

VESSEL OPERATING PROCEDURES

(Best Maritime Practices)

The LA/LB Harbor Safety Plan (HSP) contains operating procedures for vessels. All of the procedures are considered Good Marine Practice, but some are Regulations (either Local, State or Federal) while others are non-regulatory "Standards of Care".

(Regulations are shown in bold.) These Vessel Operating Procedures have been extracted from the main text of the HSP in order to create a helpful "Quick Reference Guide" containing the most important information necessary for safe, reliable and environmentally sound vessel movements in and around the port area. These Vessel Operating Procedures list only the basics; additional and more detailed information can be found in HSP Chapters addressing each topic. Port Tariffs also contain requirements for vessels operating in and around the port. Familiarization and compliance with the Harbor Safety Plan and the Port Tariff(s) are a must! An electronic copy of the HSP and other useful links can be seen on the Coast Guard Marine Safety Office/Group LA/LB home page at [HTTP://www.mxsocial.org](http://www.mxsocial.org). Nothing in these procedures precludes a master and/or pilot from taking necessary and prudent actions to avoid or mitigate unsafe conditions.

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IMPORTANT GENERAL INFORMATION

Pilot Requirements: Local Port Tariffs require vessels of greater than 300 gross tons to use a federally-licensed pilot whenever navigating inside the breakwater. In most circumstances, vessels employ the services of a federally-licensed local pilot from Jacobsen Pilot Service (for Port of Long Beach) or the Los Angeles Harbor Pilots (for the Port of Los Angeles). In instances where a local pilot is not used, masters must have a local federal pilot license and receive approval by the Coast Guard Captain of the Port (COTP) prior to entering or departing port.

Equipment Failures: **Vessels are required by law to report navigational equipment, propulsion, steering or other vital system failures as soon as possible to the Coast Guard via the COTP office or the Captain of the Port representative at VTS on channel 14.** The COTP will require appropriate "equivalent levels of safety" provided by such things as:

1. Directing vessels to outside anchorage pending verification of repairs;
2. Proceed into port at safest slow speed with suitable tug escort/assist;
3. Second licensed navigation officer on the bridge for radar plotting, etc.
4. Sea Trials performed to the satisfaction of the Master, Pilot and the COTP.

VESSEL TRAFFIC SERVICE (Chapter XI)

Vessel traffic in the ports of and approaches to Los Angeles and Long Beach is managed by three entities:

1. Vessel Traffic Service - for the port approaches (25 nm from Pt Fermin to the Federal Breakwater)
2. Jacobsen Pilot Service - for the Port of Long Beach
3. Los Angeles Harbor Pilots - for the Port of Los Angeles

Vessel Traffic Service (VTS):

A VTS is in operation on the approaches to Los Angeles and Long Beach Harbors. Operated jointly by the U.S. Coast Guard and the Marine Exchange, the VTS provides information about commercial, other vessel traffic and navigation safety. **Covered vessels are required to participate in the VTS. The following are considered "Covered Mandatory Full Participant" vessels:**

1. **Every power driven vessel of 40 meters (131 ft) or more in length, while navigating.**
2. **Commercial vessels 8 meters (26 ft) or more in length that are towing alongside, astern or by pushing ahead.**
3. **Every vessel certificated to carry 50 or more passengers for hire, while engaged in trade, under sail or power.**

Following are considered "Mandatory Passive Participants":

Every power driven vessel 20 meters (65 ft) or more in length, every vessel 100 gross tons or more carrying one or more passengers for hire and every dredge or floating plant are required to monitor channel 14 VHF/FM when operating in the VTS area.

Notes of Interest:

1. The outer limit of the VTS AOR is defined by a 25 nm arc from Point Fermin (LAT 33 42.3'N, 118 17.6'W).
2. There is no speed restriction between the 25 mile arc and the Precautionary Area. However, **ships are required to be at 12 kts or less upon entering the Precautionary Area.**
3. **A minimum vessel separation of 1/4 nm is required in the Precautionary Area.**
4. Code of Federal Regulations, CFR 33, Part 165, Subsection 165.1152, identifies portions of the Precautionary Area as a Regulated Navigation Area.

Arriving Vessels Upon Entering the 25 Mile Outer Limit:

Call "San Pedro Traffic" on VHF/FM channel 14 and provide the following information:

1. **Vessel Name/Call Sign.**
2. **Position, course and speed.**
3. **Vessel destination.**
4. **State whether or not taking a pilot.**
5. **Estimated time of arrival to the breakwater/anchorage.**
6. Tank vessels report their displacement.

Contact Los Angeles Pilots on Channel 73 or Long Beach Pilots on Channel 12 to arrange pilot service.

Limit their speed to 12 kts or less upon entry to the Precautionary Area.

Upon Entering the Precautionary Area:

Call " San Pedro Traffic" and provide the following information:

1. **Confirm vessel speed is 12 kts or less.**
2. **Confirm master is on the bridge.**
3. **Confirm vessel is in hand steering.**
4. **Maintain a minimum vessel separation of 1/4 nm.**

Departing Vessels from Inside the Breakwater:

15 minutes prior to getting underway, contact Los Angeles pilots on Channel 73 or Long Beach Pilots on Channel 74 (depending on which harbor the vessel is in) to check into the traffic system. Provide vessel name, type, departure point, destination and intended route.

15 minutes prior to the breakwater entrance, call "San Pedro Traffic" on VHF/FM channel 14. Breakwater entrances include Los Angeles Gate (LA), Long Beach Gate (LB) and Anaheim Bay, (Naval Weapons Support Facility, Seal Beach).

Provide the following:

- 1. Vessel Name/Call Sign.**
- 2. Destination.**
- 3. Acknowledge VTS traffic report.**
- 4. Report departure from Precautionary Area to VTS.**
- 5. If outbound, ETA to 25 nm from Point Fermin.**
- 6. Report departure from VTS at 25 nm limit.**

Maintain speed at 12 kts or less through Precautionary Area.

Sea Approaches - CAUTION

The Master's attention is directed to NOAA Chart nos. 18746 & 18749 or BA 1063 & 1082 regarding regulations for:

1. Passage of Los Angeles and Long Beach sea buoys.
2. Transit of Los Angeles and Long Beach Pilot Boarding areas.
3. Anchorage G, outside the breakwater.

VESSEL SPEED LIMITS

These speeds restrictions do not preclude the Master or Pilot from adjusting speeds to avoid or mitigate unsafe conditions. Weather, vessel maneuvering characteristics, traffic density, construction/dredging and other possible items should also be taken into account.

Tank Vessels:

Precautionary area (approach to port): 12.0 kts
Within pilot operating areas and anywhere inside the breakwater (except where lower speed limits apply):
60,000 displacement tons or less: 8.0 kts
Greater than 60,000 displacement tons: 6.0 kts

Other than Tank Vessels:

Precautionary area (approach to port): 12.0 kts

Long Beach (LB port tariff):

Within the Main Channel between the breakwater entrance and

| | |
|---|-----------------|
| light 6 | 10.0 kts |
| Everywhere else in the harbor: | 6.0 kts |

Los Angeles (LA port tariff):

| | |
|--|-----------------|
| Outer Harbor (between breakwater and Reservation Point) if draft greater than 1.5 meters: | 10.0 kts |
|--|-----------------|

| | |
|--|----------------|
| West Channel, Fish Harbor, marinas, yacht anchorage | 4.4 kts |
| Everywhere else in the harbor..... | 6.0 kts |

See Port Tariff for Speed limits for vessels that have drafts of 5 feet or 1.5 meters or less.

TUG ESCORT/ASSIST FOR TANK VESSELS (Chapter XII)

Overview: "Tug Escort" refers to the stationing of tugs in proximity of a vessel as it transits into port to provide immediate assistance should a steering or propulsion failure develop. "Tug Assist" refers to the positioning of tugs alongside a vessel and applying force to assist in making turns, reducing speed, providing propulsion and docking. Additional assist tugs may be required inside the breakwater. Arrangements should be made via the vessel agent, tug company and appropriate pilot service. Outbound laden tank vessels are not required to use tugs once they have safely cleared the breakwater. **All tank vessels shifting within the harbor(s) (including dock to anchor, anchor to anchor and dock to dock) shall comply with the escort requirements.** Arrangements should be made via the vessel agent, tug company or appropriate pilot service to ensure compliance.

Tug Escort Applicability: **All laden tank vessels (tankers or barges carrying as cargo a total volume of oil greater than or equal to 5,000 long tons of oil) entering the port should ensure proper implementation of the Displacement Ton/Tug Braking Force Table listed below. In addition, to meet the requirements of the Force Selection Matrix, tractor tugs shall be tethered, inbound and outbound. Conventional tugs may be tethered or untethered inbound, but shall be tethered outbound. Inbound, laden Oil and Chemical Tank Vessels shall not proceed closer than two nm from the Federal Breakwater entrance unless the prescribed escort tug(s) are in position at the southern boundary of the pilot operating areas. Masters shall also ensure that anchors are ready for letting go prior to entering the pilot operating areas. The tank vessel master/pilot shall hold a "pre-escort conference" that should at a minimum include:**

1. contacting the escort tug operator to confirm the number and position of the escort tug(s); and
2. establishing the radio frequency to be used; and
3. establishing the destination of the tank vessel; and
4. discussing any other pertinent information that the master/pilot and escort tug operator deem necessary.

These standards reflect favorable circumstances and conditions. Adverse weather, unusual port/traffic congestion or other conditions/circumstances may require additional tugboat assistance.

Small Tank Barge Matrix

| | | |
|---|--|------------------------|
| Total displacement tonnage of the tank barge and primary towing tug | Minimum required escort tug(s) static bollard pull in short tons | |
| A. ≤20,000 displacement tons | Tethered escort tug(s) | Untethered escort tugs |
| | 10 short tons | 15 short tons |
| B. >20,000 displacement tons | Tethered Escort Tug(s) | |
| | A total astern static bollard pull (in pounds) equal to or greater than the sum of both the primary towing tugs and barges total displacement tonnage. (E.g., where the total towing tug and tank barge displacement is 25,000 displacement tons, the escort tug's astern static bollard pull shall be at least 25,000 pounds or 12.5 short tons.) | |

SECTION 851.27. FORCE SELECTION MATRIX

| TANKER DISPLACEMENT | TRACTOR TUGS | | | CONVENTIONAL TUGS | | | | |
|------------------------|---|------|---------------------|-------------------|------|---------------------|---------------|------|
| | AHEAD FORCES FOR TUGS USING STERN LINE (VSP) ASTERN FORCES FOR TUGS USING HEADLINE (ASD) | | 2ND TUG RATIO | AHEAD FORCES | | 2ND TUG RATIO | ASTERN FORCES | |
| | LONG TONS | KIPS | SHORT TONS | R_{T2} | KIPS | SHORT TONS | R_{C2} | KIPS |
| 0 TO < 60,000 | 20 | 10 | 2.7 | 50 | 25 | 1.2 | 30 | 15 |
| 60,000 TO <100,000 | 40 | 20 | 2.7 | 60 | 30 | 1.3 | 50 | 25 |
| 100,000 TO <140,000 | 50 | 25 | 2.7 | 80 | 40 | 1.4 | 80 | 40 |
| 140,000 TO <180,000 | 60 | 30 | 2.8 | 120 | 60 | 1.4 | 100 | 50 |
| 180,000 TO <212,000 | 90 | 45 | 3.8 | 220 | 110 | 1.6 | 120 | 60 |
| 212,000 TO <220,000 | 100 | 50 | 3.8 | 250 | 125 | 1.6 | 120 | 60 |
| 220,000 TO <260,000 | 120 | 60 | 5.3 | 410 | 205 | 1.6 | 140 | 70 |
| 260,000 TO <300,000 | 140 | 70 | 5.4 | 480 | 240 | 1.6 | 160 | 80 |
| 300,000 TO <340,000 | 170 | 85 | 5.6 | 590 | 295 | 1.6 | 190 | 95 |

Tugs Employed in LA/LB

AMNAV Maritime Services ***

| Name | Ahead Bollard Pull | | Astern Bollard Pull | |
|--------------|--------------------|-------------------|---------------------|-------------------|
| | <u>Kips</u> | <u>Short Tons</u> | <u>Kips</u> | <u>Short Tons</u> |
| SANDRA HUGH | 132.86 | 66.43 | 135.04 | 67.52 |
| INDEPENDENCE | 130 | 65 | 135.14 | 67.57 |

Crowley Marine Services, Inc. ***

| Name | Ahead Bollard Pull | | Astern Bollard Pull | |
|---------|--------------------|-------------------|---------------------|-------------------|
| | <u>Kips</u> | <u>Short Tons</u> | <u>Kips</u> | <u>Short Tons</u> |
| SCOUT | | | 104. | 52. |
| MASTER | 102.44 | 51.22 | 87.66 | 43.83 |
| LEADER | | | 117.8 | 58.9 |
| ADMIRAL | | | 108.80 | 54.40 |

Foss Maritime ***

| Name | Ahead Bollard Pull | | Astern Bollard Pull | |
|-----------------|--------------------|-------------------|---------------------|-------------------|
| | <u>Kips</u> | <u>Short Tons</u> | <u>Kips</u> | <u>Short Tons</u> |
| CAMPBELL FOSS | 125.3 | 62.65 | 122.7 | 61.35 |
| BRYNN FOSS | 105.2 | 52.6 | 89.7 | 44.85 |
| ALTA JUNE | 133.52 | 66.76 | 129.52 | 64.76 |
| CAROLYN DOROTHY | 127.3 | 63.65 | 125.4 | 63.7 |
| ARTHUR FOSS | | | 109.31 | 54.66 |

***Updated tug and bollard pull information and Escort Tug Inspection Program (ETIP) information are available from the Marine Exchange of Southern California Web page: www.mxsocial.org

Tugs Employed in LA/LB (continued)

Millennium Maritime***

| Name | Ahead Bollard Pull | | Astern Bollard Pull | |
|---------------------|--------------------|-------------------|---------------------|-------------------|
| | <u>Kips</u> | <u>Short Tons</u> | <u>Kips</u> | <u>Short Tons</u> |
| Z THREE | 107.26 | 53.63 | 101.48 | 50.74 |
| MILLENNIUM MAVERICK | 116.12 | 58.06 | 106.58 | 53.29 |
| TIM QUIGG | 99.28 | 49.64 | 90.36 | 45.18 |
| MILLENNIUM FALCON | 125.96 | 62.98 | 115.44 | 57.72 |
| MILLENNIUM STAR | 129.24 | 64.62 | 118.76 | 59.38 |
| MILLENNIUM DAWN | 128.5 | 64.25 | 109.0 | 54.5 |
| JOHN QUIGG | 98.60 | 49.3 | 91.05 | 45.525 |

Sause Brothers***

| Name | Ahead Bollard Pull | | Astern Bollard Pull | |
|---------|--------------------|-------------------|---------------------|-------------------|
| | <u>Kips</u> | <u>Short Tons</u> | <u>Kips</u> | <u>Short Tons</u> |
| ARAPAHO | 32.02 | 16.01 | 20.94 | 10.47 |
| LAGUNA | 40.14 | 20.07 | 25.66 | 12.83 |
| REDONDO | 32.14 | 16.07 | 22.34 | 11.17 |

***Updated tug and bollard pull information and Escort Tug Inspection Program (ETIP) information are available from the Marine Exchange of Southern California Web page: www.mxsocal.org

UNDERKEEL CLEARANCE (Chapter XIV)

Minimum clearances (between the deepest point on the vessel and the bottom in still water conditions) are established for these ports and depend upon transit/anchor location. On November 27, 1996 Coast Guard underkeel clearance regulations for tank vessels without double hulls became effective (33 CFR 157.455). The regulations require in part, that the Master calculate the tankship's deepest navigational draft and the controlling depth of the intended transit and to discuss these issues with the pilot prior to any transit. Consideration of the following is required:

1. The tankship's mean draft
2. The tankship's trim and list characteristics
3. The intended transit speed and the corresponding squat characteristics
4. The tide and current conditions
5. Present sea state conditions
6. Past weather impact on water depth
7. The depth at the facility or anchorage and
8. The depth of the transit area

Port of Los Angeles

1. Between Los Angeles sea buoy and Los Angeles Main Channel Buoy #11, minimum underkeel clearance is 10 percent of vessel's draft.
2. In the channel between Los Angeles Main Channel Buoy #11 and position off of designated berth, minimum underkeel clearance is 1.5 feet (.46 meters).
3. Final approach to berth, and while at berth, vessel to remain always afloat.
4. Anchorages inside breakwater minimum underkeel clearance is 1.5 feet (.46 meters).
5. Shifts (see 5. in POLB).

Port of Long Beach

1. Between Long Beach sea buoy and Long Beach Channel Buoy #3, minimum underkeel clearance is 10 percent of vessel's draft (before roll and pitch correction)
2. In the channel between Long Beach Channel Buoy #3 and position off of designated berth, minimum underkeel clearance is:
 - a. Vessels 120,000 DWT and under: 1.5 feet (.46 meters).
 - b. Vessels over 120,000 DWT: 3 feet (.91 meters).
3. Final approach to berth, and while at berth, vessel to remain always afloat.
4. Anchorages inside breakwater, minimum underkeel clearance is:
 - a. All anchorages, except as noted below: 1.5 feet (.46 meters).
 - b. Anchorages B7 and B11 when vessel's draft is 50 feet (15.24 meters) or more: 4 feet (1.22 meters).

5. Shifts via outer harbor between Los Angeles and Long Beach, minimum keel clearance is 3 feet (.91 meters).

All tank vessels without double hulls will not enter the Ports of Long Beach and Los Angeles with less than 10% of the vessel's deepest draft for underkeel clearance.

ANCHORING PROCEDURES (Chapter IV)

In addition to observing all port tariffs and U.S. Coast Guard regulations, the Master of any commercial vessel at anchor shall implement the following Standard of Care:

1. Maintain a 24-hour bridge watch by an English speaking licensed deck officer monitoring VHF-FM Channel 16.
2. Make frequent checks to assure vessel is not dragging anchor.
3. When winds exceed 40 knots, put the propulsion plant on standby ready to bring on line on short notice and make another anchor ready to let go. Accurate wind speed can be determined by contacting either VTS or the appropriate pilot station.
4. Provide 15-minute advance notice to the respective pilot station (inside anchorages) or to VTS (outside anchorages) before heaving anchor to get underway.

General Anchoring Guidelines for Santa Catalina Island:

1. The three federal anchorages offshore of Santa Catalina Island "A", "B" and "C", will be assigned by the Vessel Traffic Service, Los Angeles/Long Beach.

General Anchoring Guidelines OUTSIDE the federal breakwater:

1. All anchorages outside the federal breakwater will be managed and monitored by the Vessel Traffic Service (VTS).
2. Any vessel desiring to use one of these anchorages must advise their intentions to VTS on VHF-FM Channel 14 and receive clearance to do so from VTS.
3. VTS will not assign an anchorage to tankers or vessels exceeding 200 meters length overall (LOA) in the first row of anchorage sites closest to the breakwater (G-1 to G-3 and F-1 to F-4).
4. VTS will not provide shoreside radar direction during anchoring; however, ranges and bearings from either the Angel's Gate or Queen's Gate Light to the center of a particular anchorage site will be offered, if requested.
5. Tug assistance outside the federal breakwater is not required for anchoring.

General Anchoring Guidelines INSIDE the federal breakwater:

1. All anchorages inside the federal breakwater will be managed and monitored by the Long Beach Pilot Station.
2. All vessels with a draft of 15.2 meters or greater must use a minimum of 1 tug to ensure proper placement of the anchor and chain, as well as to assist in turning the

vessel at the anchorage site. Tank vessel masters shall refer to the tug escort/assist standards.

COMMUNICATIONS (Chapter VIII)

Operational communications in the LA/LB harbor area are conducted by marine VHF radio and commercial telephone from five principle nodes: VTS, LA Pilots, Long Beach Pilots, Port of Long Beach Security and the US Coast Guard Long Beach. All users are encouraged to minimize voice traffic on all channels, maintain circuit discipline and broadcast on "low power" whenever possible.

SMALL CRAFT (Chapter X)

Recreational vessels should follow the below Standards of Care to ensure the safe operation of their craft while in and around the port. Recreational vessel operators should be sensitive to the fact that large commercial vessels are severely limited in their ability to stop or alter course and many times are limited in their ability to sight small vessels due to "blind spots" that extend more than 1/2 mile ahead, and therefore cannot easily avoid a collision with a smaller, more maneuverable recreational vessel.

1. Ensure Vessel is Safe Before Getting Underway
2. Ensure Vessel is Seaworthy
3. Keep Flares and Distress Calling Equipment Readily Accessible
4. Be Extra Careful in Fog – do not loiter near the breakwater entrances
5. Comply with Rules of the Road Rule 9 - small vessels remain clear of large vessels that must navigate within a narrow channel
6. Avoid Passing Larger Vessels Close Aboard
7. Pass Tugs with Caution
8. Know Where the Traffic Lanes and the Regulated Navigational Area are
9. Know How and When to Monitor VHF Channels 16, 14 and 13
10. Know Vessel's Position
11. Be an Informed Mariner:
 - Know the Rules of the Road
 - Read Coast Guard Notice to Mariners
 - Monitor the Weather
 - Listen to Channel 16 for Coast Guard Information Broadcasts
 - Listen to Channel 14 for all VTS Information
 - Practice man over board procedures.

INCLEMENT WEATHER: STANDARDS OF CARE FOR VESSEL MOVEMENTS (Chapter XVII)

1. **Purpose:** Inclement weather requires heightened awareness and vigilance. This section is intended to provide clear guidance to mariners as to what is expected of them when navigating in inclement weather in the area covered by the HSP. Nothing in this section shall be construed to require the master of a vessel to commence a transit during inclement weather, nor does this section replace compliance with the COLREGS. It is recognized; however, *under certain circumstances, vessels may safely transit during inclement weather provided that equivalent safety levels are applied.*

2. **Definition of Inclement Weather:**

A. **High Winds:** Whenever the National Weather Service issues a “small craft advisory” for sustained winds of 21 to 33 knots potentially in combination with wave heights exceeding 10 feet (or wave steepness values exceeding local thresholds).

B. **Restricted Visibility:** Whenever conditions of visibility fall below the following:

- i. Tankers 150,000 DWT or greater: 1 nautical mile
- ii. Tankers greater than 60,000 DWT, but less than 150,000 DWT: .75 nautical mile
- iii. All other vessels 45’ draft or more: .75 nautical mile
- iv. All other tankers and petroleum barges: .5 nautical mile
- v. All other vessels: 3 times vessel’s LOA

3. **Guidelines For Commencing A Transit During Inclement Weather:** Vessel characteristics, navigational equipment and the availability of shoreside support must be considered when a movement is undertaken during inclement weather. Conditions of visibility and wind can vary considerably throughout the port complex at any given time and may impact the decision to proceed. While specific movement parameters are difficult, if not impossible, to define, it is recommended that mariners carefully consider commencing vessel movements inside the federal breakwater when conditions reach the defined thresholds contained in Section 3 above.

A. **Piloted Vessel Guidelines:**

i. **General:** When inclement weather exists along a vessel's intended route:

1. The respective pilot station management will be notified, and
2. Prior to commencing a transit, the operating pilot will conduct a risk analysis that includes consultation with a second pilot. This expanded participation is a key risk reduction measure.

ii. **Reduced Visibility:**

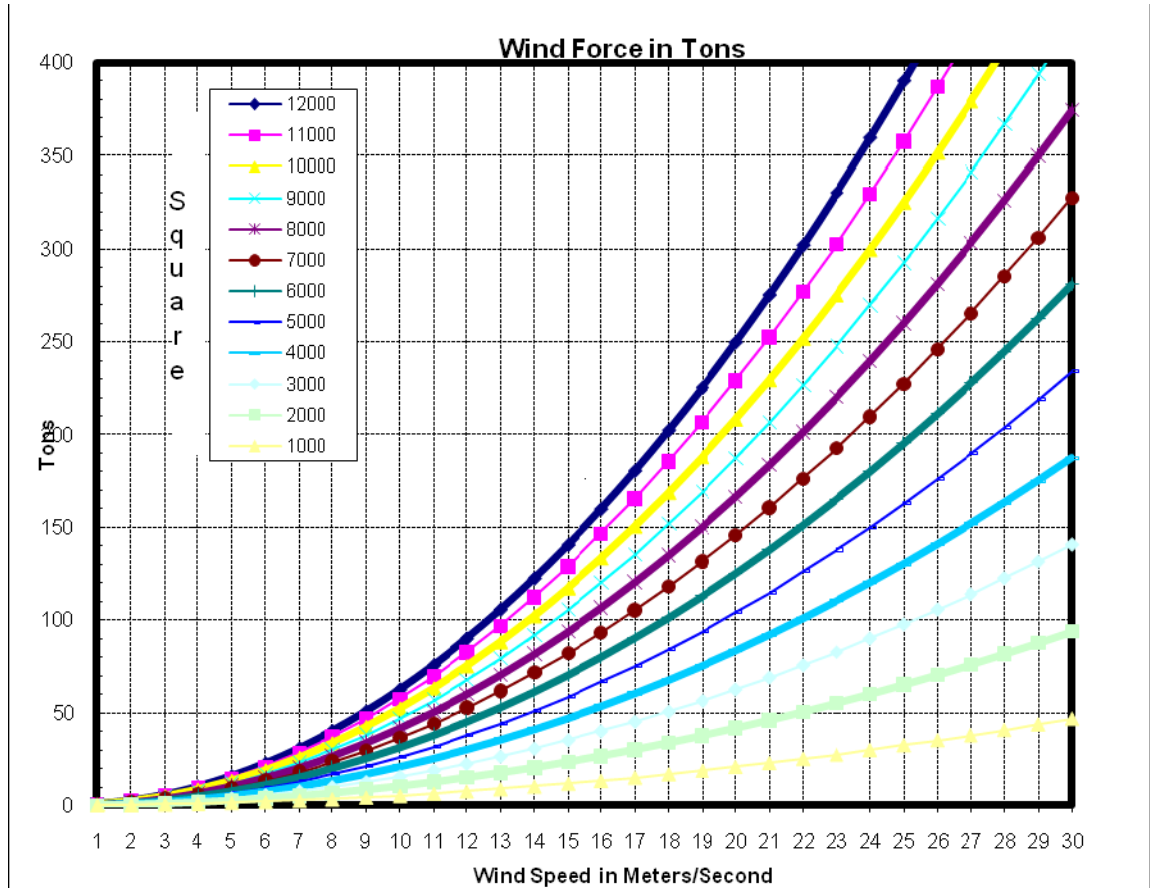
1. When visibility inside the federal breakwater is less than 0.5 mile, the respective vessel traffic center (VTC) will impose one-way traffic restrictions when and where appropriate.
2. When commencing a vessel movement in reduced visibility, as defined in Section 3.b. above, shoreside radar assistance and carry-on enhanced navigational tools such as a Portable Pilot Unit (PPU) shall be readily available for use.
3. When reduced visibility is encountered after commencing a transit, the operating pilot should take appropriate precautions to minimize the risk of collision. Precautions may include but are not limited to continuing the transit or anchoring, reducing speed, enlisting shore-based radar support and securing additional tug assistance.

iii. **High Winds:** Vessel movements will proceed on a case by case basis. Depending on direction and force of wind, type and characteristics of the vessel, movements requiring more than 50 tons of force to hold the vessel against a wind on the beam shall be carefully considered. Below are examples of wind velocities acting on corresponding sail areas that would require 50 tons of counter force exerted by tugs and/or thrusters [formula: $(total\ area/1000) \times (V^2/18) = wind\ effect\ in\ tons$ where "V" is the wind speed in **meters/second**]:

1. 1000 square meters – 60 knots
2. 5000 square meters - 28 knots and

3. 10000 square meters - 18 knots

iv. Wind Force Chart



B. Non-Piloted Vessel Guidelines:

- i. It is recommended that all vessels develop, and follow, their own internal operating guidelines for inclement weather transits, including a provision for second opinion consultation.

4. Application of Equivalent Safety Levels: When a vessel master intends to commence a transit during inclement weather, at a minimum, the following equivalent safety levels should be adhered to:

A. Vessels 1600 GT or greater:

- i. When operating inside the federal breakwater be under the control of a USCG licensed pilot with the appropriate endorsement for the vessel and area of operation, and

- ii. Have shore-based radar immediately available to assist the vessel.
- B.** All vessel masters and pilots (if employed) should make a positive evaluation of the following:
- i. The number of vessels transiting within the harbor and expected traffic concentrations,
 - ii. Planned transit speeds appropriate for the prevailing conditions,
 - iii. The maneuvering characteristics of the vessel,
 - iv. The quality of the vessel's radar and navigation systems
 - v. The vessel's size and draft in relation to the area to be transited,
 - vi. Number, type and power of assist tugs,
 - vii. Number and power of bow/stern thrusters available,
 - viii. Maneuvering room at various stages of the transit,
 - ix. Quality of the vessel's bridge team
 - x. Special circumstances to be encountered (e.g. dredging projects, obstructions).
 - xi. Wind direction in relation to planned maneuvers.
- 5. COTP Notification of intention to move in inclement weather without applying equivalent safety levels:** Vessels 1600 GT or greater, that intend to commence a vessel transit during inclement weather without complying with item 5 (including shore based radar support) shall make the following broadcast to the VTS on VHF Channel 14 at least 15 minutes prior to getting underway:
- A.** *“Vessel name/call sign, making our inclement weather COTP notification, as per guidance within the Harbor Safety Plan, that we intend to transit from vessel location to intended destination“*
 - B.** In addition a safety broadcast will be made on Channel 13 and the vessel will coordinate its movement with the appropriate vessel traffic center.

