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INSTITUTION
OF NAVAL ARCHITECTS
NSW SECTION



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RINA&IMarEST Technical Presentation

IT Earthing Systems and the Evolution of Insulation Monitoring Devices

Presenter	Thomas Frank Principal Engineer, Ausbright Electrical Solutions
Date	Wednesday 5 June 2024
Time	6:00 pm AEST refreshments 6:30 pm AEST presentation
Venue in person	Henry Carmichael Theatre Level 1, Sydney Mechanics School of Arts 280 Pitt St, Sydney
online	URL and password will be advised prior to the presentation Registration for the presentation is required (see below)

This presentation will begin with a brief explanation of IT earthing systems which all vessels implement. Essentially, an IT earthing system is a distribution system in which all live parts of a power source are isolated from the earth or one live part of the power source is earthed through an impedance (I), and exposed conductive parts of an electrical installation are connected to earth electrodes of the electrical installation by protective earthing conductors (T).

The presentation will then describe the insulation monitoring systems which were employed 50 years ago and how they worked, with an incandescent bulb turning on at the breakdown of insulation between phase and earth, and the bender device which has been in for the last 30 years.

Recent bender devices now employ current transformers on outgoing circuits to give maintainers the earth fault location.

The presentation will conclude with a snapshot of Ausbright Electrical Solutions and their electrical services, engineer services, and company history.

Registration Registration for this presentation may be completed at

<https://forms.gle/CreYX5L8SSvCq24V9>

Registrations close at 6:00 pm AEST on Tuesday 4 June. Registration for in-person attendance is required to gauge numbers for catering. Those registered for online participation will be emailed the Zoom meeting ID and passcode on the evening of 4 June.

Register and put this date in your diary now, and we look forward to you joining the presentation.