

Episode #42 – Dancing with Squalls

Introduction: Roller Coaster with Sails

My favorite definition of a squall? “A sudden violent increase in wind speed that is commonly associated with torrential rain showers or thunderstorms.” I mean, come on—that sounds less like a weather event and more like a Six Flags ride no sane insurance company would cover.

Let me preface this: I am not a meteorologist. I’m just a sailor who’s been slapped, spun, and soaked by hundreds of these watery tantrums. Today I’ll talk about spotting squalls, preparing for them, riding them out, and—most importantly—coming out the other side in one piece with a story to tell.

Over the last few years, I’ve sailed from Mexico to Fiji, from the Marshalls to Palau, riding the trades for a solid year and a half. And let me tell you: where there are trades, there’s warm, moist air—and where there’s warm, moist air, there are squalls popping up like unwanted party guests.

Generally speaking, a squall throws 15–20 knots of wind on top of whatever you’re already sailing in. So if you’re trucking along at 20 knots of true wind, you might suddenly be dealing with 35–40 knots. They’re short-lived—5 to 30 minutes, usually—but intense. And if you get caught in a squall line? Buckle up. You’re in for the long haul. The strongest true wind I’ve personally seen? Forty-five knots. Let’s just say I felt very small and very humble.

And here’s the kicker: they don’t come when it’s convenient. They come at 3 a.m. when you’re half-asleep and wearing socks that don’t match. Which is why practice—reefing both day and night—is the only thing that saves you from chaos.

Radar: The Crystal Ball

Radar is your best friend when it comes to squalls. Without it, you’re stuck squinting at the horizon and guessing whether that menacing puff of cloud wants to ruin your night.

Normally, we use radar zoomed in a couple miles to spot sneaky fishing boats, rocks, or random obstructions. But at that range, squalls don’t even show up until they’re practically smacking you in the face. You’re already in it. And since wind and rain usually arrive before the squall itself, that’s... less than ideal.

My rule: while close to shore, every half hour I zoom out to check for weather. Once I’m offshore, I tend to keep the radar zoomed to 12 miles. At 6 knots, that gives me plenty of time to adjust course if I need to.

Depending on your setup, squalls show up differently on the screen. On my AXIOM PRO 12S,

I get these blobby little monsters that look like ink stains racing toward me. No matter how fancy your radar, the important thing is this: radar shows you size, speed, and direction. But it does not tell you what's inside. And I always assume the inside is angry.

Preparation: Before the Beast Hits

This is the make-or-break moment. Squalls are violent. Preparation is sanity.

1. Don't panic. Even for seasoned sailors, it can be scary.
2. Reef early. Don't wait for the first 40-knot slap. Reef before it hits.
3. Know your boat. On Hold Fast, double-reefed main plus jib means I can ride out 30 knots apparent while running. Your mileage may vary.
4. Brief novices. For new crew, I strap them in and out of the way. I don't need to add "man overboard" to my to-do list.
5. Engine on standby. Running and ready. Peace of mind, potential lifesaver.
6. Secure the deck. Cushions, poles, solar panels—everything. A squall will happily fling them into orbit.
7. Gear up. PFD, gloves, foulies.
8. Mask at the helm. Laugh all you want—when rain is blasting sideways like bullets, goggles make you the smart one.
9. Hand steering only. This is not autopilot territory. You need quick reactions and steady hands.
10. Tactics. I'm a fan of "reef and run." Fall off to 140–150 apparent and ride it out. If you go nose-in and aren't reefed properly, you risk getting knocked flat.

Signs of an Approaching Squall

Squalls don't sneak—they send invitations:

- * A sudden chill down your back.
- * The wind drops to an eerie calm.
- * Whitecaps start building on the horizon.
- * The sea state shifts.
- * Then—like a horror soundtrack cue—the wind howls through your rigging.

And remember: the rain and gusts can start miles before the squall cloud is overhead. By the time it's on top of you, your options are limited.

While in the Storm

At this point, you're in it. You've done your prep, your sails are reefed, your crew is briefed. Now it's just about staying sharp, steering steady, and avoiding any "oops" that could turn bad into worse. It's loud, wet, and messy, but it's temporary. Think of it as the ocean's version of a CrossFit workout—intense, sweaty, but over fast.

Aftermath: The Hangover

Congratulations—you survived. You’ve got a story to tell, the adrenaline is still pumping, and the sea feels like it just pulled a prank on you.

But now your wind speed is probably cut in half, your boat speed sluggish, and your rig still reefed down. Decision time:

* Daytime: I’ll check radar. If I’ve got at least 10 miles of clear air ahead, I might shake out a reef. At 5 knots of boat speed, that gives me about two hours of peace—if the weather doesn’t spin the wheel of chaos again.

* Nighttime: I’m much more conservative. Re-rigging on a wet deck in the dark? No thanks. I’ll usually keep whatever reef I had in during the squall and pull out the jib. If I’m making 5 knots, I’m content. Greed is punished at sea. Murphy’s Law applies the instant you get ambitious.

Summation: Squalls as Teachers

At the end of the day, squalls are nature’s way of reminding us who’s really in charge. Preparation is everything. Once you’re in it, it’s too late to adjust. Be proactive, not reactive.

And when the storm passes, you’re left with two things: a calmer sea... and another story to laugh about later at the bar.

Because out here, squalls aren’t just storms. They’re rites of passage.