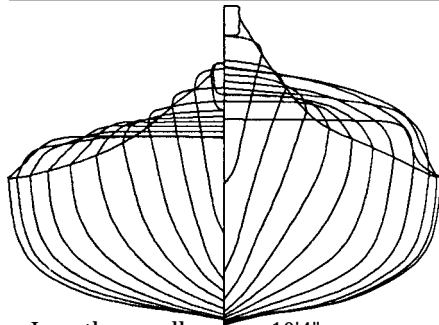
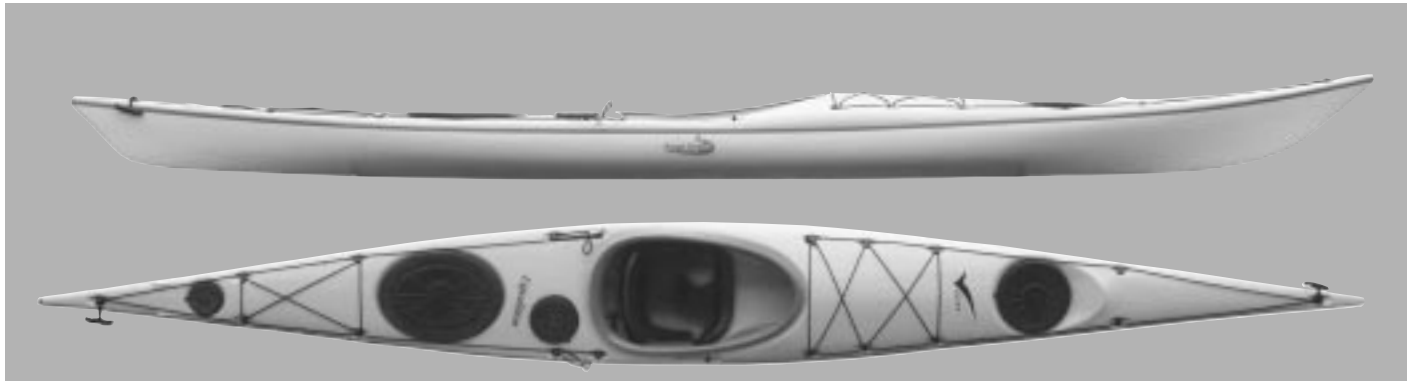


Viking Expedition by Kajak-Sport



Length overall	16'4"
Beam	21 3/4"
Volume	X.XX cu. ft.
Cockpit size	15 7/8" x 28 1/2"
Coaming height	
Forward	11 3/4"
Aft	8 3/8"
Height of seat	1"
Weight	52 3/4 lbs.
Center of buoyancy*	49%

*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-pound 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 SK, 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	0.93
3 knots	1.95
4 knots	3.59
4.5 knots	5.20
5 knots	7.84
6 knots	13.81

Calculated by Matt Broze using Taylor Standard Series:

2 knots	0.92
3 knots	1.97
4 knots	3.64
4.5 knots	5.14
5 knots	8.03
6 knots	14.37

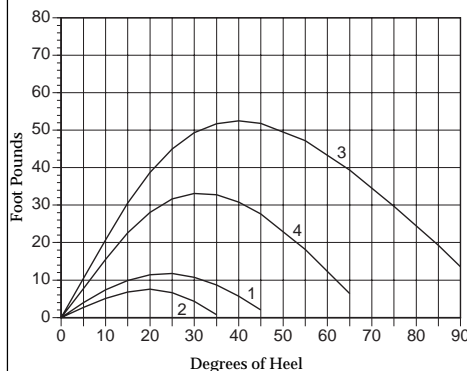
Hydrostatics

Paddler weight	150 lbs.	200 lbs.	150 lbs.	200 lbs.
Cargo weight*	none	none	100 lbs.	100 lbs.
Waterline length	14' 7.2"	14' 9.4"	14' 11.2"	15' 8.3"
Waterline beam	20.8"	21.2"	21.4"	21.5"
Draft	4.4"	5.0"	5.6"	6.3"
Prismatic coefficient	0.51	0.52	0.52	0.53
Block coefficient	0.34	0.36	0.38	0.39
Wetted surface in sq. ft.	18.36	20.07	21.72	23.22
Lbs./inch immersion	78.4	82.0	84.8	87.1

* 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

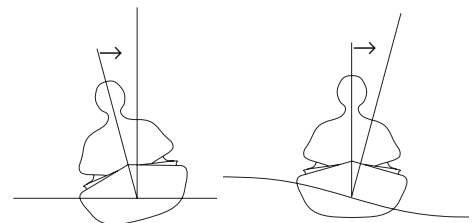
Righting/Heeling Moments (Fixed-weight)



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 that 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.

Viking Expedition Design Statement

The Viking Expedition is designed for extended use by small to medium paddlers of varied abilities. The ideal profile is 115 to 185 pounds and 5'3" to 6'. It is a versatile and well-balanced performer in all conditions. The Viking Expedition features a lightly V-shaped hull with a long

waterline and graceful rockers at both ends for maneuverability. It has a low-profile deck with recessed fittings to minimize wind resistance and deck clutter. Both initial and secondary stability are excellent. These combined design characteristics result in a truly sea-worthy, efficient and comfortable kayak that is fast and nimble

to paddle.

The Viking Expedition comes fully equipped with: four state-of-the-art Kajak-Sport hatches; three fiberglass bulkheads; a retractable skeg; compass recess; adjustable/interchangeable ergonomic seat and backrest; and full-perimeter deck lines.

Phil Wong

Global Outfitters, Distributor

Viking Expedition Review

Reviewers:

TL: 5'6", 150-pound male. Day paddle, no load, wind 22 knots, 4-foot whitecaps.

GL: 5'11", 165-pound male. Day paddles, wind to 20 knots, 1-foot chop to 3-4 foot swell, surfing.

TW: 6'1", 180-pound male. Strong currents and rips. Light winds. Wakes to 3 feet.

The Viking drew praise for the quality of its construction: "The finish on the Viking is one of the nicest I have seen. High attention to detail is evident throughout the kayak" (TW). "Great-looking kayak, nice lines" (GL).

For carrying solo, the Viking was "well-balanced and light-weight. There are comfortable ergonomic-shaped carry toggles at bow and stern" (GL) for a tandem carry.

The Viking's deck lines are secured by recessed fittings. There are grab lines along the kayak's perimeter and bungies for securing charts on the foredeck and a spare paddle aft. The deck rigging for setting up a paddle-float outrigger has hooks to facilitate releasing the paddle.

The keyhole cockpit is of "moderate, but not small size, very comfortable and a breeze to slip in and out of" (TW). The cockpit opening had "just enough room for me to sit in the seat and bring the legs in afterward. Nice low cockpit volume, without a lot of space behind the seat or in front of the foot pedals. There is not a lot of extra hip room: very large paddlers won't fit. The cockpit's overall comfort and function are excellent" (GL).

The seat "was remarkably comfortable. The molded seat pan was connected to the cockpit coaming using one bolt on each side; not particularly secure, but it allows the user to adjust the tilt of the seat" (TW). TL didn't care for the ability of the seat to shift, especially while rolling, and recommended adding a second pair of bolts to the mount to hold the seat in a fixed position. The back band "was secure and supported me at just about the right spot in the small of my back" (TL). The band is supported from the coaming so that it doesn't slip down when you enter the cockpit.

Thigh bracing is provided by foam-pad-

ded flanges molded into the cockpit coaming. They were "comfortable for extended paddling and yet secure for bracing in surf or rolling" (TW). "A superior feature" (GL).

The foot braces have "larger foot platforms that are attached with rubber mounts. The system added more surface area for the feet and a less rigid foot angle" (TW). Besides adding comfort to "allow the feet and legs to shift around somewhat" (TL), the pivoting footpads can function as rudder pedals (if the Viking is equipped with an optional rudder) without sacrificing the solid support.

The control for the skeg "was nicely recessed into a convenient location on the right-hand side of the cockpit. It was easy to make fine adjustments to the skeg depth, and there was enough friction that the skeg retained a given position. The skeg did jam on one occasion, but was cleared without difficulty while on the beach" (TW). "The skeg has a small hole at its lower margin that on shore would allow a tool to be inserted to manually pull the jammed skeg down. A nice, and even essential, touch" (TL).

The Viking has "an excellent combination of initial and secondary stability. The boat is easy to lean, but has comfortable secondary stability. Paddlers used to a more stable boat might initially find the boat a little tippy, but once they gained confidence in the secondary stability, they would find the boat fine for activities in which the paddle is stowed" (TL). GL thought the "initial stability is moderate. Secondary stability excellent; very secure on its edge." TW found the Viking's secondary stability "predictable and solid."

With the skeg retracted, the Viking's response to "leaned turns [is] excellent" (GL). TL also thought that it turned "easily and quickly," but TW, the heaviest of the reviewers, thought edged turns required "a bit of work and a few more sweep strokes."

The Viking tracks very well without the skeg. In the wind, the Viking had some tendency to weathercock, but "with the skeg, it tracks beautifully in any wind direction without weathercocking" (GL). Running downwind, TL found that the "skeg significantly reduced the amount of bracing, ruddering, and general skating from side to side."


TL, the lightest paddler, noted that the bow of the Viking rose over waves, GL noted that it cut through waves, and TW, the heaviest reviewer, wrote that the bow "tended to plunge into waves." The reviewers were similarly divided on the amount of spray thrown up into the face of the paddler.

GL thought the Viking had "excellent speed." TW found it easy to hold pace with other kayakers.

For GL, it was "easy and fun to catch and ride waves. It had some tendency to broach, so I needed to do hard ruddering to prevent broaching." While surfing boat wakes, TW found that the Viking "tended to broach and was very difficult to bring back on course."

The Viking's "thigh braces, solid foot pegs and low back deck make performing a variety of rolls easy" (GL). After a wet exit, "the cockpit drains of water with a single lift and pour from the bow" (GL).

The Viking has ample storage space for weekend or week-long trips and is capable of longer excursions with careful packing. The day hatch and compartment aft of the cockpit provide handy storage for items you might need while paddling, but it cuts into the volume of the main compartment. "Large main hatch openings are nice and big, making loading the kayak easy" (TW). The four rubber hatch covers can "require a bit of finessing and work to get on, but when in place were very secure" (TW). The fiberglass bulkheads "seem completely solid" (TL). None of the reviewers reported any leaks. Because of the airtight seal, "the hatch covers bulge if the kayak heats up. Underway in cold water, the hatch covers suck down into the vacuum." With a load of 65 pounds aboard, GL noted that the Viking "turns and tracks effortlessly with load."

TW thought the Viking would be "great for the medium-sized person to do 2- to 4-day trips or leisurely day trips." TL noted that "this is a maneuverable, seaworthy and nimble boat suitable for open coast paddling. It's fun to paddle in waves and confused water." For GL, the Viking is "a versatile, easy-to-roll, great-tracking yet maneuverable kayak with excellent speed, with capacity for week-long trips, perhaps longer. Intermediate and advanced paddlers, put it on your short list." 

Design Response

Many thanks to all the participants in this review. We appreciate their time, insight and dedication to the paddling community. Consistent with the two previous *Sea Kayaker* reviews (the Kajak-Sport Millennium in the October 1999 issue, and the Kajak-Sport Viviane in the April 2000 issue), the Viking Expedition has once again demonstrated the fundamental characteristics for which Kajak-Sport kayaks are known: excellent quality and design; top notch components;

and superb performance in virtually all sea conditions.

At Kajak-Sport, we always strive to design and produce the very best kayaks and accessories possible. We believe that this has been accomplished in the Viking Expedition, as well as the rest of our kayaks. Effective innovation has been, and will continue to be, one of our core competencies. Most kayaks available today typically excel in one way or another; ours are thoughtfully designed to excel in every way possible. All of these

excellent design features are built into the Viking Expedition: remarkably comfortable ergonomic seats (available in three sizes); functional pivoting foot pads; efficient retractable skeg with ultra smooth "slider" control that won't kink; recessed deck fittings designed to withstand 100 kg pulls; ergonomic carry toggles; and of course the waterproof Kajak-Sport hatches which are the most coveted in the industry worldwide.

Phil Wong
Global Outfitters, Distributor

Options and Pricing

Designed: 2001

Standard Lay-up: Fiberglass and Diolene, hand laid. Extra bow and stern reinforcements. Butt-joined and edge-seamed.

Standard Features: Four Kajak-Sport hatches (a 9.5" round front hatch, a 16.5" x 12" oval rear hatch, a 6" round day hatch, and a unique 4" round skeg-inspection hatch); three fiberglass bulkheads; recessed deck fittings; full perimeter deck lines; keyhole cockpit; adjustable and interchangeable ergonomic seat with backrest; retractable skeg with "no-kink" skeg control; Kajak-Sport pivoting foot braces mounted on Keepers; prepared for easy installation of optional rudder kit.

Options: Take-apart (two or three sections); removable rudder kit; interchangeable ergonomic seats and backrests (three sizes); extra strength for deck and/or hull.

Approximate Weight: 45 pounds

Price: \$2,745

Availability: Global Outfitters, Inc. (GOI) of Massachusetts is the exclusive importer and distributor for the United States and Canada. Call or e-mail GOI for the nearest dealer (also listed on website).

Distributor's Address: Global Outfitters, Inc., P.O. Box 133, Waban, Massachusetts 02468, USA. Phone: (617) 83-GLOBE. E-mail: GO Kajak@aol.com, web site: gokajaksport.com