

Lieutenant Colonel William Yolland CB FRS FRSA

William Yolland (1810-1885), CB, FRS, was an English military surveyor, astronomer, and engineer, and was Britain's Chief Inspector of Railways from 1877 until his death. He was a redoubtable campaigner for railway safety, often in the face of strong opposition, at a time when railway investment was being directed towards the expansion of the networks rather than the prevention of accidents. He was a member of the three-man committee of inquiry into the Tay Bridge disaster.

1810 March 17th. Born in Plympton St Mary, Devon, the son of the land agent to Lord Morley, Plymouth, and his father promoted the boy's interest in surveying and land management by enrolling him at a school specialising in mathematics.

1828 He was commissioned into the Royal Engineers and completed his technical training at the Royal School of Military Engineering in Chatham, Kent, in 1831.

1838 After service in Britain, Ireland, and Canada he was posted to the Ordnance Survey. He made such a strong impression there, particularly with his mathematical knowledge and publications on astronomy, that in 1846 he was nominated to head the organisation by its departing Superintendent, General Thomas Colby. He was, however, thought too young for the post and an older officer (who had no survey experience) was appointed instead. This new Superintendent, Colonel Lewis Hall, despatched Yolland to Ireland to avoid his embarrassment in commanding a more qualified officer, but the survey there was of greater importance than Hall had realised: Parliament had noticed that revenue was being lost as land assessments for tax were not up to date and Yolland's progress there was followed with interest.

In 1849 he was called to appear before a parliamentary select committee to explain how his method of mapping settlements in Ireland could be applied in England, as more detailed town maps were urgently needed to assist in the planned reforms of town sanitation. On his return to England he was placed in charge of the Ordnance Survey's new offices in Southampton, where he produced a set of maps of the City itself which were recently reproduced by the City Council for purchase by the public.

1854 When Colonel Hall retired it was expected that, at the second opportunity, Yolland would be offered the Superintendent's post. However, Hall, who had continued to resent his subordinate's abilities, succeeded in blocking the appointment. Yolland left the Ordnance Survey immediately afterwards.

The Railway Inspectorate of the Board of Trade was invariably staffed from the Royal Engineers and Yolland, although still an army officer (by then a major) had no difficulty in securing a post with that organisation. Additionally, he was appointed to a commission to report on the best methods of scientific and technical training for military officers. His findings were accepted, and his report was still influencing the training of military engineers (in Britain and the United States) at the end of the twentieth century.

1863 Yolland retired from the army with the rank of lieutenant-colonel, although he retained his position with the Railway Inspectorate. At a time when Britain's railway mileage was expanding at a great rate, his duties included the inspection of new lines and he took full opportunity to insist that the latest safety features, such as signal interlocking and block working, should be deployed. His campaign for continuous automatic brakes was initially less successful. At that time, the Inspectorate had no statutory powers with regard to existing lines; all too frequently Yolland found himself reporting, in his characteristic rigorous manner, the organisational failures and neglect that had led to serious accidents.

In 1877 he was appointed HM Chief Railway Inspector in succession to Henry Whatley Tyler.

One of the worst railway crashes he investigated occurred on the Great Western Railway near Oxford. The accident occurred on 24 December 1874 at Shipton-on-Cherwell, just north of Kidlington when a passenger train was derailed and crashed down the embankment. The investigation led by Yolland established the root causes very quickly, and further details emerged at the public enquiry set up by the Board of Trade. By tracing the marks on the sleepers behind the derailed train, Yolland established that the small 4-wheel carriage behind the locomotive had suffered a broken wheel, which disintegrated and caused the derailment. The driver braked hard and the carriages behind cannonaded into the 4-wheeler, crushing it entirely, as well as themselves running off the track. The accident occurred near to a small bridge crossing the Oxford canal and 34 passengers died from their injuries.



Shipton-on-Cherwell Disaster (1874)

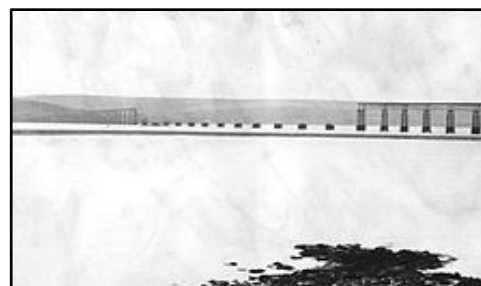
He was a member of the Board of Inquiry into the Tay Bridge disaster, with fellow members Henry Cadogan Rothery and William Henry Barlow. A train was lost on the night of 28 December 1879 while crossing the Tay estuary just south of Dundee. The centre section of the 2-mile-long bridge collapsed during a storm, with the loss of all on board the train. The inquiry sat initially in Dundee to hear eyewitness accounts of the accident, and then in London for expert evidence. They

produced their final report in June 1880, and concluded that the bridge was "badly designed, badly built and badly maintained".

Yolland went on to report on the state of other Bouch bridges, especially a very similar structure at Montrose, the South Esk Viaduct. The bridge was in a dire state according to Yolland in his Railway Inspectorate report and had eventually to be demolished and replaced by a safer structure.

1885 September 5th. Died in Atherstone, Warwickshire.

Buried in Kensal Green Cemetery



Fallen Tay Bridge from the north