

Kingsland Tram Accident Remembered

Address to Commemoration Ceremony 23 December 2016

By James Duncan

About three years ago I did some heavy duty research into the Kingsland tram accident for an article I was writing for two international tramway publications. My findings left me in no doubt that today, we are commemorating more than just a tram crash. This tragic accident galvanised the nation and saw a change in the design standards for future open top double decker trams in New Zealand, and also brought about a review of the methods used to train Tram Motormen or drivers as we might call them today, particularly here in Auckland.

We need to remember that back in 1903, electric trams had only been in operation in Auckland for just over a year. This form of transport was revolutionary – until this time life was governed by the speed of a horse, and now here were large railed vehicles propelling themselves along without horses or steam engines, using this new and dangerous force called electricity. So people looked on the electric tram with a mixture of fear and great excitement. We were indeed the first New Zealand city to go in for a full tramway system and therefore other New Zealand cities, who were either planning a tram system or had already begun construction, were using Auckland as a template for their own future operations.

Therefore you will understand why New Zealand was truly stunned when they awoke on Christmas morning 1903 to learn of the events of the previous evening. A well loaded city-bound double decker tram, No.39, suffered a brake failure and ran away backwards down Eden Terrace, along New North Rd and slamming into a single decker tram on this very spot, killing three and causing brutal injuries to over 100 people. The tragedy was reported in every main newspaper throughout the country and the coroner's inquest which lasted over several days, was closely followed by the press. This tramway accident rocked the nation in much the same way as the Tangiwai rail disaster of Christmas Eve 1953 and the Erebus disaster in November of 1979.

So what came out of this tragedy?

First up, tramway companies here took a good look at the design of open top double decker trams. Back in those days the British influence was strong in so much of our lives. So when we opted for the latest trend in city street transport, we placed our order for forty-three electric trams with a British company, and the order included six of the then very popular British style, open top double decker tram.

The Kingsland runaway, No.39, was one of those six double deckers and featured hand rails on the top deck that were shoulder height for seated passengers, and provided an unobstructed view of the city scape as the tram trundled along. However, these very handrails were in part, to contribute to the death of one soul and injury to dozens of others on the top deck of No.39.

The second design factor that came under scrutiny was the all-important trolley pole, a steel pole sitting in a spring-loaded base on the roof of the tram which has a heavy brass wheel fitted at the end that runs along the underside of the wire. This pole conveys the electricity from the wire above down to the tram, its lights, controllers and motors, but the trolley pole is designed always to be in the trailing position or in other words at the back of the tram being dragged.

In the case of No.39, as it rolled backwards with increasing speed down Eden Terrace, the trolley pole, being forced backwards, finally left the wire, plunging the tram into darkness and then, snagging a cross wire, the pole was spun around quite violently to the other end of the tram, with the big brass trolley wheel striking a passenger, young Ann Hogarth, on the side of the head, breaking her neck and killing her instantly. From here on, as the tram continued its flight along New North Rd, the trolley pole flayed around striking support wires and bouncing up and down with great force, striking other passengers seated on the top deck who had nowhere to escape to and no protection. Their nightmare coming to an abrupt end when the double decker telescoped into a following city bound tram, single-decker tram No.32.

In 1904, the year following the Kingsland tram accident, Wellington city opened its tramway system. It too included a fleet of open top double deckers, however with Kingsland still fresh in their minds, Wellington deckers were fitted with handrails that went high enough to be just above the heads of seated passengers. Wellington also made their trolley poles slightly longer than the tram itself, so if the pole did bounce down it would strike the top of the handrails and not the heads of the top deck passengers.

A similar situation in Christchurch when they opened in 1905, they too included the standard British designed double decker trams, but they fitted a hoop at each end of the top deck to protect the passengers from any anti-social behaviour by the trolley pole.

The other key issue raised during the coroner's inquest, was the training standards for tram motormen. Although they were given hands-on experience driving a tram in the normal way, the method of dealing with brake failure was mentioned in their training, but they were never physically made to try it, resulting in poor Motorman Humphrey on decker No.39 struggling to remember the correct process of using dynamic braking which short circuits one motor and uses it to drive the other motor in the opposite direction.

Following the inquest, this became a standard practise during training on the Auckland tramway system right through the years, even to the present day. I am currently responsible for the training and testing of tram motormen on both tram operations here in Auckland, that's the MOTAT tramway and the loop down in Wynyard Quarter. As was done during *my* training back in the late 1970s, I ensure our would-be drivers are aware of the issues surrounding the Kingsland crash, they are taught how to deal with a similar brake failure, and as part of their test, they must be able to perform the dynamic braking procedure on command.

In conclusion, over the 54 years that trams served Auckland, there were of course other accidents, some taking lives, but most tramway historians today all agree, that the Kingsland runaway of Christmas Eve 1903, was the worst in the history of the tramway system. In light of what I've shared with you this morning, I'm sure that you will agree, that a lasting commemoration of this tragic event is long overdue.

Thank you.

James Duncan
Auckland Council Tram Operations Manager

23 December 2016