

IN IRONS

Paul Tara, 2014

Definition: A sailing vessel is “*in irons*” when she is trapped in the “No Go Zone”, unable to bear away and begin sailing. The term dates from when criminals aboard old sailing ships were secured to the deck with leg-irons, unable to move.

El Toros: Their catboat rig makes El Toros prone to getting in irons. Changes in the class sail measurement rules, and the practice of sailing with more rake have increased the tendency. This, coupled with the propensity for beginning sailors to pinch and lose concentration, often results in their being “caught in irons”.

Escape:

- Wait until the boat begins to make sternway.
- Push the tiller towards the desired tack (reverse helm).
- Ease the sheet.
- *Raise the daggerboard.*
- WAIT for the bow to fall off until the boat is on a reach.
- If the bow falls off in the wrong direction, don't worry.
- Center the tiller.
- Heel the boat to weather.
- Trim in the sail.
- Lower the daggerboard part way and start sailing.
- Fully lower the board.
- Trim in and steer to close-hauled course

Physics: With the sail luffing, the rig's center of effort is at the mast. Raise the board, and the center of lateral resistance shifts aft to the rudder. *The boat then essentially pivots around the rudder as the windage of the rig forces the bow off.* Heeling to weather moves the sail's center of effort to windward of the boat's centerline, which also facilitates bearing away. Experienced sailors often escape from irons without raising the board, just by heeling sharply to weather. But, as the breeze goes up, so does the likelihood of the board having to follow.