Distances Between United States Ports

2019 (13th) Edition

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Preface

Distances Between United States Ports is published by the Office of Coast Survey, National Ocean Service (NOS), National Oceanic and Atmospheric Administration (NOAA), pursuant to the Act of 6 August 1947 (33 U.S.C. 883a and b), and the Act of 22 October 1968 (44 U.S.C. 1310).

Distances Between United States Ports contains distances from a port of the United States to other ports in the United States, and from a port in the Great Lakes in the United States to Canadian ports in the Great Lakes and St. Lawrence River.

Distances Between Ports, Publication 151, is published by National Geospatial-Intelligence Agency (NGA) and distributed by NOS. NGA Pub. 151 is international in scope and lists distances from foreign port to foreign port and from foreign port to major U.S. ports. The two publications, Distances Between United States Ports and Distances Between Ports, complement each other.

This volume of **Distances Between United States Ports** cancels the 2012 (12th) Edition.

Mariners and others are urged to promptly report errors or general inquiries to www.nauticalcharts.noaa.gov/customer-service/assist

Digital copy—www.nauticalcharts.noaa.gov/publications/docs/distances.pdf

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General Information

Distances
These are in nautical miles unless otherwise indicated. A nautical mile is 1 minute of latitude, or approximately 2,000 yards, and is about 1.15 statute miles. See conversion tables in the latter part of this book.

Geographic Positions
Departure and arrival geographic coordinates, where listed, are for a centrally located pier inside the port.

Routes
These distances are measured along navigable tracklines. Each distance is along the shortest route that safe navigation permits between the two ports concerned. The navigator must make their own adjustments for weather or prevailing currents.

Junction Points
These are positions where two or more routes converge; they are indicated by magenta CAPITAL LETTERS in the tables. Distances between ports listed in different tables can be obtained by adding the respective distances to the junction points. Where a port is listed in more than one table, additional combinations of distances can also be obtained by using the port as a common reference point. (See examples that follow.)

Foreign Ports
Distances Between Ports, Pub. 151, is published by the **National Geospatial-Intelligence Agency (NGA)**. **NGA Pub 151** is International in scope and lists distances from foreign port to foreign port, and from foreign port to major United States ports. The two publications, **Distances Between United States Ports** and **Distances Between Ports**, complement each other. See the appendix for procurement information.

Examples
The following examples will illustrate the use of the tables. Distances shown in these examples are in nautical miles.

Ports in the same table

Example 1
Find the distance from New York, NY to Charleston, SC.
In **Table 1**, find New York, NY, in the list of cities along the left edge of the table, and Charleston, SC, in the list of cities along the top of the table. The intersection of the row and column will contain the distance (630 nautical miles) between these two ports.

Example 2
Find the distance from New Orleans, LA to St. Louis, MO, using **Table 20**.
- St. Louis mileage is 1,134 statute miles.
- New Orleans mileage is 95 statute miles.
- Subtract 95 from 1,134—New Orleans to St. Louis is 1,039 statute miles.

Example 3
Find the distance from Pittsburgh, PA to Chicago, IL, using **Table 20**.
- Pittsburgh mileage is 981 statute miles
- The difference in distance between the Ohio River mouth and the Illinois River mouth (954 from 1,172) is 218 statute miles
- Chicago mileage is 333
- Add the values together—Pittsburgh to Chicago is 1,532 statute miles

Use of junction and common reference points

Example 4
Find the distance from Bridgeport, CT to Albany, NY.
- Bridgeport to New York (**Table 3**) is 52 miles
- New York to Albany (**Table 5**) is 126 miles
- Bridgeport to Albany is 178 miles

Example 5
Find the distance from Woods Hole, MA to Freeport, NY, via the inside route along the south side of Long Island.
- Woods Hole to Greenport, NY (**Table 3**) is 82 miles
- Greenport to Freeport (**Table 4**) is 77
- Woods Hole to Freeport is 159 miles

Example 6
Find the distance from New Haven, CT to Burlington, VT.
- New Haven to New York (**Table 3**) is 68 miles
- New York to Troy Lock (**Table 5**) is 134 miles
- Troy Lock to Burlington (**Table 6**) is 116 miles
- New Haven to Burlington is 318 miles

Example 7
Find the distance from New York, NY to Miami, FL, via the Intracoastal Waterway.
- New York to Chesapeake and Delaware Canal east entrance (**Table 8**) is 190 miles
- Chesapeake and Delaware Canal east entrance to Norfolk Virginia (**Table 10**) is 209 miles
- Norfolk to Miami (**Table 14**) is 947 miles
- New York to Miami is 1,346 miles

Example 8
Find the distance from Boston, MA to San Francisco, CA.
- Boston to Panama Canal (Pacific Entrance) (**Table 1**) is 2,195 miles
- Panama Canal (Pacific Ent.) to San Francisco (**Table 27**) is 3,270 miles
- Boston to San Francisco is 5,465 miles

Example 9
Find the distance from Bridgeport, CT to Stockton, CA.
- Bridgeport to New York (**Table 3**) is 52 miles
- New York to Panama Canal (Pacific Entrance) (**Table 1**) is 2,018 miles
- Panama Canal (Pacific Ent.) to San Francisco (**Table 27**) is 3,270 miles
- San Francisco to Stockton (**Table 28**) is 75 miles
- Bridgeport to Stockton is 5,415 miles

Example 10—find the distance from Blaine, WA to San Diego, CA.
- Blaine to Cape Flattery (**Table 31**) is 112 miles
- Cape Flattery to San Diego (**Table 28**) is 1,104 miles
- Blaine to San Diego is 1,216 miles

Example 11
Find the distance from Eureka, CA to Redwood City, CA.
• Eureka to San Francisco, CA (Table 28) is 232 miles
• San Francisco to Redwood City (Table 29) is 22 miles
• Eureka to Redwood City is 254 miles

Example 12
Find the distance from Astoria, OR to Nome, AK.
• Astoria to Unimak Pass, AK (Table 27) is 1,626 miles
• Unimak Pass to Nome (Table 35) is 646 miles
• Astoria to Nome is 2,272 miles

Alternate Routes

Example 13
Find the distance from Portland, ME to New York, NY by two routes.
Outside via Nantucket Shoals
• Portland to New York (Table 1) is 426 miles
Via Cape Cod Canal and Long Island Sound
• Portland to Cape Cod Canal (Table 2) is 118 miles
• Cape Cod Canal to New York (Table 3) is 182 miles
• Portland to New York is 300 miles

Example 14
Find the distance from Boston, MA to Baltimore, MD by two routes.
Outside via Nantucket Shoals and Chesapeake Bay Entrance
• Boston to Baltimore (Table 1) is 694 miles
Via Cape Cod Canal and Chesapeake and Delaware Canal
• Boston to Cape Cod Canal (Table 2) is 52 miles
• Cape Cod Canal to Montauk Point, NY (Table 3) is 76 miles
• Montauk Point to C&D Canal east entrance (Table 7) is 263 miles
• C&D Canal east entrance to Baltimore (Table 10) is 62 miles
• Boston to Baltimore is 453 miles

Example 15
Find the distance from Chicago, IL to Key West, FL by three different routes.
Deepwater Route via St. Lawrence River
• Chicago to Port Huron, MI (Table 21) is 496 miles
• Port Huron to Montreal, Canada (Table 21) is 586 miles
• Montreal to Key West (Table 1) is 2,479 miles
• Chicago to Key West is 3,561 miles
Via New York Canal System and Intracoastal Waterway
• Chicago to Port Hurn, MI (Table 21) is 496 miles
• Port Huron to Buffalo, NY (Table 21) is 280 miles
• Buffalo to Troy Lock (Table 6) is 307 miles
• Troy Lock to New York (Table 5) is 134 miles
• New York to C&D Canal east entrance (Table 8) is 190 miles
• C&D Canal east entrance to Norfolk, VA (Table 10) is 209 miles
• Norfolk to Key West (Table 14) is 1,081 miles
• Chicago to Key West is 2,697 miles
Via Mississippi River System and Gulf Intracoastal Waterway
• Chicago to Mississippi River (Illinois River) (Table 20) is 284 miles
• Mississippi River junction with Illinois River to New Orleans, LA (1018 miles and subtract 83 miles) (Table 20) is 935 miles
• New Orleans to Apalachicola, FL (Table 18) is 302 miles
• Apalachicola to Key West (Table 17) is 406 miles
• Chicago to Key West is 1,927 miles

Example 16
Find the distance from Seattle, WA to Anchorage, AK by two routes.
Inside Passage
• Seattle to Cape Spencer (Table 34) is 976 miles
• Cape Spencer to Anchorage (Table 33) is 641 miles
• Seattle to Anchorage is 1,617 miles
Outside Route
• Seattle to Swiftsure Bank (Table 31) is 134 miles
• Swiftsure Bank to Anchorage (Table 33) is 1,294 miles
• Seattle to Anchorage is 1,428 miles

Harbor Entrances

Example 17
Find the distance from Chesapeake Bay entrance to Delaware Bay entrance.
• Chesapeake Bay entrance to Philadelphia, PA (Table 1) is 242 miles
• Delaware Bay entrance to Philadelphia (Table 9) subtract 87 miles
• Chesapeake Bay entrance to Delaware Bay entrance is 155 miles

Foreign Ports

Example 18
Find the distance from Wilmington, DE to Halifax, NS.
• Philadelphia, PA to Halifax (Pub 151) is 746 miles
• Philadelphia to Wilmington (Table 7) subtract 26 miles
• Wilmington to Halifax is 720 miles

Example 19
Find the distance from Beaumont, TX to Lisboa, Portugal.
• Beaumont, TX to Straits of Florida (table 16) is 726 miles
• Straits of Florida to Lisboa (Pub 151) is 3,831 miles
• Beaumont to Lisboa is 4,557 miles

Atlantic Distances

Atlantic Ocean Distances—Montreal, Canada to the Panama Canal

Table 1

	PANAMA CANAL (Pacific)	Panama Canal (Atlantic)	YUCATAN CHANNEL	San Juan, PR	Corpus Christi, TX	Galveston, TX	Port Arthur, TX	NEW ORLEANS, LA **	Mobile, AL	Pensacola, FL	Tampa, FL	STRAITS OF FLORIDA	Key West, FL	Jacksonville, FL	Savannah, GA	Charleston, SC	Wilmington, NC	DIAMOND SHOALS	Norfolk, VA	CHESAPEAKE BAY ENT.	Baltimore, MD	Philadelphia, PA	NEW YORK, NY	NANTUCKET SHOALS	Boston, MA	Portland, ME	Gut of Canso (Lock)	Cabot Strait
MONTREAL, QUEBEC* (St. Lambert Lock)	3249	3203	2730	2445	3347	3242	3240	3080	3011	2977	2772	2540	2479	2172	2088	2014	1948	1729	1716	1689	1838	1682	1534	1311	1318	1276	717	681
Cabot Strait 45°07.0'N., 60°17.0'W.	2568	2522	2049	1764	2666	2561	2559	2399	2330	2296	2091	1859	1798	1491	1407	1333	1267	1048	1035	1008	1157	1001	853	630	637	595	120	
Gut of Canso (Lock) 45°39.0'N., 61°25.0'W.	2465	2419	1937	1669	2558	2453	2451	2291	2222	2188	1983	1751	1690	1379	1295	1221	1155	936	923	896	1046	890	742	519	526	484		
Portland, ME 43°39.4'N., 70°14.7'W.	2235	2189	1629	1531	2255	2150	2148	1988	1919	1885	1680	1448	1387	1071	987	913	847	628	611	584	734	575	426	203	100			
Boston, MA 42°22.0'N., 71°03.0'W.	2195	2149	1589	1486	2215	2110	2108	1948	1879	1845	1640	1408	1347	1031	947	873	807	588	571	544	694	535	386	163				
NANTUCKET SHOALS 40°30.0'N., 69°25.0'W.	2032	1986	1426	1334	2052	1947	1945	1785	1716	1682	1477	1245	1184	868	784	710	644	425	408	381	531	372	223					
NEW YORK, NY 40°42.0'N., 74°01.0'W.	2018	1972	1346	1399	1977	1872	1870	1710	1641	1607	1402	1170	1109	788	704	630	564	345	294	267	417	240						
Philadelphia, PA 39°56.8'N., 75°08.3'W.	2001	1955	1323	1395	1954	1849	1847	1687	1618	1584	1379	1147	1086	765	681	607	541	322	269	242	392							
Baltimore, MD 39°16.0'N., 76°34.5'W.	1950	1904	1268	1375	1899	1794	1792	1632	1563	1529	1324	1092	1031	710	626	552	486	267	173	150								
CHESAPEAKE BAY ENT. 36°56.3'N., 75°58.6'W.	1800	1754	1118	1225	1749	1644	1642	1482	1413	1379	1174	942	881	560	476	402	336	117	27									
Norfolk, VA 36°50.9'N., 76°17.9'W.	1827	1781	1145	1252	1776	1671	1669	1509	1440	1406	1201	969	908	587	503	429	363	144										
DIAMOND SHOALS 35°08.0'N., 75°15.0'W.	1683	1637	1001	1114	1632	1527	1525	1365	1296	1262	1057	825	764	443	359	285	219											
Wilmington, NC 34°14.0'N., 77°57.0'W.	1655	1609	904	1153	1535	1430	1428	1268	1199	1165	960	728	667	315	227	151												
Charleston, SC 32°47.2'N., 79°55.2'W.	1609	1563	809	1138	1440	1335	1333	1173	1104	1070	865	633	572	197	102													
Savannah, GA 32°05.0'N., 81°05.7'W.	1610	1564	780	1156	1411	1306	1304	1144	1075	1041	836	604	543	145														
Jacksonville, FL 30°19.2'N., 81°39.0'W.	1559	1513	699	1121	1330	1225	1223	1063	994	960	755	523	462															
Key West, FL 24°33.7'N., 81°48.5'W.	1106	1060	251	966	880	775	773	613	544	510	305	73																
STRAITS OF FLORIDA 24°25.0'N., 83°00.0'W.	1047	1001	192	1017	807	702	700	540	471	437	232																	
Tampa, FL 27°56.5'N., 82°26.7'W.	1259	1213	404	1249	810	703	697	502	389	347																		
Pensacola, FL 30°24.0'N., 87°13.0'W.	1388	1342	533	1448	618	509	504	288	89																			
Mobile, AL 30°42.5'N., 88°02.5'W.	1417	1371	562	1448	605	496	491	269																				
NEW ORLEANS, LA** 29°57.0'N., 90°03.7'W.	1442	1396	587	1557	555	446	441																					
Port Arthur, TX 29°49.5'N., 93°57.6'W.	1533	1487	691	1717	249	89																						
Galveston, TX 29°19.0'N., 94°47.0'W.	1539	1493	696	1719	207																							
Corpus Christi, TX 27°48.8'N., 97°24.0'W.	1595	1549	769	1824																								
San Juan, PR 18°27.8'N., 66°06.7'W.	1036	990	1111																									
YUCATAN CHANNEL 21°50.0'N., 85°03.0'W.	855	809																										
Panama Canal (Atlantic) 9°23.5'N., 79°55.3'W.	46																											

Distances are in nautical miles

All tabular distances are by outside routes which can be used by the deepest-draft vessel that the listed ports can accommodate. Lighter-draft vessels can save considerable mileage by transiting Canso Lock (Canada), the Cape Cod Canal (Massachusetts), and the Chesapeake and Delaware Canal (Delaware-Maryland); see the detailed tables. Gulf of Mexico distances are through the Shipping Safety Fairways.

* For Quebec City, Canada – subtract 139 miles
* Via Southwest Pass

Gulf of Maine Distances—Calais, Maine to Cape Cod, Massachusetts

Table 2

	NANTUCKET SHOALS	Provincetown, MA	CAPE COD CANAL	Plymouth, MA	Scituate, MA	Boston, MA	Lynn, MA	Marblehead, MA	Salem, MA	Gloucester, MA	Rockport, MA	Newburyport, MA	Portsmouth, NH	York Harbor, ME	Portland, ME	Augusta, ME	Bath, ME	Wiscasset, ME	Boothbay Harbor, ME	Bangor, ME	Bucksport, ME	Searsport, ME	Rockland, ME	Stonington, ME	Buck Harbor, ME	Bar Harbor, ME	Jonesport, ME	Machiasport, ME	Lubec, ME	Eastport, ME
Calais, ME 45°11.4'N, 67°16.7'W	312	258	270	268	259	265	261	251	252	245	236	241	230	222	198	214	187	189	168	176	159	152	145	118	125	98	66	61	26	24
Eastport, ME 44°54.3'N., 66°59.0'W.	297	243	255	253	244	250	246	236	237	230	221	226	216	208	183	200	173	175	153	162	145	137	130	102	109	83	42	46	3	
Lubec, ME 44°51.7'N., 66°59.0'W.	286	232	244	242	233	239	235	225	226	219	210	215	204	196	172	188	161	162	142	150	133	126	118	91	98	72	40	35		
Machiasport, ME 44°41.9'N., 67°23.6'W.	271	214	226	224	215	221	217	207	208	200	192	197	186	178	153	169	142	144	123	132	115	107	100	73	80	52	20			
Jonesport, ME 44°31.6'N., 67°37.0'W.	257	197	209	206	196	203	198	188	189	182	173	178	167	159	135	149	122	124	105	113	96	89	82	53	60	34				
Bar Harbor, ME 44°23.5'N., 68°12.0'W.	243	179	190	188	177	184	179	169	170	163	154	159	148	140	115	130	103	105	86	94	77	70	62	33	39					
Buck Harbor, ME 44°20.3'N., 68°44.2'W.	237	165	176	174	159	162	157	148	149	138	131	137	123	114	85	94	67	68	57	39	22	16	22	16						
Stonington, ME 44°09.2'N., 68°39.8'W.	226	155	165	163	155	158	153	143	145	133	126	132	119	109	81	90	63	64	53	47	30	24	20							
Rockland, ME 44°06.0'N., 69°05.5'W.	223	148	160	155	142	147	142	132	133	126	115	118	107	99	71	86	59	62	42	50	33	23								
Searsport, ME 44°27.0'N., 68°54.0'W.	242	166	178	174	161	166	161	151	152	145	134	137	127	118	90	105	78	80	61	30	13									
Bucksport, ME 44°34.3'N., 68°48.0'W.	250	175	187	182	169	174	169	159	160	153	143	145	135	126	98	113	86	89	70	17										
Bangor, ME 44°47.7'N., 68°46.3'W.	267	192	204	199	186	191	186	176	177	170	160	162	151	144	115	131	104	106	87											
Boothbay Harbor, ME 43°51.0'N., 69°37.6'W.	207	119	130	125	112	115	110	101	102	95	84	86	74	64	36	50	23	21												
Wiscasset, ME 43°59.5'N., 69°40.1'W.	217	127	139	133	120	123	118	109	110	103	92	94	82	72	44	57	30													
Bath, ME 43°54.5'N., 69°48.7'W.	213	123	137	129	115	119	114	104	105	98	88	89	78	67	40	27														
Augusta, ME 44°18.9'N., 69°46.4'W.	240	150	164	156	142	146	141	131	132	125	115	116	104	94	66															
Portland, ME 43°39.4'N., 70°14.7'W.	203	107	118	112	97	100	95	86	87	79	66	67	56	43																
York Harbor, ME 43°07.9'N., 70°38.6'W.	182	75	83	75	60	63	58	48	49	42	29	25	11																	
Portsmouth, NH 43°04.6'N., 70°44.5'W.	180	73	81	73	58	61	56	46	47	40	27	22																		
Newburyport, MA 42°48.8'N., 70°52.4'W.	171	63	72	64	48	51	47	37	38	31	16																			
Rockport, MA 42°40.0'N., 70°36.5'W.	157	49	58	50	34	37	33	23	24	17																				
Gloucester, MA 42°36.6'N., 70°39.6'W.	155	45	52	43	26	26	22	11	12																					
Salem, MA 42°31.3'N., 70°52.5'W.	159	49	53	45	24	27	18	5																						
Marblehead, MA 42°30.2'N., 70°50.7'W.	156	45	48	39	22	19	14																							
Lynn, MA 42°27.3'N., 70°56.6'W.	159	47	48	40	22	13																								
Boston, MA 42°22.0'N., 71°03.0'W.	163	49	52	40	21																									
Scituate, MA 42°11.9'N., 70°43.5'W.	143	29	29	20																										
Plymouth, MA 41°57.6'N., 70°39.8'W.	144	26	20																											
CAPE COD CANAL 41°46.8'N., 70°29.0'W.	144	22																												
Provincetown, MA 42°02.5'N., 70°10.0'W.	132																													

Distances are in nautical miles

Each distance is by the shortest route that safe navigation permits between the two ports concerned. Vessels standing along the coast must make their own adjustments for non-direct routes. For example the table shows a distance of 214 miles by direct route from Machiasport to Provincetown; the distance via Matinicus Rock and Cape Ann is 235 miles. Distances from Eastport to Machiasport and other ports southward are via the deep Head Harbour Passage, which is 8 miles farther than via the shallower Lubec Channel.

Coastwise Distances—Cape Cod, Massachusetts to New York, New York

Table 3

	Port Newark, NJ	Elizabethport, NJ	Perth Amboy, NJ	NEW YORK, NY	MONTAUK POINT	Port Jefferson, NY	Greenport, NY	Sag Harbor, NY	Montauk, NY	Stamford, CT	South Norwalk, CT	Bridgeport, CT	Stratford, CT	New Haven, CT	Hartford, CT	New London, CT	Stonington, CT	Great Salt Pond, RI	Providence, RI	Fall River, MA	Newport, RI	New Bedford, MA	Woods Hole, MA	Vineyard Haven, MA	Nantucket, MA	NANTUCKET SHOALS
CAPE COD CANAL 41°46.8'N., 70°29.0'W.	193	191	202	182	76	134	99	100	85	152	151	138	132	127	140	89	77	66	74	69	54	31	22	43	69	144
NANTUCKET SHOALS 40°30.0'N., 69°25.0'W.	227	225	223	223	113	178	142	143	127	196	195	182	176	171	187	136	126	114	131	126	111	111	92	88	85	
Nantucket, MA 41°17.2'N., 70°05.7'W.	208	206	216	196	89	149	113	114	99	167	166	153	147	140	155	103	92	80	91	77	71	53	33	29		
Vineyard Haven, MA 41°27.3'N., 70°35.8'W.	183	181	191	171	63	123	87	88	74	141	140	127	121	114	129	77	67	54	65	51	45	28	7			
Woods Hole, MA 41°31.4'N., 70°40.4'W.	178	176	186	166	59	118	82	83	69	136	135	123	117	109	125	72	61	50	57	44	38	15				
New Bedford, MA 41°38.1'N., 70°55.1'W.	178	176	186	166	60	118	80	81	66	136	135	122	113	111	124	74	58	48	58	54	38					
Newport, RI 41°29.8'N., 71°19.8'W.	151	149	159	139	35	91	56	57	42	109	108	95	90	84	98	48	34	23	21	16						
Fall River, MA 41°42.4'N., 71°09.8'W.	166	164	174	154	51	107	71	72	58	125	124	110	105	100	113	63	49	38	21							
Providence, RI 41°48.5'N., 71°24.0'W.	171	169	179	159	56	112	76	77	63	130	129	115	110	105	118	68	55	43								
Great Salt Pond, RI 41°11.1'N., 71°34.9'W.	133	131	141	121	15	74	37	39	23	92	91	78	72	65	80	29	19									
Stonington, CT 41°19.9'N., 71°54.6'W.	121	119	129	109	19	61	28	29	18	79	77	64	59	52	66	12										
New London, CT 41°21.4'N., 72°05.4'W.	116	114	124	104	28	56	25	27	20	74	73	60	54	49	62											
Hartford, CT 41°45.0'N., 72°39.0'W.	143	141	151	131	75	84	62	64	66	102	101	86	81	74												
New Haven, CT 41°17.4'N., 72°54.5'W.	80	78	88	68	62	23	47	49	51	37	36	25	15													
Stratford, CT 41°11.3'N., 73°07.3'W.	69	67	77	57	65	15	52	54	56	27	26	10														
Bridgeport, CT 41°10.3'N., 73°10.8'W.	64	62	72	52	74	15	58	60	62	22	21															
South Norwalk, CT 41°05.7'N., 73°24.7'W.	52	50	60	40	84	23	71	73	75	11																
Stamford, CT 41°01.8'N., 73°32.3'W.	45	43	53	33	85	24	72	74	76																	
Montauk, NY 41°02.8'N., 71°57.5'W.	117	115	125	105	16	58	22	21																		
Sag Harbor, NY 41°00.2'N., 72°17.7'W.	115	113	123	103	32	56	11																			
Greenport, NY 41°06.0'N., 72°21.5'W.	114	112	122	102	30	54																				
Port Jefferson, NY 40°57.0'N., 73°04.5'W.	64	62	72	52	68																					
MONTAUK POINT 41°01.7'N., 71°47.3'W.	126	124	123	20																						
NEW YORK, NY 40°42.0'N., 74°01.0'W.	12	10	20																							
Perth Amboy, NJ 40°30.3'N., 74°15.7'W.	15	10																								
Elizabethport, NJ 40°38.8'N., 74°11.2'W.	5																									

Distances are in nautical miles

Inside Route Distances—south side of Long Island Sound
Greenport, New York to East Rockaway Inlet, New York

Table 4

	* Manasquan Inlet, NJ	* NEW YORK (The Battery)	* Rockaway Point	East Rockaway Inlet	Long Beach	Freeport	Jones Inlet	Jones Beach	Amityville	Babylon	Fire Island Inlet	Bay Shore	Patchogue	Bellport	Moriches Inlet	Westhampton Beach	Shinnecock Inlet	Shinnecock Canal (north end)	Riverside	Sag Harbor
Greenport 41°06.0'N., 72°21.5'W.	116	107	94	85	80	77	76	72	66	61	62	57	48	42	34	28	21	16	21	11
Sag Harbor 41°00.2'N., 72°17.7'W.	117	108	95	86	81	78	77	73	67	62	63	58	49	43	35	29	22	17	22	
Riverside 40°55.0'N., 72°39.4'W.	108	99	86	77	72	69	68	64	58	53	54	49	40	34	26	20	13	8		
Shinnecock Canal 40°53.9'N., 72°30.3'W.	100	91	78	69	64	61	60	56	50	45	46	41	32	26	18	12	5			
Shinnecock Inlet 40°50.3'N., 72°28.6'W.	97	88	75	66	61	58	58	54	47	42	44	39	29	23	15	9				
Westhampton Beach 40°48.2'N., 72°38.4'W.	89	80	67	58	53	49	49	45	39	34	35	30	21	15	7					
Moriches Inlet 40°45.8'N., 72°45.3'W.	85	76	63	54	49	46	45	42	35	30	32	27	17	11						
Bellport 40°45.1'N., 72°56.0'W	75	66	53	44	38	35	35	31	24	19	21	16	6							
Patchogue 40°45.5'N., 73°01.2'W.	72	63	50	41	36	32	32	28	22	17	18	13								
Bay Shore 40°42.8'N., 73°14.2'W.	60	51	38	29	24	21	21	17	10	5	9									
Fire Island Inlet 40°37.8'N., 73°18.6'W.	60	51	38	29	24	21	20	16	12	8										
Babylon 40°41.2'N., 73°18.9'W.	57	48	35	26	21	18	17	13	6											
Amityville 40°39.6'N., 73°24.8'W.	51	42	29	20	15	12	11	7												
Jones Beach 40°36.2'N., 73°30.8'W.	44	35	22	13	8	4	4													
Jones Inlet 40°34.4'N., 73°34.9'W.	41	32	19	10	5	4														
Freeport 40°37.6'N., 73°34.9'W.	42	33	20	11	6															
Long Beach 40°35.7'N., 73°39.4'W.	36	27	14	5																
East Rockaway 40°34.9'N., 73°45.4'W.	31	22	9																	
* Rockaway Point 40°32.4'N., 73°56.5'W.	27	13																		
* NEW YORK (The Battery) 40°42.0'N., 74°01.0'W.	40																			

Distances are in nautical miles

* Outside distances westward of East Rockaway Inlet

Distances on the Hudson River—New York, New York to Troy Lock, New York

Table 5

	Troy Lock	Watervliet	Troy	Rensselaer	Albany	Coeymans	Coxsackie	Athens	Hudson	Catskill	Saugerties	Kingston	Hyde Park	Poughkeepsie	Newburgh	West Point	Peekskill	Haverstraw	Ossining	Nyak	Tarrytown	Yonkers
NEW YORK (The Battery) 40°42.0'N., 74°01.0'W.	134	132	132	126	126	115	108	102	102	99	89	80	71	66	53	45	38	33	29	25	24	16
Yonkers 40°56.1'N., 73°54.3'W.	118	116	116	110	110	100	93	86	86	83	74	64	55	50	37	29	23	18	14	10	9	
Tarrytown 41°04.7'N., 73°52.2'W.	110	108	108	102	102	92	85	78	78	75	66	56	47	42	29	21	15	9	6	2		
Nyack 41°05.4'N., 73°54.9'W.	110	108	108	102	102	92	85	78	78	75	66	57	48	43	29	22	15	10	6			
Ossining 41°09.6'N., 73°52.3'W.	106	104	104	98	98	88	80	74	74	71	62	52	43	38	25	17	11	5				
Haverstraw 41°11.8'N., 73°57.5'W.	102	100	100	94	94	84	76	70	70	67	58	48	39	34	21	13	6					
Peekskill 41°17.3'N., 73°56.0'W.	96	94	94	88	88	78	71	64	64	61	52	43	34	29	15	8						
West Point 41°23.1'N., 73°57.3'W	89	87	87	81	81	70	63	57	57	54	45	35	26	21	8							
Newburgh 41°30.1'N., 74°00.3'W.	81	79	79	73	73	62	55	49	49	46	37	27	18	13								
Poughkeepsie 41°42.3'N., 73°56.5'W.	68	66	66	60	60	49	42	36	36	33	24	14	5									
Hyde Park 41°47.3'N., 73°56.9'W.	63	61	61	55	55	44	37	31	31	28	19	9										
Kingston 41°55.1'N., 73°59.0'W.	56	54	54	48	48	38	30	24	24	21	12											
Saugerties 42°04.4'N., 73°56.7'W.	46	44	44	38	38	28	21	14	14	11												
Catskill 42°13.0'N., 73°52.1'W.	37	35	35	29	29	19	11	5	5													
Hudson 42°15.3'N., 73°48.1'W.	32	30	30	24	24	14	7	1														
Athens 42°15.6'N., 73°48.5'W.	32	30	30	24	24	14	6															
Coxsackie 42°21.0'N., 73°47.6'W.	26	24	24	18	18	7																
Coeymans 42°28.5'N., 73°47.4'W.	18	16	16	10	10																	
Albany 42°37.9'N., 73°45.3'W.	8	6	6	0																		
Rensselaer 42°37.9'N., 73°45.1'W.	8	6	6																			
Troy 42°43.7'N., 73°41.8'W.	2	0																				
Watervliet 42°43.7'N., 73°41.9'W.	2																					

Distances are in nautical miles

New York State Waterway Distances

Table 6

City and local point	From Buffalo (Erie Basin)	From Oswego (Lake Terminal)	From Troy Lock
via Erie Canal			
BUFFALO (Erie Basin)	-	214.2	353.3
Tonawanda (terminal)	12.9	201.3	340.3
Lockport (lower terminal)	30.9	183.3	322.3
Rochester	93.9	126.9	265.9
Newark (dock)	124.3	89.9	228.9
Syracuse (terminal)	190.1	37.2	176.2
Rome (terminal)	235.9	69.1	117.3
Utica (terminal)	249.9	83.1	104.9
Little Falls (terminal)	270.8	104	82.5
Amsterdam (terminal)	313.3	146.5	40
Schenectady	330.1	163.3	23.8
Cohoes	351.6	184.8	1.7
Troy Lock	353.3	186.5	-
via Cayuga and Seneca Canals			
Watkins Glen	201.4	116.8	255.9
Ithaca	191.4	106.7	245.8
via Oswego Canal			
Fulton (dock wall)	202.5	11.7	174.7
Oswego (lake terminal)	214.2	-	186.5
via Champlain Canal and Lake			
Mechanicville (terminal)	360.1	193.3	11.4
Fort Edward (terminal)	388.7	222	40.1
Whitehall (terminal)	411.2	244.5	62.6
Burlington (landing)	481.8	315.1	133.1
Plattsburg (terminal)	497.2	330.5	148.5
Rouses Point (terminal)	593.3	366.5	173.0

Distances are in statute miles

Coastwise Distances—New York, New York to Chesapeake Bay entrance, Virginia

Table 7

	CHESAPEAKE BAY ENTRANCE	Chincoteague, VA	Ocean City, MD	Indian River Inlet, DE	Trenton, NJ	Former U.S. Steel Basin, PA	Philadelphia, PA	Chester, PA	Marcus Hook, PA	Wilmington, DE	C & D CANAL (east entrance)	Harbor of Refuge, DE	DELAWARE BAY ENTRANCE	Cape May Harbor, NJ	Atlantic City, NJ	Barnegat Inlet, NJ	Manasquan Inlet, NJ	NEW YORK, NY	MONTAUK POINT, NY
NANTUCKET SHOALS 40°30.0'N., 69°25.0'W.	381	328	295	285	400	395	372	356	353	347	336	285	285	271	242	221	212	223	113
MONTAUK POINT, NY 41°01.7'N., 71°47.3'W.	322	262	227	209	327	322	299	283	280	274	263	212	212	192	157	131	117	122	
NEW YORK, NY 40°42.0'N., 74°01.0'W.	267	201	161	145	268	263	240	224	221	215	204	153	153	128	94	63	40		
Manasquan Inlet, NJ 40°06.9'N., 72°30.3'W.	291	161	121	105	212	207	184	169	165	159	148	98	97	85	52	22			
Barnegat Inlet, NJ 39°46.0'N., 74°06.3'W.	199	141	101	86	193	188	165	150	146	140	129	79	78	65	32				
Atlantic City, NJ 39°22.6'N., 74°24.9'W.	171	113	73	57	164	159	136	121	117	111	100	50	49	37					
Cape May Harbor, NJ 38°57.1'N., 74°52.6'W.	141	80	40	24	131	126	103	88	84	78	67	17	16						
DELAWARE BAY ENTRANCE 38°50.5'N., 75°03.3'W.	136	72	32	15	115	110	87	72	68	62	51	2							
Harbor of Refuge, DE 38°49.0'N., 75°05.2'W.	136	71	31	14	116	111	88	73	69	63	52								
C & D CANAL (east entrance) 39°33.8'N., 75°32.8'W.	206	123	83	66	64	59	36	21	17	11									
Wilmington, DE 39°43.2'N., 75°31.5'W.	218	134	95	77	54	49	26	11	8										
Marcus Hook, PA 39°48.2'N., 75°25.2'W.	224	140	101	83	46	41	18	3											
Chester, PA 39°50.0'N., 75°22.0'W.	227	144	104	86	43	38	15												
Philadelphia, PA 39°56.8'N., 75°08.3'W.	242	159	119	101	28	23													
Former U.S. Steel Basin, PA 40°08.2'N., 74°45.3'W.	265	182	142	124	5														
Trenton, NJ 40°37.6'N., 73°34.9'W.	270	187	147	129															
Indian River Inlet, DE 38°36.5'N., 75°03.6'W.	118	60	20																
Ocean City, MD 38°19.6'N., 75°05.6'W.	100	41																	
Chincoteague, VA 37°56.1'N., 75°22.8'W.	69																		

Distances are in nautical miles

Ambrose Channel Lighted Whistle Buoy A (40°27.5'N., 73°50.2'W.) to New York, 20.7 miles
Five Fathom Bank Lighted Buoy F (38°46.8'N., 74°34.5'W.) to Philadelphia, 111 miles
Delaware Lighted Buoy D (38°27.3'N., 74°41.8'W.) to Philadelphia, 116 miles
Chesapeake Light (36°54.3'N., 75°42.8'W.) to Norfolk, 42 miles; to Baltimore, 165 miles

Distances by Intracoastal Waterway – Manasquan Inlet to Cape May Canal, New Jersey

Table 8

	CHESAPEAKE AND DELAWARE CANAL (east entrance)	Cape May Canal (west entrance)	Cape May Harbor	Wildwood	Stone Harbor	Avalon	Sea Isle City	Ocean City	Mays Landing	Atlantic City	Beach Haven	Barnegat Inlet	Forked River (town)	Seaside Park	Toms River (town)	Mantoloking	Bay Head	Manasquan Inlet	Shark River Inlet*
NEW YORK (The Battery) 40°42.0'N., 74°01.0'W.	190	142	138	133	128	123	119	108	124	97	79	66	63	54	58	46	44	40	34
Shark River Inlet* 40°11.2'N., 74°00.5'W.	156	108	103	99	94	89	85	74	90	62	45	32	29	20	23	11	9	6	
Manasquan Inlet 40°06.1'N., 74°01.9'W.	150	102	98	93	88	83	79	68	84	57	39	26	23	14	18	6	4		
Bay Head 40°03.8'N., 74°03.1'W.	146	98	94	89	85	79	76	64	80	53	35	22	19	10	14	2			
Mantoloking 40°02.2'N., 74°03.4'W.	144	96	92	88	83	77	74	63	79	51	33	20	17	9	12				
Toms River (town) 39°56.9'N., 74°11.8'W.	142	94	90	86	81	75	72	60	77	49	31	18	15	7					
Seaside Park 39°55.3'N., 74°05.0'W.	137	89	85	80	75	70	66	55	71	44	26	13	10						
Forked River (town) 39°50.1'N., 74°11.7'W.	132	84	80	75	70	65	61	50	66	39	21	8							
Barnegat Inlet 39°46.0'N., 74°06.3'W.	131	83	79	74	69	64	60	49	65	38	20								
Beach Haven 39°34.0'N., 74°14.8'W.	111	63	59	54	49	44	40	29	45	18									
Atlantic City 39°22.6'N., 74°24.9'W.	95	47	43	39	34	28	25	13	30										
Mays Landing 39°26.9'N., 74°43.4'W.	100	52	47	43	38	33	29	18											
Ocean City 39°17.3'N., 74°34.4'W.	82	34	30	25	20	15	11												
Sea Isle City 39°09.4'N., 74°42.0'W.	71	23	18	14	9	4													
Avalon 39°06.6'N., 74°44.0'W.	67	19	15	10	5														
Stone Harbor 39°03.4'N., 74°46.0'W.	62	14	9	5															
Wildwood 39°00.5'N., 74°49.8'W.	57	9	5																
Cape May Harbor 38°57.1'N., 74°52.6'W.	52	4																	
Cape May Canal (west entrance) 38°58.0'N., 74°58.0'W.	48																		

Distances are in nautical miles

*Outside distances between New York and Manasquan Inlet

Distances on Delaware Bay and River

Table 9

	Trenton, NJ	Bordentown, NJ	(former) U.S. Steel Basin, PA	Burlington, NJ	Philadelphia, PA	Schuylkill River (mouth), PA	Chester, PA	Bridgeport, NJ	Marcus Hook, PA	Wilmington, DE	New Castle, DE	C & D CANAL (east entrance)	Salem, NJ	Smyrna River (mouth), DE	Bridgeton, NJ	Mauricetown, NJ	St. Jones River (mouth), DE	Cape May Canal (west entrance)	Roosevelt Inlet, DE
DELAWARE BAY ENTRANCE 38°50.5'N., 75°03.3'W.	115	112	110	103	87	80	72	72	68	62	58	51	54	39	51	33	20	9	6
Roosevelt Inlet, DE 38°47.7'N., 75°09.4'W.	116	113	111	104	88	81	73	73	69	63	59	52	55	40	52	37	20	14	
Cape May Canal (west entrance) 38°58.0'N., 74°58.0'W.	112	109	107	100	84	77	69	69	65	59	55	48	51	36	47	26	21		
St. Jones River (mouth), DE 39°04.0'N., 75°22.5'W.	97	94	92	85	69	63	55	55	51	45	40	34	36	21	35	30			
Mauricetown, NJ 39°17.1'N., 74°59.5'W.	115	112	110	103	87	80	72	72	68	62	58	51	54	39	51				
Bridgeton, NJ 39°25.5'N., 75°14.2'W.	100	97	95	88	72	65	57	57	53	47	43	36	39	25					
Smyrna River (mouth), DE 39°22.2'N., 75°30.2'W.	77	74	72	65	49	42	34	34	30	24	20	13	16						
Salem, NJ 39°34.6'N., 75°28.7'W.	69	66	64	57	41	34	26	26	22	16	12	5							
C & D CANAL (east entrance) 39°33.8'N., 75°32.8'W.	64	61	59	52	36	29	21	21	17	11	7								
New Castle, DE 39°39.4'N., 75°33.6'W.	58	55	53	46	30	23	15	15	12	5									
Wilmington, DE 39°43.2'N., 75°31.5'W.	54	51	49	42	26	19	11	11	8										
Marcus Hook, PA 39°48.2'N., 75°25.2'W.	46	43	41	34	18	12	3	4											
Bridgeport, NJ 39°48.0'N., 75°21.3'W.	49	46	44	37	22	14	6												
Chester, PA 39°50.0'N., 75°22.0'W.	43	40	38	31	15	9													
Schuylkill River (mouth), PA 39°52.8'N., 75°11.9'W.	34	31	29	23	7														
Philadelphia, PA 39°56.8'N., 75°08.3'W.	28	25	23	16															
Burlington, NJ 40°04.9'N., 74°51.8'W.	12	9	7																
(former) U.S. Steel Basin, PA 40°08.2'N., 74°45.3'W.	5	2																	
Bordentown, NJ 40°09.1'N., 74°43.0'W.	4																		

Distances are in nautical miles

Chesapeake Bay Distances

Table 10

	CHESAPEAKE BAY (entrance)	Norfolk, VA	Richmond, VA	Petersburg, VA	Hopewell, VA	Suffolk, VA	Newport News, VA	West Point, VA	Yorktown, VA	Cape Charles, VA	Fredericksburg, VA	Crisfield, MD	Washington, DC	Potomac River (mouth)	Salisbury, MD	Solomons, MD	Cambridge, MD	St. Michaels, MD	Annapolis, MD	Chestertown, MD	Baltimore, MD	Havre de Grace, MD	Chesapeake City, MD
C & D CANAL (east entrance) 39°33.8'N., 75°32.8'W.	187	209	284	259	265	209	207	214	192	169	243	134	213	122	143	103	98	83	65	78	62	33	13
Chesapeake City, MD 39°31.8'N., 75°48.9'W.	174	196	271	246	252	196	194	201	179	156	230	121	200	109	130	90	85	70	52	65	49	20	
Havre de Grace, MD 39°32.7'N., 76°05.0'W.	166	175	249	240	230	190	172	185	163	149	224	115	192	101	124	84	78	62	45	61	41		
Baltimore, MD 39°16.0'N., 76°34.5'W.	150	173	247	222	228	172	170	174	155	132	206	98	175	84	107	66	60	45	28	45			
Chestertown, MD 39°12.4'N., 76°03.8'W.	162	170	244	235	225	185	167	178	156	146	219	110	187	96	119	78	72	59	40				
Annapolis, MD 38°59.0'N., 76°28.6'W.	129	140	213	204	194	152	136	152	130	112	186	77	155	64	86	45	39	25					
St. Michaels, MD 38°47.2'N., 76°13.2'W.	132	141	215	206	196	156	138	149	126	116	190	80	156	65	89	48	36						
Cambridge, MD 38°34.4'N., 76°04.3'W.	123	132	206	197	187	147	129	140	117	107	182	72	149	58	81	39							
Solomons, MD 39°19.2'N., 76°27.4'W.	92	100	174	165	155	115	97	109	87	76	150	42	118	27	51								
Salisbury, MD 38°21.9'N., 75°36.3'W.	103	113	187	178	168	128	110	122	100	87	165	43	141	49									
Potomac River (mouth) 37°57.7'N., 76°16.7'W.	67	89	163	137	144	89	86	90	68	50	125	27	96										
Washington, DC 38°52.4'N., 77°01.4'W.	163	185	259	233	240	185	182	186	164	146	221	121											
Crisfield, MD 37°58.6'N., 75°51.9'W.	67	77	151	142	132	92	74	86	64	51	129												
Fredericksburg, VA 38°17.8'N., 77°27.2'W.	136	146	220	211	201	161	143	154	132	122													
Cape Charles, VA 37°15.9'N., 76°01.4'W.	21	32	106	97	88	48	29	50	28														
Yorktown, VA 37°14.4'N., 76°30.5'W.	34	58	132	101	114	55	55	22															
West Point, VA 37°31.6'N., 76°48.1'W.	56	66	140	123	122	78	63																
Newport News, VA 36°58.0'N., 76°26.0'W.	24	12	77	68	58	21																	
Suffolk, VA 36°44.3'N., 76°35.0'W.	42	29	98	89	79																		
Hopewell, VA 37°19.0'N., 77°16.4'W.	82	70	19	10																			
Petersburg, VA 37°14.1'N., 77°24.0'W.	92	80	28																				
Richmond, VA 37°31.4'N., 77°25.2'W.	101	90																					
Norfolk, VA 36°50.9'N., 76°17.9'W.	27																						

Distances are in nautical miles

Potomac River Distances

Table 11

	Chain Bridge	Key Bridge	Washington, DC	Bladensburg, MD	Alexandria, VA	Mount Vernon, VA	Indian Head, MD	Occoquan, VA	Quantico, VA	Potomac River (US 301) Bridge	Dahlgren, VA	Colonial Beach, VA	Wicomico River (mouth), MD	Breton Bay (entrance), MD	Nomini Bay, VA	Lower Machodoc Creek, VA	Piney Point, MD	Yeocomico River (mouth), VA	St. Marys River (mouth), MD	Smith Creek (mouth), MD	Coan River (mouth), VA
Potomac River (mouth) 37°57.7'N., 76°16.7'W.	101	98	96	101	91	84	76	80	68	44	43	38	31	26	27	23	16	13	12	11	11
Coan River (mouth), VA 37°59.7'N., 76°27.1'W.	96	93	90	96	86	79	70	75	63	38	37	33	26	22	22	18	11	6	8	17	
Smith Creek (mouth), MD 38°05.8'N., 76°24.0'W.	95	92	89	95	85	78	69	74	62	37	36	32	25	21	21	17	10	8	3		
St. Marys River (mouth), MD 38°06.2'N., 76°26.3'W.	93	90	87	93	83	76	68	72	60	35	34	30	23	19	19	15	8	7			
Yeocomico River (mouth), VA 38°02.1'N., 76°31.0'W.	94	91	88	94	84	76	68	72	61	36	35	31	24	19	20	16	9				
Piney Point, MD 38°08.0'N., 76°32.0'W.	85	82	80	85	75	68	60	64	52	28	27	22	15	11	11	7					
Lower Machodoc Creek, VA 38°08.5'N., 76°39.1'W.	80	77	75	80	70	63	55	59	47	22	21	17	10	6	5						
Nomini Bay, VA 38°08.6'N., 76°43.4'W.	78	75	72	78	68	60	52	57	45	20	19	15	8	6							
Breton Bay (entrance), MD 38°14.0'N., 76°41.8'W.	79	76	74	79	69	62	54	58	46	21	20	16	9								
Wicomico River (mouth), MD 38°14.5'N., 76°49.1'W.	71	68	66	71	61	53	45	50	38	13	12	9									
Colonial Beach, VA 38°14.4'N., 76°57.9'W.	68	65	63	68	58	51	43	47	35	11	10										
Dahlgren, VA 38°19.1'N., 77°02.1'W.	63	60	58	63	53	46	38	42	30	6											
Potomac River Bridge (US 301) 38°21.7'N., 76°59.4'W.	58	55	52	58	48	40	32	36	24												
Quantico, VA 38°31.2'N., 76°17.2'W.	33	30	28	34	24	16	8	12													
Occoquan, VA 38°41.0'N., 77°15.4'W.	33	30	27	33	23	15	7														
Indian Head, MD 38°36.4'N., 77°10.0'W.	26	23	20	26	16	8															
Mount Vernon, VA 38°42.3'N., 77°05.3'W.	19	16	13	19	9																
Alexandria, VA 38°48.2'N., 77°02.3'W.	10	7	4	10																	
Bladensburg, MD 38°56.1'N., 76°56.4'W.	14	11	8																		
Washington, DC 38°52.4'N., 77°01.4'W.	8	5																			
Key Bridge 38°54.1'N., 77°04.2'W.	3																				

Distances are in nautical miles

Coastwise Distances—Norfolk, Virginia to Key West, Florida

Table 12

	STRAITS OF FLORIDA	Key West, FL	Miami, FL	Port Everglades, FL	Port of Palm Beach, FL	Stuart, FL	Fort Pierce, FL	Cape Canaveral, FL	St. Augustine, FL	Jacksonville, FL	Fernandina Beach, FL	Brunswick, GA	Savannah, GA	Port Royal, SC	Charleston, SC	Georgetown, SC	Wilmington, NC	Southport, NC	Morehead City, NC	DIAMOND SHOALS	Norfolk, VA
CHESAPEAKE BAY ENTRANCE 36°56.3'N., 75°58.6'W.	942	881	743	720	678	666	647	612	557	560	533	527	476	465	402	365	336	315	222	117	27
Norfolk, VA 36°51.2'N., 76°17.8'W.	969	908	770	747	705	693	674	639	584	587	560	554	503	492	429	392	363	342	249	144	
DIAMOND SHOALS 35°08.0'N., 75°15.0'W.	825	764	626	603	561	549	530	495	440	443	416	410	359	348	285	248	219	198	105		
Morehead City, NC 34°42.8'N., 76°41.8'W.	772	711	573	550	509	497	476	438	377	379	352	346	295	284	220	184	154	133			
Southport, NC 33°54.8'N., 78°01.0'W.	707	646	508	485	443	423	407	367	296	294	265	260	206	191	130	87	21				
Wilmington, NC 34°14.0'N., 77°57.0'W.	728	667	529	506	464	444	428	388	317	315	286	281	227	212	151	108					
Georgetown, SC 33°21.4'N., 79°16.9'W.	671	610	472	449	407	391	368	324	246	247	216	210	154	141	79						
Charleston, SC 32°47.2'N., 79°55.2'W.	633	572	434	411	369	353	329	283	199	197	166	156	102	90							
Port Royal, SC 32°22.3'N., 80°41.6'W.	605	544	406	383	341	324	298	251	157	152	120	110	51								
Savannah, GA 32°05.0'N., 81°05.7'W.	604	543	405	382	340	324	298	251	152	145	115	104									
Brunswick, GA 31°08.0'N., 81°29.7'W.	549	488	350	327	285	268	242	195	90	82	50										
Fernandina Beach, FL 30°40.3'N., 81°28.0'W.	526	465	327	304	262	242	216	169	61	53											
Jacksonville, FL 30°19.2'N., 81°39.0'W.	523	462	324	301	256	240	214	167	56												
St. Augustine, FL 29°53.6'N., 81°18.5'W.	475	414	276	253	211	192	167	120													
Cape Canaveral, FL 28°24.6'N., 80°36.5'W.	374	313	175	152	110	91	69														
Fort Pierce, FL 27°27.5'N., 80°19.3'W.	316	255	117	94	52	32															
Stuart, FL 27°12.2'N., 80°15.6'W.	300	239	101	78	36																
Port of Palm Beach, FL 26°46.1'N., 80°03.0'W.	267	207	68	46																	
Port Everglades, FL 26°05.6'N., 80°07.0'W.	226	165	27																		
Miami, FL 25°47.0'N., 80°11.0'W.	211	151																			
Key West, FL 24°33.7'N., 81°48.5'W.	73																				

Distances are in nautical miles

Inside Route Distances—Norfolk, Virginia to Fernandina Beach, Florida

Table 13

	Fernandina Beach, FL	Brunswick, GA	Thunderbolt, GA	Savannah, GA	Beaufort, SC	Charleston, SC	McClellanville, SC	Georgetown, SC	Bucksport, SC	Little River, SC	Southport, NC	Wilmington, NC	Wrightsville, NC	Jacksonville, NC	Swansboro, NC	Morehead City, NC	Beaufort, NC	New Bern, NC	Oriental, NC	Ocracoke, NC	Washington, NC	Belhaven, NC	Manteo, NC	Plymouth, NC	Edenton, NC	Columbia, NC	Hertford, NC	Elizabeth City, NC	Norfolk, VA
Norfolk, VA	623	595	507	508	466	406	374	352	328	299	268	273	248	231	20	178	177	180	160	131	156	120	80	105	98	89	89	77*	•
Elizabeth City, NC	581	553	465	466	424	364	332	311	286	257	226	231	204	189	158	136	134	139	118	91	114	79	39	56	48	39	39	•	89
Hertford, NC	582	554	466	467	425	366	333	311	287	259	227	232	205	190	160	137	137	139	119	97	115	79	46	42	35	26	•	45	102
Columbia, NC	581	553	465	466	424	364	332	310	286	257	226	231	204	189	158	136	136	138	118	96	114	78	45	33	25	•	30	45	102
Edenton, NC	589	562	474	475	432	373	340	318	294	266	235	240	213	197	166	145	144	146	126	104	123	87	54	14	•	29	40	55	113
Plymouth, NC	596	570	482	483	441	381	349	327	303	274	243	248	221	206	175	152	152	155	134	113	130	95	61	•	16	38	48	64	121
Manteo, NC	555	527	439	440	397	337	306	283	260	232	201	205	178	162	132	110	110	110	91	61	105	70	•	70	62	52	53	45	92
Belhaven, NC	506	479	391	392	349	290	257	235	211	183	152	157	130	114	83	61	61	63	43	43	39	•	81	109	100	90	91	91	138
Washington, NC	519	491	403	404	362	302	270	248	224	195	164	169	142	127	96	74	74	76	56	60	•	45	121	150	142	131	132	131	180
Ocracoke, NC	504	477	389	390	347	288	255	233	209	181	150	155	128	112	81	59	59	62	41	•	69	49	70	130	120	110	112	105	151
Oriental, NC	467	440	352	353	310	251	218	196	172	144	113	118	91	75	44	22	22	23	•	47	64	49	105	154	145	136	137	136	184
New Bern, NC	484	456	368	369	327	267	235	213	188	160	129	134	107	91	60	38	38	•	26	71	87	72	127	178	168	159	160	160	207
Beaufort, NC	447	420	332	333	290	231	199	177	152	124	93	97	70	55	24	3	•	44	25	68	85	70	127	175	166	157	158	154	204
Morehead City, NC	445	418	330	331	288	229	196	174	150	122	91	96	69	53	22	•	3	44	25	68	85	70	127	175	167	157	158	157	205
Swansboro, NC	423	396	307	309	266	207	174	152	128	100	69	73	46	31	•	25	28	69	51	93	110	96	152	201	191	182	184	182	230
Jacksonville, NC	425	397	309	310	268	208	176	154	129	101	70	75	48	•	36	61	63	105	86	129	146	131	186	237	227	217	219	217	266
Wrightsville, NC	377	349	261	262	220	160	128	106	82	53	22	27	•	55	53	79	81	123	105	147	163	150	205	254	245	235	236	235	283
Wilmington, NC	376	349	260	261	219	159	127	105	81	52	21	•	31	86	84	110	112	154	136	178	194	181	236	285	276	266	267	266	314
Southport, NC	355	327	239	240	198	138	106	84	60	31	•	24	25	81	79	105	107	148	130	173	189	175	231	280	270	260	261	260	308
Little River, SC	324	296	208	209	167	107	75	53	28	•	36	60	61	116	115	140	143	184	166	208	224	211	267	315	306	296	298	296	344
Bucksport, SC	295	268	179	181	138	79	46	24	•	32	69	93	94	148	147	173	175	216	198	241	258	243	299	349	338	329	330	329	377
Georgetown, SC	273	246	157	159	116	56	24	•	28	61	97	121	122	177	175	200	203	245	226	268	285	270	326	376	366	357	358	358	405
McClellanville, SC	249	222	133	135	92	32	•	28	53	86	122	146	147	203	200	226	229	270	251	293	311	296	352	402	391	382	383	382	430
Charleston, SC	218	191	103	104	60	•	37	64	91	123	159	183	184	239	238	264	266	307	289	331	348	334	388	438	429	419	421	419	467
Beaufort, SC	157	130	41	43	•	69	106	133	159	192	228	252	253	308	306	331	334	376	357	399	417	402	457	508	497	488	489	488	536
Savannah, GA	130	102	14	•	49	120	155	183	208	241	276	300	302	357	356	381	383	425	406	449	465	451	506	556	547	536	537	536	585
Thunderbolt, GA	116	88	•	16	47	119	153	181	206	239	275	299	300	356	353	380	382	423	405	448	464	450	505	555	545	535	536	535	583
Brunswick, GA	35	•	101	117	150	220	255	283	308	341	376	402	402	457	456	481	483	525	506	549	565	551	606	656	647	636	638	636	685
Fernandina Beach, FL	•	40	133	150	181	251	287	314	339	373	409	433	434	489	487	512	514	557	537	580	597	582	639	688	678	669	670	669	717

Distances are in nautical and statute miles

*51 statute miles/44 nautical miles via the Dismal Swamp Canal

Inside Route Distances—Fernandina Beach, Florida to Key West, Florida

Table 14

	Key West	Flamingo	Marathon	Matecumbe Harbor	Tavernier	Miami	Port Everglades	Fort Lauderdale	Port of Palm Beach	Jupiter	Fort Myers	Moore Haven	Clewiston	Port Mayaca	Stuart	Salerno	Fort Pierce	Vero Beach	Melbourne	Eau Gallie	Cocoa	Titusville	New Smyrna Beach	Daytona Beach	Marineland	St. Augustine	Jacksonville	Fernandina Beach	Norfolk, VA
Norfolk, VA	1081	1050	1045	1017	999	947	927	925	885	873	975	926	915	892	865	860	839	827	798	795	780	764	735	722	692	676	659	623	•
Fernandina Beach	458	427	422	394	378	324	304	303	262	251	353	303	292	269	242	237	216	204	175	172	157	141	113	99	69	53	36	•	717
Jacksonville	454	423	418	390	374	320	300	299	258	247	349	299	288	265	238	233	212	200	171	168	153	137	108	95	65	49	•	41	758
St. Augustine	405	374	369	341	324	271	251	249	209	197	299	250	239	216	189	184	163	151	122	119	104	88	59	46	16	•	56	60	778
Marineland	389	358	353	325	309	255	235	234	193	182	284	235	223	200	173	169	148	136	106	103	89	72	44	30	•	18	75	79	796
Daytona Beach	359	328	323	295	279	225	205	204	163	152	254	204	193	170	143	138	117	105	76	73	58	42	14	•	35	53	109	114	831
New Smyrna Beach	345	315	309	282	265	211	191	190	150	18	240	191	180	157	130	125	104	92	63	59	45	28	•	16	51	68	124	130	846
Titusville	317	286	281	253	237	183	163	162	121	110	212	163	151	128	101	97	76	64	34	31	17	•	32	48	83	101	158	162	879
Cocoa	301	270	264	237	220	166	146	145	105	93	195	146	135	112	85	80	59	47	18	14	•	20	52	67	102	120	176	181	898
Eau Gallie	286	255	250	223	206	152	132	131	90	79	181	132	120	97	70	66	45	33	3	•	16	36	68	84	119	137	193	198	915
Melbourne	283	252	247	219	203	149	129	128	87	76	178	128	117	94	67	62	41	29	•	14	21	39	72	87	122	140	197	201	918
Vero Beach	254	223	217	190	173	119	99	98	58	46	148	99	88	65	38	33	12	•	34	38	54	74	106	121	157	174	230	235	952
Fort Pierce	242	211	205	178	161	107	87	86	46	34	136	87	76	53	26	21	•	14	47	52	68	87	120	135	170	188	244	249	966
Salerno	224	193	188	161	144	90	70	69	28	17	119	70	58	35	8	•	24	38	71	76	92	112	144	159	194	212	268	273	990
Stuart	229	198	193	165	149	95	75	74	33	22	111	61	50	27	•	9	30	44	77	81	98	116	150	165	199	217	274	278	995
Port Mayaca	256	225	220	192	176	122	102	101	60	49	83	34	23	•	31	40	61	75	108	112	129	147	181	196	230	248	305	310	1026
Clewiston	279	248	243	215	199	145	125	124	83	72	61	11	•	26	58	67	87	101	135	138	155	174	207	222	257	275	331	336	1053
Moore Haven	290	259	254	227	210	156	136	135	94	83	49	•	13	40	70	81	100	114	148	152	168	188	220	235	270	288	344	349	1066
Fort Myers	339	309	303	276	259	205	185	184	144	132	•	56	70	96	128	137	157	170	205	208	224	244	276	292	327	344	402	406	1122
Jupiter	207	177	171	144	127	73	53	52	12	•	152	96	83	56	25	20	39	53	87	91	107	127	159	175	209	227	284	289	1005
Port of Palm Beach	196	165	160	132	116	62	42	41	•	14	166	108	96	69	38	32	53	67	100	104	121	139	173	188	222	241	297	302	1018
Fort Lauderdale	155	125	119	92	75	21	1	•	47	60	212	155	143	116	85	79	99	113	147	151	167	186	219	235	269	287	344	348	1064
Port Everglades	154	123	118	91	74	20	•	1	48	61	213	156	144	117	86	80	100	114	148	152	168	188	220	236	270	289	345	350	1067
Miami	134	104	98	71	54	•	23	24	71	84	236	180	167	141	109	104	123	137	171	175	191	211	243	259	293	312	368	373	1090
Tavernier	83	52	47	19	•	62	85	86	133	146	298	242	229	203	171	166	185	199	234	237	253	273	305	321	356	373	430	435	1150
Matecumbe Harbor	65	35	29	•	22	82	105	106	152	166	318	261	247	221	190	185	205	219	252	257	273	291	323	339	374	392	449	453	1170
Marathon	42	34	•	33	54	113	136	137	184	197	349	292	280	253	222	216	236	250	284	288	304	323	356	372	407	425	481	486	1203
Flamingo	73	•	39	40	60	120	142	144	190	204	356	296	285	259	228	222	243	257	290	293	311	329	362	377	412	430	486	491	1208
Key West	•	84	48	75	96	154	177	178	226	239	390	334	321	295	264	258	278	292	326	329	346	365	397	413	448	466	522	527	1244

Distances are in nautical and statute miles

Distances on St. Johns River, Florida

Table 15

	Lake Harney	Sanford	Astor-Volusia	Georgetown	Leesburg	Moss Bluff Lock	Silver Springs	Welaka	Crescent City	Palatka	Doctors Lake Inlet	Jacksonville	Broward River (mouth)	Intracoastal Waterway	Mayport	St. Johns River (mouth)
St. Johns River (mouth)	161	143	109	95	162	145	136	86	89	68	32	20	12	4	2	•
Mayport	159	141	107	93	160	143	134	84	87	66	30	18	10	2	•	2
Intracoastal Waterway	157	139	105	91	158	141	132	82	85	64	28	16	8	•	2	5
Broward River (mouth)	149	131	97	83	150	133	124	74	77	56	20	8	•	9	12	14
Jacksonville	141	123	89	75	142	125	116	66	69	48	12	•	9	18	21	23
Doctors Lake Inlet	129	111	77	62	129	112	104	54	56	36	•	14	23	32	35	37
Palatka	93	75	41	26	94	76	68	18	20	•	41	55	64	74	76	78
Crescent City	101	83	49	35	102	85	76	26	•	23	64	79	89	98	100	102
Welaka	75	57	23	8	75	58	50	•	30	21	62	76	85	94	97	99
Silver Springs	123	105	71	56	31	14	•	58	87	78	120	134	143	152	154	157
Moss Bluff Lock	131	113	79	65	17	•	16	67	98	87	129	144	153	162	165	167
Leesburg	148	131	96	82	•	20	36	86	117	108	148	163	173	182	184	186
Georgetown	66	49	14	•	94	75	64	9	40	30	71	86	96	105	107	109
Astor-Volusia	52	34	•	16	110	91	82	26	56	47	89	102	112	121	123	125
Sanford	18	•	39	56	151	130	121	66	96	86	128	142	151	160	162	165
Lake Harney	•	21	60	76	170	151	142	86	116	107	148	162	171	181	183	185

Distances are in nautical and statute miles

Gulf of Mexico Distances–Key West, Florida to Port Brownsville, Texas

Table 16

	Port Brownsville, TX	Port Isabel, TX	Corpus Christi, TX	La Quinta, TX	Point Comfort, TX	Freeport, TX	Houston, TX	Texas City, TX	Galveston, TX	Beaumont, TX	Orange, TX	Port Arthur, TX	Lake Charles, LA	Morgan City, LA	NEW ORLEANS, LA (SW Pass)*	New Orleans, LA (South Pass)*	Gulfport, MS	Pascagoula, MS	Mobile, AL	Pensacola, FL	Panama City, FL	Port St. Joe, FL	Tampa, FL	Port Tampa, FL	St. Petersburg, FL	Port Boca Grande, FL	Key West, FL	STRAITS OF FLORIDA
YUCATAN CHANNEL	729	718	769	763	761	717	740	702	696	717	713	691	705	602	587	579	576	554	562	533	506	495	404	399	389	332	251	192
STRAITS OF FLORIDA	793	782	807	802	797	743	746	707	702	726	722	700	715	581	540	524	792	469	471	437	381	369	232	228	219	150	73	
Key West, FL	866	855	880	875	870	816	819	780	775	799	795	773	789	653	613	597	564	542	544	510	454	442	305	301	292	223		
Port Boca Grande, FL	825	814	816	811	806	747	752	714	709	730	726	704	717	564	512	489	436	414	413	372	294	281	113	109	100			
St. Petersburg, FL	813	802	797	792	786	729	733	695	690	710	707	684	697	539	488	459	401	379	377	334	252	240	18	8				
Port Tampa, FL	822	810	805	800	795	738	742	704	699	719	715	693	706	548	496	467	409	387	386	343	261	248	18					
Tampa, FL	826	815	810	804	799	742	746	708	703	723	719	697	710	552	502	472	413	392	389	347	265	252						
Port St. Joe, FL	695	684	671	666	661	604	605	567	562	581	577	565	568	397	346	308	235	213	206	154	42							
Panama City, FL	684	673	659	654	649	593	594	555	550	571	567	545	558	385	333	295	222	200	193	139								
Pensacola, FL	643	632	618	614	609	552	553	514	509	530	526	504	517	339	288	253	117	94	89									
Mobile, AL	629	618	605	600	595	538	539	501	496	517	513	491	504	324	269	236	98	75										
Pascagoula, MS	609	598	585	580	575	518	519	481	476	497	493	471	484	304	250	216	52											
Gulfport, MS	632	621	607	602	597	540	542	503	498	519	515	493	506	330	271	238												
New Orleans, LA (South Pass)*	599	588	574	569	564	508	470	465	486	482	460	472	298	-	-													
NEW ORLEANS, LA (SW Pass)*	580	569	555	550	545	489	490	451	446	467	463	441	454	278														
Morgan City, LA	426	415	395	390	354	273	278	240	235	216	212	190	182															
Lake Charles, LA	387	376	289	283	248	166	172	133	128	109	105	83																
Port Arthur, TX	347	336	249	244	208	126	132	94	89	26	22																	
Orange, TX	369	358	271	266	230	148	154	116	111	27																		
Beaumont, TX	373	362	275	270	234	152	158	120	115																			
Galveston, TX	304	293	207	201	165	84	47	9																				
Texas City, TX	309	298	212	206	170	89	52																					
Houston, TX	348	337	250	244	209	127																						
Freeport, TX	258	247	160	154	119																							
Point Comfort, TX	215	204	117	112																								
La Quinta, TX	148	137	15																									
Corpus Christi, TX	154	142																										
Port Isabel, TX	13																											

Distances are in nautical miles

All tabular distances are via Straits of Florida (24°25'N., 82°00'W.), and through the Shipping Safety Fairways. For distances from Key West to west Florida ports via Rebecca Shoal Channel (24°24.4'N., 82°42.4'W.), subtract 24 miles from Port Boca Grande distance, 17 miles from Tampa Bay distance, 9 miles from Port St. Joe and Panama City distances, and 5 miles from Pensacola.

*Baton Rouge, LA add 115 miles

Coastwise and Inside Route Distances–Key West, Florida to Apalachicola, Florida

Table 17

	Apalachicola, FL	Carrabelle, FL	St. Marks, FL	Cedar Key, FL	Tarpon Springs, FL	Clearwater, FL	Tampa, FL	St. Petersburg, FL	Bradenton, FL	Sarasota, FL	Venice, FL	Port Boca Grande, FL	Fort Myers, FL	Naples, FL	Everglades, FL	Cape Sable, FL	Flamingo, FL	Matecumbe Harbor, FL	Marathon, FL
Key West, FL	406	389	367	310	250	234	232	218	210	186	172	144	134	96	88	57	70	65	42
Marathon, FL	408	391	389	313	253	237	235	221	213	189	174	146	136	100	80	31	37	29	
Matecumbe Harbor, FL	411	394	392	316	255	240	237	224	215	191	177	149	139	103	81	32	35		
Flamingo, FL	396	379	377	301	240	225	222	209	200	176	162	134	124	88	66	17			
Cape Sable, FL	379	362	360	284	223	208	205	192	183	159	145	117	107	71	49				
Everglades, FL	350	334	332	255	195	179	177	163	155	131	116	88	79	38					
Naples, FL	316	299	297	221	160	145	143	129	120	96	82	54	44						
Fort Myers, FL	297	280	278	202	142	126	124	110	102	78	63	35							
Port Boca Grande, FL	262	245	244	167	107	91	89	75	67	43	28								
Venice, FL	234	218	216	139	79	63	61	47	39	15									
Sarasota, FL	221	204	202	125	65	49	42	33	25										
Bradenton, FL	209	193	191	114	54	38	36	22											
St. Petersburg, FL	202	186	184	107	47	31	18												
Tampa, FL	218	202	200	123	63	47													
Clearwater, FL	174	157	155	79	18														
Tarpon Springs, FL	164	147	145	68															
Cedar Key, FL	118	101	91																
St. Marks, FL	69	52																	
Carrabelle, FL	25																		

Distances are in nautical miles

Routes used in table:
Hawk Channel–between Marathon and Key West
Northwest Channel (Key West) and outside to places between Cape Sable and San Carlos Bay, thence inside to Anclote Keys, thence outside to St. George Sound.

Distances from Everglades northwest are inside via Big Marco River and Gordon Pass.

Gulf Intracoastal Waterway Distances–Apalachicola, Florida to Port Brownsville, Texas

Table 18

	Port Brownsville, TX	Port Isabel, TX	Port Mansfield, TX	Corpus Christi, TX	La Quinta, TX	Aransas Pass, TX	Rockport, TX	Port O'Connor, TX	Freeport, TX	Texas City, TX	Houston, TX	Galveston, TX	Port Arthur, TX	Beaumont, TX	Orange, TX	Lake Charles, LA	Morgan City, LA	Houma, LA	New Orleans, LA	Gulfport, MS	Biloxi, MS	Pascagoula, MS	Mobile, AL	Pensacola, FL	Fort Walton Beach, FL	Panama City, FL	Port St. Joe, FL	Apalachicola, FL
Apalachicola, FL	900	887	856	786	780	769	762	717	651	615	653	614	556	562	537	525	388	356	302	248	236	222	214	150	112	51	27	•
Port St. Joe, FL	885	872	841	771	766	754	748	703	636	600	636	599	542	547	523	510	374	341	288	233	224	208	200	135	98	36	•	31
Panama City, FL	849	836	805	735	730	718	712	666	600	564	602	563	506	511	487	474	338	305	252	197	188	171	164	99	62	•	41	59
Fort Walton Beach, FL	788	775	743	673	666	656	650	605	539	503	541	502	444	450	425	412	276	243	190	136	126	110	102	37	•	71	113	129
Pensacola, FL	758	746	714	644	639	627	621	576	510	474	512	473	415	421	396	383	247	214	161	106	97	81	73	•	43	114	155	173
Mobile, AL	736	723	692	622	616	605	598	553	487	451	489	450	392	396	373	361	224	191	138	84	74	58	•	84	117	189	230	246
Pascagoula, MS	693	980	649	579	574	562	556	510	444	408	446	407	350	355	331	318	182	149	96	41	32	•	67	93	127	197	239	255
Biloxi, MS	680	668	636	566	561	549	543	496	431	396	433	394	337	342	318	305	169	136	83	26	•	37	85	112	145	216	258	274
Gulfport, MS	664	651	620	550	544	533	526	481	415	379	417	378	320	326	302	289	152	120	66	•	32	47	97	122	157	227	268	285
New Orleans, LA	598	585	553	483	578	466	460	415	349	313	351	312	254	260	235	222	86	53	•	76	96	110	159	185	219	290	331	348
Houma, LA	544	532	500	430	425	413	407	362	295	260	297	258	201	206	182	169	33	•	61	138	157	171	220	246	280	351	392	410
Morgan City, LA	512	499	467	397	392	380	374	329	263	227	265	226	168	174	149	136	•	38	99	175	194	209	258	284	318	389	430	447
Lake Charles, LA	395	382	351	280	275	264	257	212	146	110	148	109	51	57	32	•	157	194	255	333	351	266	415	441	474	545	587	604
Orange, TX	364	352	320	250	245	233	227	182	115	80	117	78	21	26	•	37	171	209	270	348	366	381	429	456	489	560	602	618
Beaumont, TX	370	357	326	255	250	236	232	187	121	85	123	84	26	•	30	66	200	237	299	375	394	409	458	484	518	588	629	647
Port Arthur, TX	344	331	300	229	224	212	206	161	95	59	97	58	•	30	24	59	193	231	292	368	388	403	451	478	511	582	624	640
Galveston, TX	289	276	244	174	169	158	151	106	40	10	48	•	67	97	90	125	260	297	359	435	453	468	518	544	578	648	689	707
Houston, TX	333	320	289	219	213	202	195	150	84	48	•	55	112	142	135	170	305	342	404	480	496	513	563	589	623	693	734	751
Texas City, TX	294	281	249	179	174	162	156	111	44	•	55	12	68	98	92	127	261	299	360	436	456	470	519	545	579	649	690	708
Freeport, TX	253	240	209	139	133	122	115	70	•	51	97	46	109	139	132	168	303	339	402	478	496	511	560	587	620	690	732	749
Port O'Connor, TX	183	170	136	68	63	52	45	•	81	128	173	122	185	215	209	244	379	417	478	554	573	587	636	663	696	766	809	825
Rockport, TX	140	127	96	26	20	9	•	52	132	180	224	174	237	267	261	296	430	468	529	605	625	640	688	715	748	819	861	877
Aransas Pass, TX	131	118	87	17	12	•	10	60	140	186	232	182	244	274	268	304	437	475	536	613	632	647	696	722	755	826	868	885
La Quinta, TX	129	116	85	15	•	14	23	72	153	200	245	194	258	288	282	316	451	489	550	626	646	661	709	735	769	840	881	898
Corpus Christi, TX	133	120	89	•	17	20	30	78	160	206	252	200	264	293	288	322	457	495	556	633	651	666	716	741	774	846	887	905
Port Mansfield, TX	46	33	•	102	98	100	110	159	241	287	333	281	345	375	368	404	537	575	636	713	732	747	796	822	855	926	968	985
Port Isabel, TX	13	•	38	138	133	136	146	196	276	323	368	318	381	411	405	440	574	612	673	749	769	783	832	858	892	962	1003	1021
Port Brownsville, TX	•	15	53	153	148	151	161	211	291	338	383	333	396	426	419	455	589	626	688	764	783	797	847	872	907	977	1018	1036

Distances are in nautical and statute miles

Puerto Rico and Virgin Islands Distances

Table 19

	Krause Lagoon, St. Croix, VI	Frederiksted, St. Croix, VI	Christiansted, St. Croix, VI	Road Town, Tortola, BVI	Cruz Bay, St. John, VI	Charlotte Amalie, St. Thomas, VI	Isabel Segunda, Vieques	Ensenada Honda, Culebra	Puerto Arecibo, PR	Bahia de Aguadilla, PR	Mayaguez, PR	Bahia de Guanica, PR	Bahia de Guayanilla, PR	Bahia de Tallaboa, PR	Ponce, PR	Bahia de Jobos, PR	Humacao, PR	Ensenada Honda, PR	Fajardo, PR
San Juan, PR	112	96	103	94	82	80	55	59	43	74	92	138	145	145	152	103	59	52	40
Fajardo, PR	77	61	68	66	53	46	18	25	72	103	121	99	89	88	83	65	21	14	
Ensenada Honda, PR	72	60	69	65	51	44	12	25	84	115	133	90	80	79	74	56	11		
Humacao, PR	70	58	68	71	57	50	17	31	92	123	131	82	72	71	65	48			
Bahia de Jobos, PR	101	89	101	113	99	93	62	76	140	105	96	47	37	36	31				
Ponce, PR	117	106	119	131	116	110	79	93	118	83	74	22	14	13					
Bahia de Tallaboa, PR	122	111	124	136	121	116	85	98	112	76	67	16	5						
Bahia de Guayanilla, PR	123	112	125	137	122	117	86	99	112	77	67	15							
Bahia de Guanica, PR	133	122	135	147	132	126	96	109	105	70	60								
Mayaguez, PR	182	171	184	175	164	161	136	141	58	23									
Bahia de Aguadilla, PR	176	159	166	157	146	144	118	123	40										
Puerto Arecibo, PR	144	128	135	126	115	112	87	92											
Ensenada Honda, Culebra	59	42	48	47	31	24	15												
Isabel Segunda, Vieques	62	46	54	55	40	33													
Charlotte Amalie, St. Thomas, VI	54	38	38	24	11														
Cruz Bay, St. John, VI	55	39	37	15															
Road Town, Tortola, BVI	62	46	42																
Christiansted, St. Croix, VI	35	19																	
Frederiksted, St. Croix, VI	18																		

Distances are in nautical miles

● Via Mona Passage

Limetree Bay, St. Croix, Virgin Islands is 1 mile east of Krause Lagoon.

Mississippi River Systems Distances

Distances on the Mississippi River Systems—Table 20

Distances in this section are the mileages (in statute miles) from the mouth of a river (or other designated point) taken from charts, maps, and publications of the U.S. Army Corps of Engineers. Distances between any two points on the same waterway may be obtained by taking the difference of the indicated mileages. Distances between places on different waterways can be determined by taking distances to and from a common reference point—see Example 2 in General Information. Likewise, distances between places on different rivers can be determined—see Example 3 in General Information.

At Head of Passes, three of the Mississippi River's important passes come together: South Pass, Southwest Pass and Pass a Loutre. This point of confluence is at Head of Passes Junction Light (29°08'53"N., 89°15'05"W.). From this point, distances on the Mississippi River are measured in statute miles *above Head of Passes*, abbreviated AHP, to its confluence with the Ohio River.

Head of Passes	
Buras, LA	25
Port Sulphur, LA	39
Algiers Alternate Route (entrance to Algiers Lock)	88
Inner Harbor Navigation Canal (Industrial Canal)	93
NEW ORLEANS (Canal Street)	95
Harvey Canal (lock entrance)	98
Donaldson, LA	175
Plaquemine, LA	209
Baton Rouge, LA (Interstate 10 bridge) Add 64 miles to Morgan City by Intracoastal Waterway via Port Allen Lock	229
Red River mouth, LA (Old River)	304
Natchez, MS (US 84 bridge)	363
Vicksburg, MS	437
Greenville, MS (Warfield Point Light)	537
Helena, AR	663
Memphis, TN (Interstate 55 bridge)	734
Ohio River mouth Cairo, IL is two miles above the Ohio River mouth	954
Commerce, MO	994
Cape Girardeau, MO	1,006
Grand Tower, IL	1,034
St. Louis, MO	1,134
Lock No. 27	1,139
Dam No. 27	1,144
Missouri River mouth	1,149
Alton, IL (Lock and Dam No. 26)	1,157
Illinois River mouth (Grafton, IL)	1,172
Lock and Dam No. 25	1,195
Lock and Dam No. 24	1,227
Lock and Dam No. 22	1,255
Hannibal, MO	1,264
Quincy, IL (Lock and Dam No. 21)	1,279
La Grange, MO	1,290
Lock and Dam No. 20	1,297
Keokuk, IA (Lock and Dam No. 19)	1,318
Fort Madison, IA	1,338
Burlington, IA	1,357
Lock and Dam No. 18	1,364
Lock and Dam No. 17	1,391
Lock and Dam No. 16	1,411
Davenport, IA (Lock and Dam No. 15)	1,437
Lock and Dam No. 14	1,447
Clinton, IA	1,473
Lock and Dam No. 13	1,477
Lock and Dam No. 12	1,511
Dubuque, IA	1,534
Lock and Dam No. 11	1,537
Lock and Dam No. 10	1,569
Prairie du Chien, WI	1,589
Lock and Dam No. 9	1,602
Lock and Dam No. 8	1,633
La Crosse, WI	1,652
Lock and Dam No. 7	1,656
Lock and Dam No. 6	1,668
Winona, MN	1,680
Lock and Dam No. 5A	1,682
Lock and Dam No. 5	1,692
Lock and Dam No. 4	1,702
Lock and Dam No. 3	1,751
Lock and Dam No. 2	1,769
St. Paul, MN	1,793
Lock and Dam No. 1	1,802
Minneapolis, MN	1,807
Ohio River	
Junction of Ohio and Mississippi Rivers to:	
Cairo, IL	2
Dam 53	18

Dam 52	42
Tennessee River mouth (Paducah, KY)	46
Cumberland River mouth	58
Smithland Lock and Dam	62
Wabash River mouth	133
Evansville, IN	187
Newburg Lock and Dam	205
Owensboro, KY	225
Cannelton Lock and Dam	260
McAlpine Lock and Dam	374
Louisville, KY (Interstate 65 bridge)	378
Madison, IN	423
Markland Lock and Dam	449
Cincinnati, OH	509
Captain Anthony Meldahl Dam	545
Portsmouth, OH	626
Greenup Dam	640
Ironton, OH	655
Huntington, WV	673
Gallipolis Dam	702
Gallipolis, OH	711
Belleville Dam	777
Parkersburg, WV	797
Marietta, OH	809
Willow Island Dam	820
Hannibal Lock and Dam	855
Wheeling, WV	894
Pike Island Lock and Dam	897
Steubenville, OH	913
New Cumberland Lock and Dam	927
East Liverpool, OH	938
Montgomery Lock and Dam	950
Dashields Lock and Dam	968
Emsworth Lock and Dam	975
Pittsburgh, PA (Point Bridge)	981
Tennessee River	
Junction of the Tennessee and Ohio Rivers to:	
Paducah, KY	0
Kentucky Lock and Dam	22
New Johnsonville, TN	100
Perryville, TN	135
Saltillo	172
Cerro Gordo	178
Savannah	190
Pickwick Landing Lock and Dam	207
Waterloo, AL	227
Sheffield, AL	254
Wilson Lock and Dam (Florence, AL)	260
General Joe Wheeler Lock and Dam	275
Decatur, AL	304
Guntersville Lock and Dam	349
Bridgeport	414
South Pittsburgh	418
Nickajack Lock and Dam	425
Chattanooga, TN	464
Chickamauga Lock and Dam	471
Watts Bar Lock and Dam	530
Clinch River mouth	568
Loudon, TN	592
Fort Loudon Lock and Dam	602
Knoxville, TN (Gay Street bridge)	648
Missouri River	
Junction of the Missouri and Mississippi Rivers to:	
St. Charles, MO	28
Washington, MO	67
Hermann, MO	98
Mouth of Gasconade River	104
Gasconade, MO	105
Mouth of Auxvass River	120
Mouth of Middle River	125
Mouth of Osage River	130
Jefferson City, MO	143
Boonville, MO	197
Mouth of Lamine River	202
Glasgow, MO	226
Mouth of Chariton River	239
Mouth of Grand River	250
Miami, MO	263

Waverly, MO	294
Lexington, MO	317
Napoleon, MO	329
Kansas City, MO	363
Mouth of Kansas River	367
Leavenworth, KS	396
St. Joseph, MO	448
Mouth of Big Nemaha River	495
Rulo, NE	498
Mouth of Tarkio River	507
Mouth of Nishnabotna River	542
Nebraska City, NE	563
Plattsmouth, NE	591
Omaha, NE	615
Council Bluffs, IA	617
Dakota City, NE	725
Sioux City, IA	732
Ponca, NE	753
Illinois River	
Junction of Illinois and Mississippi Rivers at Grafton, IL to:	
Hardin, IL	21
Florence, IL	55
Naples, IL	65
La Grange Lock	80
Beardstown, IL	89
Peoria Lock	158
Chillicothe, IL	180
Hennepin, IL	207
Illinois and Mississippi Canal	210
Peru, IL	222
Ottawa, IL	239
Marseille Lock	244
Dresden Island Lock	271
Des Plaines River	
Joliet, IL	288
Chicago Sanitary and Ship Canal	
Lockport, IL	293
Chicago River	
CHICAGO, IL (41°43.8'N., 87°31.9'W.)	333

The Mississippi River from Head of Passes to Baton Rouge is charted by NOAA's National Ocean Service (NOS). The reach from the Head of Passes to the confluence with the Ohio River is charted by the U.S. Army Corps of Engineers in **Flood Control and Navigation Maps of the Mississippi River**. Mileages indicated in Flood Control and Navigation Maps of the Mississippi River are in statute miles AHP.

The Ohio River is charted by the U.S. Army Corps of Engineers in **Ohio River Navigation Charts** (three volumes.) Distances are in statute miles.

The Illinois Waterway is charted by the U.S. Army Corps of Engineers in **Charts of the Illinois Waterway from Mississippi River at Grafton, IL to Lake Michigan at Chicago**.

The Tennessee River is charted by the U.S. Army Corps of Engineers in **Tennessee River Navigation Charts, Nashville District**.

The Missouri River is charted by the U.S. Army Corps of Engineers in **Missouri River Navigation Charts** (two volumes.) Distances are in statute miles.

Great Lakes and New York State Waterways Distances

Great Lakes Distances

Table 21

	MONTREAL, QUEBEC	Ogdensburg, NY	Kingston, Ontario	Toronto, Ontario	Oswego, NY	Rochester, NY	Port Colborne, Ontario	BUFFALO, NY	Erie, PA	Conneaut, OH	Ashtabula, OH	Fairport, OH	Cleveland, OH	Lorain, OH	Toledo, OH	Detroit, MI	Port Huron, MI	Midland, Ontario	Collingwood, Ontario	Goderich, Ontario	Bay City, MI	Alpena, MI	Ludington, MI	Muskegon, MI	Gary, IN	Chicago, IL	Milwaukee, WI	Green Bay, WI	Escanaba, MI	Sault Ste. Marie, MI	Marquette, MI	Houghton, MI	Ashland, WI	Duluth, MN	Two Harbors, MN
Thunder Bay, Ontario	1217	1096	1034	903	1016	965	848	864	795	768	754	729	711	964	658	604	542	539	531	506	505	410	536	587	699	686	621	560	492	273	171	116	164	195	172
Two Harbors, MN	1315	1194	1132	1001	1114	1063	946	963	893	866	852	828	809	792	756	702	640	638	630	604	603	508	634	685	797	785	720	659	590	371	239	157	71	26	
Duluth, MN	1339	1218	1156	1025	1138	1087	970	986	917	890	876	851	833	816	781	726	664	661	653	628	627	532	657	709	820	808	743	682	614	394	261	179	96		
Ashland, WI	1293	1172	1110	979	1092	1041	924	941	871	844	830	806	788	771	734	680	618	616	606	583	581	486	612	663	775	763	698	637	568	349	213	131			
Houghton, MI	1165	1044	982	851	964	913	796	813	743	716	702	678	659	643	606	552	490	488	480	455	453	358	484	535	647	635	570	509	440	221	84				
Marquette, MI	1104	983	921	790	903	852	735	751	682	655	641	616	598	571	545	491	429	426	418	393	391	297	422	474	585	573	508	447	378	159					
Sault Ste. Marie, MI (a)	944	823	761	630	743	692	575	592	522	495	481	457	438	422	385	331	269	267	259	234	232	137	263	314	426	414	349	288	219						
Escanaba, MI	1051	930	868	737	850	799	682	699	629	602	588	564	545	526	492	438	376	384	376	340	339	244	130	181	288	274	201	101							
Green Bay, WI	1120	999	937	806	919	868	751	767	696	671	657	632	614	597	561	507	445	452	444	409	407	313	123	171	272	255	180								
Milwaukee, WI	1181	1060	998	867	980	929	812	828	759	732	718	693	675	658	622	568	506	513	505	470	468	374	97	80	103	85									
Chicago, IL	1246	1125	1063	932	1045	994	877	893	824	797	783	758	740	723	688	633	571	578	570	535	534	439	456	114	25										
Gary, IN	1258	1137	1075	944	1057	1006	889	905	836	809	795	770	752	735	699	645	583	590	582	547	546	451	167	121											
Muskegon, MI	1146	1025	963	832	945	894	777	794	724	697	683	659	640	623	587	533	471	479	471	435	434	339	56												
Ludington, MI	1095	974	912	781	894	843	726	724	673	646	632	607	589	572	536	482	420	427	419	384	383	288													
Alpena, MI	832	711	649	518	631	580	463	479	410	383	369	344	326	309	273	219	157	193	185	124	116														
Bay City, MI	837	716	654	523	638	585	466	484	415	388	374	349	331	314	278	224	162	265	257	137															
Goderich, Ontario	740	619	557	426	539	488	371	387	318	291	277	252	234	217	181	127	65	211	207																
Collingwood, Ontario	933	821	750	619	732	681	564	580	511	484	470	446	427	410	374	320	258	55																	
Midland, Ontario	941	820	758	627	740	689	572	588	519	492	478	453	435	418	382	326	266																		
Port Huron, MI (b)	675	554	492	361	474	423	306	322	253	226	213	188	170	152	116	62																			
Detroit, MI (c)	613	492	430	299	412	361	244	261	191	164	150	126	108	91	54																				
Toledo, OH	606	485	423	292	405	354	237	254	185	157	144	119	96	72																					
Lorain, OH	549	428	366	235	348	297	180	197	124	95	80	53	28																						
Cleveland, OH	529	408	346	215	326	277	160	176	102	73	59	33																							
Fairport, OH	499	378	316	185	298	247	130	146	73	44	30																								
Ashtabula, OH	473	352	290	159	272	221	104	119	45	15																									
Conneaut, OH	461	340	278	147	260	209	92	107	33																										
Erie, PA	434	313	251	120	233	182	65	78																											
BUFFALO, NY	391	270	208	77	190	139	22																												
Port Colborne, Ontario	369	248	186	55	168	117																													
Rochester, NY	271	149	89	95	59																														
Oswego, NY	232	108	55	145																															
Toronto, Ontario	342	223	161																																
Kingston, Ontario	185	63																																	
Ogdensburg, NY	123																																		

Distances are in statute miles

Measurements are by the shortest marked or safe direct courses, starting (unless otherwise noted) from the main entrance between pierheads of breakwaters or piers, or from the principal landings of open roadsteads. Where landings are appreciably remote from protected entrances, the distance from the main entrance to the landing may be ascertained from the harbor description or from nautical charts. Points in this table are arranged in the order of their location on the Great Lakes in the following sequence (top to bottom): Lake Superior, Lake Michigan, Lake Huron, Lake Erie, and Lake Ontario-St. Lawrence River.

(a) From abreast east end of US center pier (b) From foot of Grand River Avenue (c) From Woodward Avenue (d) From St. Lambert Dock

Distances Between Points on Lake Ontario and St. Lawrence River

Table 22

	Quebec City, Quebec	Montreal, Quebec	Cote St. Catherine Lock, Quebec	Beauharnois Lock, Quebec	Colquhoun Island, Ontario	Snell Lock, NY	Eisenhower Lock, NY	Iroquois Lock, Ontario	Ogdensburg, NY	Brockville, Ontario	Alexandria Bay, NY	Thousand Island Park, NY	Clayton, NY	Gananoque, Ontario	Kingston, Ontario	Picton, Ontario	Deseronto, Ontario	Belleville, Ontario	Trenton, Ontario	Cobourg, Ontario	Port Hope, Ontario	Toronto, Ontario	Hamilton, Ontario	Port Weller, NY	Lewiston, NY	Niagara-on-the-Lake, Ontario	Olcott, NY	Rochester, NY	Sodus Bay, NY	Little Sodus Bay, NY	Oswego, NY	Sackets Harbor, NY	Cape Vincent, NY	Port Colborne, Ontario	Port Huron, MI
OLD MACKINAC POINT, MI (a)	1084	922	914	892	848	841	837	812	799	787	766	760	755	758	739	726	713	69	688	653	648	608	610	580	598	592	608	670	698	712	721	745	740	553	247
PORT HURON, MI (b)	837	675	667	645	601	594	590	565	552	540	519	513	508	511	492	479	466	45	441	406	401	361	363	333	351	356	361	423	451	465	474	498	493	306	
PORT COLBORNE, ONTARIO	531	369	361	339	295	288	284	259	246	234	213	207	202	205	186	173	160	14	135	100	95	55	57	27	45	37	55	117	145	159	168	192	187		
Cape Vincent, NY	344	183	175	153	109	102	98	73	60	48	27	20	16	19	24	45	51	67	78	101	106	160	186	160	160	154	134	89	69	59	49	26			
Sackets Harbor, NY	370	209	201	179	135	128	124	99	86	74	53	46	42	45	36	56	61	78	88	106	112	165	191	165	164	158	138	88	54	52	41				
Oswego, NY	391	232	224	202	158	151	147	122	108	97	76	69	65	68	55	66	71	88	82	91	96	145	166	141	139	133	113	59	29	15					
Little Sodus Bay, NY	401	241	233	211	167	160	156	131	118	106	85	78	74	77	64	73	78	88	79	85	90	136	157	131	130	124	104	48	18						
Sodus Bay, NY	411	251	243	221	177	170	166	141	128	116	995	88	84	87	72	80	86	83	74	77	81	124	145	118	118	112	92	35							
Rochester, NY (Charlotte)	432	271	263	241	197	190	186	161	149	136	115	108	104	107	90	98	89	73	64	57	60	96	117	89	89	83	63								
Olcott, NY	478	316	308	286	242	235	231	206	193	181	160	153	149	152	134	121	109	92	83	51	47	38	55	28	28	22									
Niagara-on-the-Lake, Ontario	500	336	328	306	262	255	251	226	213	201	180	173	169	172	154	141	128	11	102	66	63	30	39	11	6										
Lewiston, NY	506	345	334	312	268	261	257	232	219	207	186	179	175	178	160	147	134	11	108	72	69	36	45	17											
Port Weller, NY	504	342	334	312	268	261	257	232	219	207	186	179	175	178	159	146	133	11	107	72	68	28	30												
Hamilton, Ontario	530	367	359	337	293	286	282	257	244	232	211	205	200	204	185	169	156	14	131	94	88	30													
Toronto, Ontario	506	342	334	312	268	261	257	232	219	207	186	180	175	179	160	142	129	11	103	65	60														
Port Hope, Ontario	449	289	281	259	215	208	204	179	166	154	132	126	121	125	106	85	72	56	47	7															
Cobourg, Ontario	444	283	275	253	209	202	196	173	160	148	127	120	116	120	101	79	67	50	41																
Trenton, Ontario	417	255	247	225	181	174	170	145	132	120	101	94	90	89	71	40	28	11																	
Belleville, Ontario	406	244	236	214	170	163	159	134	121	109	90	84	80	78	60	29	17																		
Deseronto, Ontario	390	228	220	198	154	147	143	118	105	93	74	68	63	62	44	13																			
Picton, Ontario	383	222	214	192	148	141	137	112	99	87	68	62	57	56	37																				
Kingston, Ontario	346	185	177	155	111	104	100	75	62	50	32	25	21	19																					
Gananoque, Ontario	327	167	159	137	93	86	82	57	44	32	18	11	10																						
Clayton, NY	327	167	159	137	93	86	82	57	44	32	11	4																							
Thousand Island Park, NY	326	164	156	134	90	83	79	54	41	29	8																								
Alexandria Bay, NY	317	156	148	127	83	76	82	46	33	22																									
Brockville, Ontario	295	135	127	105	61	54	50	25	12																										
Ogdensburg, NY	283	123	115	93	49	42	38	13																											
Iroquois Lock, Ontario	270	110	102	80	36	29	25																												
Eisenhower Lock, NY	245	85	77	55	11	4																													
Snell Lock, NY	241	81	73	51	7																														
Colquhoun Island, Ontario	233	74	66	44																															
Beauharnois Lock, Quebec	190	30	22																																
Cote St. Catherine Lock, Quebec	169	8																																	
Montreal, St. Lambert Lock, Quebec	160																																		

Distances are in statute miles

(a) From sailing course point north of Old Mackinac Point
(b) From foot of Grand River Avenue to Toronto west entrance

Distances Between Points on Lake Erie and the St. Clair, Detroit and Niagara Rivers

Table 23

	Kingsville, Ontario	Rondeau, Ontario	Port Stanley, Ontario	Port Burwell, Ontario	Port Dover, Ontario	Port Maitland, Ontario	Niagara Falls, NY	Tonawanda, NY	Buffalo, NY	Dunkirk, NY	Erie, PA	Conneaut, OH	Ashtabula, OH	Fairport, OH	Cleveland, OH	Lorain, OH	Vermilion, OH	Huron, OH	Sandusky, OH	Put-in-Bay, OH	Port Clinton, OH	Toledo, OH	Monroe, MI	Detroit River Light, MI	Amherstburg, Ontario	Trenton, MI	Wyandotte, MI	Detroit, MI	Chatham, Ontario	Mount Clemons, MI	St. Clair Flats, MI/Ontario	Algonac, MI	Marine City, MI	St. Clair, MI	Port Huron, MI	Port Colborne, Ontario
OLD MACKINAC POINT, MI (a)	358	414	459	475	527	538	588	580	569	539	500	473	460	435	417	399	391	387	380	363	369	363	348	334	326	324	320	309	322	296	286	274	266	259	247	553
PORT COLBORNE, ONTARIO	201	146	109	89	52	18	41	33	22	25	65	92	104	130	160	180	190	198	204	204	213	237	227	219	227	229	234	244	292	278	267	281	287	294	306	
PORT HURON, MI (b)	111	167	212	228	280	291	341	333	322	292	253	226	213	188	170	152	144	140	133	116	122	116	101	87	79	77	73	62	75	49	39	27	19	12		
St. Clair, MI	99	155	200	216	268	279	330	322	311	281	241	214	201	176	158	141	133	129	122	105	111	105	89	75	67	65	61	50	63	37	27	15	7			
Marine City, MI	92	148	193	209	261	272	322	314	303	273	234	207	194	169	151	133	125	121	114	97	103	97	82	68	60	58	54	43	56	30	20	7				
Algonac, MI	86	143	188	203	255	267	317	309	296	268	228	201	188	163	145	128	120	116	109	92	98	92	76	62	55	53	48	37	49	22	14					
St. Clair Flats, MI/Ontario (c)	72	129	174	189	241	253	303	295	284	254	215	187	174	149	131	114	106	102	95	78	84	78	62	48	41	39	34	23	35	15						
Mount Clemons, MI	83	140	185	200	252	264	314	306	295	265	226	199	185	161	142	125	117	113	106	89	95	89	73	59	53	50	45	35	49							
Chatham, Ontario	97	154	199	214	265	278	328	320	309	279	239	212	198	174	156	139	130	127	120	102	108	102	87	73	66	63	59	48								
Detroit, MI (Woodward Avenue)	49	106	151	166	217	230	280	272	261	231	191	164	150	126	108	91	82	79	72	54	60	54	39	25	18	15	11									
Wyandotte, MI	39	96	141	156	208	220	270	262	251	221	182	154	141	116	98	81	73	69	62	45	51	45	29	15	8	5										
Trenton, MI	34	91	136	151	203	215	265	257	246	216	177	149	136	111	93	76	68	64	57	40	46	40	24	10	13											
Amherstburg, Ontario	31	88	133	148	200	212	262	254	243	213	173	146	133	108	90	73	64	61	54	36	42	36	21	7												
Detroit River Light, MI	24	81	126	141	193	205	255	247	236	206	166	139	126	101	83	66	58	54	47	30	36	30	14													
Monroe, MI (piers)	33	89	134	149	200	213	263	255	244	214	174	147	133	109	89	68	60	5	48	30	35	21														
Toledo, OH	45	98	143	159	210	223	272	265	254	224	185	157	144	119	96	72	65	59	52	38	40															
Port Clinton, OH	37	75	120	136	187	199	249	241	230	200	160	131	118	92	67	43	36	29	22	12																
Put-in-Bay, OH	27	66	111	127	177	190	240	232	221	190	150	122	109	83	51	38	32	27	21																	
Sandusky, OH	41	69	114	130	178	190	239	232	221	189	149	120	107	79	55	29	21	14																		
Huron, OH	47	68	111	124	172	184	233	226	215	183	142	113	99	72	47	20	11																			
Vermilion, OH	46	62	104	117	163	175	225	217	206	174	133	104	90	63	37	11																				
Lorain, OH	48	57	97	109	154	166	215	208	197	164	124	95	80	53	28																					
Cleveland, OH	65	53	85	93	134	146	194	187	176	143	102	73	59	33																						
Fairport, OH	83	48	62	66	104	116	165	157	146	114	73	44	30																							
Ashtabula, OH	108	63	56	47	79	90	138	130	119	86	45	15																								
Conneaut, OH	122	74	59	48	68	80	126	118	107	74	33																									
Erie, PA	149	98	70	53	47	54	98	89	78	45																										
Dunkirk, NY	188	134	98	78	50	28	55	48	37																											
Buffalo, NY	218	163	126	106	72	38	21	13																												
Tonawanda, NY	230	174	137	117	83	49	8																													
Niagara Falls, NY	237	182	145	125	90	57																														
Port Maitland, Ontario	187	132	95	75	37																															
Port Dover, Ontario	175	120	83	62																																
Port Burwell, Ontario	123	65	23																																	
Port Stanley, Ontario	108	49																																		
Rondeau, Ontario	63																																			

Distances are in statute miles

Points in this table are arranged in geographical sequence proceeding southward in St. Clair River/Lake, Detroit River, thence eastward along the south shore of Lake Erie to Niagara River, and returning westward along the north lake shore.

(a) From sailing point north of Old Mackinac Point
(b) From foot of Grand River Avenue
(c) From south end of canal dike

Distances Between Points on Lake Huron and St. Marys River

Table 24

	Thessalon, Ontario	Algoma Mills, Ontario	Gore Bay, Ontario	Little Current, Ontario	French River, Ontario	Key Harbor, Ontario	Byng Inlet, Ontario	Parry Sound, Ontario	Depot Harbor, Ontario	Port McNicoll, Ontario	Midland, Ontario	Penetanguishene, Ontario	Collingwood, Ontario	Meaford, Ontario	Owen Sound, Ontario	Wiarton, Ontario	Southampton, Ontario	Kincardine, Ontario	Goderich, Ontario	Port Sanilac, MI	Harbor Beach, MI	Saginaw, MI	Bay City, MI	East Tawas, MI	Au Sable, MI	Alpena, MI	Rockport, MI	Stoneport, MI	Rogers City, MI	Cheboygan, MI	Mackinac Island, MI	St. Ignace, MI	Port Dolomite, MI	DeTour, MI	SAULT STE. MARIE, MI	OLD MACKINAC POINT, MI
PORT HURON, MI (a)	238	238	250	225	224	232	229	247	243	267	266	265	258	241	238	228	121	94	65	33	63	175	162	119	117	157	166	182	194	233	243	247	239	224	269	247
OLD MACKINAC POINT, MI (b)	69	101	116	143	196	205	211	235	231	256	255	254	247	230	227	217	189	182	211	215	186	223	210	163	142	115	83	78	54	18	7	6	27	45	90	
SAULT STE. MARIE, MI (c)	48	88	108	131	184	193	201	242	238	268	267	266	259	242	239	229	207	213	234	238	208	246	232	185	165	137	107	96	84	84	84	90	68	45		
DeTour, MI	24	58	76	101	154	163	171	201	198	224	222	221	214	197	194	185	162	168	189	193	164	201	187	140	120	92	61	51	40	39	39	44	23			
Port Dolomite, MI	92	90	108	135	197	199	198	218	215	243	241	238	233	220	219	207	176	183	203	218	190	219	206	163	143	113	76	70	47	31	26	28				
St. Ignace, MI	68	100	115	142	195	204	209	234	231	256	254	252	246	229	227	217	191	194	214	216	187	224	210	163	143	115	83	82	55	20	8					
Mackinac Island, MI	63	95	110	137	190	199	204	229	226	251	249	248	241	224	221	212	186	189	209	212	184	220	207	159	140	111	79	77	50	17						
Cheboygan, MI	63	92	106	133	186	195	197	221	217	242	241	240	233	216	213	204	175	178	198	202	173	210	196	149	129	101	69	66	40							
Rogers City, MI	63	74	87	114	157	163	164	187	183	208	206	206	199	182	177	169	139	142	161	163	134	171	157	110	90	61	31	27								
Stoneport, MI	75	73	92	118	145	147	147	166	163	190	189	186	181	164	163	151	115	120	146	158	130	154	141	97	76	48	9									
Rockport, MI	79	79	92	119	136	143	143	166	162	187	186	185	178	161	158	148	112	113	132	134	106	142	129	82	62	31										
Alpena, MI	107	107	120	143	145	151	152	174	171	195	193	192	185	168	165	156	109	107	124	125	97	129	116	69	49											
Au Sable, MI	135	135	148	158	160	163	166	183	180	204	202	201	189	177	174	165	98	85	93	86	58	83	69	21												
East Tawas, MI	155	155	168	175	176	180	182	199	196	220	218	217	210	194	190	181	110	94	95	88	60	68	54													
Bay City, MI	202	202	215	222	223	228	229	245	243	267	265	264	257	240	237	226	153	136	137	130	102	13														
Saginaw, MI	216	216	228	235	237	242	242	258	256	280	278	278	271	254	250	241	167	149	151	144	115															
Harbor Beach, MI	178	178	191	171	171	176	176	194	190	214	213	212	205	188	185	175	79	56	47	32																
Port Sanilac, MI	207	207	219	197	196	201	201	219	215	239	238	237	230	213	210	200	97	70	47																	
Goderich, Ontario	195	196	204	169	172	172	174	192	189	213	211	210	207	187	183	174	64	36																		
Kincardine, Ontario	173	174	174	141	142	149	144	162	158	182	181	180	176	156	153	144	30																			
Southampton, Ontario	166	166	155	122	123	130	125	143	140	163	162	161	157	137	134	125																				
Wiarton, Ontario (d)	188	158	142	110	88	79	81	74	71	76	74	73	53	36	29																					
Owen Sound, Ontario (d)	197	167	152	119	97	97	89	79	75	71	70	69	46	29																						
Meaford, Ontario (d)	200	169	153	121	96	96	86	71	68	55	53	52	24																							
Collingwood, Ontario (d)	217	186	171	138	108	107	97	80	76	57	55	54																								
Penetanguishene, Ontario	224	187	172	139	106	104	94	72	69	12	10																									
Midland, Ontario (d)	225	186	173	140	107	105	95	73	70	7																										
Port McNicoll, Ontario (d)	227	190	174	142	106	106	97	75	71																											
Depot Harbor, Ontario (d)	193	155	140	107	73	71	62	6																												
Parry Sound, Ontario (d)	197	159	143	111	77	75	65																													
Byng Inlet, Ontario (d)	155	118	102	70	31	27																														
Key Harbor, Ontario (d)	148	110	94	62	22																															
French River, Ontario (d)	139	101	86	53																																
Little Current, Ontario	86	48	33																																	
Gore Bay, Ontario	61	27																																		
Algoma Mills, Ontario	43																																			

Distances are in statute miles

Points in this table are arranged in geographical sequence proceeding from St. Marys River southward along the west shore, and returning northward up the east shore, around Georgian Bay, and westward through North Channel.

(a) From foot of Grand River Avenue

(b) From sailing course point north of Old Mackinac Point

(c) From abreast east end of U.S. center pier and (except those colored ●) via Middle Neebish and DeTour; distances downbound through West Neebish are 1 mile less

(d) Distances to Georgian Bay ports (except those colored ● ● ● ●) are via the bay entrance from Lake Huron and St. Marys River points and via Little Current from North Channel points

● Via False Detour and North Channels

● Via Mississagi Straight and North Channel

● Via Lake Nicolet, St. Joseph and North Channels

● Via Potagannissing Bay and North Channel

Distances Between Points on Lake Michigan

Table 25

	Beaver Island Harbor, MI	Petoskey, MI	Charlevoix, MI	Traverse City, MI	Frankfort, MI	Portage Lake, MI	Manistee, MI	Ludington, MI	Pentwater, MI	White Lake, MI	Muskegon, MI	Grand Haven, MI	Holland, MI	Saugatuck, MI	South Haven, MI	St. Joseph, MI	Michigan City, IN	Gary, IN	Indiana Harbor, IN	South Chicago, IL	Chicago, IL	Waukegan, IL	Kenosha, WI	Racine, WI	Milwaukee, WI	Port Washington, WI	Sheboygan, WI	Manitowoc, WI	Kewaunee, WI	Algoma, WI	Sturgeon Bay, WI	Green Bay, WI	Menominee, MI	Escanaba, MI	Manistique, MI	Port Inland, MI
OLD MACKINAC POINT, MI (a)	41	55	56	97	122	142	150	173	184	213	224	238	257	263	261	300	325	336	334	333	324	296	282	272	259	237	212	191	170	161	155	198	155	129	75	59
Port Inland, MI	31	66	55	88	96	116	123	146	157	186	197	211	229	235	253	271	298	314	308	304	298	270	254	245	226	204	179	161	131	124	110	149	104	78	23	
Manistique, MI	43	76	64	94	91	110	118	141	152	182	193	207	225	232	250	268	294	303	301	298	290	260	244	235	220	195	168	146	120	111	103	135	92	66		
Escanaba, MI	99	113	99	120	91	106	112	130	141	170	181	195	213	220	238	255	280	288	286	283	274	242	226	217	201	176	149	127	100	90	69	101	55			
Menominee, MI (b)	122	134	119	138	80	86	87	96	108	135	146	159	177	183	200	216	239	246	243	240	230	198	184	172	155	130	103	81	52	43	22	49				
Green Bay, WI	165	176	160	178	105	111	112	123	134	159	171	184	202	209	225	242	264	272	268	265	255	223	209	197	180	155	128	106	78	68	47					
Sturgeon Bay, WI	123	129	113	131	58	64	65	76	87	113	124	137	155	162	178	195	217	225	222	218	208	176	162	150	133	108	81	58	30	21						
Algoma, WI	131	135	119	136	59	60	59	66	75	100	111	123	142	146	163	179	200	206	203	200	190	158	142	132	115	89	62	40	12							
Kewaunee, WI	138	143	126	143	62	60	58	61	70	93	104	116	135	141	156	171	192	197	194	191	181	149	133	123	105	79	53	31								
Manitowoc, WI	161	163	147	164	79	71	66	60	64	79	90	102	118	123	137	150	169	173	169	166	156	123	107	97	79	53	26									
Sheboygan, WI	180	181	165	182	95	83	76	60	63	68	78	87	102	106	118	130	146	149	146	143	132	99	83	74	55	29										
Port Washington, WI	206	205	189	206	119	104	98	80	76	72	77	84	94	97	105	112	124	125	121	118	107	74	58	48	29											
Milwaukee, WI	228	227	211	228	140	125	117	97	91	78	80	83	88	89	93	96	104	103	99	96	85	51	35	26												
Racine, WI	242	241	225	242	153	137	129	108	100	81	80	80	79	80	80	78	84	83	78	75	64	30	14													
Kenosha, WI	252	251	234	252	163	147	138	117	108	86	87	86	82	82	79	75	76	73	67	64	54	18														
Waukegan, IL	266	265	249	266	177	160	152	130	122	100	96	93	86	84	78	70	64	58	52	49	38															
Chicago, IL	294	293	276	293	204	186	179	156	146	120	114	108	95	90	77	60	38	25	19	15																
South Chicago, IL	302	301	285	302	213	196	188	165	154	127	120	114	100	95	79	60	33	14	7																	
Indiana Harbor, IN	304	303	287	304	215	198	189	167	156	129	122	115	99	95	79	59	31	13																		
Gary, IN	309	308	292	309	216	199	191	167	157	129	121	114	99	93	77	55	22																			
Michigan City, IN	295	294	278	295	206	189	181	157	146	117	108	99	82	75	57	36																				
St. Joseph, MI	269	268	251	268	179	162	154	130	119	88	78	69	50	44	24																					
South Haven, MI	251	250	233	250	161	144	136	111	101	39	58	49	29	22																						
Saugatuck, MI	232	231	215	232	143	126	118	93	83	51	40	29	8																							
Holland, MI	227	226	210	227	137	120	112	88	77	45	34	23																								
Grand Haven, MI	206	205	189	206	117	100	92	67	57	25	13																									
Muskegon, MI	195	194	178	195	106	89	80	56	46	13																										
White Lake, MI	184	183	167	184	95	78	69	45	35																											
Pentwater, MI	154	153	137	154	65	48	39	14																												
Ludington, MI	143	142	126	143	54	37	26																													
Manistee, MI	118	117	100	118	28	10																														
Portage Lake, MI	110	109	93	110	20																															
Frankfort, MI	93	92	75	92																																
Traverse City, MI	69	58	45																																	
Charlevoix, MI	33	18																																		
Petoskey, MI	37																																			

Distances are in statute miles

Points in this table are arranged in geographical sequence proceeding southward along the west shore and returning northward along the east shore

(a) From sailing course point north of Old Mackinac Point
(b) Distances from Menominee and Green Bay to Lake Michigan points (except those marked with *) are via Sturgeon Bay Canal
● Via Rock Island Passage

Distances Between Points on Lake Superior

Table 26

	Gargantua Harbor, Ontario	Michipicoten, Ontario	Quebec Harbor, Ontario	Peninsula Harbor, Ontario	Rossport, Ontario	Thunder Bay, Ontario	Passage Island, MI	Rock of Ages, MI	Grand Marais, MN	Taconite, MN	Silver Bay, MN	Two Harbors, MN	Duluth, MN	Superior, WI	Port Wing, WI	Bayfield, WI	Ashland, WI	Ontonagon, MI	Keweenaw, MI (upper entry)	Houghton, MI	Dollar Bay, MI	Lake Linden, MI	Chassell, MI	Portage Entry, MI	Eagle Harbor, MI	Copper Harbor, MI	Mendota Canal, MI	L'Anse, MI	Huron Bay, MI	Marquette, MI	Munising, MI	Grand Marais, MI	Whitefish Point, MI	Sault Ste. Marie, MI	OLD MACKINAC POINT, MI
PORT HURON, MI (a)	360	391	385	465	503	542	498	532	574	603	621	640	664	662	633	606	618	544	501	490	487	493	485	476	473	458	458	486	473	429	400	361	311	269	247
OLD MACKINAC POINT, MI (b)	181	212	206	285	324	363	319	353	395	426	444	461	485	483	454	426	439	365	322	311	308	314	306	297	294	279	279	307	294	249	221	182	134	90	
Sault Ste. Marie, MI (c)	91	121	116	195	234	273	229	263	305	334	352	371	394	393	364	336	349	274	232	221	218	224	215	207	204	189	189	217	204	159	131	92	42		
Whitefish Point, MI	54	83	74	153	192	231	187	221	263	292	310	329	352	351	322	294	307	323	190	179	176	182	173	165	162	147	147	175	162	117	89	50			
Grand Marais, MI	78	102	70	144	171	198	154	182	224	255	270	289	312	310	282	252	264	187	143	133	130	135	127	119	123	108	105	129	114	68	40				
Munising, MI	112	136	97	162	179	193	150	174	212	145	260	271	293	291	263	233	245	168	124	114	111	116	108	99	113	100	93	110	93	42					
Marquette, MI	135	154	112	160	164	171	128	149	181	228	239	239	261	260	231	201	213	136	93	84	81	84	76	68	91	76	67	78	62						
Huron Bay, MI	165	179	132	159	152	157	113	110	142	156	181	201	223	222	193	163	175	98	54	44	41	46	38	30	74	60	44	39							
L'Anse, MI	179	192	146	169	162	145	108	95	127	151	168	186	208	206	178	148	160	83	39	29	26	31	23	14	70	71	51								
Mendota Canal, MI	138	152	105	125	117	122	78	103	145	172	190	212	234	232	204	174	186	110	69	55	52	58	50	41	42	27									
Copper Harbor, MI	137	145	100	112	99	100	56	77	119	142	161	185	208	206	178	150	163	88	45	56	59	71	65	60	16										
Eagle Harbor, MI	151	159	114	122	102	96	53	65	105	129	146	170	194	192	163	135	147	72	31	41	45	57	50	56											
Portage Entry, MI	168	181	135	157	149	130	94	81	113	136	153	171	193	192	163	133	145	68	25	14	11	17	9												
Chassell, MI	177	190	143	166	145	125	89	76	108	128	146	166	188	187	158	128	140	63	20	9	6	12													
Lake Linden, MI	185	198	115	174	151	131	95	82	113	136	153	172	194	193	163	134	146	69	26	15	11														
Dollar Bay, MI	180	192	146	163	139	119	83	70	102	122	140	160	182	181	152	122	134	57	14	3															
Houghton, MI	182	195	146	160	136	116	80	67	99	118	135	157	179	178	149	119	131	54	11																
Keweenaw, MI (upper entry)	180	187	142	149	126	105	69	56	88	108	125	147	168	167	139	109	120	44																	
Ontonagon, MI	221	228	183	189	165	117	103	68	76	86	95	114	136	135	106	74	82																		
Ashland, WI	295	304	258	261	227	164	165	115	85	77	62	71	93	92	63	16																			
Bayfield, WI	282	291	246	254	221	149	152	99	70	60	45	57	78	77	49																				
Port Wing, WI	312	319	275	272	233	169	175	121	83	56	35	22	34	32																					
Superior, WI	340	347	303	300	259	195	199	147	107	78	54	28	7																						
Duluth, MN	342	349	305	300	259	195	200	147	105	77	53	26																							
Two Harbors, MN	319	327	281	277	236	172	177	124	82	55	27																								
Silver Bay, MN	300	302	2260	250	210	145	156	100	55	25																									
Taconite, MN	280	283	240	227	190	130	136	78	31																										
Grand Marais, MN	252	256	214	199	157	92	99	47																											
Rock of Ages, MI	209	213	171	155	112	49	53																												
Passage Island, MI	164	166	127	102	63	44																													
Thunder Bay, Ontario (d)	208	209	171	142	102																														
Rossport, Ontario	157	155	125	71																															
Peninsula Harbor, Ontario	114	112	86																																
Quebec Harbor, Ontario	41	49																																	
Michipicoten, Ontario	32																																		

Distances are in statute miles

Points in this table are arranged in geographical sequence proceeding westward along the south shore and returning eastward around the north shore

(a) From foot of Grand River Avenue
(b) From sailing course point north of Old Mackinac Point
(c) From abeam of east end of United States center pier
(d) Old Port Arthur
● Via Keweenaw Waterway

Pacific Distances

Pacific Coast Distances

Table 27

	Midway Island	Port Allen, HI	Nawiliwili, HI	Pearl Harbor, HI	Honolulu, HI	Kahalui, HI	Kawaihae, HI	Hilo, HI	Kuluk Bay, AK	Unimak Pass, AK	Kodiak, AK	Anchorage, AK	Seward, AK	Port Valdez, AK	CAPE SPENCER, AK	Sitka, AK	Ketchikan, AK	Seattle, WA	Swiftsure Bank, WA	CAPE FLATTERY, WA	Portland, OR	Astoria, OR	San Francisco, CA	Los Angeles, CA	Long Beach, CA	San Diego, CA
PANAMA CANAL (PACIFIC) 08°53.0'N., 79°31.0'W.	5707	4777	4767	4690	4685	4609	4594	4527	5604	5228	4924	5117	4940	4984	4603	4538	4387	4044	-	3920	3888	3803	3270	2939	2939	2867
San Diego, CA 32°43.0'N., 117°10.5'W.	3097	2347	2330	2283	2278	2212	2219	2175	2806	2412	2115	2303	2124	2174	1787	1723	1575	1228	-	1104	1074	989	455	95	94	
Long Beach, CA 33°46.2'N., 118°13.3'W.	3034	2302	2284	2241	2236	2173	2183	2143	2725	2331	2034	2223	2043	2092	1707	1643	1497	1148	-	1024	992	908	374	3		
Los Angeles, CA 33°45.0'N., 118°16.2'W.	3031	2299	2281	2238	2233	2170	2180	2140	2722	2328	2031	2220	2040	2089	1703	1639	1493	1144	-	1020	989	904	371			
San Francisco, CA 37°48.5'N., 122°24.0'W.	2792	2146	2128	2096	2091	2036	2051	2019	2403	1990	1693	1882	1702	1745	1366	1302	1156	807	-	683	652	567				
Astoria, OR 46°11.7'N., 123°50.0'W.	2724	2281	2262	2251	2246	2207	2235	2214	2071	1626	1261	1435	1242	1239	883	815	660	278	-	153	85					
Portland, OR 45°33.0'N., 122°41.7'W.	2809	2366	2347	2336	2331	2292	2320	2299	2156	1711	1346	1520	1327	1324	968	900	745	362	-	238						
CAPE FLATTERY, WA 48°26.0'N., 124°47.0'W.	2694	2308	2289	2290	2285	2245	2276	2260	-	-	-	-	-	-	-	-	-	124	10							
Swiftsure Bank, WA 48°31.0'N., 125°00.0'W.	-	-	-	-	-	-	-	-	1973	1510	1124	1294	1100	1100	739	681	518	134								
Seattle, WA 47°36.2'N., 122°20.3'W.	2818	2432	2413	2414	2409	2369	2400	2384	2107	1644	1258	1428	1234	1234	976	815	659									
Ketchikan, AK 55°20.5'N., 131°38.7'W.	2570	2387	2368	2388	2383	2361	2405	2398	1656	1193	742	892	682	713	307	224										
Sitka, AK 57°03.1'N., 135°20.5'W.	2481	2380	2361	2390	2385	2365	2412	2410	1490	1027	564	708	464	479	85											
CAPE SPENCER, AK 58°10.0'N., 136°38.3'W.	2472	2407	2388	2416	2411	2398	2445	2447	1450	987	505	641	422	400												
Port Valdez 61°06.0'N., 146°24.0'W.	2386	2445	2429	2473	2468	2463	2513	2524	1224	761	280	385	144													
Seward, AK 60°06.0'N., 149°26.0'.	2250	2351	2332	2378	2373	2377	2432	2439	1115	652	175	274														
Anchorage, AK 61°14.2'N., 149°53.3'W.	2305	2459	2440	2482	2477	2479	2535	2542	1151	688	242															
Kodiak, AK 57°47.1'N., 152°25.1'W.	2088	2203	2184	2235	2230	2233	2289	2296	968	505																
Unimak Pass, AK 54°20.0'N., 164°45.0'W.	1680	1972	1963	2024	2028	2044	2110	2126	463																	
Kuluk Bay, AK 51°51.6'N., 176°37.6'W.	1460	1990	1989	2057	2061	2099	2164	2198																		
Hilo, HI 19°44.1'N., 155°03.5'W.	1338	297	287	201	196	121	83																			
Kawaihae, HI 20°02.3'N., 155°49.9'W.	1278	240	230	145	140	85																				
Kahalui, HI 20°54.0'N., 156°28.2'W.	1232	193	181	94	89																					
Honolulu, HI 21°18.5'N., 157°52.3'W.	1150	106	96	9																						
Pearl Harbor, HI 21°20.0'N., 157°58.3'W.	1146	102	92																							
Nawiliwili, HI 21°57.4'N., 159°21.5'W.	1069	21																								
Port Allen, HI 24°51.1'N., 159°35.6'W.	1042																									

Distances are in nautical miles

● Via inside passage

Pacific Coast Distances – San Diego, California to Cape Flattery, Washington

Table 28

	CAPE FLATTERY, WA	Aberdeen, WA	South Bend, WA	Portland, OR	Vancouver, WA	Longview, WA	Astoria, OR	Garibaldi, OR	Depoe Bay, OR	Newport, OR	Florence, OR	Gardiner, OR	Coos Bay, OR	Crescent City, CA	Eureka, CA	Sacramento, CA	Stockton, CA	Oakland, CA	San Francisco, CA	Monterey, CA	Port San Luis, CA	Santa Barbara, CA	Port Hueneme, CA	Los Angeles, CA	Long Beach, CA	Newport Beach, CA
San Diego, CA 32°43.0'N., 117°10.5'W	1104	1031	1019	1074	1070	1034	989	937	891	881	848	832	817	704	653	530	526	458	455	370	259	174	147	95	94	78
Newport Beach, CA 33°37.1'N., 117°55.5'W.	1038	965	953	1007	1003	967	922	871	825	815	782	766	751	638	587	464	460	392	389	304	193	108	81	27	25	
Long Beach, CA 33°46.2'N., 118°13.3'W	1024	951	939	992	988	953	908	857	810	800	768	751	736	624	572	449	445	377	374	290	179	94	66	3		
Los Angeles, CA 33°45.0'N., 118°16.2'W.	1020	947	935	989	985	949	904	853	807	797	764	748	733	620	569	446	442	374	371	286	175	90	62			
Port Hueneme, CA 34°09.0'N., 119°12.4'W.	961	888	876	930	925	890	845	794	748	737	706	689	674	561	510	387	383	315	312	228	116	29				
Santa Barbara, CA 34°24.5'N., 119°41.1'W.	937	864	852	905	901	866	821	770	723	713	681	664	649	537	485	362	358	290	287	203	91					
Port San Luis, CA 35°10.4'N., 120°44.8'W.	854	781	769	823	819	783	739	687	641	631	599	582	567	455	403	280	276	208	205	121						
Monterey, CA 36°36.5'N., 121°53.0'W.	746	673	661	714	710	675	630	579	532	522	490	474	459	346	294	171	167	100	96							
San Francisco, CA 37°48.5'N., 122°24.0'W.	683	610	598	652	647	612	567	516	469	459	427	411	396	283	232	79	75	3								
Oakland, CA 37°48.2'N., 122°19.5'W.	686	613	601	655	651	615	570	520	473	463	430	414	399	287	235	82	78									
Stockton, CA 37°57.2'N., 121°18.8'W.	755	682	670	723	719	684	639	588	541	531	498	482	467	354	303	75										
Sacramento, CA 38°33.8'N., 121°33.0'W.	758	685	673	727	722	687	642	591	544	534	502	486	471	358	307											
Eureka, CA 40°47.8'N., 124°11.2'W.	468	395	383	436	432	397	352	301	254	244	212	195	180	64												
Crescent City, CA 41°44.5'N., 124°11.4'W.	411	339	327	381	377	341	296	245	199	188	156	140	125													
Coos Bay, OR 43°22.4'N., 124°12.5'W.	321	244	232	285	281	246	201	150	101	92	59	42														
Gardiner, OR 43°43.9'N., 124°06.8'W.	298	221	209	262	258	223	178	127	78	69	36															
Florence, OR 43°58.0'N., 124°06.3'W.	273	196	184	238	234	198	153	102	54	43																
Newport, OR 44°37.8'N., 124°03.1'W.	235	158	146	200	196	160	115	63	16																	
Depoe Bay, OR 44°48.6'N., 124°03.6'W.	222	144	133	186	182	146	101	50																		
Garibaldi, OR 45°33.3'N., 123°55.1'W.	179	102	90	142	138	103	58																			
Astoria, OR 46°11.7'N., 123°50.0'W.	153	75	63	85	80	45																				
Longview, WA 46°06.3'N., 122°57.7'W.	198	119	108	39	34																					
Vancouver, WA 45°37.6'N., 122°41.3'W.	234	155	143	13																						
Portland, OR 45°33.0'N., 122°41.7'W.	238	159	147																							
South Bend, WA 46°40.1'N., 123°47.5'W.	131	53																								
Aberdeen, WA 46°58.4'N., 123°48.5'W.	117																									

Distances are in nautical miles

San Francisco Bay Area Distances

Table 29

	San Francisco	Hunters Point	Redwood City	Oakland	Richmond	Sausalito	San Rafael	Petaluma	Vallejo	Napa	Benicia	Pittsburg	Antioch	Stockton	Hills Ferry	Rio Vista	Sacramento	Knights Landing	Colusa
Chico Landing 39°42.6'N., 121°56.6'W.	197	203	219	200	194	196	192	204	178	193	171	159	163	174	246	146	119	89	42
Colusa 39°13.0'N., 122°00.0'W.	155	161	177	158	152	154	150	162	136	151	129	117	121	132	204	104	77	47	
Knights Landing 38°48.1'N., 121°43.1'W.	107	113	129	110	104	106	102	114	88	103	81	69	73	84	156	56	29		
Sacramento 38°33.8'N., 121°33.0'W.	78	84	100	81	75	77	73	85	59	74	52	40	44	75	127	27			
Rio Vista 38°09.3'N., 121°41.3'W.	52	58	73	55	49	51	47	58	33	48	26	14	17	48	100				
Hills Ferry 37°20.4'N., 120°58.5'W.	147	153	168	149	143	145	141	153	127	142	120	107	103	74					
Stockton 37°57.2'N., 121°18.8'W.	75	81	96	78	71	73	69	81	55	70	48	35	31						
Antioch 38°01.1'N., 121°48.7'W.	44	50	65	47	40	42	38	50	24	39	17	3							
Pittsburg 38°02.1'N., 121°52.6'W.	40	46	62	43	37	39	35	46	21	36	14								
Benicia 38°02.4'N., 122°08.2'W.	27	33	49	30	24	25	21	33	8	22									
Napa 38°17.7'N., 122°16.9'W.	37	43	58	40	34	36	32	43	15										
Vallejo 38°05.3'N., 122°15.3'W.	23	29	44	26	19	21	17	28											
Petaluma 38°14.1'N., 122°38.2'W.	33	39	54	36	29	31	27												
San Rafael 37°58.1'N., 122°30.7'W.	13	19	35	16	9	11													
Sausalito 37°51.6'N., 122°28.6'W.	5	11	27	8	7														
Richmond 37°54.6'N., 122°21.7'W.	11	17	32	14															
Oakland 37°54.6'N., 122°21.7'W.	3	7	22																
Redwood City 37°30.8'N., 122°12.5'W.	22	16																	
Hunters Point 37°43.5'N., 122°21.5'W.	6																		

Distances are in nautical miles

Distances on Columbia River System

Table 30

	Johnson Bar Landing, ID	Lewiston, ID	Central Ferry, WA	Ice Harbor Dam, WA	Harrisburg, OR	Corvallis, OR	Albany, OR	Salem, OR	Oregon City, OR	Portland, OR	Richland, WA	Pasco, WA	Port of Walla Walla, WA	McNary Lock & Dam	Umatilla, OR	Arlington, OR	John Day Lock & Dam	The Dalles Lock & Dam	Hood River (town), OR	Bonneville Lock & Dam	Vancouver, WA	St. Helens, OR	Longview, WA	Astoria, OR	Warrenton, OR	Ilwaco, WA	Columbia River (mouth)
Columbia River (mouth)	483	404	354	291	230	203	192	162	110	97	293	285	276	254	251	210	188	166	148	126	92	75	58	12	11	6	•
Ilwaco, WA	484	404	355	292	230	203	193	163	111	98	294	286	276	254	252	211	189	167	149	127	93	76	59	13	12	•	7
Warrenton, OR	475	396	346	283	222	195	184	154	103	89	285	277	268	246	244	202	180	159	140	118	84	67	50	4	•	14	13
Astoria, OR	470	391	342	278	217	190	180	149	98	85	281	273	263	241	239	198	175	154	136	114	80	62	45	•	5	15	14
Longview, WA	425	345	296	233	171	144	134	104	52	39	235	227	217	195	193	152	130	108	90	68	34	17	•	52	58	68	67
St. Helens, OR	411	332	282	219	158	131	121	90	39	25	222	214	204	182	180	138	117	95	76	55	20	•	20	71	77	87	86
Vancouver, WA	391	312	262	199	145	118	108	77	26	13	202	193	184	162	160	118	96	75	56	35	•	23	39	92	97	107	106
Bonneville Lock & Dam	356	277	228	164	180	153	142	112	61	47	167	159	149	127	125	84	62	40	22	•	40	63	78	131	136	146	145
Hood River (town), OR	335	256	206	143	201	174	164	134	82	69	145	137	128	106	103	62	40	18	•	5	64	87	104	157	161	171	170
The Dalles Lock & Dam	316	237	188	124	220	193	183	152	101	87	127	119	109	87	85	44	22	•	21	46	86	109	124	177	183	192	191
John Day Lock & Dam	294	215	166	102	242	215	204	174	123	109	105	97	87	65	63	22	•	25	46	71	110	135	150	203	207	217	216
Arlington, OR	273	194	144	81	263	236	226	195	144	130	83	75	66	44	42	•	25	51	71	97	136	159	175	228	232	243	242
Umatilla, OR	231	152	103	39	305	278	268	237	186	172	42	34	24	2	•	48	72	98	119	144	184	207	222	275	281	290	289
McNary Lock & Dam	229	150	101	37	307	280	270	239	188	174	40	32	22	•	2	51	75	100	122	146	186	209	224	277	283	292	292
Port of Walla Walla, WA	207	128	79	15	329	302	292	261	210	196	18	10	•	25	28	76	100	125	147	171	212	235	250	303	308	318	318
Pasco, WA	204	125	75	12	339	312	301	271	220	206	8	•	12	37	39	86	112	137	158	183	222	246	261	314	319	329	328
Richland, WA	212	133	83	20	347	320	309	279	228	214	•	9	21	46	48	96	121	146	167	192	232	255	270	323	328	338	337
Portland, OR	403	324	275	211	133	106	96	65	14	•	246	237	226	200	198	150	125	100	79	54	15	29	45	98	102	113	112
Oregon City, OR	417	338	288	225	119	92	82	51	•	16	262	253	242	216	214	166	142	116	94	70	30	45	60	113	119	128	127
Salem, OR	468	389	340	276	68	41	31	•	59	75	321	312	300	275	273	224	200	175	154	129	89	104	120	171	177	188	186
Albany, OR	499	420	370	307	37	10	•	36	94	110	356	346	336	311	308	260	235	211	189	163	124	139	154	207	212	222	221
Corvallis, OR	509	430	380	317	27	•	12	47	106	122	368	359	348	322	320	272	247	222	200	176	136	151	166	219	224	234	234
Harrisburg, OR	536	457	407	344	•	31	43	78	137	153	399	390	379	353	351	303	278	253	231	207	167	182	197	250	255	265	265
Ice Harbor Dam, WA	192	113	63	•	396	365	353	318	259	243	23	14	17	43	45	93	117	143	165	189	229	252	268	320	326	336	335
Central Ferry, WA	129	50	•	72	468	437	426	391	331	316	96	86	91	116	119	166	191	216	237	262	302	325	341	394	398	409	407
Lewiston, ID	79	•	58	130	526	495	483	448	389	373	153	144	147	173	175	223	247	273	295	319	359	382	397	450	456	465	465
Johnson Bar Landing, ID	•	91	148	221	617	586	574	539	480	464	244	235	238	264	266	314	338	364	386	410	450	473	489	541	547	557	556

Distances are in nautical and statute miles

Distances in Strait of Juan de Fuca and Strait of Georgia

Table 31

	Vancouver, BC, Canada	New Westminster, BC, Canada	Nanaimo, BC, Canada	Blaine, WA	Bellingham, WA	Anacortes, WA	Friday Harbor, WA	Roche Harbor, WA	Olympia, WA	Tacoma, WA	Bremerton, WA	Eagle Harbor, WA	Seattle, WA	Point Wells, WA	Everett, WA	Port Gamble, WA	Port Ludlow, WA	Port Townsend, WA	Victoria, BC, Canada	Port Angeles, WA	Neah Bay, WA	SWIFTSURE BANK, WA
CAPE FLATTERY, WA 48°26.0'N., 124°47.0'W.	141	139	145	112	108	93	87	83	168	143	131	123	124	111	117	104	100	86	62	61	10	10
SWIFTSURE BANK, WA 48°31.0'N., 125°00.0'W.	150	148	154	121	117	102	96	92	178	153	141	133	134	121	127	114	110	96	71	71	20	
Neah Bay, WA 48°22.4'N., 124°36.5'W.	133	132	138	105	101	86	80	76	160	136	124	115	116	103	110	97	93	79	55	54		
Port Angeles, WA 48°07.5'N., 123°26.4'W.	95	93	99	65	54	42	37	36	113	89	77	68	69	56	63	50	46	32	19			
Victoria, BC, Canada 48°25.0'N., 123°23.5'W.	83	82	89	55	50	36	30	25	115	91	80	71	72	59	66	53	48	34				
Port Townsend, WA 48°06.8'N., 122°45.2'W.	92	91	97	59	43	30	30	41	84	59	48	40	40	27	34	21	16					
Port Ludlow, WA 47°55.3'N., 122°41.0'W.	106	105	111	72	57	43	44	54	75	52	40	32	32	19	26	10						
Port Gamble, WA 47°51.3'N., 122°34.7'W.	110	109	115	76	61	47	48	58	78	53	42	34	34	21	28							
Everett, WA 47°59.3'N., 122°13.2'W.	115	114	118	80	63	49	62	71	73	49	38	29	30	16								
Point Wells, WA 47°47.1'N., 122°23.7'W.	117	116	121	83	68	54	54	64	59	34	23	14	14									
Seattle, WA 47°36.2'N., 122°20.3'W.	129	128	134	95	80	66	67	77	50	25	14	8										
Eagle Harbor, WA 47°34.2'N., 122°30.7'W.	129	128	134	95	80	66	67	76	50	25	13											
Bremerton, WA 47°33.5'N., 122°38.0'W.	138	137	142	104	88	74	76	85	50	29												
Tacoma, WA 47°16.0'N., 122°26.0'W.	149	148	154	115	100	86	86	96	34													
Olympia, WA 47°03.1'N., 122°54.3'W.	173	171	177	139	124	110	112	121														
Roche Harbor, WA 48°36.6'N., 123°09.1'W.	62	60	66	35	37	27	12															
Friday Harbor, WA 48°32.2'N., 123°00.9'W.	62	60	69	37	28	18																
Anacortes, WA 48°31.4'N., 122°36.7'W.	71	70	76	36	17																	
Bellingham, WA 48°45.1'N., 122°29.0'W.	72	71	75	38																		
Blaine, WA 48°59.5'N., 122°45.9'W.	48	48	55																			
Nanaimo, BC, Canada 49°10.1'N., 123°56.0'W.	36	48																				
New Westminster, BC, Canada 49°12.0'N., 122°54.5'W.	41																					

Distances are in nautical miles

Hawaii Distances

Table 32

	Palmyra Island	Johnston Island	Midway Island	Nonopapa, Nihau	Hanalei, Kauai	Waimea, Kauai	Port Allen, Kauai	Nawiliwili, Kauai	Ahukini, Kauai	Pearl Harbor, Oahu	Honolulu, Oahu	Kalaupapa, Molokai	Haleolono, Molokai	Kaunakakai, Molokai	Kamalo, Molokai	Kaumalapau, Lanai	Kahalui, Maui	Lahaina (Mala), Maui	Hana, Maui	Mahukona, Hawai'i	Kawaihae, Hawai'i	Kailua, Hawai'i	Napoopoo, Hawai'i
Hilo, Hawai'i 19°44.1'N., 155°03.5'W.	959	905	1338	332	308	303	297	287	287	201	196	154	155	145	137	136	121	125	85	72	83	109	120
Napoopoo, Hawai'i 19°28.6'N., 155°55.3'W.	-	-	-	287	266	260	254	244	245	162	157	138	124	120	112	101	120	99	84	50	45	11	
Kailua, Hawai'i 19°38.6'N., 156°00.0'W.	-	-	-	278	257	251	245	235	236	152	147	127	114	109	102	91	110	88	73	39	34		
Kawaihae, Hawai'i 20°02.3'N., 155°49.9'W.	928	811	1278	277	251	246	240	230	230	145	140	110	103	93	86	82	85	72	48	12			
Mahukona, Hawai'i 20°11.2'N., 155°54.2'W.	-	-	-	272	244	239	233	223	223	138	133	102	95	85	77	76	74	63	36				
Hana, Maui 20°45.6'N., 155°59.1'W.	-	-	-	262	224	226	220	210	210	124	119	70	80	69	59	72	37	57					
Lahaina (Mala), Maui 20°53.5'N., 156°41.5'W.	-	-	-	214	186	182	177	165	165	78	73	39	34	23	15	25	27						
Kahalui, Maui 20°54.0'N., 156°28.2'W.	1010	798	1232	232	194	199	193	181	181	94	89	41	50	39	30	50							
Kaumalapau, Lanai 20°47.4'N., 156°59.7'W.	-	-	-	199	172	167	161	151	151	65	60	54	24	21	25								
Kamalo, Molokai 21°02.9'N., 156°52.7'W.	-	-	-	203	173	169	163	153	153	66	61	37	22	12									
Kaunakakai, Molokai 21°05.1'N., 157°02.0'W.	-	-	-	193	164	160	154	144	144	57	52	45	13										
Haleolono, Molokai 21°05.2'N., 157°15.2'W.	-	-	-	181	152	148	142	132	132	45	40	33											
Kalaupapa, Molokai 21°11.7'N., 156°59.3'W.	-	-	-	194	159	162	156	144	143	58	53												
Honolulu, Oahu 21°18.5'N., 157°52.3'W.	959	725	1150	147	116	112	106	96	96	9													
Pearl Harbor, Oahu 21°20.0'N., 157°58.3'W.	960	722	1146	143	112	108	102	92	92														
Ahukini, Kauai 21°59.7'N., 159°20.1'W.	-	-	-	65	29	29	23	5															
Nawiliwili, Kauai 21°57.4'N., 159°21.5'W.	986	668	1069	63	32	27	21																
Port Allen, Kauai 21°54.1'N., 159°35.6'W.	979	656	1042	45	42	8																	
Waimea, Kauai 21°57.4'N., 159°40.4'W.	-	-	-	40	35																		
Hanalei, Kauai 22°12.9'N., 159°30.1'W.	-	-	-	52																			
Nonopapa, Nihau 21°52.0'N., 160°14.1'W.	-	-	-																				
Midway Island 28°13.0'N., 177°22.0'W.	1606	825																					
Johnston Island 16°44.6'N., 169°31.2'W.	785																						

Distances are in nautical miles

Gulf of Alaska Distances

Table 33

	UNIMAK PASS	False Pass	Unga	Chignik	Uyak	Kodiak	Anchorage	Homer	Seldova	Seward	Latouche	Whittier	Port Valdez	Cordova	Yakutat	CAPE SPENCER	Sitka	CAPE DECISION	DIXON ENTRANCE
SWIFTSURE BANK 48°31.0'N., 125°00.0'W.	1510	1473	1394	1301	1200	1124	1294	1178	1167	1100	1076	1113	1100	1093	869	739	681	588	500
DIXON ENTRANCE 54°28.0'N., 132°52.0'W.	1120	1064	953	874	762	687	845	729	718	642	617	647	634	627	402	259	192	106	
CAPE DECISION 55°59.4'N., 134°08.1'W.	1064	1016	892	811	689	613	763	647	636	553	527	542	529	522	295	162	95		
Sitka 57°03.1'N., 135°20.5'W.	1027	980	865	772	628	564	708	591	580	494	467	492	479	472	231	85			
CAPE SPENCER 58°10.0'N., 136°38.3'W.	987	926	811	717	571	505	641	525	514	422	395	413	400	393	141				
Yakutat 59°32.9'N., 139°43.9'W.	897	844	730	636	480	414	538	422	411	312	286	298	285	278					
Cordova 60°33.4'N., 145°45.3'W.	763	711	597	503	339	282	387	270	260	146	85	96	78						
Port Valdez 61°06.0'N., 146°24.0'W.	761	709	595	501	337	280	385	267	257	144	83	96							
Whittier 60°46.8'N., 148°39.6'W.	742	689	574	481	317	261	367	249	239	125	64								
Latouche 60°03.3'N., 147°54.1'W.	678	626	511	418	254	201	300	183	172	61									
Seward 60°06.0'N., 149°26.0'W.	652	600	485	392	228	175	274	158	147										
Seldova 59°26.5'N., 151°43.0'W.	562	510	395	302	138	115	139	16											
Homer 59°36.0'N., 151°24.0'W.	573	521	406	313	149	126	143												
Anchorage 61°14.2'N., 149°53.3'W.	688	636	521	428	264	242													
Kodiak 57°47.1'N., 152°25.1'W.	505	453	338	245	80														
Uyak 57°38.6'N., 154°00.0'W.	440	388	273	180															
Chignik 56°17.8'N., 158°24.0'W.	289	236	122																
Unga 55°10.6'N., 160°29.8'W.	187	135																	
False Pass 54°51.4'N., 163°24.0'W.	86																		

Distances are in nautical miles

Inside Passage Distances–Seattle, Washington to Cape Spencer, Alaska **Table 34**

	CAPE SPENCER, AK	Gustavus, AK	Skagway, AK	Haines, AK	Juneau, AK	Pelican, AK	Sitka, AK	Petersburg, AK	Port Alexander, AK	CAPE DECISION, AK	Wrangell, AK	Craig, AK	Ketchikan, AK	Metlakatla, AK	Cape Chacon, AK	Hyder, AK	DIXON ENTRANCE	Victoria, BC
Seattle, WA 47°36.2'N., 122°20.3'W.	976	938	962	950	879	989	883	771	812	788	749	716	659	660	640	690	664	72
Victoria, BC 48°25.0'N., 123°28.5'W.	924	886	910	898	827	937	832	719	761	737	697	664	608	608	588	638	612	
DIXON ENTRANCE 54°28.0'N., 132°52.0'W.	319	290	371	359	288	332	221	180	150	126	157	77	79	66	34	169		
Hyder, AK 55°54.2'N., 130°00.6'W.	451	423	447	435	364	464	368	256	297	273	234	212	144	148	136			
Cape Chacon, AK 54°40.6'N., 131°59.7'W.	318	289	337	325	254	331	220	146	149	125	123	76	45	32				
Metlakatla, AK 55°07.8'N., 131°34.2'W.	321	293	317	305	235	334	238	126	167	143	104	109	16					
Ketchikan, AK 55°20.5'N., 131°38.7'W.	307	278	303	291	220	320	224	112	153	129	89	121						
Craig, AK 55°28.7'N., 133°09.7'W.	242	213	264	253	206	255	144	113	73	49	111							
Wrangell, AK 56°28.2'N., 132°23.2'W.	235	208	231	219	148	248	170	40	99	75								
CAPE DECISION, AK 55°59.4'N., 134°08.1'W.	193	164	215	204	157	206	95	76	24									
Port Alexander, AK 56°14.8'N., 134°38.8'W.	173	147	198	186	140	186	82	100										
Petersburg, AK 56°48.9'N., 132°57.8'W.	195	166	191	179	108	207	159											
Sitka, AK 57°03.1'N., 135°20.5'W.	85	136	187	176	162	79												
Pelican, AK 57°57.6'N., 136°13.8'W.	18	45	148	136	123													
Juneau, AK 58°17.9'N., 134°24.7'W.	110	82	100	88														
Haines, AK 59°13.8'N., 135°26.1'W.	124	96	14															
Skagway, AK 59°26.8'N., 135°19.3'W.	136	106																
Gustavus, AK 58°23.3'N., 135°43.6'W.	32																	

Distances are in nautical miles

Bering Sea and Arctic Ocean Distances

Table 35

	Alaska-Canada Boundary	Barter Island	Barrow	Wainwright	Point Lay	Point Hope	Deering	CAPE PRINCE OF WALES	Port Clarence	Savoonga	Nome	Golovnin Bay	Unalakleet	St. Michael	Apoon Bay	Hooper Bay	Bethel	Platinum	Dillingham	Naknek	Meshik	Port Moller	St. Paul Island	Massacre Bay	Alcan Harbor	Kiska	Constantine Harbor	Kuluk Bay	Dutch Harbor
UNIMAK PASS 54°20.0'N., 164°45.0'W.	1490	1428	1155	1079	998	868	900	702	708	642	646	686	737	711	708	472	421	307	384	377	277	208	254	833	805	672	614	463	75
Dutch Harbor 53°52.7'N., 166°31.8'W.	1503	1440	1167	1092	1011	881	913	715	720	654	659	699	750	724	721	485	464	343	432	425	325	256	239	777	749	616	558	407	
Kuluk Bay 51°51.6'N., 176°37.6'W.	1678	1616	1343	1268	1187	1057	1089	891	896	830	835	875	926	900	897	678	776	662	785	779	694	627	387	396	368	235	175		
Constantine Harbor 51°24.0'N., 179°18.1'W.	1763	1701	1428	1353	1272	1142	1174	976	981	915	920	960	1011	985	982	775	903	789	919	912	832	769	501	249	222	79			
Kiska 51°58.3'N., 177°34.5'W.	1762	1700	1427	1352	1271	1141	1173	975	980	914	919	958	1009	984	981	783	931	817	951	945	871	809	526	185	157				
Alcan Harbor 52°44.0'N., 174°04.5'W.	1795	1733	1460	1385	1304	1174	1206	1008	1013	945	950	990	1044	1018	1015	830	1007	893	1036	1029	978	920	604	33					
Massacre Bay 52°48.9'N., 174°15.6'W.	1819	1756	1483	1408	1327	1197	1229	1031	1036	970	975	1015	1066	1040	1037	854	1034	921	1062	1056	991	934	632						
St. Paul Island 57°07.6'N., 170°17.9'W.	1317	1255	982	906	825	695	727	529	535	468	470	504	555	529	528	304	415	302	444	437	381	335							
Port Moller 55°59.0'N., 160°36.5'W.	1469	1407	1134	1059	978	848	880	682	687	621	618	652	703	678	676	452	310	196	207	198	88								
Meshik 56°56.5'N., 158°49.0'W.	1477	1414	1141	1066	985	855	887	689	695	628	625	660	712	685	684	459	293	179	130	118									
Naknek 58°41.5'N., 157°16.0'W.	1507	1442	1169	1094	1012	883	915	717	722	656	653	687	738	712	711	486	315	202	72										
Dillingham 59°02.0'N., 158°29.0'W.	1513	1448	1175	1100	1019	889	921	723	728	662	659	693	744	719	718	493	322	208											
Platinum 59°01.5'N., 161°52.0'W.	1358	1296	1023	948	866	737	769	571	576	510	507	541	592	566	565	340	120												
Bethel 60°49.0'N., 161°47.0'W.	1472	1410	1137	1061	980	850	883	685	690	624	620	655	706	680	679	454													
Hooper Bay 61°29.0'N., 166°04.0'W.	1058	995	722	647	566	436	468	270	276	209	200	235	286	260	259														
Apoon Pass 63°02.6'N., 163°22.3'W.	1010	947	674	599	518	388	420	222	228	229	116	85	88	53															
St. Michael 63°32.4'N., 161°54.8'W.	1007	945	672	596	515	385	417	219	225	230	110	59	35																
Unalakleet 63°53.0'N., 160°50.0'W.	1025	963	690	615	534	404	436	238	244	254	126	66																	
Golovnin Bay 64°22.3'N., 163°06.7'W.	961	899	626	551	470	340	372	174	179	197	62																		
Nome 64°29.0'N., 165°26.0'W.	901	839	566	490	409	279	312	114	119	139																			
Savoonga 63°43.0'N., 170°27.0'W.	912	850	577	502	420	291	323	125	151																				
Port Clarence 65°17.1'N., 166°24.5'W.	846	783	510	435	354	223	255	57																					
CAPE PRINCE OF WALES 65°37.6'N., 168°31.5'W.	787	725	452	377	296	166	198																						
Deering 66°06.0'N., 162°44.0'W.	794	732	458	383	302	172																							
Point Hope 68°21.0'N., 167°18.0'W.	621	560	286	211	130																								
Point Lay 68°21.0'N., 163°08.0'W.	496	434	161	86																									
Wainwright 70°40.0'N., 160°00.0'W.	412	350	77																										
Barrow 71°18.0'N., 156°48.0'W.	337	274																											
Barter Island 70°09.0'N., 143°40.0'W.	62																												

Distances are in nautical miles

Yukon River, Alaska Distances — Table 36

From Apoon Pass (63°02.6'N., 163°22.3'W.)	
Hamilton	22
Azacharak	85
Pilot Station	115
Marshall	153
Russian Mission	195
Paimiut	231
Holy Cross	257
Anvik	292
Kaltag	409
Nulato	438
Koyukuk	453
Galena	481
Ruby	526
Kokrines	556
Tanana	628
Rampart	688
Stevens	762
Beaver	835
Fort Yukon	896
Circle	959
Coal Creek	1,002
Nation	1,047
Eagle	1,089
Alaska-Canada Boundary	1,099
Fortymile, Canada	1,149
Dawson, Canada	1,197

Distances are in nautical miles

Miscellaneous Tables

Table for Estimating Time of Transit

Distance	Speed (knots)																	
	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Nautical miles	days/ hours	days/ hours	days/ hours	days/ hours	days/ hours	days/ hours	days/ hours	days/ hours	days/ hours	days/ hours	days/ hours	days/ hours	days/ hours	days/ hours	days/ hours	days/ hours	days/ hours	days/ hours
10	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	-	-	-	-	-
20	0/3	0/2	0/2	0/2	0/2	0/2	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1	0/1
30	0/4	0/3	0/3	0/3	0/2	0/2	0/2	0/2	0/2	0/2	0/2	0/2	0/2	0/1	0/1	0/1	0/1	0/1
40	0/5	0/4	0/4	0/4	0/3	0/3	0/3	0/3	0/3	0/2	0/2	0/2	0/2	0/2	0/2	0/2	0/2	0/2
50	0/6	0/6	0/5	0/5	0/4	0/4	0/4	0/3	0/3	0/3	0/3	0/3	0/3	0/2	0/2	0/2	0/2	0/2
60	0/8	0/7	0/6	0/5	0/5	0/5	0/4	0/4	0/4	0/4	0/3	0/3	0/3	0/3	0/3	0/3	0/3	0/2
70	0/9	0/8	0/7	0/6	0/6	0/5	0/5	0/5	0/4	0/4	0/4	0/4	0/4	0/3	0/3	0/3	0/3	0/3
80	0/10	0/9	0/8	0/7	0/7	0/6	0/6	0/5	0/5	0/5	0/4	0/4	0/4	0/4	0/4	0/3	0/3	0/3
90	0/11	0/10	0/9	0/8	0/8	0/7	0/6	0/6	0/6	0/5	0/5	0/5	0/5	0/4	0/4	0/4	0/4	0/4
100	0/13	0/11	0/10	0/9	0/8	0/8	0/7	0/7	0/6	0/6	0/6	0/5	0/5	0/5	0/5	0/4	0/4	0/4
200	1/1	0/22	0/20	0/18	0/17	0/15	0/14	0/13	0/13	0/12	0/11	0/11	0/10	0/10	0/9	0/9	0/8	0/8
300	1/14	1/9	1/6	1/3	1/1	0/23	0/21	0/20	0/19	0/18	0/17	0/16	0/15	0/14	0/14	0/13	0/13	0/12
400	2/2	1/20	1/16	1/12	1/9	1/7	1/5	1/3	1/1	1/0	0/22	0/21	0/20	0/19	0/18	0/17	0/17	0/16
500	2/15	2/8	2/2	1/21	1/18	1/14	1/12	1/9	1/7	1/5	1/4	1/2	1/1	1/0	0/23	0/22	0/21	0/20
600	3/3	2/19	2/12	2/7	2/2	1/22	1/19	1/16	1/14	1/11	1/9	1/8	1/6	1/5	1/3	1/2	1/1	1/0
700	3/16	3/6	2/22	2/16	2/10	2/6	2/2	1/23	1/20	1/17	1/15	1/13	1/11	1/9	1/8	1/6	1/5	1/4
800	4/4	3/17	3/8	3/1	2/19	2/14	2/9	2/5	2/2	1/23	1/20	1/18	1/16	1/14	1/12	1/11	1/9	1/8
900	4/17	4/4	3/18	3/10	3/3	2/21	2/16	2/12	2/8	2/5	2/2	1/23	1/21	1/19	1/17	1/15	1/14	1/12
1000	5/5	4/15	4/4	3/19	3/11	3/5	2/23	2/19	2/15	2/11	2/8	2/5	2/2	2/0	1/21	1/19	1/18	1/16
2000	10/10	9/6	8/8	7/14	6/23	6/10	5/23	5/13	5/5	4/22	4/15	4/9	4/4	3/23	3/19	3/15	3/11	3/8
3000	15/15	13/21	12/12	11/9	10/10	9/15	8/22	8/8	7/20	7/8	6/23	6/14	6/6	5/23	5/16	5/10	5/5	5/0
4000	20/20	18/21	16/16	15/4	13/21	12/20	11/22	11/3	10/10	9/19	9/6	8/19	8/8	7/22	7/14	7/6	6/23	6/16
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6000	31/6	27/19	25/0	22/17	20/20	19/6	17/21	16/16	15/15	14/17	13/21	13/4	12/12	11/22	11/9	10/21	10/10	10/0

Determination of Wind Speed by Sea Condition

Miles per hour	Knots	Descriptive	Sea Conditions	Wind Force (Beaufort)	Probable Wave Height (feet)
0-1	0-1	Calm	Sea smooth and mirror like	0	-
1-3	1-3	Light Air	Scale-like ripples without foam crests	1	¼
4-7	4-6	Light Breeze	Small, short wavelets; crests have a glassy appearance and do not break.	2	½
8-12	7-10	Gentle Breeze	Large wavelets; some crests begin to break; foam has glassy appearance. Occasional white foam crests.	3	2
13-18	11-16	Moderate Breeze	Small waves, become longer; fairly frequent white foam crests.	4	4
19-24	17-21	Fresh Breeze	Moderate waves, taking a more pronounced long form; many white foam crests; there may be some spray.	5	6
25-31	22-27	Strong Breeze	Large waves begin to form; white foam crests are more extensive everywhere; there may be some spray.	6	10
32-38	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
39-46	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
47-54	41-47	Strong Gale	High waves; dense streaks of foam along the direction of the wind; crests of waves begin to topple, tumble and roll over; spray may reduce visibility.	9	23
55-63	48-55	Storm	Very high waves with long overhanging crests. The resulting foam in great patches is blown in dense white streaks along the direction of the wind. On the whole, the surface of the sea is white in appearance. The tumbling of the sea becomes heavy and shock-like. Visibility is reduced.	10	29
64-72	56-63	Violent Storm	Exceptionally high waves that may obscure small and medium-sized ships. The sea is completely covered with long white patches of foam lying along the direction of the wind. Everywhere the edges of the wave crests are blown into froth. Visibility is reduced.	11	37
73+	64+	Hurricane	The air is filled with foam and spray. Sea completely white with driving spray; visibility is very much reduced.	12	45

State Abbreviations

Alabama	AL
Alaska	AK
American Samoa	AS
Arizona	AZ
Arkansas	AR
California	CA
Canada	CN
Colorado	CO
Connecticut	CT
Delaware	DE
District of Columbia	DC
Florida	FL
Georgia	GA
Guam	GU
Hawaii	HI
Idaho	ID
Illinois	IL
Indiana	IN
Iowa	IA
Kansas	KS
Kentucky	KY
Louisiana	LA
Maine	ME
Maryland	MD
Marshall Islands	MH
Massachusetts	MA
Mexico	MX
Michigan	MI
Minnesota	MN
Mississippi	MS
Missouri	MO
Montana	MT
Nebraska	NE
Nevada	NV
New Hampshire	NH
New Jersey	NJ
New Mexico	NM
New York	NY
North Carolina	NC
North Dakota	ND
Northern Mariana Islands	MP
Ohio	OH
Oklahoma	OK
Oregon	OR
Pennsylvania	PA
Puerto Rico	PR
Rhode Island	RI
South Carolina	SC
South Dakota	SD
Tennessee	TN
Texas	TX
United States	US
Utah	UT
Vermont	VT
Virgin Islands	VI
Virginia	VA
Washington	WA
West Virginia	WV
Wisconsin	WI
Wyoming	WY

Conversion Factors

Known Value	Multiply By	Unknown Value
inches	25.40	millimeters
	2.540	centimeters
centimeters	0.032808	feet
feet	30.48	centimeters
	0.3048	meters
	0.00016458	nautical miles
yard	0.9144	meters
meters	3.2808	feet
	1.094	yards
	0.0005399	nautical miles
statute miles	0.86897	nautical miles
	1.6093	kilometers
	1,609.3	meters
nautical miles	1.151	statute miles
square feet	0.0929	square meters
	0.00002296	acres
square meters	10.764	square feet
	0.0002471	acres
acres	4,046.9	square meters
	43,560	square feet
	0.404685	hectare
hectare	2.471054	acres
	10,000	square meters
	1.07639×10^5	square feet
fathoms	1.8288	meters
meters	0.54681	fathoms
	3.2808	feet
feet	0.3048	meters
feet per second	0.5925	knots
	0.6818	miles per hour
	30.48	centimeters per second
statute miles per hour	0.8689	knots
	1.467	feet per second
	0.447	meters per second
knots	1.151	miles per hour
	0.5144	meters per second
	1.6878	feet per second
centimeters per second	0.01944	knots
	0.02237	miles per hour
	0.032808	feet per second
grams	0.035275	ounces
	0.002205	pounds
ounces	28.349	grams
pounds	0.45359	kilograms
short tons	2,000	pounds
	0.89286	long tons
	0.9072	metric tons
long tons	2,240	pounds
	1.12	short tons
	1.016	metric tons
metric tons	1,000	kilograms
	0.9842	long tons
	1.1023	short tons
	2,204.6	pounds
barrels (petroleum)	42	gallons (US)
	158.99	liters
barrels (liquid, US)	31.5	gallons (US)
	26.229	gallons (British)
	119.24	liters
gallons (US)	0.02381	barrels (petroleum)
	3.7854	liters
liters	0.26417	gallons (US)

Measurements and Equivalencies

Unit	Equivalency
nautical mile	1,852 meters 6,076.12 feet
statute mile	5,280 feet 1,609.3 meters 1.6093 kilometers
cable	0.1 nautical mile (CN) 720 feet (US)
fathom	6 feet 1.8288 meters
foot	0.3048 meter
inch	2.54 centimeters
meter	39.37 inches 3.281 feet 1.0936 yards
kilometer	1,000 meters
knot	1.6877 feet per second 0.5144 meters per second
miles per hour (statute)	1.466 feet per second 0.44704 meters per second
acre	43,560 square feet 4,046.82 square meters
pound (avoirdupois)	453.59 gram
gram	0.0022046 pound (avoirdupois) 0.035274 ounce
short ton	2,000 pounds
long ton	2,240 pounds
metric ton	2,204.6 pounds
kilogram	2.2 pounds
liter	1.0567 quarts
barrel (petroleum)	42 gallons (US)

Appendix

Sales Information

NOAA publications, nautical charts and unclassified National Geospatial-Intelligence Agency (NGA) nautical charts are sold by authorized sales agents in many U.S. ports and in some foreign ports. Information on obtaining charting products and a listing of authorized agents can be found at www.nauticalcharts.noaa.gov.

Products and Services—NOAA

Reporting corrections to NOAA Nautical Publications

Users are requested to report all significant discrepancies or additions to NOAA navigational products, including depth information in privately maintained channels and basins; obstructions, wrecks, and other dangers; new, relocated, or demolished landmarks; uncharted fixed private aids to navigation; deletions or additions of small-craft facilities and any other information pertinent to safe navigation. This information may be submitted using the NOAA Office of Coast Survey website *www.nauticalcharts.noaa.gov/customer-service/assist/*.

Department of Commerce, NOAA
Nautical Data Branch
N/CS26, Station 7505
1315 East-West Highway
Silver Spring, Maryland 20910
ocs.ndb@noaa.gov

Nautical Charts

NOAA maintains the nautical charts and publications for the coast of the United States and the Great Lakes. Over a thousand charts cover 95,000 miles of shoreline and 3.4 million square nautical miles of water. Access to charts, publications and chart catalogs is available through *www.nauticalcharts.noaa.gov.*

Dates of Latest Editions

Information concerning the dates of latest editions for the full suite of NOAA's nautical charts and U.S. Coast Pilot volumes can be found at *www.nauticalcharts.noaa.gov/mcd/dole.htm.*

U.S. Coast Pilots

U.S. Coast Pilot 1–Atlantic Coast, Eastport to Cape Cod

U.S. Coast Pilot 2–Atlantic Coast, Cape Cod to Sandy Hook

U.S. Coast Pilot 3–Atlantic Coast, Sandy Hook to Cape Henry

U.S. Coast Pilot 4–Atlantic Coast, Cape Henry to Key West

U.S. Coast Pilot 5–Gulf of Mexico, Puerto Rico and Virgin Islands

U.S. Coast Pilot 6–Great Lakes: Lakes Ontario, Erie, Huron, Michigan, Superior and St. Lawrence River

U.S. Coast Pilot 7–Pacific Coast: California, Oregon, Washington, Hawaii and Pacific Islands

U.S. Coast Pilot 8–Alaska, Dixon Entrance to Cape Spencer

U.S. Coast Pilot 9–Alaska, Cape Spencer to Beaufort Sea

Center for Operational Oceanographic Products and Services

1305 East-West Highway
Silver Spring, Maryland 20910
301–713–2815 (phone)
301–713–4500 (fax)
www.tidesandcurrents.noaa.gov

Marine Weather Forecasts

Scheduled coastal marine forecasts are issued four times daily by National Weather Service Offices. Further information on coastal marine forecasts and other types of forecasts is available at *www.nws.noaa.gov/om/marine/forecast.htm.*

Space Weather Prediction Center (SWPC)

The Space Weather Prediction Center provides real time monitoring and forecasting of solar and geophysical events that impact satellites, power grids, communications, navigation and many other technological systems.

NOAA, National Weather Service
National Centers for Environmental Predictions
Space Weather Prediction Center, W/NP9
325 Broadway
Boulder, Colorado 80305
www.swpc.noaa.gov

Products and Services—Other U.S. Government and State Agencies

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Nautical Charts

Apalachicola, Chattahoochee and Flint Rivers Navigation Charts, Alabama River Charts and Black Warrior-Tombigbee Rivers River Charts—available from the U.S. Army Corps of Engineers Mobile District for purchase in bound hard copy or as a free download in PDF at *www.sam.usace.army.mil.*

Flood Control and Navigation Maps of the Mississippi River, Cairo, Illinois to the Gulf of Mexico—available from the U.S. Army Corps of Engineers Memphis District as a free download in PDF at *www.mvm.usace.army.mil.*

Upper Mississippi River Navigation Charts (Mississippi River, Cairo, Illinois to Minneapolis, Minnesota) and Charts of the Illinois Waterway, from Mississippi River at Grafton, Illinois to Lake Michigan at Chicago and Calumet Harbors—available from the U.S. Army Corps of Engineers Rock Island District for purchase in hard copy format or as a free download in PDF at *www.mvr.usace.army.mil.*

Publications and Services

Local Notice to Mariners are posted weekly by the U.S. Coast Guard Navigation Center at *www.navcen.uscg.gov*. The National Geospatial-Intelligence Agency, U.S. Notice to Mariners are available at *msi.nga.mil/NGAPortal/MSI.portal*.

Special Notice to Mariners are issued annually in National Geospatial-Intelligence Agency Notice to Mariners 1. These notices contain important information of considerable interest to all mariners. Interested parties are advised to read these notices.

Light List—maintained by the United States Coast Guard and available online at *www.navcen.uscg.gov*.

List of Lights, **Sailing Directions**, **Radio Navigational Aids (Pub. 117)**, **American Practical Navigator (Pub. 9)**, **International Code of Signals (Pub. 102)** and **Distance Between Ports (Pub 151)**—issued by the National Geospatial-Intelligence Agency and available at *msi.nga.mil/NGAPortal/MSI.portal*.

The Nautical Almanac, the **Air Almanac** and **Astronomical Almanac**—available through the United States Naval Observatory—*www.usno.navy.mil/USNO/astronomical-applications*.

Marine Product Dissemination Information—maintained by the National Weather Service on the internet—*www.nws.noaa.gov/om/marine/home.htm*.

Navigation Rules and Regulations Handbook—publication produced by the United States Coast Guard Navigation Standards Branch, which contains International and Inland Rules of the Road and Navigation Regulations. Available for download or viewing at *www.navcen.uscg.gov*.

New York State Canal

The National Ocean Service provides chart coverage of the New York State Canal System from the Hudson River at Troy, New York, as far west as Lyons, New York–see National Oceanic and Atmospheric Administration Service Sales Information, above. Additional information on the canal system from Syracuse west to the Niagara River at Tonawanda, New York, is available on the New York State Canal Corporation website *www.canals.ny.gov.*

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