

HYDROFOIL ASSISTED CATAMARANS. HYDRODYNAMICS, DESIGN AND OPERATION

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Hydrofoil support for catamarans has been developed for roughly 40 years and there are many vessels using this technology from 4m – 45m in length and with speed up to 60 knots. This presentation will cover major milestones in their development and provide some comparison with conventional Russian hydrofoil developments.

Hydrodynamic principles, hull-hydrofoil interactions, propulsion and seakeeping will be discussed from a practical design perspective. Lastly some recent applications will be presented and discussed considering the practical issues of foil manufacturing, certification and operation of the vessel.