

# Vincent Pica Chief of Staff, First District, Southern Region (D1SR) United States Coast Guard Auxiliary

Coast Guard Aux NEWS >

July 25, 2012

## Happy Trails While Trailering Part I

### By Vincent Pica

We've written in the past about commissioning (making ready) the boat for the summer months. And you may recall that we started with making sure the trailer was capable of safely transporting your boat from the driveway to the boat ramp. This column expands considerably on that, now that the summer is in full swing. Since this is a topic that can take up lots of space just due to safety precautions, this is Part I of a two-part series.

# Safety First

I have an uncle who drives his boat pretty hard -- WOT (Wide Open Throttle) and dead-stop are his two favorite speeds. As you might expect, the boat is wearing out around him from stress and strain. When he complained to me about it, I said, "If you constantly drove your brand-new car at full speed over a bumpy road, would you be surprised that it might start to shake loose?" He said, "hmm . . ."

That started me thinking about trailering. When you are driving your boat over many types of road (how about those winter-created pot holes?) at relatively high speeds, stresses from over-the-road travel can be more punishing than normal operation.

A boat is designed to sit in water, along her waterline. While the manufacturer may even put some markings along the waterline that say "trailer strap goes here," nothing "extra" is there; it is simply a mathematical recommendation about the weight displacement of the boat. And that is before you added all that gear.

Trailering is, by its nature, more stressful on the boat than riding at anchor.

Start with making sure that what the boat sits on isn't adding to the stress. You don't want your rollers or bunkers stressing, scratching or gouging the hull. Make sure the tie-downs (and engine support) do not permit the boat to bounce on the trailer. How can you be sure? Well, you aren't going to be able to lift the boat up to see. It's too heavy by far.

Unfortunately, the only way to be sure is by testing. Have someone follow you over a

course and watch the boat. Speed limit only! If any air shows, stop and adjust the straps. Then, once all is secure, make some marks or apply some tell-tales so you can consistently have the boat sit snuggly on her trailer.

Be sure she is sitting properly in the first place. What does that mean? No more than seven to 10 percent of the total weight of the boat should be on the trailer "tongue" - the part that attaches the ball and coupler together. This means that a 3,000 pound boat, including engine, cooler, etc, can have no more than 210 to 300-pounds on the tongue.

Well, how do you tell that? You'll need a couple of bathroom scales and a strong friend. Each of you stand on the scale while lifting the tongue together. Note the combined weight. Step off, weigh yourselves and subtract. If the resulting numbers add up to more than 300 pounds, the boat is too far forward. If the final figure is less than 210 pounds, it is too far aft.

Why is that important? Too much weight at the back (too light at the front), will tend to pry your car's rear tires up. That's less traction than designed by the manufacturer. Too much weight on the tongue (too heavy at the front), will tend to pry your car's front tires up. That's less steering control than designed by the manufacturer. Neither is going to be good for you.

The car must be properly configured with an engine powerful enough to handle the load and a transmission designed for towing. The vehicle may need a heavy duty cooling system and special brakes as well.

Make sure a load-bearing hitch is attached to the frame, not the bumper. The tow ball and coupler must be the same size, exactly. The boat may be properly secured to the trailer but the trailer has to be properly secured to your car or you may see her pass you on the highway.

The safety chains are attached and crisscrossed under the coupler to the frame of the tow vehicle. If the ball and coupler were to break apart, the trailer would fall into the chains, which now are a safety net.

#### Underway, Making Way

Now you're ready to go. Before going too far, be sure that the lights on the trailer function properly. Remember, each time you come up that boat ramp, your lights have been in (cold) salt water. So do your brakes. Check them, too. Drive forward and apply the brakes several times at increasing speeds to determine a safe stopping distance.

Check tires (including spare) and wheel bearings for proper inflation. Remember trailer tires are likely to be far smaller than car or truck tires. This means that they will be spinning faster just to stay in place. Faster equals more stress on the bearings.

And don't forget that the aft-most set of tires will be in salt water at least twice a day when you go boating.

Part II will give you things to think about at the launch ramp.

BTW, if you are interested in being part of USCG Forces, email me at <u>JoinUSCGAux@aol.com</u> or go direct to the D1SR Human Resources department, who are in charge of new members matters, at <u>DSO-HR</u> and we will help you "get in this thing..."