W corresponds to present survey depths as shoal as five feet. *Concur.*

A three-foot depth is charted in the vicinity of Point Lookout at lat. 43°12'01.5"N, long. 077°31'58.5"W. Presently, this area is overgrown with grass and zero soundings at LWD extend out to the charted six-foot contour at lat. 43°12'06.0"N, long. 077°31'49.0"W. *Concur.*

Four and five-foot soundings are charted in the southern area of Irondequoit Bay at lat. 43°10'55.0"N, long. 077°31'19.0"W and at lat. 43°11'06.5"N, long. 077°31'16.0"W respectively. The present survey shows soundings generally from zero to one foot at LWD in areas south of lat. 43°11'15.0"N. *Concur.*

A 100 meter area centered at lat. 43°11'38.0"N, long. 077°31'40.0"W has soundings as shoal as four feet. Charted depths in this area are in excess of 12 feet. *Concur.*

A dangerous uncharted obstruction was located at lat. 43°14'08.23"N, long. 077°32'30.73"W, approximately 550 meters west of the western breakwater entrance to Irondequoit Bay and approximately 60 meters offshore in ~~eight feet~~^{one foot} of water with a least depth of one foot at the present water level (bare ~~1.5~~² feet at LWD). The obstruction is a 15-foot circumference metal structure. *Concur. See also page 50 of this Report. Chart as an obstruction (metal) that bares 2ft at LWD.*

Four uncharted submerged piles were located approximately 500 meters west of the western breakwater entrance to Irondequoit Bay and 20 meters seaward of the shoreline between lat. 43°14'07.19"N, long. 077°32'31.75"W and lat. 43°14'06.99"N, long. 077°32'31.01"W and had a least depth of 2.0 feet at the time of observation (bares ~~0.7~~^{1.2} feet at LWD). *Concur. See also section 7. a. 1) of the Evaluation Report.*

Comparisons were made between charted and survey soundings. General agreement is good, usually within ± two feet. The following noteworthy discrepancy, not previously addressed, was noted:

A three-foot depth is charted at lat. 43°13'06.0"N, long. 077°31'22.5"W. The present survey has corresponding depths between 35 and 60 feet. The only explanations for such large discrepancies are: movement of bottom sediment offshore toward deeper waters; dredging; and inaccuracy in scale of the chart enlargement. *Concur.*

Special investigations were performed on the following shoals and features:

Two outfalls are charted in Lake Ontario within the limits of the survey area. The western most extends from the shoreline to 19 feet of water at lat. 43°14'23.8"N, long. 077°32'30.3"W. The second outfall extends from the shoreline out to 18⁹ feet of water at lat. 43°14'22.1"N, long. 077°32'17.4"W. The chart has the comment "depths over 14 ft". Hydrography was run at 50 meter line spacing over the charted outfall area. Divers performed a circle search and compass search over the charted offshore ends of the outfalls. Detached positions 1477 and 1488 marked the centers of the diver investigations. Investigation revealed no evidence of the outfalls in the charted areas. *See A/50' section 7.2.2) of the Evaluation Report.*

Four-foot shoal depths were recorded in a 100-meter area (addressed as a danger to navigation) in an area charted as having depths in excess of 12 feet centered at lat. 43°11'38.0"N, long. 077°31'40.0"W. The area was investigated by 50-meter line spacing mainscheme hydrography and 25-meter line spacing development from uncommon control. *Concur.*

A sixteen-foot shoal, lying between the 18 and 30-foot contours at lat 43°11'55.5²"N, long. 077°31'19.0"W was developed by reduced line spacing. *Concur.*

Five-foot soundings were recorded over a charted seven-foot depth at lat. 43°12'29.0"N, long. 077°31'46.5"W. The area was developed by reduced line spacing with uncommon control and was addressed as a danger to navigation. *Concur.*

Eleven-foot soundings among 13 to 15-foot depths were located 50 meters north of the western breakwater at lat. 43°14'20.0"N, long. 077°32'01.5"W. The area was developed by reduced line spacing ~~from~~ controlled from two stations. *Concur.*

M. ADEQUACY OF SURVEY *See section 6. and 7. of the Evaluation Report.*

This survey is complete and adequate to warrant its use to supersede prior surveys for charting in the common areas.

N. AIDS TO NAVIGATION *See section 7. c. of the Evaluation Report.*

All fixed aids to navigation (there were no floating aids) were located and comparisons made between charted, Light List (Vol. VII, 1987) and survey positions.

No lights or aids to navigation appear on Chart 14804, Ed. 1981 in the vicinity of Irondequiot Bay. The chart was compiled from data collected before the construction of the breakwaters at the north end of the bay. Aids should be charted as surveyed. *Concur.*

The Light List is completely inaccurate but has been updated in the Local Notice to Mariners (LNM) 08/87, dated 1 May 1987 (a copy is appended). The LNM directs that Irondequoit Bay Lt. 2 (LL# 2177) and Irondequoit Bay Lt. 3 (LL# 2178) be removed from the Light List. The following lights were verified as accurate as listed in the LNM:

Name and Description	Light Characteristic	Position
- Light 2 (LL# 2172) TR on white cylindrical twr	F1 R 4s	43°14'17.6"N 077°32'01.6"W
- Light 3 (LL# 2173) SG on pole	F G 2.5s	43°14'13.3"N 077°32'01.6"W
- Light 4 (LL# 2174) TR on steel pile	F1 R 4s	43°14'02.7"N 077°32'04.4"W
- Light A (LL# 2175) JR on steel pile	F1 (2+1) R 6s	43°14'00.7"N 077°32'04.4"W
- Light 5 (LL# 2176) SG on steel pile	QG	43°13'50.0"N 077°32'03.2"W
- Light 6 (LL# 2177) TR on steel pile	QR	43°13'50.1"N 077°32'04.6"W
- Light 7 (LL# 2178) SG on steel pile	F1 G 4s	43°13'34.0"N 077°32'09.9"W
- Light 8 (LL# 2179) TR on steel pile	F1 R 4s	43°13'34.3"N 077°32'11.3"W

All aids in the survey area were lighted and were located to Third-order, Class I standards by HFP-3 and N/MOA2222. All aids to navigation served the apparent purpose for which they were established.

There were no submerged or overhead power cables within the limits of the survey area.

One bridge crossed the survey area within the limits of navigation between lat. 43°12'³²09.0"N, long. 077°32'15.0"W and lat. 43°12'¹³13.5"N, long. 077°31'52.5"W. Clearances were determined on 1 July 1987 (DN 182) using a Topcon ET-1. The clearance of the western span was 48.90 feet, the center span was 44.48 feet, and the eastern span was measured to be 55.61 feet (the clearances are not corrected for water levels which was 2.7 feet above LWD at the time of measurement). *Retain charted clearances*

O. STATISTICS

Type of Production	TOTAL
=====	=====
Days of Production (Days at Sea)	15
Number of Positions	1499
Nautical Miles of Sounding Line	84.9
Nautical Miles of Crossline	11.7
Nautical Miles of Development	4.5
Total Miles of Hydrography	101.1
Number of Detached Positions	233
Number of Bottom Samples	15
Number of Bar Checks	13
Number of TDC Cast	0
Number of Nansen Casts	0
Number of PSR/AWOIS Investigations	32

P. MISCELLANEOUS

Dredging operations are currently under way to maintain water depths at the marina located at lat. 30°15'52.0"N, long. 085°48'45.0"W. It was learned from the dredge operators that the controlling depth for the marina is five feet. *Not within survey limits. See also section 4.e. of the Evaluation Report.*

Positions 1211 was used twice on DN 176.

Bottom samples were submitted to the Curator, Dept. of Paleobiology, Natural History Museum, Smithsonian Institution. The Oceanographic Log Sheet-M form is appended.

Currents were not detectable anywhere within the survey area without specialized equipment.

Q. RECOMMENDATIONS

See sections H, K, L, N, and the appended Item Investigation Forms for specific recommendations.

R. AUTOMATED DATA PROCESSING

Programs used during field data acquisition and field processing of this survey are as follows:

PROGRAM	DESCRIPTION	VERSION DATE
=====	=====	=====
RK201	Grid, Signal, and Lattice Plot	04/18/75
RK212	Visual Station Table Load	04/01/74
RK216	Range/Azimuth Non-Real Time Plot	02/24/84

PROGRAM	DESCRIPTION	VERSION DATE
=====		
RK300	Utility Computations	02/05/76
RK330	Reformat and Data Check	10/21/80
RA362	RK330 and AM602 combined	08/20/84
RK407	Geodetic Inverse/Direct Computation	09/25/78
RK530	Velocity Correction Computations	05/10/76
AM602	ELINORE - Line Oriented Editor	12/08/82

S. REFERENCE TO REPORTS

The Horizontal Control Report for OPR-V215, Irondequoit Bay is in the process of being prepared and will be submitted by N/MOA222.

A User Evaluation and a Coast Pilot Report are appended.

Local currents are discussed in Section P, MISCELLANEOUS.

Respectfully Submitted,

Kenneth P. Peters
 Kenneth P. Peters, LT, NOAA
 OIC, HFP-3

CHART # 14804

ITEM # NONE

ITEM DESCRIPTION:

METAL STRUCTURE

SOURCE:

INVESTIGATION DATE: JULY 8, 1987 TIME: 141507 VESSEL: 0517

OIC: LT. KEN PETERS

REFERENCES:

Position No: 1476

Volume 5 pg. 50

CORRECTORS APPLIED:

Velocity

TRA Correctors

Predicted or

Actual Tide Correctors

GEODETTIC POSITION:

Charted:

Latitude

Longitude

Observed:

43/14/08.24⁵

77/32/30.73⁶⁹

POSITION DETERMINED BY: R/AZ

METHOD OF ITEM INVESTIGATION: VISUAL SEARCH IN 8' OF WATER WITH 6' VIS.
ITEM SEEN DURING POSITIONING OF PIERS AND ASSORTED FEATURES ALONG SHORE.
METAL STRUCTURE OF 15' CIRCUMFERENCE.

CONCR. CLAM AS AN OBSTRUCTION (METAL) THAT HARES 2 FT. AT LOW AS SHOWN ON THE PRESENT SURVEY.

CHARTING RECOMMENDATIONS:

CHART AS OBSTRUCTION 1.0' ~~LEAST DEPTH~~
AT TIME OF POSITION. DN. 189

Compilation Use Only

CHART

APPLIED AS

CHART # 14804

ITEM # NONE

ITEM DESCRIPTION: SUBM. PILES

SOURCE:

INVESTIGATION DATE: JULY 8, 1987 TIME: 15030 VESSEL: 0517

OIC: LT. KEN PETERS

REFERENCES:

Position No: 1474: 1475 Volume 5 pg. 49, 50

CORRECTORS APPLIED:

- Velocity TRA Correctors
- Predicted or Actual Tide Correctors

GEODETTIC POSITION:

	Latitude	Longitude
Charted:	43/14/07.19	77/32/31.7 ³ X
Observed:	43/14/06.998	77/32/31.01

POSITION DETERMINED BY:

R/AZ

METHOD OF ITEM INVESTIGATION:

VISUAL SEARCH I.D.P. DURING POSITIONING OF FEATURES ALONG SHORE. SUBM. PILES PARALLEL TO SHORE 2.0' FOLE LEAST DEPTH.

CHARTING RECOMMENDATIONS: CHART AS SURVEYED

Concur See also section 7.2.1) of the Evaluation Report.

Compilation Use Only

CHART

APPLIED AS

CHART # 14804

ITEM # 4565

ITEM DESCRIPTION: PIER

SOURCE: TP01067/80-82

INVESTIGATION DATE: JULY 9, 1987 TIME: 153200 VESSEL: 0517

OIC: LT. KEN PETERS

REFERENCES:

Position No: 1498

Volume 5 pg. 57

CORRECTORS APPLIED:

- Velocity TRA Correctors
- Predicted or Actual Tide Correctors

GEODETTIC POSITION:

	Latitude	Longitude
Charted:	43/10/37.00	77/31/02.50
Observed:	43/10/36.987	77/31/02.69

POSITION DETERMINED BY: R/AZ

METHOD OF ITEM INVESTIGATION: VISUAL; FATHO SEARCH FOR PIER IN
 2-4' OF WATER WITH 4' VISIBILITY
 D.P. TAKEN IN VICINITY (NOTHING FOUND)
 NOT SMOOTH PLOTTED

CHARTING RECOMMENDATIONS:

~~REMOVE FROM CHART~~ Do not Chart

Compilation Use Only

CHART

APPLIED AS:

CHART # 14804

ITEM # 4566

ITEM DESCRIPTION: PIER IN RUINS

SOURCE: TP-01067/80-82

INVESTIGATION DATE: 6/16/87

TIME: 134800Z VESSEL: 0517

OIC: LT. KEN PETERS

REFERENCES:

Position No: 991

Volume 4 pg. 4

CORRECTORS APPLIED:

Velocity

TRA Correctors

Predicted or

Actual Tide Correctors

GEODETTIC POSITION:

Charted:

Latitude

43/11/12.9

Longitude

077/31/43.5

Observed:

43/11/12.858

077/31/44.26

POSITION DETERMINED BY: R/AZ

METHOD OF ITEM INVESTIGATION: VISUAL SEARCH

CHARTING RECOMMENDATIONS: PIER RUINS - CHART AS SURVEYED *Correct.*

*See also section 6.b.1) of the
Evaluation Report.*

Compilation Use Only

CHART

APPLIED AS

CHART # 14804

ITEM # 4567

ITEM DESCRIPTION: PIERS(3) IN RUIN

SOURCE: TP-01067/80-82

INVESTIGATION DATE: 6/16/87

TIME: 134400Z VESSEL: 0517

OIC: LT. KEN PETERS

REFERENCES:

Position No: 990

Volume 4 pg. 4

CORRECTORS APPLIED:

- Velocity TRA Correctors
 Predicted or Actual Tide Correctors

GEODETTIC POSITION:

	Latitude	Longitude
Charted:	43/11/13.8	077/31/43.5
Observed:	43/11/13.93	077/31/43.70

POSITION DETERMINED BY: R/AZ

METHOD OF ITEM INVESTIGATION: VISUAL SEARCH

CHARTING RECOMMENDATIONS: PIER RUINS - CHART AS SURVEYED *Correct.*

Compilation Use Only

CHART

APPLIED AS

CHART # 14804

ITEM # 4568

ITEM DESCRIPTION: PIER IN RUINS

SOURCE: TP-01067/80-82

INVESTIGATION DATE: 6/16/87

TIME: 133800 Z VESSEL: 0517

OIC: LT. KEN PETERS

REFERENCES:

Position No: 989

Volume 4 pg. 4

CORRECTORS APPLIED:

Velocity

TRA Correctors

Predicted or

Actual Tide Correctors

GEODETTIC POSITION:

Charted:

Latitude

Longitude

43/11/15.0

077/31/44.0

Observed:

43/11/15.436

077/31/43.27

POSITION DETERMINED BY: R/AZ

METHOD OF ITEM INVESTIGATION: VISUAL SEARCH

CHARTING RECOMMENDATIONS: PIER RUINS - CHART AS SURVEYED *Correct. Do NOT chart notation "Floating Dock"*

Compilation Use Only

CHART

APPLIED AS

CHART # 14804

ITEM # 4569

ITEM DESCRIPTION: PIER

SOURCE: TP-0067/80-82

INVESTIGATION DATE: JULY 9, 1987 TIME: 150000 VESSEL: 0517

OIC: LT. KEN PETERS

REFERENCES:

Position No: 1496

Volume 5 pg. 56

CORRECTORS APPLIED:

Velocity

TRA Correctors

Predicted or

Actual Tide Correctors

GEODETTIC POSITION:

Charted:

Latitude

43/11/16.70

Longitude

77/31/45.50

Observed:

43/11/15.9^{X3}

77/31/45.41

POSITION DETERMINED BY:

R/AZ

METHOD OF ITEM INVESTIGATION:

VISUAL SEARCH; FATHO SEARCH FOR PIER
IN 1-2' OF WATER WITH 4' VISIBILITY

D.P. TAKEN IN VICINITY (NOTHING FOUND)
NOT SMOOTH PLOTTED

CHARTING RECOMMENDATIONS: ~~REMOVE FROM CHART~~ Do not chart

Compilation Use Only

CHART

APPLIED AS

CHART # 14804

ITEM # 4570

ITEM DESCRIPTION: PIER

SOURCE: TP-01067/80-82

INVESTIGATION DATE: 6/16/87

TIME: 164900 Z VESSEL: 05197

OIC: LT. KEN PETERS

REFERENCES:

Position No: 1011

Volume 4 pg. 8

CORRECTORS APPLIED:

- Velocity TRA Correctors
 Predicted or Actual Tide Correctors

GEODETTIC POSITION:

	Latitude	Longitude
Charted:	43/11/18.2	077/31/45.1
Observed:	43/11/18.34	077/31/45.0

POSITION DETERMINED BY:

R/AZ

METHOD OF ITEM INVESTIGATION: VISUAL SEARCH

CHARTING RECOMMENDATIONS: PIER - CHART AS SURVEYED. *Correct. Chart as shown on present survey*

Compilation Use Only

CHART

APPLIED AS

CHART # 14804

ITEM # 4571

ITEM DESCRIPTION: PIER

SOURCE: TP-01067/80-82

INVESTIGATION DATE: 6/16/87

TIME: 165300Z VESSEL: 0517

OIC: LT. KEN PETERS

REFERENCES:

Position No: 1013²

Volume 4 pg. 9

CORRECTORS APPLIED:

Velocity

TRA Correctors

Predicted or

Actual Tide Correctors

GEODETTIC POSITION:

Charted:

Latitude

Longitude

Observed:

43/11/19.6
43/11/19.76

077/31/43.6
077/31/43.63

POSITION DETERMINED BY: R/AZ

METHOD OF ITEM INVESTIGATION: VISUAL SEARCH

CHARTING RECOMMENDATIONS: PIER - CHART AS SURVEYED. *Condr. Chart as shown on the present survey.*

Compilation Use Only

CHART

APPLIED AS

CHART # 14804

ITEM # 4572

ITEM DESCRIPTION: PIER

SOURCE: TP-01067/80-82

INVESTIGATION DATE: 6/16/87

TIME: 165400Z VESSEL: 0517

OIC: LT. KEN PETERS

REFERENCES:

Position No: 1014

Volume 4 pg. 9

CORRECTORS APPLIED:

Velocity

TRA Correctors

Predicted or

Actual Tide Correctors

GEODETTIC POSITION:

Charted:

Latitude
43/11/20.50

Longitude
077/31/43.10

Observed:

43/11/20.495

077/31/42.653

POSITION DETERMINED BY: R/AZ

METHOD OF ITEM INVESTIGATION: VISUAL SEARCH

CHARTING RECOMMENDATIONS: PIER- CHART AS SURVEYED *Concur. Chart as shown on the present survey*

Compilation Use Only

CHART

APPLIED AS

CHART # 14804

ITEM # 4573

ITEM DESCRIPTION: T-PIER

SOURCE: TP-01067/80-82

INVESTIGATION DATE: 6/16/87

TIME: 174700Z VESSEL: 0517

OIC: LT. KEN PETERS

REFERENCES:

Position No: 1018

Volume 4 pg. 10

CORRECTORS APPLIED:

- Velocity TRA Correctors
- Predicted or Actual Tide Correctors

GEODETTIC POSITION:

	Latitude	Longitude
Charted:	43/11/38.0	077/31/57.50
Observed:	43/11/37.63 ₄	077/31/56.21 ₁₇

POSITION DETERMINED BY: R/AZ

METHOD OF ITEM INVESTIGATION: VISUAL SEARCH

CHARTING RECOMMENDATIONS: T-PIER - CHART AS SURVEYED *Do not correct. Observed pier is not the same as pier described for AWOIS 4573. On page 8, of the Descriptive Report, the hydrographer states pier is gone. See also section 6.6.2) of the Evaluation Report.*

Compilation Use Only

CHART

APPLIED AS

CHART # 14804

ITEM # 4574

ITEM DESCRIPTION: PIER

SOURCE: TP-01067/80-82

INVESTIGATION DATE: 6/16/87

TIME: 185400 Z VESSEL: 0517

OIC: LT. KEN PETERS

REFERENCES:

Position No: 1036

Volume 4 pg. 14

CORRECTORS APPLIED:

Velocity

TRA Correctors

Predicted or

Actual Tide Correctors

GEODETTIC POSITION:

Charted:

Latitude

Longitude

Observed:

43/11/39.50

077/31/05.50

43/11/39.95⁸

077/31/05.53⁴

POSITION DETERMINED BY: R/AZ

METHOD OF ITEM INVESTIGATION: VISUAL SEARCH

CHARTING RECOMMENDATIONS: PIER - CHART AS SURVEYED

See section 6.6.3 of the Evaluation Report.

Compilation Use Only

CHART

APPLIED AS

CHART # 14804

ITEM # 4575

ITEM DESCRIPTION: PIER

SOURCE: TP-01067/80-82

INVESTIGATION DATE: 6/16/87

TIME: 190000Z VESSEL: 0517

OIC: LT. KEN PETERS

REFERENCES:

Position No: 1040

Volume 4 pg. 14

CORRECTORS APPLIED:

Velocity

TRA Correctors

Predicted or

Actual Tide Correctors

GEODETTIC POSITION:

Charted:

Latitude

Longitude

Observed:

43/11/41.8

077/31/05.00

43/14/41.96

077/31/04.754

POSITION DETERMINED BY: R/AZ

METHOD OF ITEM INVESTIGATION: VISUAL SEARCH

CHARTING RECOMMENDATIONS: PIER - CHART AS SURVEYED *Concor. Chart as shown on the present survey.*

Compilation Use Only

CHART

APPLIED AS

CHART # 14804

ITEM # 4576

ITEM DESCRIPTION: PIER

SOURCE: TP-01067/80-82

INVESTIGATION DATE: JULY 9, 1987 TIME: 151500 VESSEL: 0517

OIC: LT. KEN PETERS

REFERENCES:

Position No: 1497

Volume 5 pg. 56

CORRECTORS APPLIED:

Velocity TRA Correctors

Predicted or Actual Tide Correctors

GEODETTIC POSITION:

	Latitude	Longitude
Charted:	43/11/43.0	077/32/00.00
Observed:	43/11/43.36	77/32/00.38

POSITION DETERMINED BY: R/AZ

METHOD OF ITEM INVESTIGATION:

VISUAL 1 FATHO SEARCH FOR PIER IN
1'-2' OF WATER WITH 4' VISIBILITY
D.P. TAKEN IN VICINITY (NOTHING FOUND)
NOT SMOOTH PLOTTED

CHARTING RECOMMENDATIONS:

~~REMOVE FROM CHART~~ Do not chart

Compilation Use Only

CHART

APPLIED AS

CHART # 14804

ITEM # 4577

ITEM DESCRIPTION: PIER

SOURCE: TP-01067/80-82

INVESTIGATION DATE: 6/16/87

TIME: 191900Z VESSEL: 0517

OIC: LT. KEN PETERS

REFERENCES:

Position No: 1041

Volume 4 pg. 15

CORRECTORS APPLIED:

Velocity TRA Correctors

Predicted or Actual Tide Correctors

GEODETTIC POSITION:

	Latitude	Longitude
Charted:	43/12/10.0	077/31/14.50
Observed:	43/12/09.9 ₅	077/31/14.39 ₄₂

POSITION DETERMINED BY: R/AZ

METHOD OF ITEM INVESTIGATION: VISUAL SEARCH

CHARTING RECOMMENDATIONS: PIER - CHART AS SURVEYED *Concur. Chart as shown on the present survey.*

Compilation Use Only

CHART

APPLIED AS

CHART # 14804

ITEM # 4578

ITEM DESCRIPTION: PIER

SOURCE: TP-01067/80-82

INVESTIGATION DATE: 6/16/87

TIME: 192100Z VESSEL: 0517

OIC: LT. KEN PETERS

REFERENCES:

Position No: 1042

Volume 4 pg. 15

CORRECTORS APPLIED:

Velocity TRA Correctors

Predicted or Actual Tide Correctors

GEODETTIC POSITION:

	Latitude	Longitude
Charted:	43/12/11.0	077/31/14.50
Observed:	43/12/10.85 90	077/31/14.64 7

POSITION DETERMINED BY: R/AZ

METHOD OF ITEM INVESTIGATION: VISUAL SEARCH

CHARTING RECOMMENDATIONS: PIER - CHART AS SURVEYED *Concur. Chart as shown on the present survey.*

Compilation Use Only

CHART

APPLIED AS

CHART # 14804

ITEM # 4579

ITEM DESCRIPTION: PIER

SOURCE: TP-01067/80-82

INVESTIGATION DATE: 6/16/87

TIME: 192200Z VESSEL: 0517

OIC: LT. KEN PETERS

REFERENCES:

Position No: 1043

Volume 4 pg. 15

CORRECTORS APPLIED:

Velocity

TRA Correctors

Predicted or

Actual Tide Correctors

GEODETTIC POSITION:

	Latitude	Longitude
Charted:	43/12/11.60	077/31/14.50
Observed:	43/12/11.60 ₂	077/31/14.48 ₅₁

POSITION DETERMINED BY: R/AZ

METHOD OF ITEM INVESTIGATION: VISUAL SEARCH

CHARTING RECOMMENDATIONS: PIER - CHART AS SURVEYED *Concor. Chart as shown on the present survey.*

Compilation Use Only

CHART

APPLIED AS

CHART # 14804

ITEM # 4580

ITEM DESCRIPTION: PIER

SOURCE: TP-01067/80-82

INVESTIGATION DATE: 6/16/87

TIME: 195000Z VESSEL: 0517

OIC: LT. KEN PETERS

REFERENCES:

Position No: 1054

Volume 4 pg. 17

CORRECTORS APPLIED:

Velocity TRA Correctors

Predicted or Actual Tide Correctors

GEODETTIC POSITION:

	Latitude	Longitude
Charted:	43/12/14.00	077/32/08.50
Observed:	43/12/14.27 ₆	077/32/08.59

POSITION DETERMINED BY: R/AZ

METHOD OF ITEM INVESTIGATION: VISUAL SEARCH

CHARTING RECOMMENDATIONS: PIER - CHART AS SURVEYED *Concur. Chart as shown on the present survey.*

Compilation Use Only

CHART

APPLIED AS

CHART # 14804

ITEM # 4581

ITEM DESCRIPTION: PIER

SOURCE: TP-01067/80-82

INVESTIGATION DATE: 6/16/87

TIME: 195200Z VESSEL: 0517

OIC: LT. KEN PETERS

REFERENCES:

Position No: 1055

Volume 4 pg.17

CORRECTORS APPLIED:

Velocity TRA Correctors

Predicted or Actual Tide Correctors

GEODETTIC POSITION:

	Latitude	Longitude
Charted:	43/12/14.90	077/32/09.00
Observed:	43/12/14.87	077/32/08.78

POSITION DETERMINED BY: R/AZ

METHOD OF ITEM INVESTIGATION: VISUAL SEARCH

CHARTING RECOMMENDATIONS: PIER - CHART AS SURVEYED *Correct. Chart as shown on the present survey.*

Compilation Use Only

CHART

APPLIED AS

CHART # 14804

ITEM # 4582

ITEM DESCRIPTION: PIER

SOURCE: TP-01067/80-82

INVESTIGATION DATE: 6/16/87

TIME: 193300Z VESSEL: 0517

OIC: LT. KEN PETERS

REFERENCES:

Position No: 1048

Volume 4 PG.16

CORRECTORS APPLIED:

Velocity TRA Correctors

Predicted or Actual Tide Correctors

GEODETTIC POSITION:

	Latitude	Longitude
Charted:	43/12/20.00	077/31/16.00
Observed:	43/12/19.52 ₃	077/31/16.9X ₄

POSITION DETERMINED BY: R/AZ

METHOD OF ITEM INVESTIGATION: VISUAL SEARCH

CHARTING RECOMMENDATIONS: PIER^{POINTS} CHART AS SURVEYED *Concor. See also section 6.6.4) of the Evaluation Report.*

Compilation Use Only

CHART

APPLIED AS

CHART # 14804

ITEM # 4583

ITEM DESCRIPTION: OBSTRUCTION/PIER

SOURCE: TP-01067/80-82

INVESTIGATION DATE: 6/25/87 TIME: 1754 VESSEL: 0517

OIC: LT. KEN PETERS

REFERENCES:

Position No: 1233

Volume 4 pg. 59

CORRECTORS APPLIED:

- Velocity TRA Correctors
 Predicted or Actual Tide Correctors

GEODETTIC POSITION:

	Latitude	Longitude
Charted:	43/12/38.00	77/31/37.50
Observed:	43/12/37.48 ₆	77/31/36.51 ₅

POSITION DETERMINED BY:

R/AZ

METHOD OF ITEM INVESTIGATION:

VISUAL SEARCH! D.P.

CHARTING RECOMMENDATIONS:

~~CHART AS SURVEYED~~ See section 6.b.5) of the
Evaluation Report.

Compilation Use Only

CHART

APPLIED AS

CHART # 14804

ITEM # 4584

ITEM DESCRIPTION: OBSTRUCTION/PIER

SOURCE: TP-01067/80-82

INVESTIGATION DATE: 6/18/87

TIME: 150000 VESSEL: 0517

OIC: LT. KEN PETERS

REFERENCES:

Position No: 1081

Volume 4 pg. 25

CORRECTORS APPLIED:

Velocity TRA Correctors

Predicted or Actual Tide Correctors

GEODETTIC POSITION:

	Latitude	Longitude
Charted:	43/12/48.50	77/32/21.00
Observed:	43/12/48.89	77/32/21.44'

POSITION DETERMINED BY:

R/A2

METHOD OF ITEM INVESTIGATION:

VISUAL SEARCH: D.P.

CHARTING RECOMMENDATIONS:

~~CHART AS SURVEYED~~
See section 6.b.6) of the Evaluation Report.

Compilation Use Only

CHART

APPLIED AS

CHART # 14804

ITEM # 4585

ITEM DESCRIPTION: OBSTRUCTION/T-PIER

SOURCE: TPO1067/80-82

INVESTIGATION DATE: 6/18/87

TIME: 133300 VESSEL: 0517

OIC: LT. KEN PETERS

REFERENCES:

Position No: 1125

Volume 4 pg. 37

CORRECTORS APPLIED:

Velocity

TRA Correctors

Predicted or

Actual Tide Correctors

GEODETTIC POSITION:

	Latitude	Longitude
Charted:	43/13/06.00	77/31/20.50
Observed:	43/13/06.13 ₅	77/31/49.71 ₃

POSITION DETERMINED BY: R/AZ

METHOD OF ITEM INVESTIGATION: VISUAL SEARCH & D.P.

CHARTING RECOMMENDATIONS:

CHART AS SURVEYED *Concur. Chart is shown on the present survey.*

Compilation Use Only

CHART

APPLIED AS

CHART # 14804

ITEM # 4586

ITEM DESCRIPTION: OBSTRUCTION/PIER

SOURCE: TPO1067/80-82

INVESTIGATION DATE: JULY 9, 1987 TIME: 155800 VESSEL: 0517

OIC: LT. KEN PETERS

REFERENCES:

Position No: 1499

Volume 5 PG. 57

CORRECTORS APPLIED:

Velocity TRA Correctors

Predicted or Actual Tide Correctors

GEODETTIC POSITION:

	Latitude	Longitude
Charted:	43/13/09.70	77/32/25.50
Observed:	43/13/09.21 ⁰	77/32/25.93

POSITION DETERMINED BY: R/AZ

METHOD OF ITEM INVESTIGATION: VISUAL'S FAITH SEARCH FOR PIER IN
 2-5' OF WATER WITH 4' VISIBILITY
 D.P. TAKEN IN VICINITY (NOTHING FOUND)
 NOT SMOOTH PLOTTED

CHARTING RECOMMENDATIONS: ~~REMOVE FROM CHART~~ Do not Chart

Compilation Use Only

CHART

APPLIED AS

CHART # 14804

ITEM # 4587

ITEM DESCRIPTION: OBSTRUCTION

SOURCE: TP01067/80-82

INVESTIGATION DATE: 6/18/87

TIME: 1724

VESSEL: 0517

OIC: LT. KEN PETERS

REFERENCES:

Position No: 1100

Volume 4 pg. 29

CORRECTORS APPLIED:

Velocity TRA Correctors

Predicted or Actual Tide Correctors

GEODETTIC POSITION:

	Latitude	Longitude
Charted:	43/13/12	77/32/23
Observed:	43/18/12.15	77/32/23.88

POSITION DETERMINED BY:

R/AZ

METHOD OF ITEM INVESTIGATION:

VISUAL SEARCH: D.P.

CHARTING RECOMMENDATIONS:

Revise
CHANGE OBSTR. TO PIER AS CHARTED ^{shown} on the
present survey.

Compilation Use Only

CHART

APPLIED AS

CHART # 14804

ITEM # 4588

ITEM DESCRIPTION: OBSTRUCTION

SOURCE: TP 01067/80-82

INVESTIGATION DATE: July 8, 1987 TIME: 131200 VESSEL: 0517

OIC: LT. KEN PETERS

REFERENCES:

Position No:

1688

Volume

5⁴

pg.

52³²

CORRECTORS APPLIED:

1124, 1488

Velocity

TRA Correctors

Predicted or

Actual Tide Correctors

GEODETTIC POSITION:

Charted:

Latitude 43/13/50.00

Longitude 77/32/21.00

Observed:

43/13/50.16

77/32/21.00

POSITION DETERMINED BY:

R/AZ

METHOD OF ITEM INVESTIGATION:

VISUAL SEARCH; D.P. ALONG WITH SHORELINE D.P.'S IN POOL AREA.

CHARTING RECOMMENDATIONS:

CHART AS SURVEYED *Concord. See also section 6.6.7 of the Evaluation Report.*

Compilation Use Only

CHART

APPLIED AS

CHART # 14804

ITEM # 4589

ITEM DESCRIPTION: VISIBLE OBSTRUCTION

SOURCE: TPO1067/80-82

INVESTIGATION DATE: 6/23/87

TIME: 143200 VESSEL: 0517

OIC: LT. KEN PETERS

REFERENCES:

Position No: 1136

Volume 4 pg. 39

CORRECTORS APPLIED:

Velocity

TRA Correctors

Predicted or

Actual Tide Correctors

GEODETTIC POSITION:

	Latitude	Longitude
Charted:	43/14/50.00 ⁰⁴	77/32/10.50 ²¹⁰⁰
Observed:	43/14 04.27	77/31/10.88 ⁴

center of search

POSITION DETERMINED BY:

R/AZ

METHOD OF ITEM INVESTIGATION:

VISUAL SEARCH ; D.P. 3' VISIBILITY IN 3' WATER
(NOTHING FOUND)

CHARTING RECOMMENDATIONS:

~~REMOVE FROM CHART~~ Do not chart.

Compilation Use Only

CHART

APPLIED AS

CHART # 14804

ITEM # 4590

ITEM DESCRIPTION: PIER

SOURCE: TP 01067/80-82

INVESTIGATION DATE: 6/23/87

TIME: 152600 VESSEL: 0517

OIC: LT. KEN PETERS

REFERENCES:

Position No: 1150

Volume 4 PG. 42

CORRECTORS APPLIED:

Velocity

TRA Correctors

Predicted or

Actual Tide Correctors

GEODETTIC POSITION:

Charted:

Latitude

Longitude

Observed:

43 14 09.00

77 31 41.00

43 14 08.43

77 31 43.58

POSITION DETERMINED BY:

R/AZ

METHOD OF ITEM INVESTIGATION:

VISUAL SEARCH ; D.P.

CHARTING RECOMMENDATIONS:

~~CHART AS SURVEYED~~ See sections 6.6.8) and 9)
of the Evaluation Report.

Compilation Use Only

CHART

APPLIED AS

CHART # 14804

ITEM # 4591

ITEM DESCRIPTION: PIER

SOURCE: TP-01067/80-82

INVESTIGATION DATE: 6/23/87 TIME: 151000 VESSEL: 0517

OIC: LT. KEN PETERS

REFERENCES:

Position No: 1146 Volume 4 pg. 41

CORRECTORS APPLIED:

- Velocity TRA Correctors
- Predicted or Actual Tide Correctors

GEODETTIC POSITION:

	Latitude	Longitude
Charted:	43° 14' 09.50"	077° 31' 35.50"
Observed:	43° 14' 09.54" 3	077 31' 35.40" 5

POSITION DETERMINED BY: R/AZ

METHOD OF ITEM INVESTIGATION: VISUAL SEARCH; D.P.

CHARTING RECOMMENDATIONS: ~~CHART AS SURVEYED~~ only one (1) pier found. See section 6.6.10) of the Evaluation Report.

Compilation Use Only

CHART

APPLIED AS

CHART # 14804

ITEM # 4592

ITEM DESCRIPTION: PIER

SOURCE: TP-01067/80-82

INVESTIGATION DATE: 6/23/87

TIME: 150600 VESSEL: 0517

OIC: LT. KEN PETERS

REFERENCES:

Position No: 1144

Volume 4 pg. 41

CORRECTORS APPLIED:

Velocity TRA Correctors

Predicted or Actual Tide Correctors

GEODETTIC POSITION:

	Latitude	Longitude
Charted:	43/14/10.00	077/31/32.50
Observed:	43/14/09.70	077/31/32.64

POSITION DETERMINED BY:

R/AZ

METHOD OF ITEM INVESTIGATION:

VISUAL SEARCH ! D.P.

CHARTING RECOMMENDATIONS:

~~CHART AS SURVEYED~~ See section 6.b.11) of the Evaluation Report.

Compilation Use Only

CHART

APPLIED AS

CHART # 14804

ITEM # 4593

ITEM DESCRIPTION: PIER

SOURCE: TP 01067/80-82

INVESTIGATION DATE: July 8, 1987 TIME: 183500 VESSEL: 0517

OIC: LT. KEN PETERS

REFERENCES:

Position No: ¹⁴1689

Volume 5 pg. 52

CORRECTORS APPLIED:

- Velocity
- TRA Correctors
- Predicted or
- Actual Tide Correctors

GEODETTIC POSITION:

	Latitude	Longitude
Charted:	43/14/10.00	77/31/37.00
Observed:	43/14/09.9X	77/31/36.9X

POSITION DETERMINED BY: R/AZ

METHOD OF ITEM INVESTIGATION: VISUAL SEARCH ; D.P. IN VICINITY OF NON EXISTING PIER (NOT SMOOTH PLOTTED)

CHARTING RECOMMENDATIONS: ~~REMOVE FROM CHART~~ Do not chart.

Compilation Use Only

CHART

APPLIED AS

CHART # 14804

ITEM # 4594

ITEM DESCRIPTION: SUBM. ROCK

SOURCE: UNKNOWN

INVESTIGATION DATE: 6/23/87

TIME: 143700 VESSEL: 0517

OIC: LT. KEN PETERS

REFERENCES:

Position No: 1137

Volume 4 pg. 39

CORRECTORS APPLIED:

Velocity

TRA Correctors

Predicted or

Actual Tide Correctors

WATER LEVEL

GEODETIC POSITION:

Charted:

Latitude

Longitude

Observed:

43° 14' 13.00"
43° 14' 12.89"
91

077° 31' 16.00"
077 31' 16.01"
15.98

POSITION DETERMINED BY:

R/AZ

METHOD OF ITEM INVESTIGATION:

VISUAL SEARCH IN 3' OF WATER WITH 3' VISIBILITY,
LOCAL KNOWLEDGE INFORMS FIELD UNIT OF NO EXISTING ROCK IN THIS AREA.
BRIAN M'COY 247 LAKE RD. WEBSTER, N.Y. 716-323-1158.
MR. M'COY INFORMED UNIT OF A SUBMERGED LOG IN THE AREA APPROXIMATELY
400 METERS WEST THAT HE BELIEVED TO BE THE ONLY EXISTING
DANGER TO NAVIGATION. THIS ITEM WAS POSITIONED 6/15/87. IN VOL. 3,
PG. 66. POS #5987; 988. MR M'COY HAS LIVED IN THE AREA 17 YEARS AND
HAS SEEN THESE AREAS AT EXTREME LOW WATER.

CHARTING RECOMMENDATIONS:

REMOVE

Conc. See also section 7.2.3) of the Evaluation Report.

Compilation Use Only

CHART

APPLIED AS

DIVE INVESTIGATION REPORT
PROJECT NUMBER OPR-VZ15
SURVEY H-10245
FIELD NUMBER HAP-10-3-87

DIVE NUMBER 1

DIVE DATE July 8, 1987

I. AREA OF INVESTIGATION

- A. State/Country New York Sub-Locality LAKE ONTARIO / IRONDEQUOIT
B. Position: Latitude 43° 14' 23.79 Longitude 77° 32' 30.33
(Dive site or center of search area)
C. Method of Positioning R/AZ

II. PURPOSE OF INVESTIGATION

- A. AWOIS item number: ∅
B. Source of item being investigated (if other than AWOIS listing): CHART BLOWUP
C. Contacts (e.g. USCG, C of E, Harbor Masters, Owners, etc.):
D. Names, Addresses and Phone Numbers etc. of contacts:

III. SURVEY PROCEDURES

- A. Determination of dive site (e.g. wire drag, side scan, development): CHARTED FEATURE
B. Search Procedure (e.g. following a groundwire, circle search, sweep along known feature, etc.)
CIRCLE SEARCH - 50 M. RADIUS
COMPASS COURSES
C. Known reference to features nearby:
ROCK JETTY ENT. TO IRONDEQUOIT BAY
D. Area and depths covered:
18-20' 100 M. DIA.

IV. DIVE DATA

- A. Divers: M. McMANN, D. ELLIOTT
- B. Time of Dive (in UTC) - Real 1540
Elapsed 1610
- C. General Bottom Depths (units and method of determination):
20' FATHO: LEADLINE
- D. Current and conditions: 1-2KTS LT. CHOP
- E. Visibility (number of feet - horizontally and vertically):
5-10' HOR. & 6-8' VERT.
- F. Bottom type (mud, sand, rocks, etc.): SAND: ROCKS

IV. RESULTS

- A. Detached Positions Number(s): 1477
Time of D.P.'s (UTC): Describe if other time zone: 1610
Least Depth and Fix Numbers (^{Final}~~raw~~ depth): 17.2 reduced
Method of determining depth (The raw sounding should be recorded. The reduced least depth should be plotted on the field sheet.) _____
- B. Description of findings:
NOTHING FOUND / FLAT BOTTOM
NO EVIDENCE OF ANY CRIB OR STRUCTURE FOR OUTFALL.
- C. Dimensions of item or feature (attach sketch if appropriate):
- D. Unusual Conditions:

VI. CHARTING RECOMMENDATIONS

REMOVE FROM CHART See section 7.2.3 of the Evaluation Report.

Position Lat. _____ Long. _____
Reduced Depth _____
Type of Feature (Reference Chart No.1) _____

DIVE INVESTIGATION REPORT
PROJECT NUMBER OFR-V215
SURVEY H-10245
FIELD NUMBER HFR-10-3-87

DIVE NUMBER 2

DIVE DATE July 8, 1987

I. AREA OF INVESTIGATION

- A. State/Country NEW YORK Sub-Locality LAKE ONTARIO / IRONDEQUOIT
- B. Position: Latitude 43° 14' 22.13" Longitude 77° 32' 17.44"
(Dive site or center of search area)
- C. Method of Positioning R/AZ

II. PURPOSE OF INVESTIGATION

- A. AWOIS item number: ∅
- B. Source of item being investigated (if other than AWOIS listing): CHART BLOWUP
- C. Contacts (e.g. USCG, C of E, Harbor Masters, Owners, etc.):
- D. Names, Addresses and Phone Numbers etc. of contacts:

III. SURVEY PROCEDURES

- A. Determination of dive site (e.g. wire drag, side scan, development): CHARTED FEATURE
- B. Search Procedure (e.g. following a groundwire, circle search, sweep along known feature, etc.)
CIRCLE SEARCH - 50 M. RADIUS
COMPASS COURSES
- C. Known reference to features nearby:
ROCK JETTY ENT. TO IRONDEQUOIT BAY
- D. Area and depths covered:
18-20' 100 M. DIA.

IV. DIVE DATA

- A. Divers: M. McMANUS, D. ELLIOTT
- B. Time of Dive (in UTC) - Real 1625
Elapsed 1655
- C. General Bottom Depths (units and method of determination):
20' FATHOM LEADLINE
- D. Current and conditions: 1-2 KTS. LT. CHOP
- E. Visibility (number of feet - horizontally and vertically):
5-10' HOR : 6-8' VERT.
- F. Bottom type (mud, sand, rocks, etc.): SAND : ROCKS

IV. RESULTS

- A. Detached Positions Number(s): 1478
Time of D.P.'s (UTC): Describe if other time zone: _____
Least Depth and Fix Numbers (^{final}~~raw~~ depth): 17.1 reduced
Method of determining depth (The raw sounding should be recorded. The reduced least depth should be plotted on the field sheet.) _____
- B. Description of findings:
NOTHING FOUND / FLAT BOTTOM
NO EVIDENCE OF ANY CRIB OR STRUCTURE FOR OUTFALL
- C. Dimensions of item or feature (attach sketch if appropriate):
- D. Unusual Conditions:

VI. CHARTING RECOMMENDATIONS

REMOVE FROM CHART See also section 9.2.2) of the Evaluation Report.

Position Lat. _____ Long. _____
Reduced Depth _____
Type of Feature (Reference Chart No.1) _____

APPROVAL SHEET

FOR

H-10245

The hydrographic records transmitted with this survey are complete and adequate to supersede prior surveys for charting with no additional field work recommended.

No direct supervision was given by me during the field work.

Approved and forwarded.

Kenneth W. Perrin

Kenneth W. Perrin

LCDR, NOAA

Chief, Hydrographic Field Parties Section

SIGNAL LISTING

IRONDEQUOIT BAY, N.Y.

OPR-V215 HFP-10-3-87 H-10245

101	6	43	14	05940	077	32	44967	250	0000	000000	SILL 1987
102	6	43	14	17579	077	32	01638	250	0000	000000	USE 22 1987
103	6	43	14	13221	077	32	01644	250	0000	000000	USE 23 1987 *
104	5	43	14	05565	077	32	05526	250	0000	000000	USE 20 1987
105	4	43	14	18155	077	31	16592	250	0000	000000	RAIL 1987 *
106	4	43	14	19784	077	31	02780	250	0000	000000	ROD 1987 *
107	3	43	13	45997	077	32	286426	250	0000	000000	STEEP 1987
108	3	43	13	20541	077	32	24748	250	0000	000000	MICHAEL 1987
109	3	43	13	16622	077	32	233892	250	0000	000000	MARINO 1987
110	4	43	13	059489	077	31	4918891	250	0000	000000	LOG 1987
111	4	43	12	58805	077	31	44963	139	0000	000000	WEST WEBSTER STAND PIPE 1987
112	0	43	12	49564	077	32	218535	250	0000	000000	NEWPORT 1987
113	3	43	12	46118	077	32	239813	250	0000	000000	CIACCIA 1987
114	3	43	12	27439	077	32	11338	250	0000	000000	INTO 1987
115	3	43	12	56381	077	32	50105	250	0000	000000	SEA 1987 *
116	2	43	12	354235	077	31	52255	250	0000	000000	SWAMP 1987
117	3	43	12	04472	077	31	58819	250	0000	000000	KREMER 1987
118	2	43	12	059302	077	31	14838	250	0000	000000	ORLAN 1987
119	4	43	11	38998	077	31	04853	250	0000	000000	AVALON 1987
120	3	43	11	31569	077	31	46890	250	0000	000000	HAVEN 1987 *
121	3	43	11	203624	077	31	442386	250	0000	000000	SNIDER 1987
122	6	43	10	36922	077	31	31922	250	0000	000000	WELCH 1987 *
123	4	43	10	3210710	077	31	0989086	250	0000	000000	BOUNTY 1987
124	7	43	10	33542	077	30	58655	250	0000	000000	SOUTH 1987 *
125	4	43	14	13275	077	32	01640	139	0000	000000	IRONDEQ. BAY, E. BRK. LT. 3 1987
126	4	43	14	17633	077	32	01566	139	0000	000000	IRONDEQ. BAY, W. BRK. LT. 1987
127	3	43	14	02699	077	32	04430	139	0000	000000	IRONDEQ. BAY, LT. 4 1987
128	4	43	14	00717	077	32	04447	139	0000	000000	IRONDEQ. BAY, RED/GRN. LT. 1987
129	3	43	13	50099	077	32	04576	139	0000	000000	IRONDEQ. BAY, LT. 6 1987
130	4	43	13	49966	077	32	03199	139	0000	000000	IRONDEQ. BAY, LT. 5 1987
131	4	43	13	34007	077	32	09949	139	0000	000000	IRONDEQ. BAY, LT. 7 1987
132	3	43	13	34329	077	32	11311	139	0000	000000	IRONDEQ. BAY, LT. 8 1987
133	7	43	13	09015	077	31	45700	139	0000	000000	IRONDEQ. BAY, MICRO TWR. 1987
134	5	43	13	01441	077	32	44721	139	0000	000000	SEA BREEZE MUN. TANK 1987

Note: All signals listed were located to Third Order, Class 1 standards in the year shown, by personnel from the Atlantic Marine Center and/or HFP-3.

** Not used with present survey*

NOAA FORM 76-40
(8-74)U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

ORIGINATING ACTIVITY

Replaces C&GS Form 567.

NONFLOATING AIDS OR LANDMARKS FOR CHARTS

<input checked="" type="checkbox"/> TO BE CHARTED	REPORTING UNIT (Field Party, Ship or Office)	STATE	LOCALITY	DATE	<input checked="" type="checkbox"/> HYDROGRAPHIC PARTY <input type="checkbox"/> GEODETIC PARTY <input type="checkbox"/> PHOTO FIELD PARTY <input type="checkbox"/> COMPILATION ACTIVITY <input type="checkbox"/> FINAL REVIEWER <input type="checkbox"/> QUALITY CONTROL & REVIEW GRP. <input type="checkbox"/> COAST PILOT BRANCH (See reverse for responsible personnel)
<input type="checkbox"/> TO BE REVISED	Field Party #3	New York	Irondequoit Bay Lake Ontario	7-7-87	
<input type="checkbox"/> TO BE DELETED					

The following objects HAVE HAVE NOT been inspected from seaward to determine their value as landmarks.

OPR PROJECT NO.	JOB NUMBER	SURVEY NUMBER	DATUM				METHOD AND DATE OF LOCATION (See instructions on reverse side)		CHARTS AFFECTED
OPR-V215		H-10245	POSITION				OFFICE	FIELD	
CHARTING NAME	DESCRIPTION (Record reason for deletion of landmark or aid to navigation. Show triangulation station names, where applicable, in parentheses)	LATITUDE		LONGITUDE					
		° /	// D.M. Meters	° /	// D.P. Meters				
Light 3	Irondequoit Bay E BRK LT 3	43 14	13.275	77 32	01.640		F-3-6-L 5-7-87		
Light 2	Irondequoit Bay W BRK LT	43 14	17.633	77 32	01.566		F-3-6-L 5-7-87		
Light 4	Irondequoit Bay LT 4	43 14	02.699	77 32	04.430		F-3-6-L 5-9-87		
Light 5	Irondequoit Bay LT 5	43 13	49.966	77 32	03.199		F-3-6-L 5-9-87		
Light 6	Irondequoit Bay LT 6	43 13	50.099	77 32	04.576		F-3-6-L 5-9-87		
Light 7	Irondequoit Bay LT 7	43 13	34.007	77 32	09.949		F-3-6-L 5-9-87		
Red/Green Light	Irondequoit Bay Red/Green LT	43 14	00.717	77 32	04.447		F-3-6-L 5-9-87		
Light 8	Irondequoit Bay LT 8	43 13	34.329	77 32	11.311		F-3-6-L 5-9-87		
Radio Tower	Irondequoit Bay Micro Tower	43 13	09.015	77 31	45.700		F-3-6-L 5-9-87		
Sea Breeze Tower TANK	Irondequoit Bay Sea Breeze Tank	43 13	01.441	77 32	44.722		F-3-6-L 5-9-87		

RESPONSIBLE PERSONNEL		
TYPE OF ACTION	NAME	ORIGINATOR
OBJECTS INSPECTED FROM SEAWARD	K. P. Peters, LTJG, NOAA OIC-HFP 3	<input checked="" type="checkbox"/> PHOTO FIELD PARTY <input type="checkbox"/> HYDROGRAPHIC PARTY <input type="checkbox"/> GEODETIC PARTY <input type="checkbox"/> OTHER (Specify)
POSITIONS DETERMINED AND/OR VERIFIED	R. DeCroix/ A. Ebadirad, MOAA 2322	FIELD ACTIVITY REPRESENTATIVE
		OFFICE ACTIVITY REPRESENTATIVE
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES		<input type="checkbox"/> REVIEWER <input type="checkbox"/> QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE

INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'

(Consult Photogrammetric Instructions No. 64,

OFFICE

I. OFFICE IDENTIFIED AND LOCATED OBJECTS

Enter the number and date (including month, day, and year) of the photograph used to identify and locate the object.

EXAMPLE: 75E(C)6042
8-12-75

FIELD

I. NEW POSITION DETERMINED OR VERIFIED

Enter the applicable data by symbols as follows:

F - Field P - Photogrammetric

L - Located Vis - Visually

V - Verified

1 - Triangulation 5 - Field identified

2 - Traverse 6 - Theodolite

3 - Intersection 7 - Planetable

4 - Resection 8 - Sextant

A. Field positions* require entry of method of location and date of field work.

EXAMPLE: F-2-6-L
8-12-75

*FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.

FIELD (Cont'd)

B. Photogrammetric field positions** require entry of method of location or verification, date of field work and number of the photograph used to locate or identify the object.

EXAMPLE: P-8-V
8-12-75
74L(C)2982

II. TRIANGULATION STATION RECOVERED

When a landmark or aid which is also a triangulation station is recovered, enter 'Triang. Rec.' with date of recovery.

EXAMPLE: Triang. Rec.
8-12-75

III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH

Enter 'V-Vis.' and date.

EXAMPLE: V-Vis.
8-12-75

**PHOTOGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.

RESPONSIBLE PERSONNEL		
TYPE OF ACTION	NAME	ORIGINATOR
OBJECTS INSPECTED FROM SEAWARD	K. P. Peters, LTJG, NOAA OIC-HFP 3	<input checked="" type="checkbox"/> PHOTO FIELD PARTY <input type="checkbox"/> HYDROGRAPHIC PARTY <input type="checkbox"/> GEODETIC PARTY <input type="checkbox"/> OTHER (Specify)
POSITIONS DETERMINED AND/OR VERIFIED	R. DeCroix/A. Ebadirad, MOAA 2322	FIELD ACTIVITY REPRESENTATIVE
		OFFICE ACTIVITY REPRESENTATIVE
FORMS ORIGINATED BY QUALITY CONTROL AND REVIEW GROUP AND FINAL REVIEW ACTIVITIES		<input type="checkbox"/> REVIEWER <input type="checkbox"/> QUALITY CONTROL AND REVIEW GROUP REPRESENTATIVE

INSTRUCTIONS FOR ENTRIES UNDER 'METHOD AND DATE OF LOCATION'

(Consult Photogrammetric Instructions No. 64,

OFFICE

I. OFFICE IDENTIFIED AND LOCATED OBJECTS

Enter the number and date (including month, day, and year) of the photograph used to identify and locate the object.

EXAMPLE: 75E(C)6042
8-12-75

FIELD

I. NEW POSITION DETERMINED OR VERIFIED

Enter the applicable data by symbols as follows:

F - Field P - Photogrammetric

L - Located Vis - Visually

V - Verified

1 - Triangulation 5 - Field identified

2 - Traverse 6 - Theodolite

3 - Intersection 7 - Planetable

4 - Resection 8 - Sextant

A. Field positions* require entry of method of location and date of field work.

EXAMPLE: F-2-6-L
8-12-75

*FIELD POSITIONS are determined by field observations based entirely upon ground survey methods.

FIELD (Cont'd)

B. Photogrammetric field positions** require entry of method of location or verification, date of field work and number of the photograph used to locate or identify the object.

EXAMPLE: P-8-V
8-12-75
74L(C)2982

II. TRIANGULATION STATION RECOVERED

When a landmark or aid which is also a triangulation station is recovered, enter 'Triang. Rec.' with date of recovery.

EXAMPLE: Triang. Rec.
8-12-75

III. POSITION VERIFIED VISUALLY ON PHOTOGRAPH

Enter 'V-Vis.' and date.

EXAMPLE: V-Vis.
8-12-75

**PHOTOGRAMMETRIC FIELD POSITIONS are dependent entirely, or in part, upon control established by photogrammetric methods.



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SURVEY

Atlantic Marine Center
439 West York Street
Norfolk, VA 23510-1114

N/MOA233

TO: N/CG223 - Director, Charting and Geodetic Services
FROM: N/MOA233 - OIC HFP-3, LT Kenneth P. Peters, NOAA Corps
SUBJECT: Coast Pilot Report - Irondequoit Bay, Chart 14804.

Coast Pilot 6, April 1986 was inspected during hydrographic operations from May 1987 through July 1987.

The information contained in the Coast Pilot was accurate in its description of Irondequoit Bay's location and shoreline characteristics, however, lines seven through eighteen, left column, page 119 should be replaced by the following:

CHANNELS-A dredged channel extends from deep water in Lake Ontario between two breakwaters. The outer ends of the breakwaters are marked by lights. Lighted daymarks delineate the channel through the shoal northern area of the bay to deep water. In May 1986 the midchannel was dredged to a contracted depth of eight feet.

LIGHT 2 (43°14.3'N., 77°32.0'W.), 16 feet above the water, is shown from a white cylindrical tower on the N end of the W entrance breakwater.

ANCHORAGES-The bay provides secure anchorage. The holding ground is good with a mud or sand bottom. High steep shorelines provide protection from winds.

DANGERS.-The entrance channel is subject to shoaling and mariners should enter with caution.

BRIDGES.-A fixed highway bridge crosses the center of the bay 1.4 miles south of the entrance and has a clearance of 44 feet.

SMALL-CRAFT FACILITIES.-Marinas at the entrance, along the W side and at the S end of the bay provide transient berths, gasoline, water, ice, electricity, marine supplies, restaurants, and launching ramps.

Copies of pages 117 and 119 are attached.



Genesee River entrance. The bay is irregularly shaped with hilly shores, and extends inland about 4 miles. It is separated from Lake Ontario by a long, low, narrow sandbar. Shallow water is on both the lake and bay sides of the sandbar. On the bay side, it extends S for about 0.6 mile.

The natural channel connecting with the lake cuts through the bar at the NW corner of the bay. During the summer, this channel is narrow and not more than 1 to 4 feet deep, but during the spring it widens sometimes to 100 feet and deepens to as much as 12 to 15 feet.

Two fixed bridges cross the channel between the lake and the bay. The railroad bridge has a clearance of 8 feet, and the highway bridge has a clearance of 6 feet. A fixed highway bridge with a clearance of 44 feet crosses the bay 1.6 miles S of the entrance channel.

Charts 14804, 14815.—From Irondequoit Bay WNW for 3.8 miles to the mouth of the Genesee River, deep water is about 0.5 mile offshore. A buoy marks a rock covered ½ foot close inshore about 0.7 mile SE of the Genesee River entrance.

Rochester Harbor, at the mouth of the Genesee River, is 56 miles W of Oswego Harbor and about 7 miles N of the main business district of the city of Rochester, N.Y. The river is navigable for about 5.5 miles above the mouth. The first of a group of dams is about 7 miles upstream from Lake Ontario. There is no navigable connection between the lower portion of the Genesee River and the New York State Barge Canal, which connects with the river about 11 miles upstream from the lake. The surface elevation of the river falls more than 260 feet between the Rochester Terminal of the New York State Barge Canal System and the head of navigation of the lower portion of the river below the dams.

An unmarked dumping ground with a least reported depth of 35 feet is about 1.8 miles NE of the mouth of the Genesee River.

Prominent features.—The lighted stacks at the powerplant 1.6 miles WNW of the river mouth, the stacks at the sewage treatment plant 1.9 miles SE of the river mouth, and the tall apartment building 1.1 miles SW of the river mouth are the most prominent objects from offshore.

Rochester Harbor Light (43°15.8'N., 77°36.0'W.), 59 feet above the water, is shown from a red skeleton tower with a red enclosed top on the outer end of the W pier. A fog signal is at the light.

A radiobeacon is at the inner end of the E pier.

Channels.—The river is entered from Lake Ontario through a dredged channel that leads between two piers, thence upstream for 2.6 miles above the mouth. There are two turning basins, one just inside the mouth and the other 2 miles above the mouth on the W side of the channel. The outer ends of the entrance piers are marked by lights, and a buoy marks a shoal that extends into the N part of the upper turning basin.

In 1983-April 1985, the midchannel controlling depth was 20 feet in the approach channel, thence in

March-April 1985, 19 feet between the piers to the lower turning basin with 17 to 19 feet in the basin, thence 16 feet at midchannel to the upper turning basin, thence 11 feet at midchannel to the upstream limit of the Federal project. The upper turning basin has shoaling to bare at the N limit and is no longer

Lines 7 through 18 should be deleted and replaced.

navigation into the harbor difficult. River currents sometimes compound this problem. A dangerous sunken wreck is 0.8 mile ENE of Rochester Harbor Light.

Bridges.—Two bridges cross the dredged section of the Genesee River. The ConRail bridge 0.9 mile above the pierheads has a swing span with a clearance of 10 feet. The Stutson Street bridge 0.4 mile upstream has a bascule span with a clearance of 24 feet. (See 33 CFR 117.1 through 117.59 and 117.785, chapter 2, for drawbridge regulations.) Overhead power cables crossing the river 2.8 miles above the pierheads have a clearance of 141 feet. Above the limit of the Federal project, Ridge Road bridge, 5.5 miles above the pierheads, has a fixed span with a clearance of 160 feet. The Driving Park Avenue bridge, 6.4 miles above the pierheads, has fixed span with unknown clearance.

Weather.—(See page T-1 for Rochester climatological table.)

Rochester is a customs port of entry.

Quarantine, customs, immigration, and agricultural quarantine.—(See chapter 3, Vessel Arrival Inspections, and appendix for addresses.)

Quarantine is enforced in accordance with the regulations of the U.S. Public Health Service. (See Public Health Service, chapter 1.)

Rochester has several hospitals.

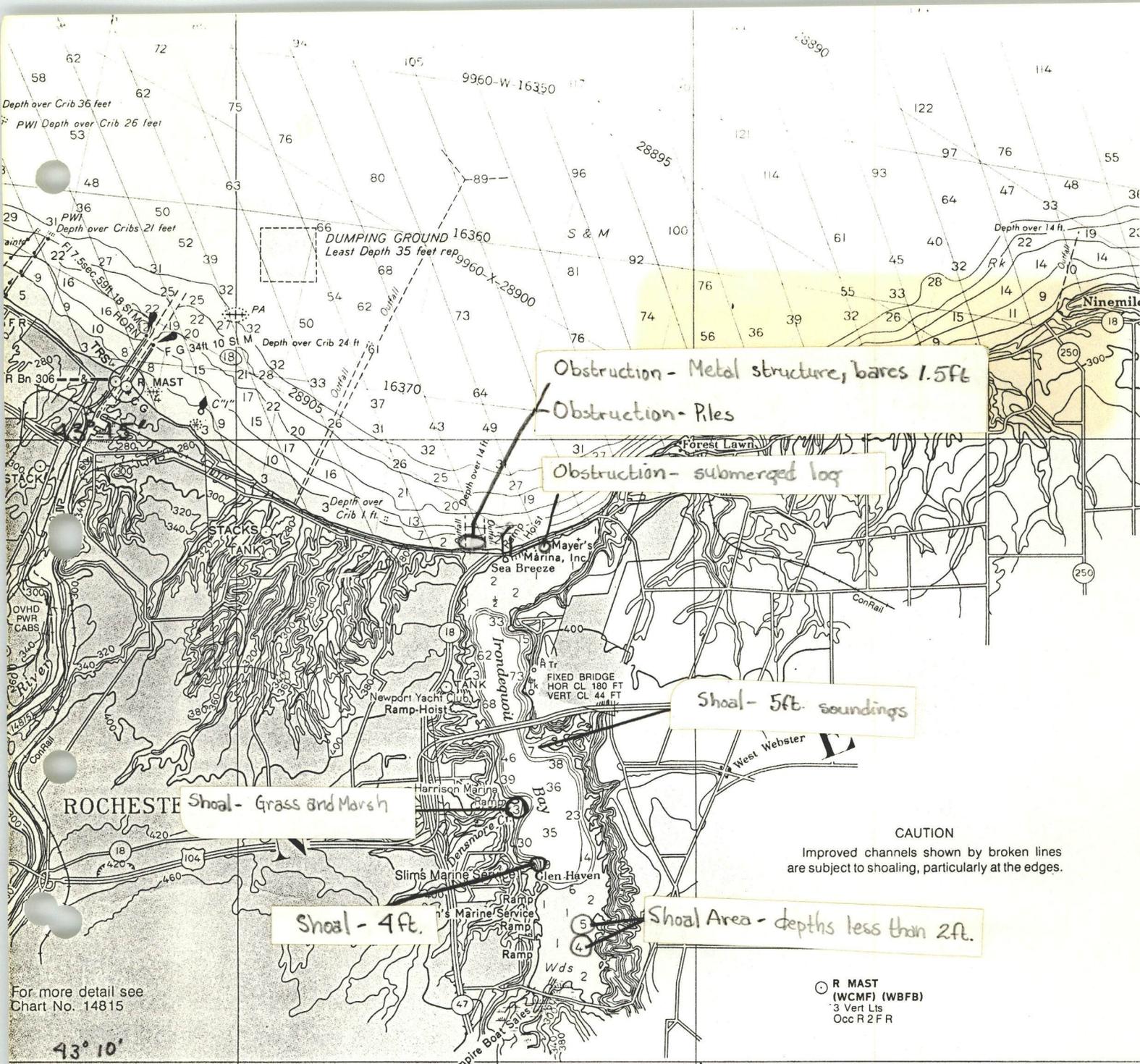
Rochester Coast Guard Station is on the E side of the river just inside the mouth.

A speed limit of 6 mph is enforced in Rochester Harbor. (See 33 CFR 162.165, chapter 2, for regulations.)

Wharves.—Rochester has facilities on both sides of the river for about 3 miles above the mouth. The facilities described have freshwater connections. The alongside depths are reported depths; for information on the latest depths, contact the operator.

The City of Rochester Port of Rochester (43°15'20"N., 77°36'26"W.): marginal wharf on the NW side of the river about 0.3 mile inside the entrance; 1,275-foot face; 9 feet alongside; deck height, 9 feet; 100,000 square feet covered storage; 9 acres open storage; rail connections; owned by the city of Rochester and operated by Pittston Stevedoring and Warehouse Corp. In 1977, this facility had been inactive for 3 years.

Charlotte Docks (43°13'30"N., 77°37'00"W.): on the W side of the river about 2.9 miles above the



Obstruction - Metal structure, bares 1.5ft

Obstruction - Piles

Obstruction - submerged log

Shoal - 5ft. soundings

Shoal - Grass and Marsh

Shoal - 4ft.

Shoal Area - depths less than 2ft.

CAUTION
Improved channels shown by broken lines
are subject to shoaling, particularly at the edges.

○ R MAST
(WCMF) (WBFB)
3 Vert Lts
Occ R 2 F R

CHART 14804, 21st Ed., May 1981

CAUTION
Only marine radiobeacons have been calibrated for
surface use. Limitations on the use of certain other radio
signals as aids to marine navigation can be found in the
U.S. Coast Guard Light Lists and Defense Mapping Agency
Hydrographic/Topographic Center Publication 117 (A & B).
Radio direction-finder bearings to commercial broadcast-
ing stations are subject to error and should be used with
caution.

Station positions are shown thus:
○ (Accurate location) ○ (Approximate location)

REQUEST FOR INFORMATION

Users are urged to report promptly to The Director, National Ocean Survey
National Oceanic and Atmospheric Administration, Rockville, Maryland 20852,
conditions found to differ from or to be additional to those shown on this chart
so that they may be fully investigated and proper corrections made. In some
instances, a section of the chart should be submitted to illustrate the reported
conditions, in which event, a new chart will be issued to replace the used copy,
indicating the revised chart is the current edition and not an obsolete copy.

○ Xerox Square
Occ R Lt

77°35'

77°30'

CAUTION

45 SOUNDINGS IN FEET

This chart has been corrected from the Notice to Mariners
published weekly by the Defense Mapping Agency Hydro-



**U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration**

NATIONAL OCEAN SURVEY
Atlantic Marine Center
439 W. York St.
Norfolk, VA 23510-1114
N/MOA233

14 July 1987

To: Commander, Ninth Coast Guard District
Cleveland, Ohio

From: LT. Kenneth P. Peters, OIC HFP-3

Subject: Danger to Navigation Notice for inclusion in the Local Notice to
Mariners, Chart 14804, 21st Ed., Lake Ontario, NY.

While conducting a basic hydrographic survey of Irondequoit Bay, NY,
(Registry No. H-10245) the following changes to information shown on the
chart were observed:

Obstruction -- A submerged log was located at lat. 43°14'09.2"N,
long. 077°31'34.6"W. The log has a 24 inch diameter and is lying
in water having depths of two feet at Low Water Datum (LWD). *Bare 3 ft at LWD.*

Shoal -- A charted seven foot depth at lat. 43°12'28.5"N, long. 077°
31'49.0"W corresponds to present survey depths as shoal as five feet
at LWD.

Shoal -- A three foot depth is charted in the vicinity of Point Look-
out at lat. 43°12'01.5"N, long. 077°31'58.5"W. Presently, this area
is overgrown with grass and zero soundings at LWD extend out to the
charted six foot contour at lat. 43°12'06.0"N, long. 077°31'49.0"W.

Shoal -- Four and five foot soundings are charted in the southern
area of Irondequoit Bay at lat. 43°10'55.0"N, long. 077°31'19.0"W
and lat. 43°11'06.5"N, long. 077°31'16.0"W respectively. The present
survey shows soundings generally from zero to one foot at LWD in
areas south of lat. 43°11'15.0"N.

Shoal -- A 100 meter area centered at lat. 43°11'38.0"N, long. 077°31'
40.0"W has soundings as shoal as four feet. Charted depths in this
area are in excess of 12 ft.

* THIS IS ADVANCE INFORMATION *
* SUBJECT TO OFFICE VERIFICATION *
* *****



Subject: Danger to Navigation Notice, Chart 14804

Obstruction -- A dangerous uncharted obstruction was located at lat. 43°14'08.23"N, long. 077°32'30.73"W, approximately 550 meters west of the western breakwater entrance to Irondequoit Bay and approximately 60 meters offshore in eight feet of water with a least depth of one foot at the present water level (bares 1.5 feet at LWD). The obstruction is a 15 ft. circumference metal structure.

Obstruction -- Four uncharted submerged piles were located approximately 500 meters west of the western breakwater entrance to Irondequoit Bay and 20 meters seaward of the shoreline. The piles are the remains of a pier, lie parallel to the shoreline between lat. 43°14'07.19"N, long. 077°32'31.75"W and lat. 43°14'06.99"N, long. 077°32'31.01"N and had a least depth of ~~2.0~~ ^{0.2} ft. at the time of observation (bares ~~0.7~~ ^{6.0} ft. at LWD).

These dangers to navigation were located using Range/Azimuth positioning methods, from Third Order, Class I. geodetic control stations. Motorola Falcon 484 electronic positioning system was used to obtain distances and a Nikon NT2D 20" Theodolite was used for azimuth determination. Depths were recorded using a Raytheon 719C Survey Fathometer. Depths were reduced to LWD using unverified actual water level heights from the Water Level Station 905-2058 Rochester, NY.

A chart section of Chart 14804, 21 st Ed. is attached showing the location of the listed dangers.

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*****  
* THIS IS ADVANCE INFORMATION *  
* SUBJECT TO OFFICE VERIFICATION *  
*****
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CC: MOA233
CC: MOA2X1
CC: CG222



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SURVEY
Atlantic Marine Center
439 West York St.
Norfolk, VA 23510-1114

To: N/CG243

Thru: N/MOA2x1

From: N/MOA233 - *for Kenneth P. Peters* - Kenneth P. Peters - OIC HFP 3

Subject: User Evaluation of NOAA Products in the Rochester, NY Area.

A user evaluation was performed to determine if the NOAA products fullfills the requirements of its users.

The information was obtained through interviews with representatives of the U.S. Coast Guard, U.S.C.G. Auxillary, Power Squadron, Army Corps of Engineers, local chart dealers, and recreational boaters.

All users had a single unanimous respose expressing the need for an inset to Chart 14804 showing an enlargement of Irondequot Bay.

There were no other criticisms of NOAA products by any of the people interviewed.

JUL 20 1987



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

WATER LEVEL NOTE FOR HYDROGRAPHIC SHEET

Processing Division: ATLANTIC MARINE CENTER: N/MOA232

Hourly heights are approved for: Rochester, NY (905-2058)
Water Level Station

Period: June 1, 1987 to July 9, 1987

HYDROGRAPHIC SHEET: H-10245

OPR- V215-HFP-87

Locality: Lake Ontario

Plane of reference: Low Water Datum (IGLD 1955:242.8 Feet)

Remarks:

Zoning not required, data from other gages on Lake Ontario indicates no unusual water level movement during survey period.

NOTE: HFP did not submit check leveling data for bench mark tie at this station. Last leveling at station was performed by the Atlantic Operations Group (Sea and Lake Levels Branch) on August 18, 1986.



Chief, Great Lakes Acquisition Unit

GEOGRAPHIC NAMES

Name on Survey											
	A	B	C	D	E	F	G	H	K		
	ON CHART NO.	ON PREVIOUS SURVEY NO.	CON U.S. QUADRANGLE MAPS	FROM LOCAL INFORMATION	ON LOCAL MAPS	P.O. GUIDE OR MAP	RAND McNALLY ATLAS	U.S. LIGHT LIST			
BAY VIEW											1
BIG MASSAUG COVE											2
DENSMORE CREEK											3
GERMAN VILLAGE											4
GLEN EDITH											5
GLEN HAVEN											6
HELDS COVE											7
IDES COVE											8
INSPIRATION POINT											9
IRONDEQUOIT BAY (title)											10
IRONDEQUOIT CREEK											11
LOOKOUT, POINT											12
NEWPORT											13
NEW YORK (title)											14
OKLAHOMA BEACH											15
ONTARIO, LAKE (title)											16
PLEASANT, POINT											17
SEA BREEZE											18
SNIDER ISLAND											19
STONY POINT											20
											21
											22
											23
											24
											25

Approved:

Charles E. Harrington

Chief Geographer - N/CG 2x5

FEB 1 1988

REFERENCE NO.
MOA23-38-88

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 Branch, N/CG243
Room 151, WSC-1
Hydrographic Surveys Branch
Rockville, MD 20852
└

DATE FORWARDED
25 March 1988

NUMBER OF PACKAGES
1 tube, 1 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-10245 (OPR-V215)
New York, Lake Ontario, Irondequoit Bay

Pkg # 1 (Tube) containing:

- ~~1~~ Original Smooth Sheet for H-10245
- ~~1~~ Original smooth position overlay
- ~~2~~ Original smooth excess overlays
- ~~1~~ Final field sheet
- ~~1~~ Final field sheet overlay
- ~~1~~ Original Descriptive Report

Pkg #2 (Box) containing:

- 1 Envelope #1 containing supplemental data removed from printouts
- 1 Cahier with final position printout, control listing, and sounding printout
- **Note: Line File Listing will be sent at a later date**
- 1 Envelope #2 containing miscellaneous data removed from the original Descriptive Report
- 1 Envelope #3 containing Baseline Calibration Log Sheets, graphs and EDM Calibrations
- 1 Envelope #4 containing corrected velocity graphs, and direct comparison logs

page 1 of 2

FROM: (Signature)

Richard H. Whitfield



RECEIVED THE ABOVE
(Name, Division, Date)

Return receipted copy to:

Chief, Hydrographic Surveys Branch, ┌
N/MOA23
Atlantic Marine Center
439 W. York Street
Norfolk, VA 23510-1114
└

LETTER TRANSMITTING DATA

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

- ORDINARY MAIL AIR MAIL
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TO:

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5 Sounding Volumes (NOAA form 77-44)
 1 Accordian file containing fathograms, master tape and
 corrector tape printouts for:
 VESNO 0517 for JDs: 152, 154, 155, 156, 160, 162, 166, 167,
 169, 174, 176, 180, 182, 189, and 190 (no
 fathograms)

page 2 of 2

FROM: (Signature)

Richard H. Whitfield

RECEIVED THE ABOVE
(Name, Division, Date)

Return receipted copy to:

Chief, Hydrographic Surveys Branch,
 N/MOA23
 Atlantic Marine Center
 439 W. York Street
 Norfolk, VA 23510-1114

03/25/88

HYDROGRAPHIC SURVEY STATISTICS
REGISTRY NUMBER: H-10245

NUMBER OF CONTROL STATIONS		16
NUMBER OF POSITIONS		1441
NUMBER OF SOUNDINGS		4639
	TIME-HOURS	DATE COMPLETED
PREPROCESSING EXAMINATION	27	08/27/87
VERIFICATION OF FIELD DATA	238	01/19/88
QUALITY CONTROL CHECKS	128	
EVALUATION AND ANALYSIS	146	03/01/88
FINAL INSPECTION	17	03/10/88
TOTAL TIME	556	
MARINE CENTER APPROVAL		03/18/88

ATLANTIC MARINE CENTER
EVALUATION REPORT

SURVEY NO.: H-10245

FIELD NO.: HFP-10-3-87

New York, Lake Ontario, Irondequoit Bay

SURVEYED: June 1 through July 9, 1987

SCALE: 1:10,000

PROJECT NO.: OPR-V215-HFP-87

SOUNDINGS: RAYTHEON 719-C Fathometer and Sounding Pole

CONTROL: MOTOROLA FALCON 484 and NIKON NT2D20 Theodolite
(Range/Azimuth), and "See Field Sheet" Method

Chief of Party.....K. W. Perrin

Surveyed by.....K. P. Peters
.....E. A. Lake
.....D. B. Elliott
.....M. J. McMann
.....J. P. Oswald
.....A. T. Seese

Automated Plot by.....XYNETICS 1201 Plotter (AMC)

1. INTRODUCTION

a. No unusual problems were encountered during office processing.

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

2. CONTROL AND SHORELINE

a. The control is adequately discussed in sections F., G., and S. of the Descriptive Report.

b. Shoreline originates with final reviewed Class III photogrammetric Shoreline Manuscript TP-01067 of 1982, photorevised with aerial photographs taken in October 1986. The shoreline is also supplemented by revisions made by the hydrographer. Revisions to the HWL and piers are shown in red on the present survey. Floating piers and revisions to floating piers not shown on the manuscript but located by the hydrographer are shown in black.

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

NAD83. To place this survey on the NAD83, move the projection lines 0.255 seconds (6.9 meters or .69 mm at survey scale) south in latitude and 1.007 seconds (22.7 meters or 2.27 mm at survey scale) west in longitude.

3. HYDROGRAPHY

a. Soundings at crossings agree within the criteria stated in sections 4.6.1. and 6.3.4.3. of the HYDROGRAPHIC MANUAL and section 6.5. of the Project Instructions.

b. With the exception of the standard sixty (60) foot curve the standard curves could not be drawn in their entirety due to the steepness of the bottom topography and or close proximity to shore. The charted supplemental twenty four (24) foot curve was not drawn in its entirety due to the steepness of the bottom topography. Dashed curves were added to better show bottom topography.

c. Development of bottom configuration and determination of least depths is considered well done with the following exception:

No hydrography was conducted in Ides Cove, in the vicinity of Latitude 43°13'14"N, Longitude 77°32'28"W.

4. CONDITION OF SURVEY

The smooth sheet and accompanying overlays, hydrographic records and reports are adequate and conform to the requirements of the HYDROGRAPHIC MANUAL except as follows:

a. It would have been desirable for a bottom sample to have been taken on the shoal feature in the vicinity of Latitude 43°11'39.0"N, Longitude 77°31'41.0"W as required by section 6.7 of the Project Instructions and section 4.5.9.2. of the HYDROGRAPHIC MANUAL.

b. Shoreline Manuscript TP-01067 with 1986 photographic revisions was not used for the hydrographer's final field sheet. The 1980 photo revised Shoreline Manuscript TP-01067 was used. This apparently caused some confusion to charting recommendations for some features that are discussed in section H. of the Descriptive Report and the same features that are again discussed in the appendix "Item Investigation/Dive Investigation Reports", pages 50 through 85. In some cases the recommendations are contradicting. Further discussion on these items can be found in section 6.b. of this report.

c. Closer comparison should be made between the geographic positions of features located by the hydrographer and the geographic position of the AWOIS item being discussed. In three cases (AWOIS Items 4573, 4590, and 4592)

the hydrographer located and discussed features that are in the vicinity of the AWOIS item with no further consideration given to the correct AWOIS item position. A check of the geographic position of the feature against the AWOIS listing position would have possibly eliminated this error. See also section 6.b. of this report.

d. The geographic position for AWOIS Item #4585 in the AWOIS listing is in error and should be revised to Latitude 43°13'06.5"N, Longitude 77°31'50.5"W. Operations Section, N/CG241, at NOS headquarters in Rockville, Maryland was notified for correction to the AWOIS listing.

e. In section P. of the Descriptive Report the hydrographer states that dredging operations are being conducted at a marina. The name of the marina was not given and the geographic position places the location of the marina in West Bay, northwest of Panama City, Florida approximately 1,613,544 meters (1002.6 miles) south of the working area.

5. JUNCTIONS

There are no junctional surveys with the present survey. The charted depths and the present survey depths are in harmony to the north.

6. COMPARISON WITH PRIOR SURVEYS

a. Hydrographic

LS-613 (1875) 1:10,000
U.S.C.O.E. (1986) 1:2,400 (Drawing No. 86S-IRB-1/1)

The comparison with the prior survey LS-613 (1875) in section K. of the Descriptive Report is adequate and needs no further discussion in this report.

The present survey is considered adequate to supersede the prior survey in the common area.

The present survey compared well with a 1986 U.S. Army Corps of Engineers survey (Drawing No. 86S-IRB-1/1). Present survey soundings indicate shoaling at the jetty entrance. Scattered soundings are one (1) to two (2) feet shoaler than the Corps of Engineers survey. Present survey soundings inside Irondequoit Bay in the channel are generally one (1) foot shoaler than prior survey depths. It is recommended that the present survey be used to supplement the Corps of Engineers survey in the common areas.

b. Topographic

TP-01067 (1980-82), Photo revised (1986)

Numerous uncharted cultural and natural features originating with TP-01067 were located by the hydrographer during the survey. Specific features discussed in section H. and the appended Item Investigation Forms of the Descriptive Report have charting recommendations that require no additional comments except as noted in that report. In addition, the following should be noted:

1) AWOIS Item #4566 is uncharted pier ruins originating with the 1986 photo revised manuscript in Latitude 43°11'12.9"N, Longitude 77°31'43.5"W. The hydrographer located the offshore end of the pier ruins bearing 15 feet at LWD in Latitude 43°11'12.88"N, Longitude 77°31.44.26"W. This is approximately 18 meters shorter than the offshore end of the pier ruins shown on TP-01067. There is no discussion of additional offshore ruins, and the existence of further offshore, submerged ruins is doubtful. The present survey shows depths of 1 foot in the area. It is recommended that the pier ruins be charted as shown on the present survey. ✓ charted

2) AWOIS Item #4573 is an uncharted pier originating with the 1980-82 manuscript in Latitude 43°11'38.0"N, Longitude 77°31'57.5"W. The pier is not visible on the 1986 photographs. The hydrographer states in section H., page 8, of the Descriptive Report that the pier, AWOIS Item #4573, no longer exists. The pier is also shown in blue on the final field sheet. This is an indication from the hydrographer that the pier no longer exists. The pier located by the hydrographer in Latitude 43°11'37.64"N, Longitude 77°31'56.17"W and discussed as AWOIS Item #4573 on the Item Investigation Form, page 60, of the Descriptive Report, is not the same pier. The pier located by the field unit is shown on the manuscript and is approximately 32 meters southeast of the AWOIS position. It is recommended that the pier, AWOIS #4573, not be charted. ✓

3) AWOIS Item #4574 is an uncharted pier originating with the 1980-82 manuscript in Latitude 43°11'39.5"N, Longitude 77°31'05.5"W. The pier is not visible on the 1986 photographs. A fixed pier not shown on the manuscript was located and discussed as item #4574 in section H., page 8, and the Item Investigation Form, page 61, of the Descriptive Report. This pier, located by the hydrographer in Latitude 43°11'39.98"N, Longitude 77°31'05.54"W, is approximately 14.8 meters north of the position listed for the AWOIS item. The correct pier is shown in blue on the hydrographer's final field sheet overlay. This is an indication from the hydrographer that the pier no longer exists. It is recommended that the pier, AWOIS Item #4574, not be charted. ✓

4) AWOIS Item #4582 is an uncharted pier originating with the 1980-82 manuscript in Latitude 43°12'20.0"N, Longitude 77°31'16.0"W. The pier is not visible on the 1986

photographs. The pier, shown in blue on the hydrographer's final field sheet, is an indication from the hydrographer that the pier no longer exists. The pier is also listed as not to be charted in section H., page 8, of the Descriptive Report. The pier ruins located by the hydrographer in Latitude 43°12'19.53"N, Longitude 77°31'16.94"W and discussed as AWOIS Item #4582 in the Item Investigation Form, page 69, of the Descriptive Report is not the same feature. The pier ruins are approximately 25.7 meters south of the AWOIS position. It is recommended that the pier (AWOIS #4582) not be charted. It is also recommended that the pier ruins bearing six (6) feet at LWD be charted as shown on the present survey.

5) AWOIS Item #4583 is an uncharted pier originating with the 1980-82 manuscript in Latitude 43°12'38.0"N, Longitude 77°31'37.5"W. The pier is not visible on the 1986 photographs. The pier, shown in blue on the hydrographer's final field sheet, is an indication from the hydrographer that the pier no longer exists. The pier is also listed as not to be charted in section H., page 8, of the Descriptive Report. The pier ruins located by the hydrographer in Latitude 43°12'37.46"N, Longitude 77°31'36.55"W and discussed as AWOIS Item #4583 in the Item Investigation Form, page 70, of the Descriptive Report is not the same feature. The pier ruins are approximately 27 meters southeast of the AWOIS position. It is recommended that the pier, AWOIS Item #4583, not be charted. It is also recommended that the pier ruins bearing five (5) feet at LWD be charted as shown on the present survey.

6) AWOIS Item #4584 is two (2) piers in ruins in the vicinity of Latitude 43°12'48.5"N, Longitude 77°32'21.0"W originating with the 1980-82 manuscript. The pier ruins are not visible on the 1986 photographs. A pier not shown on the 1986 photo revised manuscript was located by the hydrographer in Latitude 43°12'48.07"N, Longitude 77°32'21.41"W. This is in the same position as a pier shown on the 1980-82 manuscript. It is recommended that the pier ruins not be charted and the pier located by the hydrographer be charted as shown on the present survey.

7) AWOIS Item #4588 is an uncharted obstruction (possible abandoned dredge pipe) originating with the 1986 photo revised manuscript in the vicinity of Latitude 43°13'50"N, Longitude 77°32'21"W. The area was investigated by the hydrographer and found to be foul with dredging debris, logs and rocks. The area is delineated as foul (dredging support ruins, logs and rocks) on the present survey. It is recommended that the foul limits be charted as shown on the present survey.

8) AWOIS Item #4590 is two (2) uncharted piers originating with the 1980-82 manuscript in the vicinity of

Latitude 43°14'09.0"N, Longitude 77°31'41.0"W. The piers are not visible on the 1986 photographs. The pier located by the hydrographer in Latitude 43°14'08.45"N, Longitude 77°31'43.55"W and discussed as AWOIS Item #4590 in the Item Investigation Form, page 77, of the Descriptive Report is not the same feature in the AWOIS listing because the pier is approximately 60 meters west of the two piers. The two piers were not investigated by the hydrographer; however, a line of hydrography ending in Latitude 43°14'09.12N, Longitude 77°31'40.70"W, is in the same area as the two piers. A statement by the hydrographer in Sounding Volume III, page 46 (position 893), indicates the line of hydrography ends at a bulkhead with no indication of any piers in the immediate area. It is recommended that the two (2) piers shown on the manuscript not be charted unless other charting information indicates otherwise. See also section 6.b.9).

9) The pier located by the hydrographer in Latitude 43°14'08.45"N, Longitude 77°31'43.55"W and discussed as AWOIS item #4590 is the easternmost of four (4) floating piers. The westernmost floating pier was located by the hydrographer in Latitude 43°14'08.01"N, Longitude 77°31'44.86"W. These same piers are described as three fixed wooden piers in section H., page 8, of the Descriptive Report and are also shown as three piers on the manuscript. These piers are described as floating piers in Sounding Volume IV, page 42, and shown as four separate floating piers on the final field sheet. Despite the conflicting information, the sounding volume is considered the most accurate and most recent source of information, it is recommended that four (4) floating piers be charted as shown on the present survey.

10) AWOIS Item #4591 is two (2) uncharted piers originating with the 1980-82 manuscript in the vicinity of Latitude 43°14'09.5"N, Longitude 77°31'35.5"W. The piers are not visible on the 1986 photographs. A floating pier was located by the hydrographer in Latitude 43°14'09.53"N, Longitude 77°31'35.45"W. The floating pier is in agreement with the eastern most of the two piers. It is believed there is only one pier presently in the area as there is no further discussion on the existence of a second pier in the same area. It is recommended the pier located by the hydrographer be charted as shown on the present survey.

11) AWOIS Item #4592 is an uncharted pier originating with the 1980-82 manuscript in Latitude 43°14'10.0"N, Longitude 77°31'32.5"W. The pier is not visible on the 1986 photographs. A pier shown on the present manuscript and verified by the hydrographer in Latitude 43°14'09.71"N, Longitude 77°31'32.61"W is discussed as AWOIS item #4592. This pier is approximately 9.2 meters west of the AWOIS position. A pier was located by the hydrographer in Latitude 43°14'10.14"N, Longitude 77°31'32.33"W. This pier falls in the same area as the AWOIS item. It is

recommended that the piers be charted as shown on the present survey.

12) The following uncharted features shown on the manuscript were neither verified disproved or discussed by the hydrographer.

<u>Feature</u>	<u>Latitude N</u>	<u>Longitude W</u>
Pier	43°10'33.2"	77°31'07.6"
Pier	43°11'57.8"	77°31'59.6"
Pier	43°14'10.5"	77°31'32.0"

It is recommended that these features be charted as shown on the present survey unless other charting information indicates otherwise.

13) An uncharted visible rock originating with the manuscript in Latitude 43°13'49.9"N, Longitude 77°31'31.3"W was visually investigated by the hydrographer with negative results. Due to the shoal depths shown on the present survey and the proximity of the rock to the shoreline, it is recommended that the rock not be charted.

14) The uncharted pier shown on the manuscript was located by the hydrographer in Latitude 43°13'16.27"N, Longitude 77°31'49.60"W, and found to be in ruins baring 7 feet at LWD. It is recommended that the pier ruins be charted as shown on the present survey.

15) An uncharted pier shown on the manuscript in Latitude 43°12'18.0"N, Longitude 77°31'14.7"W was located by the hydrographer in Latitude 43°12'17.46"N, Longitude 77°31'14.81"W. It is recommended that the pier be charted in the position located by the hydrographer and shown on the present survey.

16) An uncharted visible pile shown on the manuscript in Latitude 43°13'21.7"N, Longitude 77°32'25.7"W, is not considered disproved by the present survey. The pile is shown as not being in the area on the hydrographer's final field overlay. However; further investigation of the pile was not conducted, and the existence was neither verified nor disproved. It is recommended that the pile be charted as a submerged pile as shown on the present survey.

7. COMPARISON WITH CHART 14804 (21st Ed., May 23/81)

a. Hydrography

The charted hydrography originates with Corps of Engineers Blueprint of 1978, National Ocean Service Revisory Survey of 1971, and miscellaneous sources. Specific features discussed in section L., and pages 50 and 51 of the

Descriptive Report have charting recommendations that require no additional comments except as noted in that report. In addition, the following should be noted:

1) The hydrographer located the east and west ends of an uncharted row of four piles centrally located in Latitude $43^{\circ}14'07.0''N$, Longitude $77^{\circ}32'31.5''W$. It is recommended that a row of piles baring 3 feet at LWD be charted as shown on the present survey.

2) The two outfalls charted in Latitude $43^{\circ}14'23.8''N$, Longitude $77^{\circ}32'30.3''W$ and Latitude $43^{\circ}14'22.1''N$, Longitude $77^{\circ}32'17.4''W$ were searched for by the hydrographer. A diver conducted a circle search with a fifty meter radius in the vicinity of both of the charted offshore ends of the outfalls with negative results. The outfalls were searched for using fifty meter line spacing in the charted area, again with negative results. In a telephone conversation, Mr. Jack Piecuch, Assistant to the Director of Public Works for the town of Irondequoit, New York (716) 467-8840 stated that one of the outfalls still remains and that the existence of the second outfall is doubtful. Mr. Piecuch however, was unable to confirm which one of the two outfalls still exists. Additional wire drag and/or side scan operations should be conducted to adequately confirm or disprove the existence of the charted outfalls. It is recommended that the outfalls and the note "depth over 14-ft." be retained as charted unless other charting information indicates otherwise.

3) AWOIS Item #4594 is a submerged rock charted in Latitude $43^{\circ}14'13.0''N$, Longitude $77^{\circ}31'16.0''W$ originating with an unknown source. A visual investigation in 2 to 3 feet of water with visibility of 3 feet was conducted by the hydrographer with negatives results. Additionally, local knowledge confirms that a submerged rock does not exist in the area. It is recommended that the submerged rock be deleted from the chart.

4) The charted shoreline inside Irondequoit Bay from the east side of the jetty entrance in Latitude $43^{\circ}14'04''N$, Longitude $77^{\circ}32'00''W$ to Latitude $43^{\circ}14'14''N$, Longitude $77^{\circ}31'16''W$ should be revised and charted as shown on the present survey.

5) The present survey shows no indication of the charted island in the vicinity of Latitude $43^{\circ}14'02''N$, Longitude $77^{\circ}32'04''W$. The area has changed with the construction of the jetty and the addition of a channel. Present survey depths are eight (8) to nine (9) feet. It is recommended that the island be deleted from the chart.

Except as noted above, the present survey is considered adequate to supersede the charted hydrography in the common area.

b. Dangers to Navigation

The hydrographer identified several dangers to navigation and submitted Local Notice to Mariners to the Commander, Ninth Coast Guard District, Cleveland, Ohio and to N/CG222, Chart Information Section.

c. Aids to Navigation

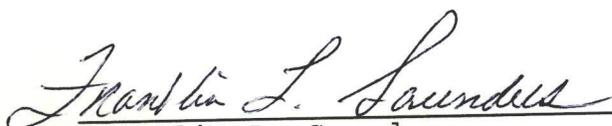
There are eleven (11) fixed aids to navigation on the present survey. Three (3) of these fixed aids are landmarks. These aids appear adequate to serve their intended purposes.

8. COMPLIANCE WITH INSTRUCTIONS

This survey adequately complies with the Project Instructions except as noted elsewhere in this report.

9. ADDITIONAL FIELD WORK

This is a good basic survey. Additional field work may be necessary at an opportune time to completely verify or disprove all questionable items addressed in sections 6. and 7. of this report.



Franklin L. Saunders
Cartographic Technician
Verification of Field Data



Richard H. Whitfield
Cartographer
Evaluation and Analysis



Robert R. Hill
Senior Cartographic Technician
Verification Check

INSPECTION REPORT
H-10245

The completed survey has been inspected with regard to survey coverage, delineation of depth curves, development of critical depths, cartographic symbolization, and verification or disproof 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 magnetic tape record for this survey. Final control, position, and sounding printouts of the survey have been made. The survey complies with National Ocean Service requirements except as noted in the Evaluation Report. The survey records comply with NOS requirements except where noted in the Evaluation Report.

Inspected



R. G. Roberson
Chief, Evaluation and Analysis
Group
Hydrographic Surveys Branch



William A. Wert, LCDR, NOAA
Chief Hydrographic Surveys Branch

Approved: 18 March 1988



Ray E. Moses, RADM, NOAA
Director, Atlantic Marine Center

