

COASTAL-PRO HOVERCRAFT & THE MARINE ENVIRONMENT

The Coastal-Pro is a 4.25m GRP general purpose hovercraft. Supplied in MACV specification, it is completely 'marine-ready' and successfully utilised by companies and organisations operating in the coastal environment.

On water, in most aspects its performance is comparable to a hard boat of equivalent size does. It can be more comfortable in short wave patterns due to the air cushion effect, but if conditions do deteriorate, then by choice a RIB would be a better vessel due to its deep 'V' hull. However, in extremis, due to its zero draft, the hovercraft can seek refuge on any beach and run closer to the shore than a conventional vessel, meaning a safe haven can be quickly sought.

In short, the Coastal-Pro's marine performance is more dictated by its size than by the fact it is a hovercraft. Before operation, ask yourself if you would operate a boat of equivalent size in the prevailing conditions. If so, then it is likely the hovercraft will prove safe and satisfactory transport.

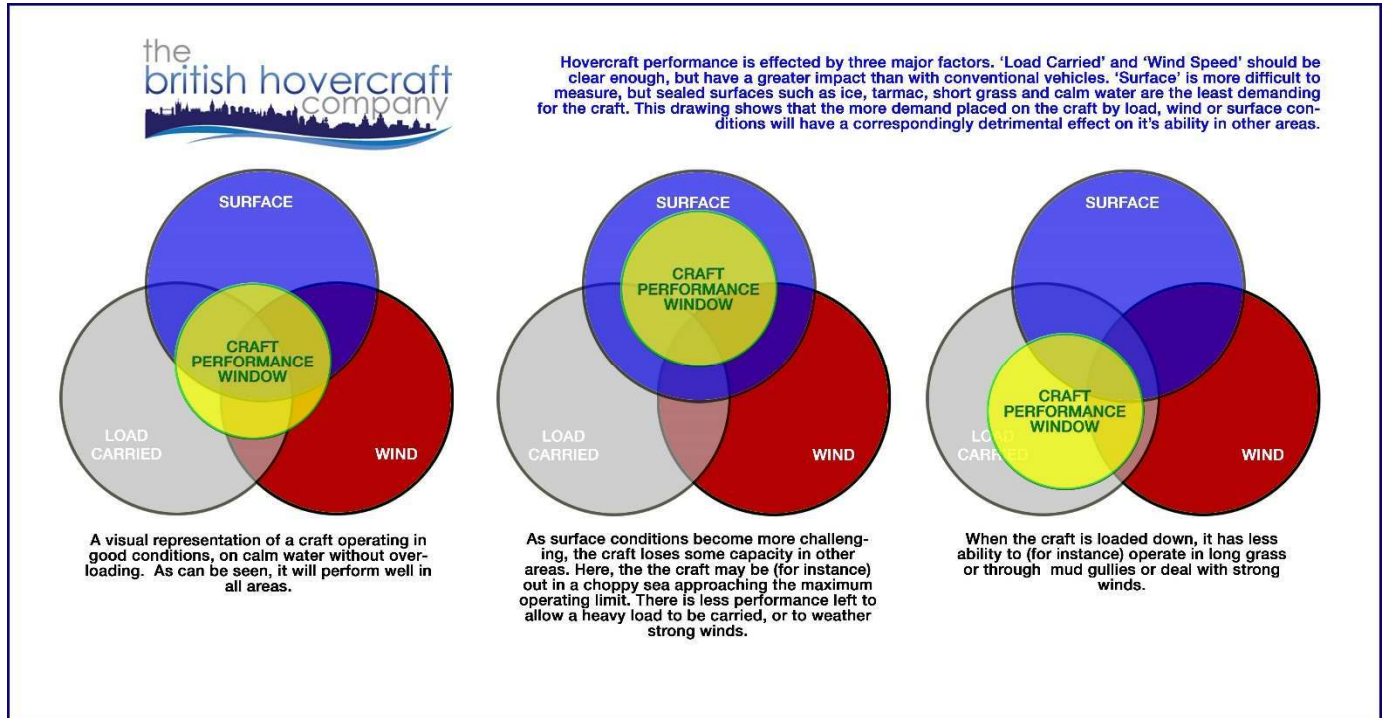
Hovercraft have a 'performance window' which is dictated by a combination of load carried, surface and wind conditions.

Load: Consider that the hovercraft is constrained by the same rules that govern flight. The less weight on board, the more lively the performance, the more closely the craft will achieve its maximum performance and the more ability the craft will have to cope with demands from the other two factors – surface and wind.

Surface: The ideal surface for a hovercraft is flat ice. This is because the skirt can seal perfectly to the surface, and there is virtually no friction. Asphalt, sand, mud, water and short grass are all perfectly acceptable surfaces and allow the hovercraft to carry a large load and cope with windier conditions. Long, thick grass & rough water can be an issue as the skirt does not seal to the surface as effectively, spilling lift air and reducing lift.

Wind: Wind is a significant factor in hovercraft performance as the thrust is generated by moving air. This being the case, a strong head-wind will have a detrimental effect on the craft's performance, meaning there is less available to carry a heavy load or traverse difficult surfaces and gradients.

The table below shows how these three factors interact.



The Coastal-Pro has good performance allowing a high tolerance towards demanding conditions. Proven in a marine environment by both commercial customers and ourselves (see the *British Hovercraft* YouTube page for examples) it is constructed using stainless steel throughout, water-resistant switching and electrical system, >100% buoyancy and is built to the standards of the MCA Hovercraft Code. The depth of water is completely irrelevant to hovercraft operations. BHC rate the craft as suitable for Sea State 3, but have safely exceeded these conditions in testing. Final call on safe operating conditions is the responsibility of the skipper.