No 93-113

Train A02

Collision with Motor Vehicle

Taupaki

4 September 1993

ABSTRACT

This report describes a collision between a passenger excursion train (A02) and a four-wheel-drive vehicle on a level crossing at Taupaki on 4 September 1993. The driver, the sole occupant of the motor vehicle, was fatally injured in the collision. As the crossing was already protected by flashing lights and bells, no specific safety issues were raised.

TRANSPORT ACCIDENT INVESTIGATION COMMISSION

RAIL ACCIDENT REPORT NO 93-113

Train Type and Number:	Passenger, A02
Locomotive:	RM 30
Date and Time:	4 September 1993, 0755 hours *
Location:	North Auckland Line, 39.43 km, Taupaki Road crossing, Taupaki
Type of Occurrence:	Collision with motor vehicle
Persons on Board:	Crew: 2 Passengers: 91
Injuries:	Crew: 2 Nil Passengers: 91 Nil Other: 1 Fatal#
Nature of Damage:	Train: Minor Motor vehicle: Substantial
Information Sources:	Transport Accident Investigation Commission field investigation
Investigator in Charge:	Mr A J Buckingham

#Motor vehicle driver
*All times in this report are NZST (UTC + 12 hours)

1. NARRATIVE

1.1 New Zealand Rail Limited's "Silver Fern" railcar RM 30 was operating as Train A02, a rail enthusiasts' charter from Auckland to Otiria. There were 91 passengers on board plus a crew of two, the Locomotive Engineer and the Train Attendant.

1.2 As the railcar entered the Taupaki Road level crossing at 0755 hours, it collided with a Toyota Landcruiser travelling east on Taupaki Road. The motor vehicle was carried 150 m along the railway line before the railcar, under emergency braking, came to a halt. The motor vehicle driver died in the collision.

1.3 The Locomotive Engineer had sounded the railcar's horn as he approached the crossing, and the headlight was on full brightness. Additionally, the railcar was equipped with a pair of low-set auxiliary headlights, which were arranged to begin flashing alternately when the horn was sounded, and continue to do so for a fixed time interval by means of a time-delay device.

1.4 The level crossing was protected by flashing lights and bells, which were observed to be operating normally at the time of the accident. Additional warning of the crossing was provided by the standard "St Andrew's Cross" sign, on the left-hand side of the road, approximately 75 m in advance of the crossing.

1.5 The road crossed the railway line at approximately right angles, with clear straight approaches to the crossing from both east and west, the approach from the west giving a clear view of the crossing for some 350 m. A hedgerow parallel to the roadline on the south side of the road would have obscured the motorist's view, for the last 50 metres (approximately) of his approach to the crossing, of rail traffic on his right. A wide gateway at the western end of the hedgerow may have facilitated the motorist's sighting of the railcar earlier in the approach, but only if he were specifically looking out for rail traffic.

1.6 Weather conditions at the time were daylight, overcast with light rain, and reasonable visibility, although light rain on the windscreens of both vehicles may have impaired the field of view of their respective drivers.

1.7 This accident occurred on a Saturday morning, normally a time when there were no scheduled trains on this section of line. The motorist was a local resident who frequently crossed the railway line at Taupaki Road, and he may have become accustomed to the pattern of train movements in the area. For this reason, he may have discounted the possibility of encountering a train on a Saturday, and may not have been paying particular attention to the crossing warning lights or the railway line itself.

1.8 The speed of the railcar as it entered the crossing was estimated by the Locomotive Engineer as between 65 and 70 km/h. The railcar was equipped with an event recorder, but in the post-accident activity at the scene, the isolation of the recorder was overlooked.

1.9 A witness who lived adjacent to the crossing estimated the Toyota's speed as about 50 km/h, and stated that the Toyota driver did not appear to have seen the train, or make any attempt to stop before the collision occurred.

1.10 The railcar sustained damage to its cowcatcher, drawgear and airbrake system, resulting in its withdrawal from service for several days. The Toyota Landcruiser was severely crushed in on the driver's side, resulting in loss of occupiable space for the driver. The accident was not survivable for the Toyota driver. The vehicle's fuel tank was ruptured in the collision, resulting in some petrol spillage, but fire did not occur.

2. FINDINGS

2.1 The train was being operated properly prior to the accident.

2.2 The crossing alarms were functioning normally at the time of the accident.

2.3 The motor vehicle driver did not appear to have observed the operation of the crossing alarms, or the approaching train.

2.4 The motor vehicle driver may have been accustomed to the fact that trains did not normally run in the area on Saturdays.

2.5 There was insufficient space in which to stop the train when the Locomotive Engineer realised the collision was imminent.

2.6 The collision was unsurvivable for the motor vehicle driver.

9 February 1994

M F Dunphy
Chief Commissioner