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Western Joint Branch

Technical Lecture

Autonomous Shipping

Speaker: Bernard Twomey BEng CEng FIET FIMarEST MIMechE

Date: 21st September 2020
Time: Webinar begins at 19:25
Venue: This lecture will be delivered through IMarEST Webinar.

Summary:

There are a number of claims relating to the benefits of using technology that can lead towards full autonomy within the maritime sector. These range from reduction in the human contribution to system hazards, enhancing safety, improving efficiency through optimization of the ship design and reduction in operating cost associated with the crew. This lecture explores the evidence that supports these claims.

The rapid introduction of technology supporting maritime autonomy is outstripping the abilities of the regulators to develop regulations and standards that seek to secure the safety and security of international shipping.

We can no longer assume that the current maritime laws are transferrable at an international level to address the maritime autonomous infrastructure. The question 'what risk is mitigated by the current law' (which is not always clear) has to be answered. This leads to the research questions: How can a complex highly coupled socio-technical autonomous maritime infrastructure be defined? What is the process for assuring and demonstrating safety of a highly coupled socio-technical autonomous maritime infrastructure? What are the barriers to acceptance of the maritime autonomous infrastructure?

Speaker:

Bernard Twomey BEng CEng FIET FIMarEST MIMechE spent 12 years in the Merchant Navy as an Electrical Superintendent. In 1993 he joined Lloyd's Register, and was the Global Head of Electrotechnical Systems until he left in 2016. He is a visiting Professor at the University of Strathclyde in the Department of Electrical and Electronic Engineering and holds a PhD research post in the Department of Computer Science at the University of York, researching maritime autonomy. Bernard is an active member of several research and special interest groups and sits on the Technical Committees of two leading Classification Societies. He is a member of BSI, CIMAC and advisor to the Danish Maritime Association at the IMO. He was involved with the T45 First of Class, QEC and Astute review panels and acted as advisor to the UK NA.



Image: [https://p1.pxfuel.com/]



Continuing Professional Development: Certificate of attendance

Attendee	Committee endorsement
Signed: _____	Signed: _____
Name: _____	Position: _____

Next event: Marine Accident Investigation Branch (MAIB)

Date: Mon 19/10/2020 **Time:** Webinar to start at 19:25

Venue: Webinar hosted on IMarEST TV



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Webinar Joining Instructions

Our Webinars will be hosted through IMarEST TV live-streams, where you will be able to see and listen to the presenter and their slides and ask questions via Slido. The speaker will monitor questions raised during the lecture and answer as many of these as possible during the Q&A session.

As with our face-to-face lectures we will adopt the following format:

1. Introductions and Parish Notices from the WJB Chair and Lecture Sponsor
2. Lecture
3. Q&A
4. Details of Next Lecture and Close

Following the meeting, a recording will then be made available on IMarEST TV (for members) and, if permission is granted, on YouTube as well (for wider audiences).

To join the Webinar please sign up to the eventbrite:

<https://www.eventbrite.co.uk/e/webinar-autonomous-shipping-tickets-118601200383>

