

FIRST BOAT

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

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Time and Tide Wait for No Man or Woman

In this weeks column, Vin Pica reads between the lines of your favorite tide table ...

Guest blog by [Vincent Pica](#)



A 50 ft cabin cruiser runs aground in Boston Harbor in August, 2010.
U.S.C.G. photo.

Whether you get your local tide tables from the internet or the local newspaper, it's probably wise to review a few essentials. First, don't mistake precision with accuracy. What??? Just because we can predict the tides to the second as far into the future as you could imagine (after all, we certainly know the rotations of the Earth, Sun and Moon to exquisite precision), it doesn't mean that the times are accurate! Why aren't they? "We can put a man on the moon..."

All about the weather

Yes, we can but, first, the weather matters. Picture the inlet that feeds your local bays as a straw between one big balloon (bays) and one REALLY big balloon (the ocean.) If there are strong winds from any heading against the orientation of the inlet, someone is blowing back out the straw while the tide itself is trying to come through the straw and into the bay. What happens? The tide wins but it arrives later than the predicted computer model that was based on the

celestial relationships between the Earth, Sun and Moon. Go through all the combinations about wind with the tide (outgoing/ebbing), wind against the tide (incoming/flooding) and you can see. *Times are approximate...*

Watch the range

Secondly, the tidal range (height, top to bottom) varies too. Wait! What about all those computer models? We know when the Sun is lined up with the Moon, creating “Spring” (higher highs, lower lows) tides (new and full moons). We know when they are exactly NOT lined up, i.e., at right angles to the Earth, creating “Neap” (lower highs, higher lows) tides (quarter moons). Well, have you ever heard the weather man say, “There is a high pressure area coming...” Well, air has weight (14lbs/square inch at sea level.) If pressure increases, it matters! It lies on top of the water like a blanket. Similarly, and with much more to worry about, if the weather man says, “There is a low-pressure area building...”, be ready for strong winds (filling the vacuum/imbalance between “normal” pressure and the low pressure) and higher tides. Someone took off the heavy blanket and replaced it with a sheet! By the way, if the wind is starting to rise, face it and point straight out to your right. If you are pointing towards water, start to double your dock lines. That means the center of the storm is over water, from whence it derives its power... Think about it. If you live in the east, face northeast and point straight out to the right. What are you pointing at? The North Atlantic... Ever wonder why Nor’easters are so powerful?

Same bay, different day

With all that as background, one last thing... Tides change at different times in the same bay... Oh, come ON now! Well, think about it. When the tide starts to form outside an inlet, it piles up outside and eventually has to work its way around any shoal islands just inside the inlet. Then it has to work its way across the open expanses of a bay, which lowers the pressure behind the tidal surge – and slows it down. Think of a garden hose with your finger over the end (pressurizing the flow) and then taking it off (just letting the “natural” water pressure flow out of the hose.) The wide expanse of the bay(s) takes some of the power out of the “straw” that is still being fed by the tidal surge...

So, what to do?

1. Don’t mistake precision with accuracy. These are estimates, good estimates, but estimates nonetheless. Use your “seaman’s eye” to anticipate how the times might be effected by the weather.
2. Be aware of the Moon’s phase in re the range of the tide. She is beautiful indeed and will have her way...
3. Remember to adjust the tide table times for your locale. If the table of offsets isn’t close enough to your home port to give you comfort, take some time and watch the tide in your creek or at your dock. I live about half way between Moriches Inlet and Potunk Point, which are ~2nm apart. The tide reaches me 75 minutes before it reaches Potunk Point.

Related post on *the Daily Boater*: [When Your Boat Runs Aground](#)

BTW, if you are interested in being part of USCG Forces, email me at JoinUSCGAux@aol.com or go direct to the D1SR Human Resources department, who are in charge of new members matters, at [DSO-HR](#) and we will help you “get in this thing...”