

KAYAK REVIEWS

Pace 18

by Tiderace

The design brief for the Pace 18 was straightforward enough: derive as much speed as possible out of an 18-foot-long hull and still keep it as a seaworthy Fast Sea Kayak (FSK) as defined under the Sound Rowers guidelines. Between its plumb bow and transom, the waterline length is maximized and the rounded cross section complements this by reducing wetted surface area as much as possible. Though designed to be paddled at 5 knots and above, the traditional expedition hatch and bulkhead configuration give the Pace 18 an alpine-style touring capability, while the keyhole cockpit with thigh braces, molded seat and backrest give the kayak a rough-water capability and easy rolling position. The pedal-operated rudder takes care of steering while the paddler focuses on an efficient forward stroke. Suitable for racing, fast training or lightweight touring, the Pace 18 fits paddlers up to 6' 2" and 220 lbs.

—Aled Williams, designer

REVIEWERS

MC: 6' 1", 160-pound male. Day trips. Winds averaging 5-15 knots, peaking at 30 knots during a sudden storm, waves to 2 feet. Cargo: 5 lbs.

TE: 6' 1", 200-pound male. Day trips. Winds to 20 knots, waves to 3 feet and cresting. No cargo.

Length overall	17' 11"
Beam	21 3/8"
Volume	13.34 cu. ft.
Cockpit size	16 1/2" x 30 1/2"
Cockpit coaming height	
Forward	12 3/8"
Aft	7 1/2"
Height of seat	1"
Weight	56 lbs.

First Glance

Tiderace's Pace 18 "looks fast with design elements you might see in a racing boat. The build quality is very high and all components felt sturdy" (MC). "The hull and deck are smoothly molded and joined inside with black woven tape. The interior is free of snags" (TE). At 56 pounds the Pace 18 is "lightweight, especially for its size; however, it does not balance easily on the shoulder because the balance point is at the thigh braces and they're too sharp to place on the shoulder" (MC). "The toggles are set in from the ends; OK for a carry, not for holding the boat in surf" (TE).

Fit and Outfitting

"The cockpit is comfortable and roomy; I had no trouble entering or exiting, and felt secure when seated" (MC). TE had "just enough room for my size-13 neo booties, heels together and toes in contact with the deck." The seat is a slightly contoured composite base with a foam pad glued in place. TE "had no discomfort after a couple of hours in the cockpit. MC "found the seat to be very comfortable when touring and secure when edging or rolling." The padded backrest has a stiff plastic band bolted to the seat supports. The two bolts on each side fixed the band's position. A single bolt would allow the band to pivot; lines of holes allowed for adjusting its position. "In the fixed position, it was still comfortable and gave good support. The contact is down low, so mobility is unrestricted and an upright paddling posture encouraged" (TE). The foam-padded thigh brace flanges "are comfortable and effective, do not interfere with reentry and provide secure contact" (MC). They "made contact with my mid-thigh, just the right position for comfort. A little extra padding would make for a more positive grip" (TE).

The SmartTrack pivoting foot pedals are "solid" (TE) and "provided secure bracing. The position of the pedals was easily adjustable, though it requires opening of the spray skirt. The only negative was that the foot braces are rounded and somewhat uncomfortable after a few hours of paddling" (MC). "The domed pedals didn't offer a completely positive grip—I slipped off a few times" (TE).

Stability and Maneuverability

"For a kayak designed for speed, the Pace 18 is remarkably stable and comfortable—plenty stable for eating lunch or taking an occasional picture. The kayak is comfortable on edge, and dealt no unpleasant surprises" (MC). "The initial stability is a bit light, but not twitchy. The secondary would kick in before I felt unstable. In the waves I felt very much at ease and only once had to slap a brace to recover from a lapse in balance. Edging the 18 was easy and the secondary stability softened up only as the coaming came near the water. The stability profile is good for active paddling and steering without the rudder" (TE).

With the rudder retracted, the Pace 18 "tended to wander, especially when pushed hard for speed" (TE). "Without the rudder deployed, small waves tended to affect the



course. Deploying the rudder vastly improves tracking” (MC). The Pace 18 “is easily steered in calm conditions with or without the rudder. A 90-degree turn can easily be made by laying the kayak on edge and using some momentum and the paddle to initiate the turn” (MC). “Up on edge it turned surprisingly well while the rudder is up. The stern would skid around nicely so it was fun to steer. With the rudder down it was not as nimble a turner in tight quarters, but the steering was good for the long haul and for surfing” (TE).

Speed

“This kayak is impressively fast. Over 17 nautical miles in a variety of wind and waves, I averaged 4.4 knots. My all-out sprint speed on flat water was an impressive 7.4 knots, which makes this the fastest non-racing boat I’ve paddled” (MC). TE had “a cruising pace of 5 knots, an exercise pace of 6 knots and could sprint a short distance at 7 1/3 knots. The hull kept its trim well. For a boat targeting fast cruising, these numbers hit the mark well.”

MC was “profoundly impressed by the efficiency with which the Pace 18 cut through waves without significant pitching or spray. The ride was dry and comfortable. Waves that did make it onto the deck were quickly and cleanly dissipated, with recessed hatches that did not kick up spray.” TE noted “the recess for the forward hatch aimed spray right at my eyes. This contour of the deck could be changed to eliminate that effect.”

“Without the rudder there is a high degree of weathercocking, but the rudder corrects this easily. In most conditions this kayak is best paddled with the high-efficiency rudder deployed” (MC). “In wind and flat water there was a persistent tendency to weathercock, so I resorted to using the rudder. With a little chop, about 6 inches, I could see the bow release and blow downwind, and the boat was better

balanced. As the water got rougher—waves up to 3 feet—I could easily manage the Pace 18 with the rudder retracted” (TE).

The Pace 18 “surfs moderately sized waves with ease and assistance from the rudder. With larger waves the rudder becomes somewhat ineffective and it becomes more challenging to stay on the wave. The kayak’s speed makes it possible to get into position or catch up to boat wake and stay on the wave longer” (MC). TE found “plenty of speed for riding waves. With the rudder up it was hard to correct a broach. The rudder kept the stern from being pushed around and then I could catch waves and race along—great fun. On short boat wakes the rudder would lose its grip if I got high on the wave and then I’d lose the ride” (TE).

Rolling and Rescue

MC noted that “the thigh bracing kept me securely in place while rolling, and the low rear deck and back support allowed me to lie back. Once inverted, the Pace 18 requires better-than-average rolling skills because it is quite stable upside down.” For TE “the C to C and layback rolls were both very easy. The Pace 18 snaps right up. The good fit in the cockpit offers good control.”

“Wet exits and reentry were unimpeded by the cockpit configuration. The bow is easy to lift to drain water from the kayak” (MC). “Lunging back aboard the low aft deck was easy. I had to wiggle into the seat rather than drop, but it was still easy. Legs went in with only a slight lean back” (TE).

Cruising

The two main compartments and fore-

BEST FEATURES

- Speed
- Stability

TO IMPROVE

- Rudder blade length



The layout of the cockpit is simple and effective.

deck day compartment have hatch covers that are “very easy to use—some of the quickest to operate I have encountered—and provided an excellent seal. There were no leaks” (MC). TE also reported “all compartments remained bone dry after rolling.” The translucent composite bulkheads are sealed with caulk.

The Bottom Line

“The Pace 18 offers impressive speeds and cuts through waves with incredible efficiency. Its stability was much higher than would be expected, but the Pace 18 is still best suited to more advanced paddlers. This is a fantastic fast-touring boat that is also suitable for fast day paddles, fitness paddling and racing” (MC). “With the Pace 18, Tiderace hit the mark nicely for a fast cruising boat. The stability is reassuring and the speed impressive” (TE).

DESIGNER'S RESPONSE

We would like to thank *Sea Kayaker* and the reviewing paddlers for their assessment of the Pace 18. The Pace 18 is the first in a new generation of kayaks for Tiderace that are rudder specific. Of this new family, the Pace 18 is the only race-specific model and one that’s designed to fit within specific confines of a class measurement. The aim for the Pace 18 was to develop a hull shape that was competitive against all other 18-foot racing sea kayaks while also capable of being easily controllable in moderate to rough sea conditions. This capability was proven by the reviewers during the test.

The Pace 18 employs a core laminate throughout both deck and hull that significantly improves boat stiffness. The deck and hull are bonded together with an overlapped seam reinforced inside and out with glass tape. This combination also contributes to boat durability and stiffness.

We are pleased that the reviewers appreciate the ergonomics of the

cockpit design as this is one key aspect that we pay particular attention to. With a little more setup time, the back band can be adjusted to suit most people’s needs.

We advise paddlers to use the rudder at all times when forward paddling. The Pace 18’s hull and side profile has been developed specifically to counter weathering when the rudder is held in the “straight ahead” position; adjustments are necessary only to change course. A larger rudder blade is available from SmartTrack and would be the preferred option for paddlers who specialize in downwind runs. For the majority of paddling time, the standard fit blade proves to be the best option as it has the least drag.

The Pace 18 is proving to be a competitive boat with its stable and efficient hull—thanks to *Sea Kayaker*, the review’s Bottom Line says it all!

-Dave Felton, Tiderace Sea Kayaks

KAYAK REVIEWS

PACE 18 MANUFACTURING DATA

Designed: 2012

Standard construction: G-Core Lite (re-viewed): Biaxial glass cloth encapsulating the core material, epoxy resin.

Optional construction: G-Core: biaxial glass cloth encapsulating the core material, epoxy resin, 56 pounds. Carbon-Pro: inner layers of carbon cloth, glass outer layers for easy repairs, epoxy resin, 48 pounds.

Standard features: SmartTrack rudder, adjustable backrest, reflective deck lines, spare paddle holders

Weight: 50 pounds (all manufacturer's weights are +/-8% and include all fittings)

Price: G-Core Lite, \$4,299

Availability: See website for a complete list

Manufacturer: Tiderace Sea Kayaks, +44 (0) 1768 840179, info@tideraceaskayaks.co.uk, www.tideraceaskayaks.com

SPEED VS. RESISTANCE

Resistance in pounds.

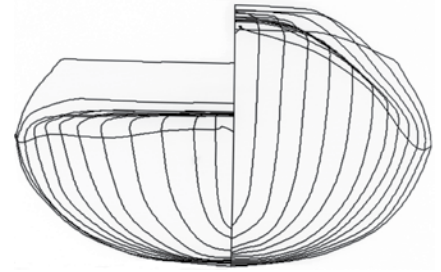
Speed	Winters/KAPER	Broze/Taylor*
2 knots	0.96	0.95
3 knots	2.01	2.04
4 knots	3.58	3.77
4.5 knots	4.79	4.89
5 knots	6.67	6.74
6 knots	11.98	11.93

*Automated with the Gertler program by Robert Livingston

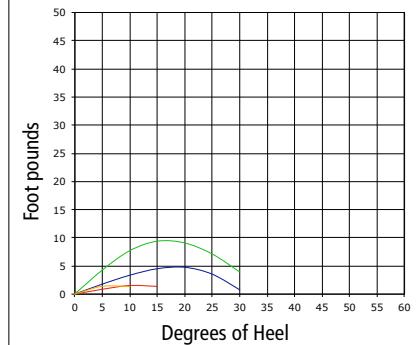
HYDROSTATICS

Waterline length	16' 5.1"
Waterline beam	20.4"
Draft	6.2"
Prismatic coefficient	0.56
Wetted surface in sq. ft.	23.04
Center of buoyancy	63%

(Hydrostatics calculated with a 250-pound load.)



Righting/Heeling Moments (Fixed-weight)



Stability Curves*

- 150 lb. paddler, no cargo
- 200 lb. paddler, no cargo
- 150 lb. paddler, 100 lb. cargo
- 200 lb. paddler, 100 lb. cargo

*Formula revised December 2009. (Not comparable with stability graphs generated prior to December 2009.)

TECH TALK: Readers interested in the full set of hydrostatics can find them posted on our website at www.seakayakermag.com along with additional data. An explanation of the terms and procedures used in the kayak test program is also available on the site.

TIDERACE



www.tideraceaskayaks.co.uk



PACE 18

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