

Petrel



Night Heron | Sea Kayak | Strip Built



Early sailors thought the Storm Petrel could walk on water. Named after Saint Peter, petrels are small birds that feed at sea by fluttering just above the swell with their feet tip-toeing across the water. Like its bird namesake the Petrel kayak is at home at sea where it can dance among the waves.

Designed as a responsive, light-weight boat suitable for day trips in rough water it is equally at home poking into sheltered estuaries or exploring the shore of isolated coves. This design will carry a large paddler through rough conditions yet it is small enough to be easily handled by [petit kayakers](#). With a form inspired by the Inuit inventors of kayaking, the Petrel will appeal to devoted Greenland-style paddlers without being intimidating to novice sea kayakers.

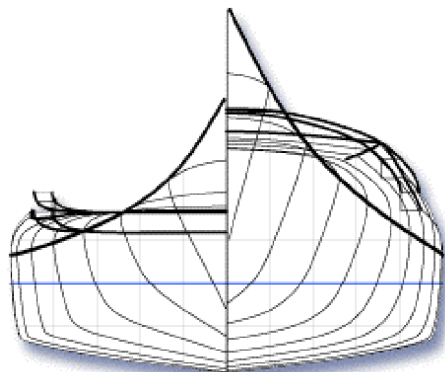
This boat is derived from my [Night Heron](#) designs, but it is shorter, has more rocker and more reserve buoyancy in the ends. The moderately hard chine of the strip Night Heron has been softened forward of the cockpit and transitions into a hard chine behind the cockpit. The result is a lively boat that accelerates quickly to catch waves, carves down wave faces and maneuvers easily.

The "transitioning" chine varies from a quite rounded, soft chine forward to a hard chine aft of the cockpit. The forward section provides smooth performance pushing out into waves and reduces the tendency to broach while surfing. The hard chine aft provides some shape that facilitates carving and leaned turns.

The deck shape takes its queue from Greenlandic Inuit skin-on-frame designs with a sharp chine-like feature line on either side. This provides height where you need it for knee room, while keeping the deck low over all. The side of the deck slopes in quickly so it is out of the way for close-to-the-hull strokes.

This design was developed to carry a 200 lbs, 6+ foot paddler on day trips, but it is small scale enough that it would also work well for substantially smaller paddlers. It is meant as a day tripping boat for larger paddlers, and would not have the capacity for extended trips, but if you are a smaller paddler there is enough interior volume to carry a fair amount of gear.

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Beam	20.0	inches	50.8	cm
Waterline Beam	19.9	inches	50.5	cm
Draft	4.1	inches	10.4	cm



Length	17.0	feet	5.18	meters
Waterline Length	15.0	feet	4.57	meters

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Number of Cockpits: 1

Small Paddler	Average Paddler	Large Paddler	Beginner Paddler	Lakes and Rivers	Open Water	Extend Tour

	English		Metric	
Length	17.0	feet	5.2	meters
Beam	20.0	inches	50.8	cm
Waterline Length	15.0	feet	4.6	meters
Waterline Beam	19.9	inches	50.5	cm
Design Displacement	245.7	lbs	111.4	kg
Draft	4.1	inches	10.4	cm
Wetted Area	20.2	sq ft	1.9	sq m
Waterplane Area	16.5	sq ft	1.5	sq m
Surface Area	46.0	sq ft	4.3	sq m
Approx. Bare Boat Weight	32.2	lbs	14.6	kg
Volume	11.0	cu ft	311.5	liters
Prismatic Coeff.	0.55			
Block Coeff.	0.36			
Lateral Plane Coeff.	0.67			
Sinkage	78.0	lbs/in	13.9	kg/cm
Moments to change trim 1 inch	63.7	foot pounds	86.4	kg/cm
Righting Moment at 1 degree	0.12	foot pounds	0.16	kg/cm

Petrel – pictures



This is what the Night Heron, Petrel has been optimized for. To play in the waves.



