ORR-Ez Custom Ratings Explained

VPP-based rating systems like ORR-Ez have the capacity to generate custom ratings tailored to the particular course and wind conditions predicted for and encountered on the actual racecourse. Thus, we are not always limited to the standard courses such as Random Leg or W50L50, nor to the standard Light/Medium/Heavy wind ranges.

The table below shows the custom distribution of wind speeds and points of sail used to create the custom ratings for the 2019 Gulfport to Pensacola Race. Note that each line is referenced to a leg of the race.

For example, the leg from the start to Ship Island (noted as legs 1 & 2) was a shallow beat, with every boat having to tack at least twice. That leg totals about 10% of the course distance and the wind ranged from 10 to 16 knots. Next, the leg out to the Gulfport sea buoy (leg 3) was a close reach, with a bit less wind, 10–12 knots, and includes about 8% of the total course distance. And so forth to the finish.

Of course, each boat encounters different specific conditions at different times and each crew may have varying perceptions of those conditions. Some may disagree with certain specifics of the table, but in the end, it's still an improvement over using a standard course such as Random Leg. As the saying goes, "Don't let perfect be the enemy of good."

Finally, you may observe that, as boats spread out over the racecourse, they will likely encounter different wind speeds. This is true, and hypothetically, each boat could have its own custom table designed for the exact conditions she alone encounters. But that would be a lot of work for the Race Committee! Fortunately, there is a much simpler way to account for these variations.

We use time-on-time (TOT) scoring which inherently takes into account changeable conditions. Under TOT, each boat's performance is expressed as a ratio of her speed against the rest of the fleet. If the race speeds up, the time allowances get smaller and, if the race slows down, logically, the allowances are larger. This goes a long way towards correcting for changing wind speeds. Under time-on-distance (TOD) scoring, the time allowances are fixed to the course length and do not change at all with the conditions.

We feel that custom ratings give us the ability to get the most out of what the ORR-Ez VPP rating system has to offer.

ORRez Boat Polars

2019 GULPORT to PENSACOLA

100.0%

		0%	10%	27%	56%	7%	0%	0%
	TWS	6.0	8.0	10.0	12.0	16.0	20.0	24.0
	TWA							
leg 1,2	VMG Up			3.0%	5.0%	2.0%		
leg 3	52			4.0%	4.0%			
	60							
	75							
leg 4	90				25.0%	5.0%		
leg 4	110			5.0%	7.0%			
leg 5	120		5.0%	5.0%	10.0%			
leg 5	135		5.0%	10.0%	5.0%			
	150							
	VMG Dn							

			TOD	TOT
ATLANTIC UNION II		EZ10560	456.8	0.953
AURORA		EZ10626	519.6	0.838
FIDELIS II		EZ10616	496.0	0.878
FORERUNNER	J105	10623.0	506.0	0.860
FRANCIS		EZ10614	560.8	0.776
FREE SPIRIT		EZ10529	574.6	0.758
GHOST		EZ10516	556.9	0.782
GREAT ESCAPE		EZ10545	464.0	0.938
HOT PURSUIT		EZ10508	440.4	0.989
JACKRABBIT 2	J30	EZ10505	560.6	0.777
LADY GRAY		EZ10615	469.2	0.928
LIVE WIRE		EZ10628	415.3	1.048
MYSTIC		EZ10498	522.6	0.833
SKYLARK		EZ10538	467.1	0.932
SOUTHERN RAIN		EZ10627	527.2	0.826
TIARE		EZ10514	498.9	0.873
TIGI TOO		EZ10480	533.7	0.816
WAR CANOE	MELGES 32	EZ10506	442.9	0.983
ZYDECO	J111	EZ10527	463.7	0.939