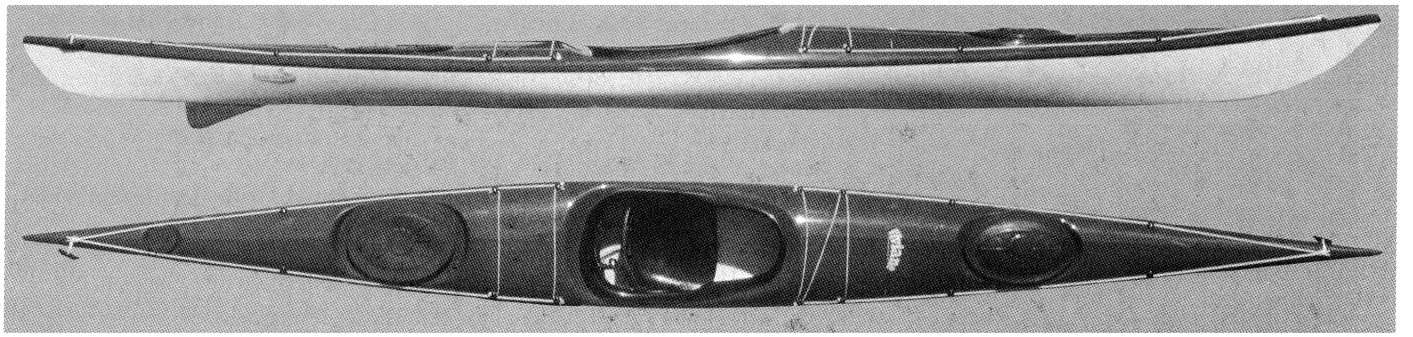
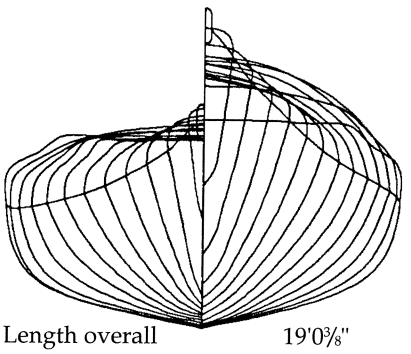
Avalon Viviane by Kajak Sport





Length overall	19'0⅜"
Beam	21½"
Volume	15.4 cu. ft.
Cockpit size	15⅝" x 31¼"
Cockpit coaming height	
Forward	12¾"
Aft	8"
Height of seat	1½"
Weight	58¼ lbs.
Center of buoyancy*	46%

*With 250-lb. load

Speed vs. Resistance

These figures are derived from mathematical models based on a limited number of towing tests on flat water.

Kayak weight + 250-lb payload

Resistance in pounds, shown to hundredths to differentiate figures formerly rounded to tenths. A fit paddler can maintain a cruising speed at 3 pounds of drag. Only a few can work against 5 pounds of drag for long distances. See August '98 page 43 for more details.

Calculated by the KAPER program by John Winters (Factor added for soft plastic hulls when applicable):

2 knots	0.96
3 knots	2.01
4 knots	3.53
4.5 knots	4.80
5 knots	7.19
6 knots	13.38

Calculated by Matt Broze using Taylor Standard Series:

2 knots	0.94
3 knots	1.98
4 knots	3.64
4.5 knots	4.75
5 knots	6.59
6 knots	11.50

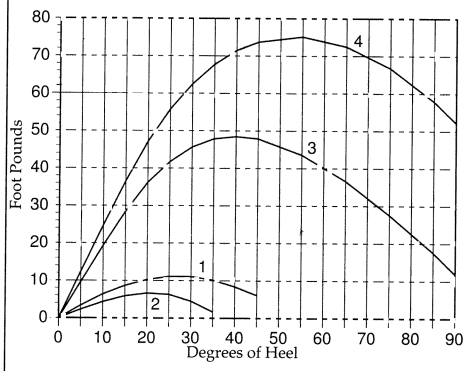
Hydrostatics

Paddler weight	150 lbs.	200 lbs.	150 lbs.	200 lbs.
Cargo weight*	none	none	100 lbs.	100 lbs.
Waterline length	17' 3.3"	17' 5.8"	17' 7.9"	17' 9.7"
Waterline beam	20.7"	21.1"	21.3"	21.5"
Draft	4.6"	5.2"	5.8"	6.4"
Prismatic coefficient	0.48	0.49	0.50	0.50
Block coefficient	0.29	0.30	0.32	0.33
Wetted surface in sq. ft.	19.46	21.39	23.18	24.85
Lbs./inch immersion	85.8	91.1	95.4	99.9

* Fixed "paddler" weight has its center of gravity located 10" above the lowest part of the seat and 10" forward of the seat at back. The "cargo's" center of gravity coincides with the kayak's approximated center of gravity.

Calculated by Nautilus System™ computer program

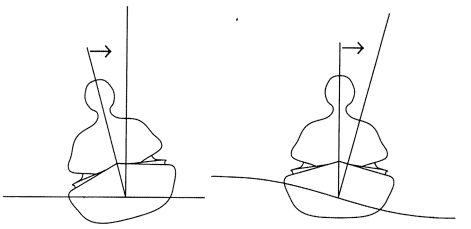
Righting/Heeling Moments (Fixed-weight)



Stability Curves

1. 150 lb. paddler, no cargo
2. 200 lb. paddler, no cargo
3. 150 lb. paddler, 100 lb. cargo
4. 200 lb. paddler, 100 lb. cargo

Calculated by Nautilus System™ computer program



Righting Moment Heeling Moment

The same force that rights a kayak on flat water contributes to its rolling motion on the face of a wave.

Reading the Stability Curves

The steeper the slope of the curve as it rises from 0°, the higher the initial stability. Beyond the maximum righting moment at the peak of the curve, the kayak enters an unstable region of decreasing stability which does little to slow the rolling of the kayak to the point of imminent capsize.

Note: Raising the center of gravity slightly will decrease the stability of a kayak while lowering it will increase it.

Avalon Viviane Design Statement

The Viviane is a fast touring kayak designed for advanced paddlers who demand speed and performance in all conditions. The brainchild of an accomplished Finnish kayak designer and racer, it has endured years of rigorous testing and continuous refinement in the formidable Arctic seas off Finland and Norway. The Viviane has apparently benefited from the designer's mastery of aerodynamics as a highly qualified pilot. Even in windy and rough conditions, it glides quickly and smoothly through the waves almost as efficiently as a plane propels through the atmosphere. The Viviane has had many racing successes, perhaps the most notable being the marathon Arctic Sea Kayaking Race in Norway.

Although lightweight, the Viviane is a high-volume kayak, well equipped, and capable of handling larger paddlers and expedition-sized loads with aplomb. It tracks superbly either loaded or empty, with or without deploying the standard retractable skeg, and remains remarkably maneuverable at all times.

Phil Wong
Global Outfitters, Distributor

Avalon Viviane Review

Reviewers:
KB 6'2", 205-pound male. Day trips, 22-mile outing with 30 pounds of gear. Winds to 12 knots; waves and wakes to 2'.
TE 6'1", 200-pound male. Day trips in conditions from calm to winds of 20 miles per hour and cresting waves to 2½'.
KW 6'2", 200-pound male. Overnight trip with 70 pounds of gear, winds to 15 knots, wind waves to 3'.

All of the reviewers liked the look of the Viviane's "appealing lines and nice finish" (KB). The hull-to-deck seam is glassed inside and out. The Viviane is "well balanced for solo carrying, although carrying any 19-foot kayak is awkward. The end toggles are comfortable for two-person carries, but they're installed too far from the ends of the boat to work well as grab handles for a swimming kayaker" (KB).

"The deck fittings were a bit spare: a nylon grab line along the perimeter and a few bungies across the foredeck" (TE). "The shock cord behind the cockpit was too flimsy for a solid anchor for a paddle float, and there wasn't a means of securely stowing a spare paddle. Fortunately, there are plenty of low-profile deck fittings to correct rigging deficiencies without adding hardware" (KB).

"The Viviane's cockpit opening is wide and long, making entry and exit easy" (KB). "The long, keyhole cockpit works well for the seat-then-legs cowboy reentry. Inside, there is more than enough room for size 12 shoes" (TE). According to KW, "The oversized rim at the rear of the coaming made it so easy to attach my spray skirt. The rim provided a nice sloped surface for doing layback rolls. An outstanding feature." The unpadded fiberglass seat was "very comfortable and allowed unencumbered torso rotation" (KB). "The angle of the seat was just right for me, and made it possible to sit in an upright position for a powerful stroke and trunk rotation without having to rely on the backrest for support" (TE).

"The contour of the coaming provided a bit of grip just above my kneecaps, but there wasn't any contour to keep my knee from slipping inward. I didn't come loose while rolling, but I'd add some foam to make a more positive connection" (TE). The foot braces had pivoting foot rests for use with an optional rudder system (not included with the test kayak). The rubber mounts let the pedals "take the angle of the feet, for comfort, without compromising bracing" (TE). "Very comfortable. I plan to install these on my own boat" (KW). The overall fit of the Viviane made rolling easy.

The skeg control is recessed in the deck near the paddler's right hip, "close at hand and visible with a downward glance. The control knob is attached to an aluminum rod slider that gives more positive control than cable that may buckle when pushed. Good design" (TE).

The Viviane's primary stability was rated as moderate (TE), medium (KW), and "nice and loose, but not uncomfortably tippy" (KB). TE and KB thought the secondary stability was moderate: "easy to edge the boat, but I didn't feel that the secondary stability was a wall to lean against" (TE). KW thought the secondary stability was "excellent. I felt comfortable with the boat on edge."

The Viviane is not an easy boat to turn: "edging the boat will help carve a turn, but the turning is slow. I had to work it around" (TE). "A difficult boat to turn without aggressive edging" (KB).

TE thought the Viviane tracked well, even without the skeg, and KB found that, with a 30-pound load aboard, the Viviane "tracked steadily through any conditions I encountered without using the skeg." With the kayak unladen, KB and KW had trouble holding a straight course, but "with the skeg deployed slightly, the boat tracked fine" (KW).

In the wind, TE found the Viviane "did very well going into the wind, and held a straight course going across the wind." With the wind and waves on the stern quarter, he was able to hold course off the wind by deploying the skeg. With a load in the kayak, KB noted that the Viviane had only a slight weathercocking that he could "easily compensate for with a combination of edging and paddle strokes. The tendency of the unloaded boat to weathercock became strong enough to make the skeg an important course-holding device. The Viviane's unloaded hull and retractable skeg are nicely matched. As I lowered the skeg in small increments, the bow tended to fall off the wind in corresponding increments. The hull held a steady course perpendicular to the wind when the skeg was lowered halfway, and a downwind course with the skeg fully lowered."

The Viviane provides a dry ride: "Waves in the 1' to 2' range were nosed to the side without much fuss. The bow didn't pound or throw spray" (TE).

"Kayakers who have the power will find this a fast boat. During a one-hour workout, I averaged over 5 knots. The Viviane also worked fine for covering 22 nautical miles at a fast cruising pace of 4 to 4½ knots" (KB). "It kept up good speed in a following sea, making it easy to catch frequent long rides on wave sets" (TE). "This kayak is fast enough to catch wind waves and boat wakes. The hull does not broach particularly easily, but it's hard to maneuver on the wave face, so it's important to catch waves at a 90° angle" (KB).

The Viviane has lots of stowage space, and easy loading through the hatches. "I'd have no problem packing for a month-long trip" (KB). The hatches proved watertight and were easy to get on and off. The small hatch in the stern "has a fairly loose fit and needs something extra to keep it from getting knocked off accidentally, especially during a reentry" (TE). The fiberglass bulkheads also proved watertight. KB reported that the Viviane "handled better with the load aboard than it did unloaded."

KW appreciated the long cockpit and the flexible foot rests, and recommends the Viviane for "strong paddlers who like to go fast and far. The storage space is quite a boon for long trips." KB thought the Viviane would "appeal to large kayakers with the power and desire to approach the hull speed and the strength and skill to handle it in rough conditions. Large experts may also want to take advantage of the large cargo capacity." TE "liked the performance of the Viviane. It may not be a great play boat, but the hull will go where you point it. It's well-suited for a paddler interested in making good distance and fast passages. Its stability profile would require a paddler with solid paddling and bracing skills. A good choice for a serious cruiser." SK

Design Response

Thank you very much to all the participants in this review. We at Kajak-Sport truly appreciate their time, energy and insight. We are delighted that their experience affirmed all the design and performance characteristics that have been hand-crafted into the Viviane.

At Kajak-Sport, we consistently strive to design and produce the best kayaks and accessories possible. We believe we have accomplished that in the Viviane, as well as in the rest of our models.

Based on the reviewers' consensus, it appears that we have hit the target with the Viviane in terms of balancing design, quality, fit and performance for this class of kayaks.

TE offered the best summary about the Viviane: "well suited for a paddler interested in making good distance and fast passages: a good choice for a serious cruiser."

Phil Wong
Global Outfitters, Distributor

Options and Pricing

Designed: 1994.
Standard Lay-up: Hand-laid fiberglass and diolene. Reinforced bow and stern. Seams glassed inside and out.
Standard Features: Kajak-Sport hatches (17" x 10" oval front hatch, 16.5" x 12" oval rear hatch, 4" round skeg-inspection hatch); two fiberglass bulkheads; perimeter deck lines; keyhole cockpit; ergonomic seat with adjustable backrest; retractable skeg with no-kink skeg control; pivoting wooden foot braces mounted on Keepers; prepared for easy installation of optional rudder kit.
Options: Take-apart kayak (two or three sections); rudder kit; small or large cockpit; extra reinforcements for deck and/or hull; additional bulkheads; recessed compass and/or pump; metallic deck colors.
Approximate Weight: 53 pounds.
Price: US $2,795.
Availability: In the United States and Canada from Global Outfitters, Inc., 50 Moffat Road, Newton, MA 02468. Call or e-mail for the nearest dealer. Phone (617) 834-5623. E-mail: GOKajak@aol.com
Manufacturer's Address: Kajak-Sport Oy, Mäntykankaanie 2, FIN-27100 Eurojaki, Finland.