

Structural Integrity: Silver Bridge

The 1967 collapse of the Silver Bridge over the Ohio River was an engineering mystery and a human tragedy - 46 people died. Why did a suspension bridge built to last a century not make 40 years? Built in 1928, it was a slimmer version of similar bridges built in nearby Pittsburgh. The slimming down was deemed to be safe because of the use of a tougher steel and 'silver coloured anticorrosion paint'. The tracks in this album look at the factors which led to the catastrophic failure of one of the eyebars which supported the deck, and the subsequent forensic investigation which led to the creation of the National Bridge Inspection Standards to inspect the 1 million bridges of the USA. This material forms part of the course T357, Structural integrity: designing against failure.