Institution of Mechanical Engineers
Railway Division
Milton Keynes Centre

A Fresh Look at Locomotive Frame Behaviour

8th December 2022 – On line event (please see below for booking)
Talk starts at 17:30 and ends around 18:30

Description:

Tom Parker describes his contribution to the preservation of the last remaining War Department 2-8-0 Austerity at the Keighley and Worth Valley Railway. Tasked with validating the design of retrofitted frame stretcher bars, he combines new and historical techniques to address frame bending around the axle boxes. After developing an understanding of the piston reaction forces, Tom uses Python code (alongside plenty of pen-and-paper calculation) to challenge some of the design assumptions, drawing on published sources from the 1930s to the present day. Metal fatigue and curving forces are also discussed as they form further considerations for manufacture and fitment.

About our speaker:

Tom studied Mechanical Engineering at the University of Southampton, where he first saw what the rail industry can offer through internships with Siemens and Great Western. Upon graduating he joined Transport for Wales and having completed the Rail Engineering Graduate Scheme, now works as a Fleet Support Engineer at Cardiff Canton diesel depot. The 90733-project allowed Tom to gain the required design experience whilst working at home through 2021 and was his first exposure to the world of steam locomotives.

The Event is FREE and open to all!

http://nearyou.imeche.org/near-you/UK/Eastern/milton-keynes-rd-centre/Events
Booking for this event close on 7th December. Log-in details will be sent on morning of 8th December.
If these have not been received by 13:00 on 8th December, please email: marco.baretta@networkrail.co.uk