THE NATION'S CHARTMAKER SINCE 1807

SHINNECOCK BAY TO EAST ROCKAWAY INLET

SOUTH COAST OF LONG ISLAND

NEW YORK

NSN 7642014010383
GPO 34
NOAA REFERENCE NO. 12CHA12352

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PUBLIC BOATING INSTRUCTION PROGRAMS

The United States Power Squadron and U.S. Coast Guard Auxiliary, national organizations of boatmen, conduct extensive boating instruction programs in communities throughout the United States. For information regarding these educational courses contact the following sources:

USPS - Local Squadron Commander or USPS Headquarters, Post Office Box 30423, Raleigh, North Carolina 27612, 919-821-0281.

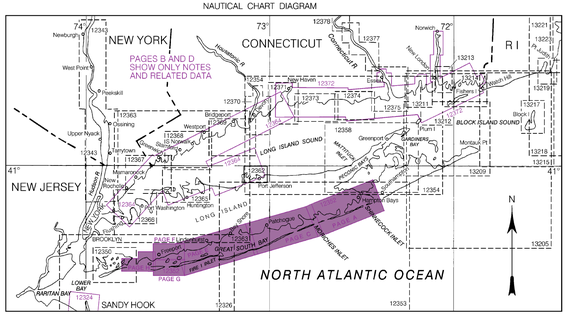
USCGAUX - 1st Coast Guard District, 408 Atlantic Ave., Boston, MA 02110-2209. Tel. 617-223-8310 or USCG Headquarters (G-BAU), Washington, D.C. 20593-0001.

This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

ACKNOWLEDGMENT

The National Ocean Service acknowledges the exceptional cooperation received from members of the Jones Beach Power Squadron, District 3, United States Power Squadrons, in continually providing essential information for revising this chart.

NAUTICAL CHART DIAGRAM



NO	SMALL CRAFT FACILITY	DEPTHS: APPROACH CHANNEL (REPORTED)	DEPTHS: ALONGSIDE (REPORTED)	SERVICES: RAMP	SERVICES: REPAIRS	SERVICES: BUILDING SUPPLIES	SERVICES: ELECTRICITY	SERVICES: MARINE RAILWAY (TIED)	SERVICES: LIFT CAPACITY (TONS)	SERVICES: BOAT RENTAL	SERVICES: CANOE/ROWBOAT RENTAL	SERVICES: FOOD	SERVICES: LODGING	SERVICES: CHARTER/PARTY BOAT	SERVICES: TOW SERVICE	SERVICES: MARINE SUPPLY STORE	SUPPLIES: GASOLINE	SUPPLIES: DIESEL FUEL	SUPPLIES: OIL	SUPPLIES: BATTERIES	SUPPLIES: GROCERIES/HARDWARE	SUPPLIES: DRY ICE	SUPPLIES: GAS OR COAL
4	JACKSON'S MARINA	A	8	8	BE			HMR			75					FL	TSLP	WD	C	WI	GH	BT	DG
5A	MARINER'S COVE MARINE	A	3	3	BE	N	HMR			12	R						TSP	D		WI	GH	B	DG
8	SHINNECOCK CANAL COUNTY MARINA	A	8	6	BE											F	TSP			W			DG
9	HAMPTON WATERCRAFT & MARINE	A	10	5	BE			HMR	15	30							TSP	D	C	WI	H		DG
9A	MODERN YACHTS	A	10	5	BE			HMR		40							TSP	WD		WI			DG
25	REMSENBURG MARINA	A	8	8	BE	S	HMR	20	25								TP	D	C	WI	H	B	DG
26	WINDSWEPT MARINA	A	5	5	BE	S	HMR		7	M						F	TSP	D	C	WI	H	BT	G
35	CENTER YACHT CLUB	C	5	8	BE		HMR		90				C				TSP	D	C	WI	H	BT	DG
36A	SENIX MARINA, INC	C	6	6	BE	S	HM									F	TSP	D	C	WI	H	B	DG
44	AQUAMARINA SUNSET HARBOUR	C	8	6	BE		HMR		50							F	TSLP	D	C	WI	H		DG
47G	MORGAN'S SWAN RIVER MARINA	C	6	5	BE	S	HM		15							F	TP	WD	C	WI	H		G
48A	ISLAND VIEW MARINA	C	6	4	BE				25								TSP	WD		WI			DG
49	FRANK M. WEEKS YACHT YARD	C	9	8	BE		HMR		40								TSP	WD		W	H		DG
70	OAKDALE YACHT MARINE	E	5.5	5.5	BE	S	HMR		50							F	TSLP	WD		WI	H	BT	DG
72B	TIMBER POINT MARINA EAST	E	8	8	BE												TP	W		W			G
98	SURFSIDE 3 MARINA INC	E	5	7	BE		HMR		40							F	TSP	WD	C	WI		BT	DG
113	AMITY HARBOR MARINE	E	6	6	BE		HMR	20	30								TSP	WD	C	W	H		G
152	BLUE WATER YACHT CLUB	F	6	6	BE		HMR		25							F	TSLP	D	C	WI	H	BT	G
162	HUDSON POINT MARINA	F	6	6	BME		HM		15								TP	D	C	WI	H	BT	DG
165	PRECISION MARINE	F	7	7	BE		HMR		25								TSP	D		WI	H	BT	G
169	ATLANTIC YACHT HAVEN	F	30	25	BE		HMR		40								TP	D		WI			DG
170	AL GROVER'S HIGH & DRY MARINA, INC	F	10	10	B		HMR	45	35								TSP	W		W	H		DG
173	OCEAN MARINE	F	15	10	BE		HMR		77							F	TSLP	WD		WI			G
175	WOODCLEFT FISHING STATION	F	10	8	B											F	TP			WI		BT	DG
195	TED'S FISHING STATION	G	12	10	B	N					M					F	TP			WI		BT	G
196	SCOTTY'S FISHING STATION, INC	G	18	14	B						M					F	TP		C	WI	G	BT	DG
206	EMPIRE POINT BOATING CENTER	H	17	14	BE		HM		35	C							TP	D	C	WI	H	BT	DG

THE LOCATIONS OF THE ABOVE PUBLIC MARINE FACILITIES ARE SHOWN ON THE CHART BY MAGENTA NUMBERS AND LEADERS.
THE TABULATED "APPROACH-FEET (REPORTED)" IS THE DEPTH AVAILABLE FROM THE NEAREST NATURAL OR DREDGED CHANNEL TO THE FACILITY.
THE TABULATED "PUMP-OUT STATION" IS DEFINED AS FACILITIES AVAILABLE FOR PUMPING OUT BOAT HOLDING TANKS.

TIDAL INFORMATION

PLACE NAME	(LAT/LONG)	Height referred to datum of soundings (MLLW): Mean Higher High Water (feet)	Mean High Water (feet)	Mean Low Water (feet)
Shinnecock Inlet	(40°50'N/72°29'W)	3.0	2.6	0.1
Ponquogue Bridge, Shinnecock Bay	(40°51'N/72°30'W)	2.6	2.4	0.1
Shinnecock Yacht Club, Peconican Creek	(40°49'N/72°33'W)	2.9	2.7	0.1
Moriches Coast Guard Station	(40°47'N/72°46'W)	2.5	2.3	0.1
Smith Point Bridge, Narrow Bay	(40°44'N/72°52'W)	1.5	1.3	0.1
Patchogue, Patchogue River	(40°45'N/73°00'W)	1.4	1.2	0.1
Bay Shore, Watchogue Creek	(40°43'N/73°14'W)	1.2	1.1	0.1
Fire Island Coast Guard Station	(40°38'N/73°16'W)	2.3	2.1	0.1
Democrat Point, Fire Island Inlet	(40°38'N/73°18'W)	2.9	2.7	0.1
Amityville, Great South Bay	(40°39'N/73°25'W)	1.3	1.2	0.1
Deep Creek Meadow, Hempstead Bay	(40°36'N/73°32'W)	2.7	2.5	0.2
Jones Inlet, Point Lookout	(40°35'N/73°35'W)	4.0	3.8	0.1
Long Beach, Hempstead Bay	(40°36'N/73°39'W)	4.3	4.1	0.2
Woodmere, Brosewere Bay	(40°37'N/73°43'W)	4.3	4.1	0.2
East Rockaway Inlet	(40°36'N/73°45'W)	4.6	4.3	0.2

Dashes (- - -) located in datum columns indicate unavailable datum values for a tide station. Real-time water levels, tide predictions, and tidal current predictions are available on the Internet from http://tidesandcurrents.noaa.gov.

(JJ 2012)

SCALE 1:40,000
Nautical Miles

LOGARITHMIC SPEED SCALE

To find SPEED, place one point of dividers on distance run (in any unit) and the other on minutes run. Without changing divider spread, place right point on 60 and left point will then indicate speed in units per hour. Example: with 4.0 nautical miles run in 15 minutes, the speed is 16.0 knots.

KAPP 950

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

12352

12352 EDITION 34 SEPTEMBER 2012

Last Correction: 9/5/2012. Cleared through:
LNM: 4115 (10/13/2015), NM: 4215 (10/17/2015), CHS: 0915 (9/25/2015)

To ensure that this chart was printed at the proper scale, the line below should measure six inches (152 millimeters).
If the line does not measure six inches (152 millimeters), this copy is not certified safe for navigation.

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SCALE 1:40,000
Nautical Miles
Statute Miles
Yards
LATITUDE LONGITUDE

NOTE C
CAUTION
Channel is subject to continual change. Buoys 26 thru 28 are not shown because they are frequently shifted in position.

MORICHES INLET
Due to rapidly changing shoaling conditions and existing dangers in Moriches Inlet, it is considered unsafe for Mariners to attempt to navigate this inlet at any time.
Buoys are not maintained in this inlet.

NOTE Z
NO-DISCHARGE ZONE, 40 CFR 140
Under the Clean Water Act, Section 312, all vessels operating within a No-Discharge Zone (NDZ) are completely prohibited from discharging any sewage, treated or untreated, into the waters. All vessels with an installed marine sanitation device (MSD) that are navigating, moored, anchored, or docked within a NDZ must have the MSD disabled to prevent the overboard discharge of sewage (treated or untreated) or install a holding tank. Regulations for the NDZ are contained in the U.S. Coast Pilot. Additional information concerning the regulations and requirements may be obtained from the Environmental Protection Agency (EPA) web site: http://www.epa.gov/owow/oceans/regulatory/vessel_sewage/.

NOTE A
Navigation regulations are published in Chapter 2, U.S. Coast Pilot 2. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 1st Coast Guard District in Boston, MA or at the Office of the District Engineer, Corps of Engineers in New York, NY.
Refer to charted regulation section numbers.

SMALL CRAFT ADVISORIES
During the boating season small craft advisories will be displayed from sunrise to sunset on Suffolk County Marine Police Patrol Boats while underway in the coastal and navigable inland waters of Suffolk County, Long Island, New York.

CAUTION
FISH TRAP AREAS AND STRUCTURES
Mariners are warned that numerous uncharted duck blinds and fishing structures, some submerged, may exist in the fish trap areas. Such structures are not charted unless known to be permanent.
Regulations to assure clear passage to and through dredged and natural channels, and to established landings, are prescribed by the Corps of Engineers in the Code of Federal Regulations.
Definite limits of fish trap areas have been established in some areas, and those limits are shown thus:
Where definite limits have not been prescribed, the location of fishing structures is restricted only by the regulations.

NOTE B
LONG ISLAND INTRACOASTAL WATERWAY
The Federal project depth is 6 feet from Bellport Bay to the south end of the Shinnecock Canal. Mariners should obtain local knowledge before navigating this waterway due to frequent reports of shoaling.

AIDS TO NAVIGATION
Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

CAUTION
Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.
During some winter months or when endangered by ice, certain aids to navigation are replaced by other types or removed. For details see U.S. Coast Guard Light List.

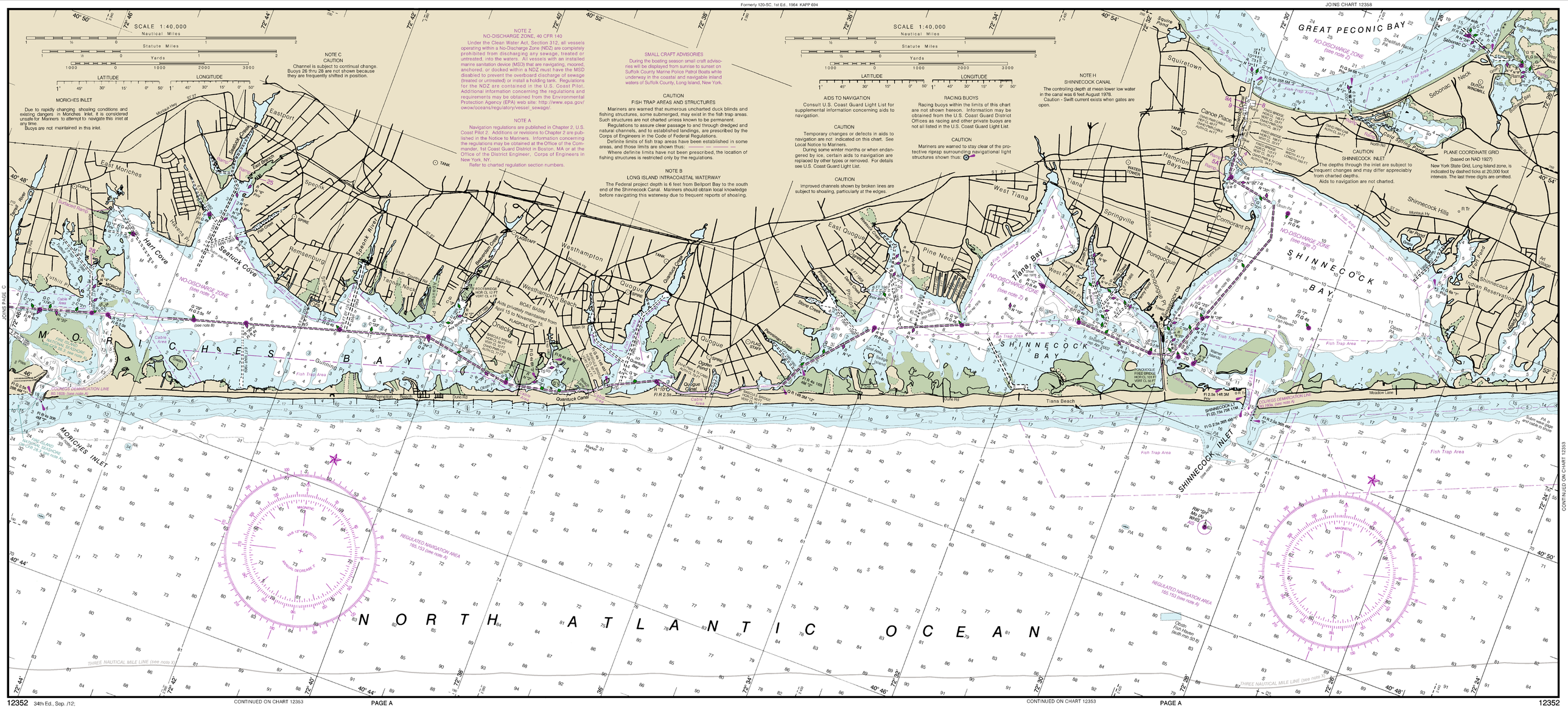
CAUTION
Mariners are warned to stay clear of the protective riprap surrounding navigational light structures shown thus:

RACING BUOYS
Racing buoys within the limits of this chart are not shown hereon. Information may be obtained from the U.S. Coast Guard District Offices as racing and other private buoys are not all listed in the U.S. Coast Guard Light List.

NOTE H
SHINNECOCK CANAL
The controlling depth at mean lower low water in the canal was 6 feet August 1978.
Caution - Swift current exists when gates are open.

CAUTION
SHINNECOCK INLET
The depths through the inlet are subject to frequent changes and may differ appreciably from charted depths.
Aids to navigation are not charted.

PLANE COORDINATE GRID
(based on NAD 1927)
New York State Grid, Long Island zone, is indicated by dashed ticks at 20,000 foot intervals. The last three digits are omitted.



SCALE 1:40,000
Nautical Miles
Statute Miles
Yards
LATITUDE LONGITUDE

BROWN CREEK
The controlling depths at MLLW were 3 feet for a mid-width of 50 feet from the channel entrance to Browns River Road, thence 1½ feet for a mid-width of 50 feet to the end of the project.
Apr 2015

NOTE F
State maintained orange and white regulatory buoys identify an area prohibited for shellfish harvest. The buoys are not charted and are frequently shifted in position to reflect changing local conditions.

RACING BUOYS
Racing buoys within the limits of this chart are not shown hereon. Information may be obtained from the U.S. Coast Guard District Offices as racing and other private buoys are not all listed in the U.S. Coast Guard Light List.

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MORICHES INLET
Due to rapidly changing shoaling conditions and existing dangers in Moriches Inlet, it is considered unsafe for Mariners to attempt to navigate this inlet at any time.
Buoys are not maintained in this inlet.

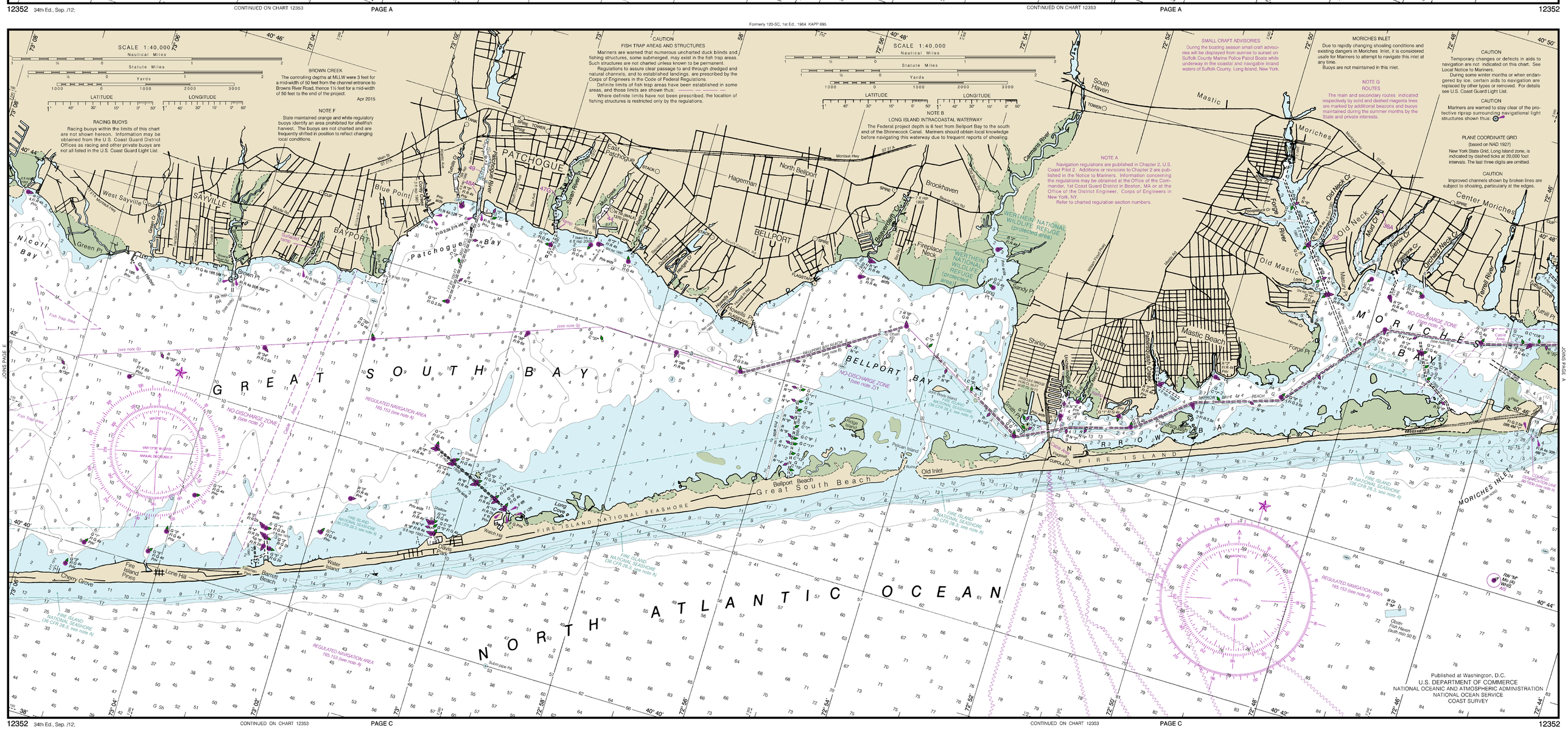
NOTE G
ROUTES
The main and secondary routes indicated respectively by solid and dashed magenta lines are marked by additional beacons and buoys maintained during the summer months by the State and private interests.

CAUTION
Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.
During some winter months or when endangered by ice, certain aids to navigation are replaced by other types or removed. For details see U.S. Coast Guard Light List.

CAUTION
Mariners are warned to stay clear of the protective riprap surrounding navigational light structures shown thus:

PLANE COORDINATE GRID
(based on NAD 1927)
New York State Grid, Long Island zone, is indicated by dashed ticks at 20,000 foot intervals. The last three digits are omitted.

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



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NATIONAL OCEAN SERVICE
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CAUTION
Mariners are warned to stay clear of the protective riprap surrounding navigational light structures shown thus:

FISH TRAP AREAS
Boundary lines of fish trap areas are shown thus:
Submerged piling may exist in these areas.

AIDS TO NAVIGATION
Numerous lights, lighted and unlighted buoys, and daybeacons in Hempstead Bay are privately maintained seasonally. Consult the U.S. Coast Guard Light List for additional information.

SPEED LIMITS
STATE BOAT CHANNEL
12 MPH in channel and 4 MPH in basin or anchorage areas.

NOTE D
No recent hydrography. Private aids mark best water.

NOTE E
CAUTION: Severe shoaling to ½ foot has been reported in many channels in Great South Bay in 1979.

NOTE G
ROUTES
The main and secondary routes indicated respectively by solid and dashed magenta lines are marked by additional beacons and buoys maintained during the summer months by the State and private interests.

SMALL CRAFT ADVISORIES
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PLANE COORDINATE GRID
(based on NAD 1927)
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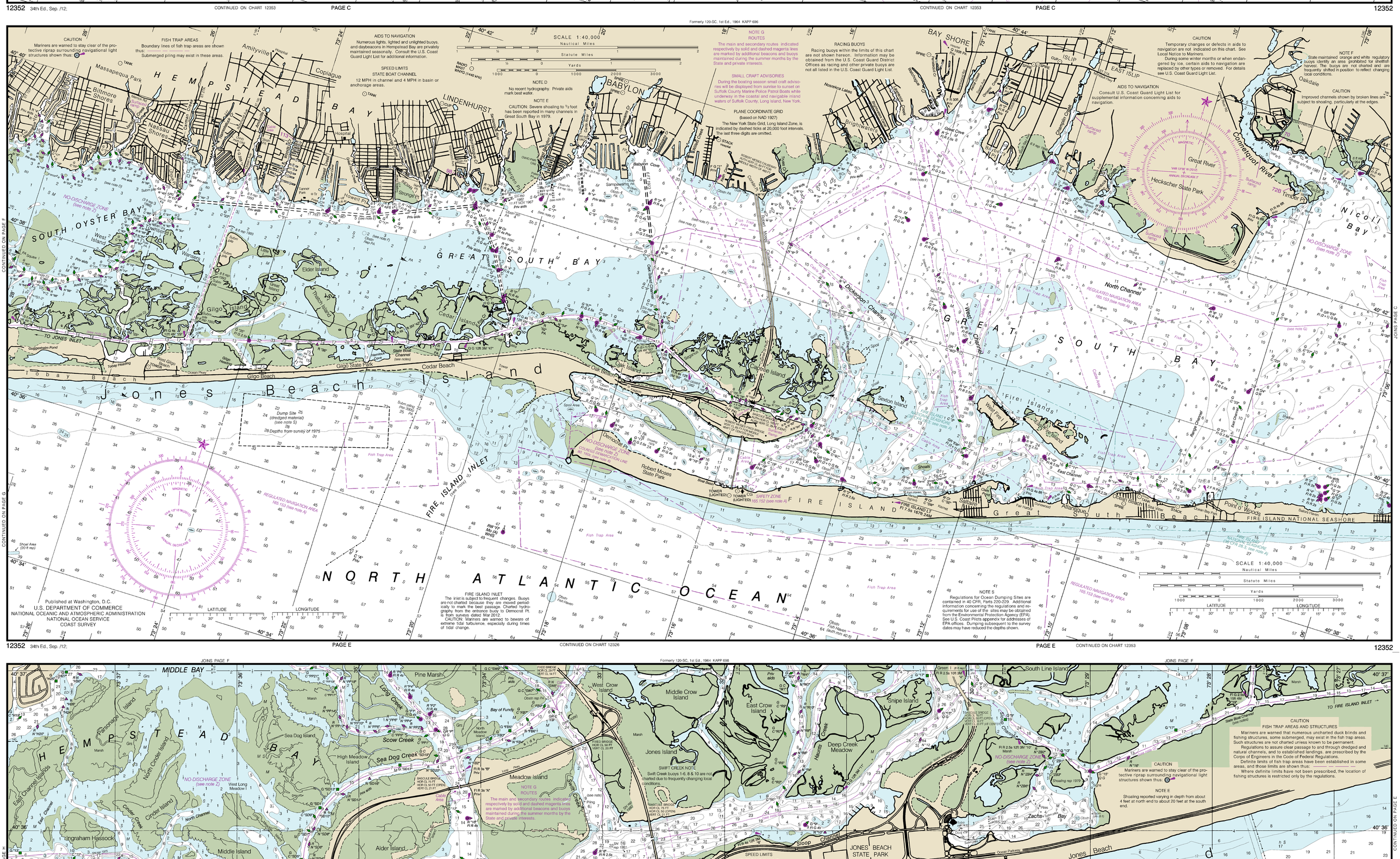
RACING BUOYS
Racing buoys within the limits of this chart are not shown hereon. Information may be obtained from the U.S. Coast Guard District Offices as racing and other private buoys are not all listed in the U.S. Coast Guard Light List.

AIDS TO NAVIGATION
Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

CAUTION
Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.
During some winter months or when endangered by ice, certain aids to navigation are replaced by other types or removed. For details see U.S. Coast Guard Light List.

NOTE F
State maintained orange and white regulatory buoys identify an area prohibited for shellfish harvest. The buoys are not charted and are frequently shifted in position to reflect changing local conditions.

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



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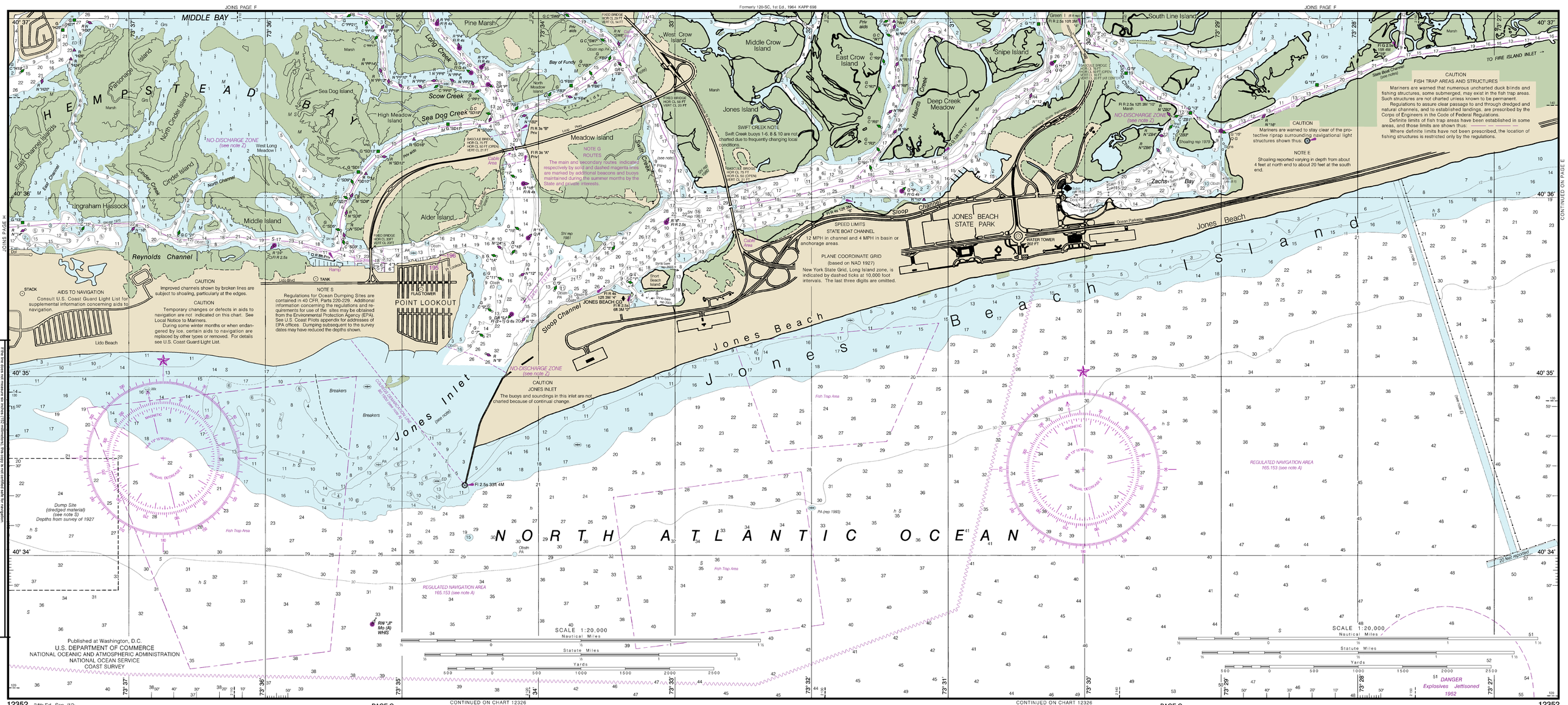
FIRE ISLAND INLET
The inlet is subject to frequent changes. Buoys are not charted because they are moved periodically to mark the best passage. Charted hydrography from the entrance buoy to Democrat Pt. is from surveys dated Mar 2012.
CAUTION: Mariners are warned to beware of extreme tidal turbulence, especially during times of tidal change.

NOTE S
Regulations for Ocean Dumping Sites are contained in 40 CFR, Parts 220-229. Additional information concerning the regulations and requirements for use of the sites may be obtained from the Environmental Protection Agency (EPA). See U.S. Coast Pilots appendix for addresses of EPA offices. Dumping subsequent to the survey dates may have reduced the depths shown.



AIDS TO NAVIGATION
Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

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

CAUTION
Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.
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NOTE G
ROUTES
The main and secondary routes indicated respectively by solid and dashed magenta lines are marked by additional beacons and buoys maintained during the summer months by the State and private interests.

SWIFT CREEK NOTE
Swift Creek buoys 1-6, 8 & 10 are not charted due to frequently changing local conditions.

SPEED LIMITS
STATE BOAT CHANNEL
12 MPH in channel and 4 MPH in basin or anchorage areas.

PLANE COORDINATE GRID
(based on NAD 1927)
New York State Grid, Long Island zone, is indicated by dashed ticks at 10,000 foot intervals. The last three digits are omitted.

CAUTION
FISH TRAP AREAS AND STRUCTURES
Mariners are warned that numerous uncharted duck blinds and fishing structures, some submerged, may exist in the fish trap areas. Such structures are not charted unless known to be permanent.
Regulations to assure clear passage to and through dredged and natural channels, and to established landings, are prescribed by the Corps of Engineers in the Code of Federal Regulations.
Definite limits of fish trap areas have been established in some areas, and those limits are shown thus:
Where definite limits have not been prescribed, the location of fishing structures is restricted only by the regulations.

NOTE E
Shoaling reported varying in depth from about 4 feet at north end to about 20 feet at the south end.

CAUTION
JONES INLET
The buoys and soundings in this inlet are not charted because of continual change.

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THE NATION'S CHARTMAKER SINCE 1807

NAUTICAL CHART 12352

SHINNECOCK BAY TO EAST ROCKAWAY INLET

SOUTH COAST OF LONG ISLAND NEW YORK

MERCATOR PROJECTION AT SCALE 1:20,000 & 1:40,000
SOUNDINGS IN FEET AT MEAN LOWER LOW WATER
North American Datum of 1983
(World Geodetic system 1984)

Additional information can be obtained at nauticalcharts.noaa.gov.

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.358" northward and 1.580" eastward to agree with this chart.

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Corps of Engineers, Geological Survey, and U.S. Coast Guard.

HEIGHTS

Heights in feet above Mean High Water.

For Symbols and Abbreviations see Chart No. 1

CAUTION

This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner. Chart updates corrected from Notice to Mariners published after the dates shown in the lower left hand corner are available at nauticalcharts.noaa.gov.

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

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COAST SURVEY

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

CAUTION
BASCULE BRIDGE CLEARANCES

For bascule bridges, whose spans do not open to a full upright or vertical position, unlimited vertical clearance is not available for the entire charted horizontal clearance.

This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

NOTE X

Within the 12-nautical mile Territorial Sea, established by Presidential Proclamation, some Federal laws apply. The Three Nautical Mile Line, previously identified as the outer limit of the territorial sea, is retained as it continues to depict the jurisdictional limit of the other laws. The 9-nautical mile Natural Resource Boundary off the Gulf coast of Florida, Texas, and Puerto Rico, and the Three Nautical Mile Line elsewhere remain in most cases the inner limit of Federal fisheries jurisdiction and the outer limit of the jurisdiction of the states. The 24-nautical mile Contiguous Zone and the 200-nautical mile Exclusive Economic Zone were established by Presidential Proclamation. Unless fixed by treaty or the U.S. Supreme Court, these maritime limits are subject to modification.

DETERMINATION OF WIND SPEED FROM SEA CONDITION

Wind Speed (knots)	Wind Description	Sea Conditions	Wind Force (Beaufort)	Probable Wave Height (feet)
0-1	Calm	Sea smooth and mirror-like.	0	-
1-3	Light air	Scale-like ripples without foam crests.	1	¼
4-6	Light breeze	Small, short wavelets; crests have a glassy appearance and do not break.	2	½
7-10	Gentle breeze	Large wavelets; some crests begin to break; foam of glassy appearance. Occasional white foam crests.	3	2
11-16	Moderate breeze	Small waves, becoming longer; fairly frequent white foam crests.	4	4
17-21	Fresh breeze	Moderate waves, taking a more pronounced long form; many white foam crests; there may be some spray.	5	6
22-27	Strong breeze	Large waves begin to form; white foam crests are more extensive everywhere; there may be some spray.	6	10
28-33	Near gale	Sea heaps up and white foam from breaking waves begin to be blown in streaks along the direction of the wind; spindrift begins.	7	14
34-40	Gale	Moderately high waves of greater length; edges of crests break into spindrift; foam is blown in well-marked streaks along the direction of the wind.	8	18

MARINE WEATHER FORCASTS

NATIONAL WEATHER SERVICE	TELEPHONE NUMBER	OFFICE HOURS
New York/Upton,NY	(631) 924-0517	9:00AM - 5:00PM M-F Recorded forecast only other times.
Boston/Taunton, MA	(508) 828-0672 *(508) 822-0634	8:00AM - 5:00PM M-F
Philadelphia, PA/Mt. Holly, NJ	(609) 261-6615 *(609) 261-6600	8:00AM - 4:00PM M-F

*Recorded forecast only

WEATHER INFORMATION BY MARINE RADIOTELEPHONE

CITY	STATION	FREQUENCY	DAILY BROADCAST-EST+
New York, NY	NMY-41	2670kHz	7:20 a.m., 7:20 p.m.

*Preceded by announcement on 2182 kHz and channel 16 (156.80 MHz) VHF
+One hour later during Eastern Daylight Saving Time.

SPECIAL WARNINGS - EST+
*On receipt

NOAA WEATHER RADIO

CITY	STATION	FREQUENCY	BROADCAST TIMES
New York, NY	KWO-35	162.550 MHz	CONTINUOUSLY 24 HOURS
New London, CT	KHB-47	162.550 MHz	CONTINUOUSLY 24 HOURS
Meriden, CT	WXJ-42	162.400 MHz	CONTINUOUSLY 24 HOURS
Riverhead, NY	WXM-80	162.475 MHz	CONTINUOUSLY 24 HOURS

CAUTION
WARNINGS CONCERNING LARGE VESSELS

The "Rules of the Road" state that recreational boats shall not impede the passage of a vessel that can navigate only within a narrow channel or fairway. Large vessels may appear to move slowly due to their large size but actually transit at speeds in excess of 12 knots, requiring a great distance in which to maneuver or stop. A large vessel's superstructure may block the wind with the result that sailboats and sailboards may unexpectedly find themselves unable to maneuver. Bow and stern waves can be hazardous to small vessels. Large vessels may not be able to see small craft close to their bows.

RULES OF THE ROAD
(ABRIDGED)

Motorless craft have the right-of-way in almost all cases.
Sailing vessels and motorboats less than sixty-five feet in length shall not hamper, in a narrow channel, the safe passage of a vessel which can navigate only inside that channel.
A motorboat being overtaken has the right-of-way.
Motorboats approaching head to head or nearly so should pass port to port.
When motorboats approach each other at right angles or obliquely, the boat on the right has the right-of-way in most cases.
Motorboats must keep to the right in narrow channels when safe and practicable.
Mariners are urged to become familiar with the complete text of the Rules of the Road in U.S. Coast Guard publication "Navigation Rules."

CAUTION
SUBMARINE PIPELINES AND CABLES

Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:

Pipeline Area — Cable Area

Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.

Covered wells may be marked by lighted or unlighted buoys.

Radio Bearing Conversion Table

Table of corrections, in minutes

[DIFFERENCE OF LONGITUDE IN DEGREES]

Mid. L.	½°	1°	1½°	2°	2½°	3°	3½°	4°	4½°	5°	5½°	6°	6½°	7°	7½°	8°	8½°	9°	9½°	10°
15°	4	8	12	16	19	23	27	31	35	40	43	47	50	54	58	62	66	70	74	78
16°	4	8	12	17	21	25	29	33	37	41	45	50	54	58	62	66	70	74	79	83
17°	4	9	13	18	22	26	31	35	39	44	48	53	57	61	66	70	75	79	83	88
18°	5	9	13	19	23	28	32	37	42	46	51	56	60	65	70	74	79	83	88	93
19°	5	10	15	20	24	29	34	39	44	49	54	59	63	68	73	78	83	88	93	98
20°	5	10	15	21	26	31	36	41	46	51	56	62	67	72	77	82	87	92	98	103
21°	5	11	16	21	27	32	38	43	48	54	59	64	70	75	81	86	91	97	102	108
22°	6	11	17	22	28	34	39	45	51	56	62	67	73	79	84	90	96	101	107	112
23°	6	12	18	23	29	35	41	47	53	59	64	70	76	82	88	94	100	105	111	117
24°	6	12	18	24	31	37	43	49	55	61	67	73	79	85	92	98	104	110	116	122
25°	6	13	19	25	32	38	44	51	57	63	70	76	82	89	95	101	108	114	120	127
26°	7	13	20	26	33	39	46	53	59	66	72	79	85	92	99	105	112	118	125	131
27°	7	14	20	27	34	41	48	54	61	68	75	82	89	95	102	109	116	123	129	136
28°	7	14	21	28	35	42	49	56	63	70	77	84	92	99	106	113	120	127	134	141
29°	7	15	21	29	36	44	51	58	65	73	80	87	95	102	109	116	124	131	138	145
30°	7	15	22	30	38	45	53	60	68	75	83	90	98	105	113	120	127	135	143	150
31°	8	15	23	31	39	46	54	62	70	77	85	93	100	108	116	124	131	139	146	155
32°	8	16	24	32	40	48	56	64	72	79	87	95	103	111	119	127	135	143	151	159
33°	8	16	25	33	41	49	57	65	74	82	90	98	106	114	123	131	139	147	155	163
34°	8	17	25	34	42	50	59	67	75	84	92	101	109	117	126	134	143	151	159	168
35°	9	17	26	34	43	52	60	69	77	86	95	103	112	120	129	138	146	155	163	172
36°	9	18	26	35	44	53	62	71	79	88	97	106	115	123	132	141	150	159	168	176
37°	9	18	27	36	45	54	63	72	81	90	99	108	117	126	135	144	153	163	172	181
38°	9	18	28	37	46	55	65	74	83	92	102	111	120	129	139	148	157	166	175	185
39°	9	19	28	38	47	57	66	75	85	94	104	113	123	132	142	151	160	170	179	189
40°	10	19	29	39	48	58	68	77	87	96	106	116	125	135	145	154	164	174	183	193
41°	10	20	30	39	49	59	69	79	89	98	108	118	128	138	148	157	167	177	187	197
42°	10	20	30	40	50	60	70	80	90	100	110	120	130	140	151	161	171	181	191	201
43°	10	20	31	41	51	61	72	82	92	102	113	123	133	143	153	164	174	184	194	205
44°	10	21	31	42	52	63	73	83	94	104	115	125	135	146	156	167	177	188	198	208
45°	11	21	32	42	53	64	74	85	95	106	117	127	138	149	159	170	180	191	201	212
46°	11	22	32	43	54	65	76	86	97	108	119	129	140	151	162	173	183	194	205	216
47°	11	22	33	44	55	66	77	88	99	110	121	132	143	154	165	176	186	197	208	219
48°	11	22	33	45	56	67	78	89	100	111	123	134	145	156	167	178	190	201	212	223
49°	11	23	34	45	57	68	79	91	102	113	125	136	147	158	170	181	192	204	215	226
50°	11	23	34	46	57	69	80	92	103	115	126	138	149	161	172	184	195	207	218	230
51°	12	23	35	47	58	70	82	93	105	117	128	140	152	163	175	186	198	210	221	233
52°	12	24	35	47	59	71	83	95	106	118	130	142	154	165	177	189	201	213	225	236
53°	12	24	36	48	60	72	84	96	108	120	132	144	156	168	180	192	204	216	228	240
54°	12	24	36	49	61	73	85	97	109	121	133	146	158	170	182	194	206	218	231	243
55°	12	25	37	49	61	74	86	98	111	123	135	147	160	172	184	197	209	221	233	246
56°	12	25	37	50	62	75	87	100	112	124	137	149	162	174	187	199	211	224	236	249
57°	13	25	38	50	63	75	88	101	113	126	138	151	164	176	189	201	214	226	239	252
58°	13	25	38	51	64	76	89	102	115	127	140	153	165	178	191	204	216	229	242	254
59°	13	26	39	51	64	77	90	103	116	129	141	154	167	180	193	206	219	231	244	257
60°	13	26	39	52	65	78	91	104	117	130	143	156	169	182	195	208	221	234	247	260

Example. A ship in latitude 39° 51'. N., longitude 67° 35' W., by dead reckoning, obtains a radio bearing of 299° true on the radiobeacon located in latitude 40° 37'. N., longitude 69° 37' W.

Radiobeacon station	Latitude	40° 37' N.
Dead-reckoning position of ship	Latitude	39° 51'
Middle latitude		40° 14'
Radiobeacon station	Longitude	69° 37' W.
Dead-reckoning position of ship	Longitude	67° 35'
Longitude difference		2° 02'

Entering the table with difference of longitude equals 2° , which is the nearest tabulated value and opposite 40° middle latitude, the correction of 39' is read.

As the ship is east of the radiobeacon, a minus correction is applied. The Mercator bearing then will be 299° - 000° 39' = 298° 21'. To facilitate plotting, subtract 180° and plot from the position of the radiobeacon the bearing 298° 21' -180°, or 118° 21' (Mercator bearing reckoned clockwise from true north).

Conversion Table, Degrees to Points and Vice Versa

° '	Points	° '	Points	° '	Points	° '	Points
0 00	N	90 00	E	180 00	S	270 00	W
2 49		92 49		182 49		272 49	
5 38	N ½ E	95 38	E ½ S	185 38	S ½ W	275 38	W ½ N
8 26		98 26		188 26		278 26	
11 15	N x E	101 15	E x S	191 15	S x W	281 15	W x N
14 04		104 04		194 04		284 04	
16 53	N x E ½ E	106 53	ESE ½ E	196 53	S x W ½ W	286 53	WNW ½ W
19 41		109 41		199 41		289 41	
22 30	NNE	112 30	ESE	202 30	SSW	292 30	WNW
25 19		115 19		205 19		295 19	
28 08	NNE ½ E	118 08	SE x E ½ E	208 08	SSW ½ W	298 08	NW x W ½ W
30 56		120 56		210 56		300 56	
33 45	NE x N	123 45	SE x E	213 45	SW x S	303 45	NW x W
36 34		126 34		216 34		306 34	
39 23	NE ½ N	129 23	SE ½ E	219 23	SW ½ S	309 23	NW ½ W
42 11		132 11		222 11		312 11	
45 00	NE	135 00	SE	225 00	SW	315 00	NW
47 49		137 49		227 49		317 49	
50 38	NE ½ E	140 38	SE ½ S	230 38	SW ½ W	320 38	NW ½ N
53 26		143 26		233 26		323 26	
56 15	NE x E	146 15	SE x S	236 15	SW x W	326 15	NW x N
59 04		149 04		239 04		329 04	
61 53	NE x E ½ E	151 53	SSE ½ E	241 53	SW x W ½ W	331 53	NNW ½ W
64 41		154 41		244 41		334 41	
67 30	ENE	157 30	SSE	247 30	WSW	337 30	NNW
70 19		160 19		250 19		340 19	
73 08	ENE ½ E	163 08	S x E ½ E	253 08	WSW ½ W	343 08	N x W ½ W
75 56		165 56		255 56		345 56	
78 45	E x N	168 45	S x E	258 45	W x S	348 45	N x W
81 34		171 34		261 34		351 34	
84 23	E ½ N	174 23	S ½ E	264 23	W ½ S	354 23	N ½ W
87 11		177 11		267 11		357 11	

WEATHER RULES FOR SAFE BOATING

Before setting out:

1. Check local weather and sea conditions.
2. Obtain the latest weather forecast for your area from radio broadcasts.

When warnings are in effect, don't go out unless you are confident your boat can be navigated safely under forecast conditions of wind and sea.

While afloat:

1. Keep a weather eye out for:
   A. A sudden vertical cumulus cloud development
   B. A sudden change in wind direction
   C. A sudden noticeable increase in wind velocity
   D. A drop in temperature
2. Be alert to heavy static on your AM radio which may indicate approaching thunderstorms
3. Check radio weather broadcasts for latest forecasts and warnings

Thundersqualls often occur on warm, moist afternoons and are a great hazard to the mariner. They can have wind gusts up to 80 mph and hit almost without warning. To survive a squall, you must prevent being capsized or blown to leeward into danger.

DISTANCE OF THE HORIZON

The following table gives the distance, in nautical miles, of the visible horizon for various heights of the eye above sea level. The actual distance varies somewhat as refraction changes.

Height, feet	Nautical miles	Height, feet	Nautical miles	Height, feet	Nautical miles	Height, feet	Nautical miles	Height, feet	Nautical miles	Height, feet	Nautical miles
1	1.1	6	2.8	11	3.8	16	4.6	21	5.2	26	5.8
2	1.6	7	3.0	12	4.0	17	4.7	22	5.4	27	5.9
3	2.0	8	3.2	13	4.1	18	4.9	23	5.5	28	6.1
4	2.3	9	3.4	14	4.3	19	5.0	24	5.6	29	6.2
5	2.6	10	3.6	15	4.4	20	5.1	25	5.7	30	6.3

NOTE Z
NO-DISCHARGE ZONE, 40 CFR 140

Under the Clean Water Act, Section 312, all vessels operating within a No-Discharge Zone (NDZ) are completely prohibited from discharging any sewage, treated or untreated, into the waters. All vessels with an installed marine sanitation device (MSD) that are navigating, moored, anchored, or docked within a NDZ must have the MSD disabled to prevent the overboard discharge of sewage (treated or untreated) or install a holding tank. Regulations for the NDZ are contained in the U.S. Coast Pilot. Additional information concerning the regulations and requirements may be obtained from the Environmental Protection Agency (EPA) web site: http://www.epa.gov/owow/oceans/regulatory/vessel_sewage/.

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.
During some winter months or when endangered by ice, certain aids to navigation are replaced by other types or removed. For details see U.S. Coast Guard Light List.

CAUTION

All craft should avoid areas where the skin divers flag, a red square with a diagonal white stripe, is displayed.

FORECASTING HINTS

With present communications, forecast facilities and storm advisories, the skilled mariner does not stand helpless before the elements. In addition to these aids, marine weather lore has been passed down for many years. Masters of ships as well as mates who assume bridge watches should have a good understanding of the significance of wind and barometer changes. In addition small boat operators, not equipped with adequate communications, must resort to local weather indications. They should have an understanding of the significance of local wind shifts and barometric tendencies as signs of changing weather.

Low pressure areas are generally associated with bad weather and high pressure areas with fair weather. As a common rule, winds from easterly quadrants and falling barometer, foretell the coming of foul weather; and shifting winds to westerly quadrants foretell clearing and fair weather.

CAUTION

Small craft operators are warned to beware of severe water turbulence caused by large vessels traversing narrow waterways.

HURRICANES AND TROPICAL STORMS

Hurricanes, tropical storms and other major storms may cause considerable damage to marine structures, aids to navigation and moored vessels, resulting in submerged debris in unknown locations.
Charted soundings, channel depths and shoreline may not reflect actual conditions following these storms. Fixed aids to navigation may have been damaged or destroyed. Buoys may have been moved from their charted positions, damaged, sunk, extinguished or otherwise made inoperative. Mariners should not rely upon the position or operation of an aid to navigation. Wrecks and submerged obstructions may have been displaced from charted locations. Pipelines may have become uncovered or moved.
Mariners are urged to exercise extreme caution and are requested to report aids to navigation discrepancies and hazards to navigation to the nearest United States Coast Guard unit.

SUPPLEMENTAL INFORMATION

Consult U.S. Coast Pilot 2 for important supplemental information.

LOGARITHMIC SPEED SCALE

1 2 3 4 5 6 7 8 9 10 15 20 25 30 40 50 60

To find SPEED, place one point of dividers on distance run (in any unit) and the other on minutes run. Without changing divider spread, place right point on 60 and left point will then indicate speed in units per hour. Example: with 4.0 nautical miles run in 15 minutes, the speed is 16.0 knots.

FACILITIES

Locations of public marine facilities are shown by large magenta numbers with leaders and refer to the facility tabulation.

ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)

Aids to Navigation (lights are white unless otherwise indicated):

AERO aeronautical	G green	Mis morse code	R TR radio tower
Al alternating	iQ interrupted quick	N nun	Rot rotating
B black	Iso isophase	OBSC obscured	s seconds
Bn beacon	LT HO lighthouse	Oc occulting	SEC sector
C can	M nautical mile	Or orange	St M statute miles
DIA diaphone	m minutes	Q quick	VQ very quick
F fixed	MICRO TR microwave tower	R red	W white
Fl flashing	Mkr marker	Ra Ref radar reflector	WHIS whistle
		R Bn radiobeacon	Y yellow

Bottom characteristics:

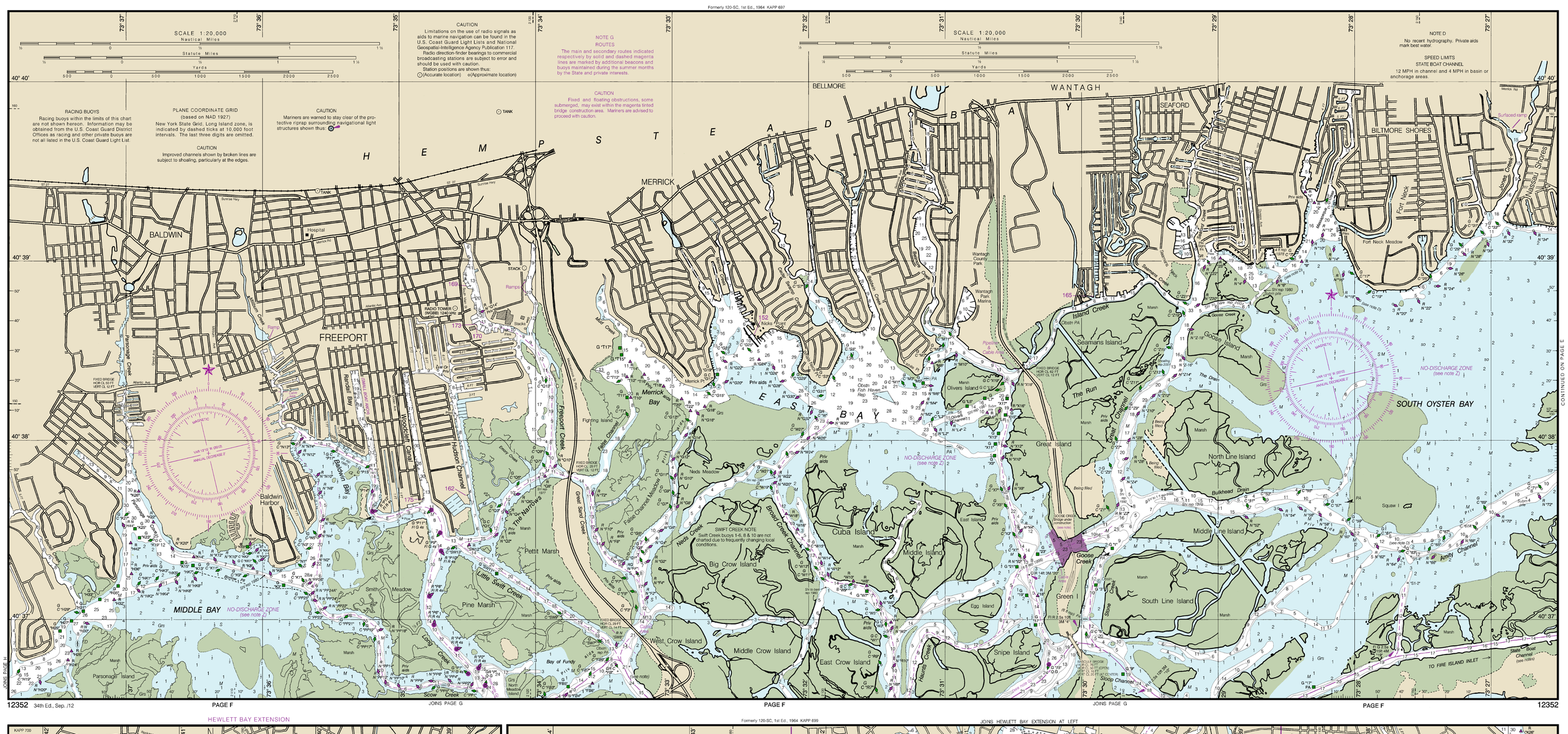
Blds boulders	Co coral	gy gray	Oys oysters	so soft	
bk broken	Gr gravel	h hard	Rk rock	Sh shells	
Cy clay	Grs grass	M mud	S sand	sy sticky	

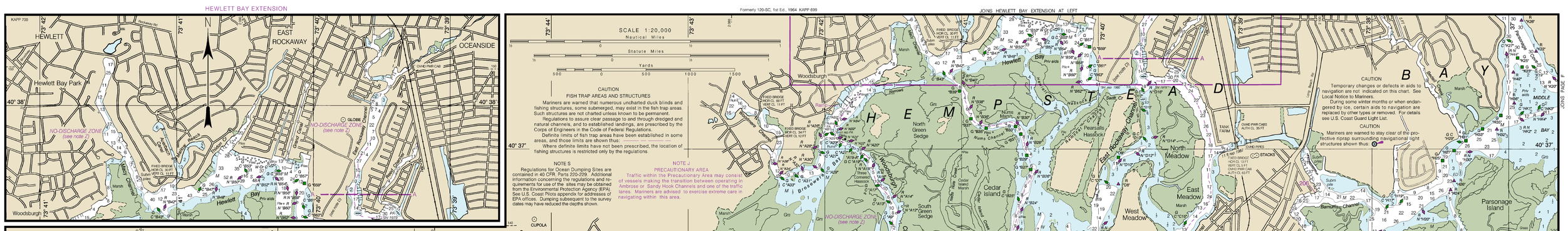
Miscellaneous:

AUTH authorized	Obstr obstruction	PD position doubtful	Submi submerged
ED existence doubtful	PA position approximate	Rep reported	

Wreck, rock, obstruction, or shoal swept clear to the depth indicated.
(2) Rocks that cover and uncover, with heights in feet above datum of soundings.
COLREGS: International Regulations for Preventing Collisions at Sea, 1972.
Demarcation lines are shown thus:

Currents: E 0.6 kn ebb current with average maximum velocity of 0.6 knots.
F 0.5 kn flood current with average maximum velocity of 0.6 knots.





Last Correction: 10/1/2015. Cleared through:
LNM: 4115 (10/13/2015), NM: 4215 (10/17/2015), CHS: 0915 (9/25/2015)

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