

August 6, 2008

Improving Your Fuel Efficiency On The Water



Can there be a timelier subject than improving your fuel efficiency on the water? At \$5.25/gallon in places, fuel bills of \$200-\$300 per outing can be the norm. Here are some tips to help you enjoy the waters-and not break the bank.

Lighten the Load

Would it be any surprise to know that heavier boats need more fuel at a given speed to move through or over water? Why lug around gear that you don't need? Just get rid of the gear that is sitting around gathering mildew. Do you have an on-board water tank? I had a 25' Chris-Craft that had a 40-gallon water tank-which I kept full whether I was going out for the afternoon or an overnight. At 8-plus pounds per gallon, this was like having a lineman from the Giants sitting on my boat! Fill up the water tank where and when you are going to use it...

Name that Tune

An engine tune-up is definitely in order. Even at \$90/hour for service work, a two-hour tune-up can pay for itself before the summer is out. Your prop is the next most important item to tune. If

your prop (pitch) is too large for the boat, the boat will waste energy. A ding in the prop can eliminate as much as 10 percent in fuel efficiency. Think of it this way: You ask for 20 gallons and the fuel tender puts 18 in your tank, pours 2 gallons down the fuel storage sump and charges you for 20 gallons.

Bottom's Up!

A fouled bottom can cut your fuel efficiency in half. It is like dragging the anchor as you motor. It reduces hull "lubricity" versus the water and, if the hull is fouled, the running gear is probably too. There are plenty of eco-friendly bottom paints now, so keep the bottom clean and painted.

Speed Kills (Fuel Efficiency!)

I have a 25' boat and she goes considerably faster than 6.7 knots. As our power boats go faster, the "V" comes up OUT of the water-we convert from a displacement vessel to a "planing" vessel. But at 6.7 knots, I'm burning 2 gallons an hour. At 25 knots, I'm burning 10 times that but only going about four times as fast. It can get very complicated from here when we start talking about bow waves and stern waves interacting and the trim of the engine versus the waterline of the boat, etc. Suffice it to say this: You'll use less fuel at 20 knots than at 25 knots and you'll use less fuel at all speeds if you reduce your wetted surface by using your trim tabs and reducing the weight of the boat so the "V" doesn't sit so deeply in the water naturally.

Lastly, install a fuel meter in your boat. If all our cars and boats had them (anybody in Washington DC listening?), our national fuel consumption would improve overnight! Nothing slows a boat down from 25 knots to 15 knots faster than realizing that you're burning 20 gallons an hour (\$100!) at 25 knots...

BTW, if you are interested in being part of USCG Forces, email me at JoinUSCGAux2008@aol.com or go direct to MaryJo Cruickshank, who is in charge of new members matters, at FSO-PS@emcg.us and we will help you "get in this thing..."