

From the Fleet Captain to All skippers...Hurricane season is now in full swing. This is a good time to check all your lines and be sure they are adequate.

Mooring Requirements

By Leathem Mehaffey III & Herman Tietjen

Following the damage done by the storm last year, and after numerous suggestions by members, Herman and I have designed a set of proposed minimum standards for dock and mooring Lines at the Poughkeepsie Yacht Club. We hope that you will look them over carefully and send us your comments. The intent is to begin a dialog that will ultimately result in an agreed-upon set of standards to which we will hold ourselves. The idea would be that such a set would be published and available to all members. It is not our intent to set up rules complete with an enforcement mechanism, but instead to have a set of standards which could be invoked by any member who sees that another member is endangering the safety of the club by substandard docking or mooring practice. We would like to have these standards in place by the start of this boating season if at all possible. Please send your comments to Leathem at mehaffey@vaxsar.vassar.edu <mailto:mehaffey@vaxsar.vassar.edu>, or by regular mail. Thank you.

Docks:

There should be at least four lines between the dock and the side of the boat adjacent to that dock. These lines should be of good quality nylon and should include:

1. Bow line: from the forward cleat on the boat forward to the to a secure point (bollard or cleat) on the dock;
2. Stern line: from the aft cleat on the boat rearwards to a secure point on the dock;
3. Bow Spring line: from a bow or waist cleat aft to a secure point on the dock;
4. Stern Spring line: from a stern or waist cleat forward to a secure point on the dock.

Optional lines for boats in slips include a line from the bow cleat and/or stern cleat on the side away from the finger dock to a secure point on the main dock.

All lines should meet minimum standards for diameter based on the size of the boat as per the following table from West Advisor, West Marine catalog 2000

Boat Length (feet)	up to 27	28-31	32-36	37-45	46-54	55-63
dock line diameter (inches)	3/8	7/16	1/2	5/8	3/4	7/8

Moorings:

All boats on moorings shall have at least one line from a bow cleat to the swivel found under the mooring ball. The length of the mooring pendant should be a minimum of 2.5 times the height of the deck above the water assuming that the pendant is attached to a cleat on the deck. (See "The Complete Book of Anchoring and Mooring" for more details).

The minimum breaking strength of the line or lines shall be based upon the size of the boat and the anticipated conditions (PYC standard should be as

Critical Dimensions ^a			Horizontal mooring load (lbs) ^b		
LOA (feet)	Beam (feet)		ABYC ^c	Hurricanes	
	Power	Sail	52 kts	64kts	100 kts
10	5	4	480	720	1,150
15	6	5	750	1,130	2,500
20	8	7	1,080	1,630	3,600
25	9	8	1,470	2,220	5,000
30	11	9	2,100	3,170	7,000
35	13	10	2,700	4,080	9,000
40	14	11	3,600	5,440	12,000
50	16	13	4,800	7,250	16,000
60	18	15	6,000	9,060	20,000

NOTES: a: use LOA or beam of boat, whichever produces the larger load
b: assumes freedom to oscillate and moderate shelter from seas
proportional to hull size c: source: American Boat and Yacht Council

for the ABYC) as follows:

Chafing gear: pendant must be protected against chafing where it passes through the chocks. Chafing under the mooring ball is usually prevented by the swivel provided by the PYC, but the attachment to that swivel should employ a thimble and should be checked periodically. If you choose to use two lines, beware of chafing of one line on the other as the boat swings with the tide, as well as the tendency for the lines to twist with consequent shortening, chafing and loss of strength. In any case, be sure that the breaking strength of the line(s) is (are) sufficient for your boat and expected.

In choosing the breaking strength of your lines, consider the following table (Wall Rope Technical

loss of breaking strength with various knots			
eye splice	10%	Square knot	50%
two half-hitches	35%	Overhand knot	50%
Bowline	35%	Fisherman's knot	55%