Testing at Barrow Hill

NewRail has been carrying out testing on site involving the fitting of instruments to the rail. The tests are part of a series of student projects developing and improving techniques for applying strain gauges to measure the stress in rails as trains pass over them. The strain gauges measure the change in shape of the rail (stretching and bending) due to the load applied by the wheels of the train. Monitoring the variations in the measured strain for each wheel of a vehicle can also be used to detect vehicle defects, such as wheel flats and unbalanced freight.

The most recent testing session, depicted here, coincided with a series of shunting moves allowing measurements to be taken whilst three different classes of locomotive were towed over the instrumented rail by the Class 03 shunter.

Publishing news

Academic papers

NewRail's collaborations with Brazil have resulted in a publication in the April-May 2013 edition of Revista Ferroviária, Brazil. The article is available in Portuguese and discusses rail systems, policies and practices in Brazil and the EU. http://bit.ly/19PB4zS

Dr Marin Marinov has had his paper entitled "Analysis of Rail Yard and Terminal Performances" published in the Journal of Transport Literature: www.transport-literature.org

Arturo Gonzalez, Roberto Palacin and Paul Batty have had the following paper published in Energy Conversion and Management- Sustainable urban rail systems: Strategies and technologies for optimal management of regenerative braking energy: www.elsevier.com/locate/enconman 75 (2013) 374-388

SafeCap publications - Professor Alexander Romanovsky, an associate member of NewRail who is based in the School of Computing Science at Newcastle University, and his team of Research Associates, have published widely on the SafeCap project. More information can be found at: http://bit.ly/1dICeRK

Dr. Xiangdong Xue and Prof. Mark Robinson et al have published: Rail vehicle impact analysis: A critique of the suitability of the rigid wall model and the assumption of symmetrical behaviour, in Proceedings of the Institution of Mechanical Engineers, Part F: Journal of Rail and Rapid Transit published online 24 September 2013: http://bit.ly/1aQXSNp

General press

Recent articles about NewRail's work have been published in the general media. An article on the Spectrum project is in International Railway Gazette, Rail/Newcastle is in RailStaff, a general overview of NewRail in Rail Express, the future of freight in The Economist and the new MSc course in Railway Strategies.

These are reproduced in full at our website page: http://bit.ly/1f1KtGs
CPD at NewRail
Following the launch of the MSc in Rail Freight and Logistics which had its first intake of students this autumn, it is now possible to undertake any of the modules individually as part of NewRail's CPD (Continuing Professional Development) offering. Each course lasts two weeks, employs a multi-method learning approach and is suitable for everybody who is interested in the field.

Academic credits are awarded through the University's Credit Accumulation and Transfer Scheme (CATS) and European Credit Transfer and Accumulation System (ECTS) credits are also earned.

Full information on the courses and how to apply can be found on our website at: http://www.ncl.ac.uk/newrail/education/CPD.htm

BESTFACT workshop
An international, two-day workshop, was held in Vienna, structured around the themes of Co-modality and Green Logistics and was attended by 85 people, including participants from the EC; national and regional government agencies; freight industry participants; academics; and project partners.

Rail Freight Group
In September, Tom Zunder (pictured below) from the Freight and Logistics research group at NewRail, attended the Rail Freight Group Annual Policy meeting where he set out the framework for innovation funding, key themes and some of the current projects in which NewRail are participating.

He also clarified some of the future funding programmes which may be available for freight participation.

SMARTSET news
This gives an overview of SMARTSET, which looks at how freight transport in European cities and regions can be made more energy-efficient and sustainable by a better use of freight terminals, and has a second page devoted specifically to SMARTSET in Newcastle. http://is.gd/WVGj1D

Visitors from China
Following Dr. Emmanuel Matsika's visit to China in the summer, a high level delegation from Xiamen University of Technology came to NewRail to discuss future collaboration.

ECTRI
Professor Mark Robinson and Dr. George Kotsikos attended the 10th anniversary celebration of the European Conference of Transport research Institutes (ECTRI) in Brussels. Founded in April 2003, ECTRI includes 25 major transport research organisations from 19 European countries. ECTRI's vision for the future is for: "an efficient and integrated European transport system that provides green, safe, efficient and inclusive transport for people and goods and utilising effectively all modes of transport". More info at: www.ectri.org

GEN Y Rail Event
NewRail, UKRIA and RailTechnology magazine are running an event to encourage young people to consider a career in the rail industry. Called GEN Y Rail the event will take place at the Great North Museum: Hancock on 13 February 2014. For more information please email: newrail-education@ncl.ac.uk or see the flyer on our website at: http://bit.ly/17wzV0B