## AQEC MEMORANDUM 2014-002 BOAT CLEATS & TOW LINES

## **QUESTION:**

"For cleating a line, I looked at figure 7-39 in the Boat Crew Seamanship Manual (page 7-66), to see the USCG reference. I am alerted there are some local adaptations requiring more than the turn around a cleat as shown in 7-39. Are you aware of any and the basis for them? This is important as the cleat that holds the 2 and 3 line is easily overwhelmed with excess turns."

## AQEC/SNC RESPONSE:

Cleating the line on a boat cleat has been the subject of controversy for years. Notice the two type cleats used on today's vessels.



If you google Boat Cleat/ Images you will see over 100 types of cleats.

The USCG vessels are considered standard vessels and use specific type cleats and thickness of lines for the type cleat on the vessel. The USCG Auxiliary vessels are considered non-standard vessels and use a variety of cleats and different type and thickness of lines.

Auxiliary should not be penalized for using the method in the BCSM (page 7-66), although I have seen a lot of slippage using this method. In most cases, the crewman shortcut the task causing slippage. When you put strain on a line you can get slippage if not made fast to the cleat properly and you have to keep adjusting the lines. I have seen boat crews keep adjusting lines for 15-20 minutes (not exaggerating). If you don't get the result you need, try another method that works or a line that fits the cleats on the boat.

The problem comes in when a line under strain separates and the bows or other lines separate and the vessel is in trouble. If you can't get the vessels straightened out or get the problem corrected, it could be a failure. In most cases the Coxswain didn't watch how the Crewman was making the line.

The goal is to put the lines on once and never have to adjust any line. Auxiliary small boats would be best served using 3/8" nylon line or whatever the cleat can handle. Recommend the Coxswain perform port & starboard turns to assist the crew tighten the lines.

I have seen good results using a round turn to establish a firm base, one figure 8, and then another round turn (wrap) to secure it. You should not be penalized for using this method. If you have to put two lines on one cleat, put the one that most likely will need to be adjusted on top.

Dropping the tow for a free approach is in the Coxswain Qualification Guide and described as an acceptable method to use, as well as, exchanging a different line (bow) as a substitute for the towline. Pass the line to be used in place of the towline and get it secured before removing the towline. Next, put on #2 line and then move the towline out of the way. The danger to dropping the towline for a free approach is that you no longer have control of the vessel in distress and may have two boats in trouble versus getting the distressed vessel out of danger. We encourage Aux boat crews to swap a new bow line to use as the #1 line to remain in control of the distressed vessel. For a side tow, we prefer a #1, #2 put on headway (GO or engage) method and get the boat out of danger and then secure lines #4 and #3. It all depends on the circumstances. Putting on #1 and #3 lines would be the preferred for backing a vessel out of danger. We frequently see Coxswains insist on hooking up all the lines as specified in the Boat Crew Qualification guides putting themselves in danger (especially when wind and current are factors) when the alternative #1 and #3 would suffice.

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## **EXAMPLE:**

Towed boat on port side of towing vessel.

Put over #1 (bow) line. Look at the sterns. If there is 2 feet between sterns, let out 2 ft @ bow before making it. It will close the gap at the stern.

*Put on #2, put on forward way and turn to starboard (sterns come together).* 

Put on #4 while in turn.

Put on #3 when making forward way (about 3-4 knots). This will take slack out of #3.

Come down, turn to port, and check line #1.

Check all lines. If done correctly, you will not have to adjust any lines.

If the towed vessel is on the Starboard side, reverse above directions.

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