

## THE JC STRAP

Paul Tara, 2014

**Purpose:** JC (jibe control) straps are used to prevent accidental jibing in light air. They can also be used to keep the mainsheet out of the water when heeled to leeward. JC straps are unique to catboats that carry pronounced rake (OK Dinghies, Finns, and El Toros). Because of the rake, the boom always wants to be on centerline, the lowest point of its arc.

**System:** JC straps consist of a line led from one forward corner of the foredeck, up through a boom block, back down to a block on the opposite corner, and then back to a cleat. Cam cleats are preferred since they're not prone to recleating. It's important to have a shock cord link in the system with enough stretch to allow the boom to pass over centerline, otherwise the strap becomes a true preventer; the boat won't jibe or tack.

**Physics:** The distance from the boom attachment point to the corners of the foredeck is greatest when the boom is on the boat's centerline. As it moves off centerline, the distance from the boom block to the leeward corner decreases. At the same time, the angle on that side "opens" and increases the leverage. In contrast, the angle on the weather side "closes" decreasing the leverage as the angle of pull becomes more parallel to the boom (think of the spring on a screen door). When the strap is tensioned, the differential in leverage is what causes the boom to move out. It wants to relieve the compression along its length, and follows the path of least resistance.

### Guidelines:

- Use the JC to hold the boom out running in light air, especially when heeled to weather.
- Also to keep the mainsheet from dragging.
- Beware of being taken aback by a shift if sailing by the lee.
- A cam cleat is preferable to a clam cleat (it won't recleat).
- Always have a shock cord link in the system.
- Always leave the JC uncleated when not in use.