## The Royal Institution of Naval Architects

## Design & Operation of Ice Class Vessels

21-22<sup>nd</sup> February 2018, Lonon, UK





## First Notice & Call for Papers

The Polar Regions see nearly 10% of the world shipping traffic. The receding ice in the North Sea Route and North West Passage offers new marine transportation options between the two major oceans and Europe, N. America and Asia. There are vast oil and gas resources around Siberia in the Barents and Kara Sea as well as in the Alaskan Chukchi Sea. Both poles also see a growing tourist inflow with the operation of many cruise ships close to the polar circles, as well as numerous ongoing scientific expeditions.

Vessels of any kind operating near the poles are exposed to a number of unique demands. Operation in first- and multi-year ice adds uncommon loads and forces to hull, propulsion system and appendages and calls for suitable built. Extremely low temperatures, bad weather and low visibility affect the ship and the crew in a multitude of ways, including materials, machinery, operational process and human factors.



The introduction of the Polar Code at the beginning of 2017 for new vessels, and existing vessels in 2018, was a big step in creating safe conditions for the work and operation of vessels, as well as to protect the fragile polar environment. However the design requirements of the code have challenged operators and builders. New owners and operators are entering the market, in need for guidance on how to tackle these harsh conditions.

RINA invites classifications societies, shipyards, operators, surveyors and designers and anyone with an interest in the ship operation in ice, to submit papers on:

- Hull Design, Construction and Equipment
- Materials, Welds and Coatings
- ICE / Polar Classification
- Ship Systems and Machinery for polar operation (heating, propulsion, engines etc)
- Environmental Systems consideration (Ballast Water Treatment, Ship emissions etc)
- Crew Consideration / Human Factors
- Cargo considerations
- Arctic Shipping Routes
- Operations in freezing conditions

I would like to offer a paper and attach a synopsis of no more than 250 words

- Evacuation, search & rescue

Selected papers may be published in the Transactions of the Royal Institution of Naval Architects



## www.rina.org.uk/ice\_class2018

	Please submit your abstract before 2 <sup>nd</sup> October 2017
	I wish to receive details on exhibition space and sponsorship opportunities
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