



***SLACKTIDE's* Sea Trials: Breaking in our T26x7**

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Part 3 of 4

Leg II: Baranof WarmSprings to Haines – Early July to Early September 2010 -- ~237nm

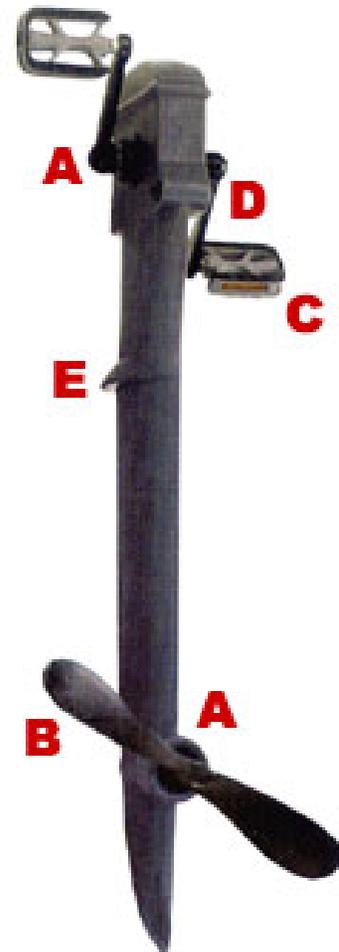
“Summertime, and the livin' is easy...!”

This leg was exciting for us. For once, we had no schedule ahead of us. SLACKTIDE was substantially complete and her initial bugs worked out. The long stretch north, with pokes into side-arms would cover one of the most beautiful and challenging straits in the world (or so I hear from any number of globe-trotters).

Our job finished end of April, and we spent May and June on various projects, including a bracket for the SeaCycle. This, it turns out, can push us at 2.3kts (by GPS) in flat water on a sprint, and 2.0kts at an easy pace. We can make a bit of progress going straight into about 10kts of wind, but we avoid it; very little progress and, if you blow off broad-side, you've lost control. Mostly we wanted it for long stretches with fair tide but no wind, and as an auxiliary, it's been quite successful. I like it and Anke *loves* it!

We headed north along Chatham Strait / Lynn Canal, which is a pretty unique body of water. It's a straight-line fault, opening onto the Pacific Ocean at its southern end. Up to 600ftm deep, it runs about 200nm north between giant islands before terminating in a fjord-like cul-de-sac in the North American mainland. Three major channels join at right angles – two from the open Pacific and one from another system of inner channels to the east. Spring tides range to 24 feet, generating strong, often conflicting

currents. Several major rivers, many of them glacial, empty into the system. Most of their fresh water, often augmented by torrents of rain, stays near the surface in a brackish, southbound layer, often indifferent to an incoming tide. Winds headed to and fro' the interior of Alaska and the Yukon (Canada) can be fierce, exceeding 100kts. Or not. It might be a mirror.



The Amazing SeaCycle Drive Unit from Meyers Boats!

On this summery, north-bound leg, the weather was mild. Too mild. Headwind, or calm and a foul current. The SeaCycle (using the largest available propeller) is a bit like cycling with a low-pressure tire. It took about a week to build our legs and lungs to the task. It gave us a work-out, but, with it, we we covered something in excess of 40nms on this leg. The SeaCycle Unit is mounted aft and outboard, similar to an outboard motor. We seized a bicycle seat to the boomkin and sit outboard to pedal. The cyclist steers with their right hand on the back of the rudder. With no wind, forces and motion are small, so it all works comfortably. I sweat like a pig (Anke glows), so we carry a large umbrella for rain... raingear would fill up and drown us!

One evening, we were not too far shy of a nice anchorage between *wall hangs* along one of the marbled and cliffy shores of W. Chatham. It was dead calm, and the tide had turned against us, but we were making progress with the SeaCycle. For fun, we decided to see how far we could get. We worked the eddies and pushed on from point to point until we were at literally the last corner before shelter. But we finally had to give it up and anchor a few hours, until the far side of max ebb. Chances are, if we had

run out a ways from the point, we could have continued in lesser current. Too pooped to try it, though!



Slough off Chatham Straits

Eventually, we got enough wind (up to 30kts) to get a better feel for SLACKTIDE's sailing qualities. Her motion, even in Chatham slop, is 'shippy', rising buoyantly to headseas, yet without any snappiness to her motion.

Her long chines, hard and straight, make for great tracking. The price is that she's not as quick to turn as was our last boat – a slab-sided sharpie whose full rockered bottom lets her spin on a dime.

Our *off-centerboards* are just like leeboards, but have a cable running outboard of them to prevent their winging out on the windward side. Thus, they can be left down without tending between tacks (did I mention that I'm lazy?). They each hang from a cable led through a block, and are secured in place with a positioning line. To stow, they are lifted clear of the preventer cable and moved dead aft, where they are secured in near horizontal position, well clear of the water.

Originally, I'd thought that, being mounted on travellers, they could be positioned aft to prevent rounding up to gusts when running in heavy winds. So far, this hasn't seemed necessary. We can hold a steady course with no tendency to strain the tiller, much less overpower the balanced rudder.

SLACKTIDE's sails are of higher aspect ratio than our previous boats', so there is less weather helm. The top panels (last sail standing) have an unusually large hollow to the leach, reminiscent of Polynesian crab-claw sails. This brings inboard the Center of Effort of the top panel, further reducing weather helm.

Running or reaching in high winds is a comfortable, controlled toboggan ride in sustained winds to 45 knots. As with most sailors, it's our preferred point of sail, and a fair slant is worth waiting for.

Into the wind, our amount of heel averages around the designed target of 15 degrees, the point at which the horizontal side boards immerse and the windward chine is at water level. Barges have high form stability, and she has no problem keeping her feet. The windows were fine, even in the blows. We only once ran the lower edge of a side window into green water. Side boards immersed is time to reef.¹

We're not 'close-winded', probably pointing around 55 degrees off the wind, a bit more or less depending on wind strength. Like most quadrilateral rigs, she prefers to sail free. If the water is relatively flat (to about three foot seas), tacking is fairly reliable, even with only one of our two boards down. In rougher water, we start missing tacks, even with both boards down.

There is a reliable tacking procedure, for which we haven't yet encountered a ceiling: put the helm down and round up; if stalled, reverse the tiller and back the foresail to leeward (this backs our stern to leeward and sails the bow across the wind); fall off and trim for the new tack. So far this has worked in all conditions without fail. A smidgeon of ground is lost as we back down on the reversed rudder, but it's far less than when wearing around.



Working Up South Arm

A highlight of this leg, for us, was our first swing through Kelp Bay and it's South Arm.

The Bay is shoal and rocky with myriad islands, riddled with coves and tidal waterways and teeming with wildlife. Playing the currents and poking into its mossy nooks and crannies could while away

¹ Personally, I consider it dangerous to let a slab-sided, keel-less boat's chine fly (clear the water). While boats of this type are *more* stable than all others of similar length and overall beam, their stability *curves* are quite different. There can be an abrupt transition between heeled-far-over and beam-knockdown. Equivalent flared hulls are more tender and will dump sooner, but give more warning on the way to critical.

manys the happy month!

South Arm is a steep-sided fjord among emerald slopes o'er-topped by rent out-croppings of young rock. At its head, dramatic, glaciated mountains, threaded with gleaming, silver torrents, rise from flats thick with wildfowl, bear and deer.

Working our way north, we poked into shoal, puddle-havens, ran along toothy reefs dividing smooth pebble beaches of jade-like mud-stone or granitic blue. Anchored in bights or river-mouths to watch brown bear fishing the thronging runs of salmon.

We swung into Icy Strait and picked up my Brother, Mark, in Gustavus. He sailed with us to Juneau for supplies, then north to his home in Haines. We were still on fine terms after three weeks... a testament to the spacious, barge interior! We got a good mix of weather, fair and foul; at one point pedalling nekkid below Chilkat glaciers at the beginning of the best Indian summer in memory.



Sitting as Planned – Mud Bay

In Mud Bay, Haines, while visiting with family, we got another hard-knock lesson in anchoring-in-position and a good test of our trampoline bottom.

Mud Bay opens onto Lynn Canal, thankfully at an angle to its general run. Its a shallow bay that, at low tide exposes flats punctuated by *glacial erratics* (boulders of various, inconvenient sizes). At about 13 feet above zero tide datum, there's a low, grass covered ridge, which we like to anchor behind during an extended visit. It's a smooth patch, but without much swing room to the next rocks, we have to lock in our position.

We had been setting three anchors – two off the bow toward the unprotected opening to Lynn Canal and one off the stern, into the apparent safety of the Bay's closed head. This aft one is actually two, in line, and we dug them in by hand.

One fine, blustery day of a spring tide (meaning we're going to float and float high) we leave SLACKTIDE for the day. The wind was NE, coming out of the bay with very little fetch. We had a fine time, and, though it's white-capping in Lynn Canal, we're unconcerned. But, returning home at dusk, we top the ridge overlooking Mud Bay to find ourselves leaning into probably 45kts with higher gusts.

Mmm... she's sitting dry, but looks a little funny... not sitting level. Not at all.

Turns out we're sitting on top of that grassy ridge. Specifically, our Ararat is a sharply pointed boulder, about two feet tall hidden in innocent looking grass. Our stern anchors have dragged, apparently at the top of the tide, and we must have spent some little time being pounded on that granite peak! Being sharp, PSIs skyrocket into a tightly focused point of impact.

Inside, we had cracked an inner veneer directly over the rock tip. Not too serious, but that certainly took some doing. It was about one foot aft of the galley floor timber, a relative hard spot. If it had been farther from that hard-spot, deeper into the middle of the cabin sole, and I doubt we would have had any damage whatsoever.



“Mud” Bay looking Southeast toward Trouble



Hunkered behind Rock-in-Grass Hummock

A trampoline structure distributes force away in all directions from a point-of-impact, until some rigid, supporting structure is reached. I'd bet a dollar that a rockered bottom, inherently more rigid, would have fared worse, absorbing the full impact locally.

A three anchor, bow and stern system allows up to 120 degrees between anchors. In practice, the angle between bow anchors may be less, widening bow / stern angles. Strong beam winds (common in Mud Bay where they can exceed base wind speeds by quite a measure) increase a vessels' windage dramatically, as the hull can't swing in line with the wind. Broad angles between anchors multiplies the force on each (similar to the physics used while 'sweating' a line home to multiply a sailor's power).

Moral: Bury anchors *fully* in cobbly bottoms and splay out *four* anchors (reducing the average angle between each to 90 degrees).

Oh well... a cheap lesson is a good lesson!

So we didn't encounter harsh conditions on this leg, but she passed what most pleasure boaters will bide with flying colors. As a cruising home, she was proving comfortable underway, even with company.

But the last leg will tell...

This four-part series of articles includes the following:

- Introduction to SLACKTIDE and Living Aboard
- Leg I – Sitka to WarmSprings Bay
- Leg II – WarmSprings Bay to Haines
- Leg III – Haines to Tenakee Springs

Please check back at this site for the rest of the series.

SLACKTIDE and other designs, along with more articles and FAQ pages, can be found at www.TriloBoats.com