

John Harvey Tilly
MSc (Eng), FIRSE

Qualifications

Masters Degree (Engineering), Railway Systems Engineering, Sheffield University (2000)
Fellow of the Institution of Railway Signal Engineers
Fellow of the Permanent Way Institution (until 01.02.2022)
Fellow of the Chartered Institute of Transport & Logistics (until 31.12.2020)
City & Guilds D32/33 Workplace Vocational Assessor

Voluntary Advisor to the English and Scottish Law Commission's review of level crossing legislation (2008-13).
Membership Secretary IRSE (1998-2007) and Proceedings Editor IRSE (1995-2002).
Voluntary Advisor to the London Transport Museum (Signal Engineering).
Judge, IRSE Minor Railways Section Biennial 'Volunteer Award' - retired following 2022 Award.

Dissertation Supervisor, Birmingham University, Railway Systems Engineering

Experience

Circa 55 years experience in railway signal and level crossing engineering

2016 to date	Retired. Volunteer, Kent & East Sussex Railway.
2009-to date	Director/Owner, Señalización Ltd. From 2016, Company dormant and being closed down.
1999-2009	HM Railway Inspectorate – HM Principal Inspector of Railways/HM Inspector of Railways
1993-1999	Senior Consultant/Consultant, Halcrow-Transmark
1993	Self Employed – Channel Tunnel (TML) UK Commissioning Team
1968-1993	London Underground Ltd – various roles

Current volunteer activity:

Ongoing voluntary work/advice to the Kent & East Sussex Heritage Railway largely in relation to their level crossings and management of them, including the proposed extension from Bodiam to Robertsbridge.
(Complimentary membership)

2023: Voluntary assessment of new private crossing signs legislation draft issued by Dft. 35 pages response; also amendments before legal process to publish, 8 pages or so; Assistance to IRSE HQ Group commenting as Member of formal group; assistance to IRSE Minor/Heritage rail group. And other heritage, minor rail individuals. Consider output from DfT requires major attention. Became legal requirement 18.11.2023. No replacement public footpath signs and old versions revoked.

Previous Clients

Independent Competent Person, Minehead LC, West Somerset Railway, 01/2018, ongoing as a Volunteer member of the West Somerset Railway following retirement. **Resigned** as matter of professional integrity. 9/2019. Formally reported WSRy to the Office of Rail Regulation for breach of regulations relating to ICP matters. ORR dismissed complaint but did not understand what the law actually means. (My opinion, supported by other WSRy railway technical staff).

Transport for London/London Underground, 12/18 >01/19, Mantles Wood Level Crossing Report on upgrading etc (via PCG Associates).

Clyde & Co Claims LLP, Expert Witness, Frampton Mansell User Worked Level Crossing fatality 01/2018 > 06/19. (Via PCG Associates) Completed. Accidental Death verdict. Not called to give evidence but in Court supporting family/lawyers. HM Coroner decided not to hear my evidence.

Director Señalización Ltd (from 01.06.09)

Railway Industry Consultancy & Local Bicycle Maintenance business. Retired December 2016.

Señalización Ltd Completed projects:

Independent Competent Person, Rawtenstall West LC, East Lancashire Railway, 4/2011 > ongoing as a Volunteer member of the East Lancashire Railway following retirement. Completed 9/2018.

Independent Competent Person, Swanage Railway. Norden Gates level crossing upgrade project. 2/2014 > 10/2017.

London Underground, Training of Signal (Engineering) Incident Managers, incident management & escalation processes, 10/2015 -11/2016.

Irish Rail/Ricardo Rail, Five DART level crossings review & report 03/2016.

Production of 12 Network Rail level crossing orders for Gilberdyke/Ferriby project, Tata Steel Railway Consultancy, York, 09/2014 > 05/2016.

Network Rail HQ, Business Critical Rules Core Team for level crossings, 7/2014 > 8/2015.

Production of 16 Network Rail level crossing orders for North Lincs project, Tata Steel Railway Consultancy, York, 12/2013 > 08/2015.

Marsh Farm Level Crossing, Expert report/review of whether the level crossing required a Level Crossing Order to accommodate biomass trains facilities, Associated British Ports, Immingham/Tata Steel Projects, 2/2015. No guidance or assistance given by local ORR Inspector.

Appointed as a Special Adviser, Transport Select Committee, UK Parliament. MPs report led directly to circa £109M investment in level crossings. 09/2013 > 02/2014. (Career highlight).

Expert Witness, Clay Mills Level Crossing, Clark Turner Brookes Cary Solicitors, Dangerous driving charge, 7/2014. Court dismissed case before trial & defendant not guilty.

Production of 39 Network Rail level crossing orders for GN&GE project, Tata Steel Railway Consultancy, York, 8/2012 > 12/2014.

Level Crossing Assessment Study, West Somerset Railway, 5/2014 > 09/2014.

Assistance to Aggregate Industries; Bardon Quarry Level Crossing, Leicestershire. 12/2013 > 2/2014.

Expert Witness, Bonnar & Co, Edinburgh, level crossing fatality, 04/13 > 01/2014; Court decided in (my) client's favour.

Production of miscellaneous Network Rail level crossing orders for various projects, Tata Steel Railway Consultancy, York, 10/2012 > 5/2013.

Assistance to Planning applicant; Killingholme Branch, Tata Steel Railway Consultancy, York, 10/2012.

Review specialist London Underground signal engineering stores functions, PCG Associates Ltd, London 04/05-2012.

Whitemoss LC, Expert Witness for MacRoberts Solicitors/Network Rail, Glasgow 2011/2; Out of Court settlement decided in (my) client's favour.

Level Crossing Order production, Tata Steel Railway Consultancy, York, 2011.

Level Crossings - Critical Review of Automatic Freight Train Operation, Rio Tinto Railways/Ansaldo STS, Western Australia 7/2011 > 01/2012.

Critical Safety Assessment, Stoke Prior Footpath LC, Tata Steel Railway Consultancy, York 08/2011. Footpath closed almost immediately as result on safety grounds.

Standards, Technical investigations, & Audit work, London Underground, Professional Head of Signalling, 3/2011 > 03/2014.

Level Crossing Assessment Study, Ravensglass & Eskdale Railway/Green Dragon Rail 2010.

Expert Witness, West Lodge level crossing fatality – prosecution of Network Rail, Office of Rail Regulation 2010; Court decided in (my) client's favour.

Independent Competent Person, Canning Town UWC LC, Docklands Light Railway 2009/10.

HM Railway Inspectorate 1999/2009 (HM Principal Inspector/HM Inspector of Railways)

Managed processes for the Level Crossings Act 1983 for the Secretary of State for Transport. Led small team of specialist inspectors in considering upgrading proposals for public level crossings in UK - all railways, nationally. Undertook assessment and approval under ROTs for all private level crossings. Similar role for Northern Ireland Government when requested by NI Government.

Managed public consultation including chairing public meetings, and following assessment of level crossing schemes against standards, legislation, made recommendations to the Secretary of State's authorised representatives. Carried out subsequent public inspections.

Responded to public and parliamentary correspondence, planning and TWA consultations.

Led HMRI investigation into Ufton train crash for HM Coroner & British Transport Police. Temporarily seconded to BTP for Potters Bar train crash investigation.

Investigated many other fatal and non-fatal level crossing incidents and have given expert evidence to a variety of Courts in connection with those incidents. Took enforcement action under the Health & Safety at Work etc. Act when required.

Chair, National Level Crossing Safety Group 2003/4. Member, EU DG TREN Level crossing group. Member EU Level Crossing Research Forum. Member of several RSSB research steering groups. Member of organising committee for 8th International Level Crossing Symposium in Sheffield UK.

1993/1999 Halcrow-Transmark

Consultant/Senior Consultant

Example projects:

Halcrow-Transmark sponsored my MSc(Eng) degree at Sheffield University.

Translink, Northern Ireland Railways; Part of team undertaking a Safety Strategy, multi-disciplinary review of whole railway system, operational and engineering methods following several accidents.

April 1998; Translink, Northern Ireland Railways; 'Expert Witness' - Independent investigation into a collision between two trains involving signalling systems and signalling staff; Verbal evidence and Report of findings to Panel of Inquiry. Subsequent on-site training of all Technician Officers.

Northern Ireland Railways; Assisting with specification and tendering process and some site work for Great Victoria Street Rail Link, Belfast; Bleach Green - Antrim rehabilitation project, level crossing and scheme plan design; Assisting & Witnessing NIR with testing & commissioning Great Victoria Street Rail Link, Belfast & track circuit tokenless block signalling Ballymena - Killagan - Ballymoney.

Railtrack Scotland; Correlation and production of Outline Project Specifications and Safety documentation, various level crossings.

Greater Manchester Passenger Transport Executive; Manchester Metrolink; Evaluation of signalling schemes, plans and specifications for Eccles/Salford extension. Site Inspection of scheme and recommendations to GMPTE for acceptance.

GMPTE; Manchester Metrolink; Audit of Signalling Maintenance prior to the end of current Concession agreement to establish equipment condition.

GMPTE; Manchester Metrolink; Surveys and site assessment of signalling equipment in connection with extension of system to Salford/Eccles and building of the Manchester City Link road. Project specification for works involved.

Seconded to Rail Link Engineering, Channel Tunnel Rail Link Project; Railway Utility Research Manager; Leading a small team in establishing the extents of railway services and utilities on Railtrack and other railway infrastructure in connection with the mapping of the new link. Then, Systemwide Signalling Staging Engineer; Responsible for liaison with the five project groups on signalling issues and interfaces between CTRL & Railtrack infrastructure:

Stansted Airport Ltd, Transit System (Rubber tyred, hybrid guided system); Theoretical and practical refresher training and examination of all system technicians.

Indonesian State Railways; Independent factory testing of Vital Processor Interlockings (VPI) for Cigading - Serpong Rehabilitation project, to their principles; Involvement in Cikampek - Cirebon double tracking project.

CS Transport Ltd, Paris; Independent design check of drawings and designs produced by CS Transport, France (one of France's major signalling contractors) to confirm that the drawings met the specification laid down by the Malaysian Railways Administration for a major re-signalling and upgrading project involving three lines of the State Railway system (KTMB) within a radius of 50km of the capital city, Kuala Lumpur.

1993 Transmanche Link Joint Venture (TML) - the Channel Tunnel Contractors; Consultant; Systems Commissioning & Operations Engineer, (Signalling UK).

Responsible for managing and witnessing the commissioning activities of various French signalling contractors within the British section of the Channel Tunnel system.

1968/1993 London Underground Ltd

1990-1993 Incident Manager (Chief Inspector), Responsible for investigation and rectification of reported malfunctions to signalling, communications, ticketing, lighting and traction systems throughout the whole LUL railway system. This included all aspects from simple maintenance repairs to major safety critical incident investigation.

1985/1990 Signal Maintenance Supervisor.

1979/1985 Signal Installation Supervisor.

1972-/1979 Signal Maintenance Technician, various grades.

1968/1972 Indentured Apprentice, LT/LU Railway Power Signal Engineering.

Publications

The "V" style Interlocking Machine and it's use by London Underground – privately published.

MSc Dissertation, Sheffield University; 'Level Crossings on Rural Railways: Can the railway industry continue to subsidise rural settlements'.

London Transport Railway Signalling; Papers on the life and work of Robert Dell 1900-1992 (Joint author).

Rehabilitation of the Bleach Green - Antrim Railway Line (assessed for Chartered Institute of Transport application).

150 years of the Edmondson ticket, joint author, article, *Railway World*.

Miscellaneous

Full, clean, driving licence. Married, two sons, two grandsons, one grand-daughter, one Great Grand-daughter; Family Tree research/Genealogy; Interests include all forms of music, railways, cycling, photography/video making, wildlife photography particularly birds & website management. Membership of the RSPB; Membership of The Wildlife Trust for Northants;