



THE ROYAL INSTITUTION
OF NAVAL ARCHITECTS



24 February 2025

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RINA TASMANIAN SECTION – PUBLIC LECTURE

18th March 2025 – 17:00

The Tasmanian Section of the Royal Institution of Naval Architects welcomes you to an evening technical presentation to be given by Dougal Harris, of Incat Crowther, on:

High-Speed Aluminium Craft: Modern Design Approaches

Tasmanian Section Technical Presentations are delivered alternately between the physical locations in Hobart or Launceston with a live stream between the two. The live stream is also made available for your convenience when joining from other locations, in Tasmania, Australia or International.

Abstract

This presentation will explore the cutting-edge design processes employed by Incat Crowther in the creation of high-speed aluminium craft. A cornerstone of our approach is the transformative power of 3D design and digital twin technologies.

We will delve into the application of digital twin technology, where a virtual replica of the vessel is created and used to aid in manufacturing, maintenance, and enhanced operational efficiency. Furthermore, we will highlight the crucial role of laser scanning in capturing the precise geometry of the final built vessel. This data allows rigorous verification against the original 3D digital twin, ensuring adherence to design specifications and identifying areas for potential refinement. Importantly this then enable seamless replication of subsequent builds with improved consistency and reduced manufacturing errors.

We will examine how the integration of these digital technologies is revolutionizing the design and manufacturing processes at Incat Crowther, leading to faster development cycles, reduced costs, and ultimately, the creation of high-performance, reliable, and innovative high-speed aluminium craft.

Speaker Profile

Dougal Harris, Incat Crowther

Education:

Undergraduate Australian Maritime College - Bachelor of Naval Architecture.

Postgraduate Curtin University - PhD Developing a VPP for yachts in following seas.

Work:

20 years developing MAXSURF suite of Software.

18 months with Incat Crowther working on the new Parramatta River Ferries project.



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Zoom Link: <https://utas.zoom.us/j/88303466460?from=addon> | **Zoom Meeting ID:** 883 0346 6460

Launceston

*Room F44 in the Swanson Building at AMC
(First floor)*



Hobart

Taylor Bros. Marine Pty Ltd, 5 Surveyors Drive, Derwent Park.

