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NSW SECTION



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## **RINA/IMarEST Technical Presentation**

### **The Hydrodynamics of the Sydney Harbour RiverCat Ferries**

<b>Presenters</b>	Lawrence Doctors Professor Emeritus UNSW Sydney
<b>Date</b>	Wednesday 7 July 2021
<b>Time</b>	6:30 pm AEST
<b>Meeting</b>	This presentation will be held as a video-conference webinar using the WebEx software platform hosted by Engineers Australia. Registration for the presentation is required (see below).

The fleet of RiverCat-class catamaran ferries has now been in operation for thirty years; they have shown themselves to be a popular form of transport for Sydney commuters and sightseers. In this presentation, we revisit the hydrodynamics supporting the design and development of these ferries which have been operating in Sydney Harbour since 1991.

More-advanced software is used here. This software accounts for the hydrodynamics of the transom sterns which experience partial or full ventilation. The transom sterns each also creates a hollow in the water, which results in an effective hydrodynamic lengthening of the vessel.

Using the original towing-tank data, it is demonstrated that the resistance and wavemaking can be predicted well by the software. It is also shown that the current catamaran design is substantially superior to the equivalent monohull. Finally, further improvements to the hull are proposed in the presentation.

**Registration** Registration for this presentation may be completed at

<https://cvent.me/YPOg1Y>

Enter your first and last names and email address, enter your career stage and engineering sector, agree to the terms and conditions, and click Next/Next, enter the Discount Code RINA21 to reduce the cost to zero, then click Submit.

When registered, you will receive a confirmation email containing the URL and password for the webinar.