

# IRSE

Institution of Railway Signal Engineers

# News

April 2019



**Human factors**  
learning from aviation

**People perspective**  
the impact of the digital railway

**Presidential view**  
a word with Markus Montigel

# Volunteer-powered

In this issue we feature the final paper in the 2018-2019 presidential programme which compares human factors within the North American railway and aviation industries. The paper provides a unique insight into practices in both industries and demonstrates how lessons can be learned from others, and why we should always be open to new ideas.

Continuing with a people theme, Steve Denniss looks at the "Digital Railway" from the people perspective and concludes that the workforce of the future needs to be endowed with new skills to support the digital railway, and by working together in a collaborative way we can deliver success.

Stephen Dapr  takes a light-hearted look at the art and science of signal sighting through the eyes of the fictional signalling engineer Ruth, but with some examples of people behaviours which some of you may recognise. We hope you like this style of article, let us know as we value all feedback.

This month's "Industry news" provides a snapshot of what is going on around the world with control and communications systems and we could have filled several more pages, such is the level of activity in the industry. The news includes ETCS Level 2, ATO, traffic management systems, communications, and the value of rail to society. If you are working on something you would like to share with other members please let us know.

"On the road with Blane" demonstrates how the IRSE is engaging with other professional bodies, leading suppliers and government officials to raise our profile and to help promote best practice. We celebrate and congratulate all members who achieved success in last year's IRSE Exam and Judith Ward provides advice on how we can all maintain and develop our professional competence.

Attending an IRSE conference is one activity to assist your CPD and Yousef Kimiagar reports on last year's excellent CBTC conference in Toronto,

Canada. The local section reports include updates from the China and Malaysian Sections, which demonstrate how international and 'volunteer-powered' the IRSE is, and how we should all be proud of what we achieve with this approach.

In Feedback we have an excellent positive letter from Roger Ford, a respected British journalist specialising in rail transport. Roger expands on David Fenner's article on innovation (IRSE News Issue 252, February 2019), confirming the innovation that has already been developed by the signalling profession, and how we must have the confidence to innovate further and promote the steel wheel on steel rail as the transport system of the future.

On the rear cover we are delighted to report an increase in membership, which now exceeds 5000, and we extend a warm welcome to all our new readers.

*Paul Darlington  
Managing Editor, IRSE News*

## Cover story

This month's front cover is the swing span of the Grand Narrows Bridge in Nova Scotia, Canada. The 516-metre-long bridge is part of the only rail link to the urban community of Sydney. Over past decades, communications on the non-signalled line evolved from train orders sent to stations to train radio to mobile phones. Until 1993, colour-light signals confirmed to trains that the swing span was closed and locked. The bridge has been out of service since 2015, with

the machine room reportedly full of sea water. The bridge would absorb about half the CAD102m (\$77m, €68m, £58m) needed to reopen the line, but supporters say the line could remove 100,000 lorries a year from local roads and allow development of a new container port at Sydney. Changes in society and business may allow the reopening of mothballed lines like this all over the world, and our profession must be ready with novel and cost-effective signalling solutions.

*Photo George Raymond*



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