



NO 95-107

TRAIN 203

COLLISION WITH MOTOR VEHICLE

MANGAPEHI

6 MARCH 1995

ABSTRACT

At 0027 hours on 6 March 1995, Train 203, the Auckland - Wellington "Northerner" express collided with a motor vehicle on the Highway 30 level crossing at Mangapehi (20 km south of Te Kuiti). The crossing was equipped with warning devices which were operating at the time of the accident. The motor vehicle driver was killed and his passenger sustained minor injuries. No specific safety issues were identified.

TRANSPORT ACCIDENT INVESTIGATION COMMISSION

RAIL ACCIDENT REPORT NO 95-107

Train Type and Number: Passenger, 203

Date and Time: 6 March 1995, 0027 hours

Location: North Island Main Trunk, 449.72 km,
Highway 30 crossing, Mangapehi

Type of Occurrence: Collision with motor vehicle

Persons on Board: Crew: 3
Passengers: 60

Injuries: Crew: Nil
Passengers: Nil
Other: 1 fatal#
1 minor*

Nature of Damage: Train: Nil
Motor vehicle: destroyed

Information Sources: Transport Accident Investigation Commission
field investigation

Investigator in Charge: A J Buckingham

Motor vehicle driver

* Motor vehicle passenger

1. NARRATIVE

- 1.1 At 0027 hours on 6 March 1995, Train 203, the Auckland - Wellington “Northerner” overnight express, was approaching the Highway 30 level crossing at Mangapehi, when the Locomotive Engineer (LE) noticed the lights of a southbound motor vehicle to his right on Highway 30.
- 1.2 The train was travelling at approximately 90 km/h on a straight and level track. The locomotive headlight was on full brightness. It was a clear night with no impediment to visibility.
- 1.3 About 70 m short of the crossing, it became apparent to the LE that the motor vehicle (a Ford Escort van) was not going to stop, and the car and train collided. The LE’s estimate of the van’s speed at the time of the collision was between 30 and 40 km/h. The LE had sounded the locomotive horn when he realised that a collision was likely, but had no chance of stopping the train or even slowing it sufficiently to affect the outcome. He brought the train to a normal halt about 600 m beyond the crossing and returned on foot to the scene of the collision.
- 1.4 The van was torn in half by the force of the collision, the front portion (in effect, everything forward of the driver and front passenger seats) being flung some 29 m and the rear portion about 32 m to the train’s front right in the direction of travel. The van passenger found the driver lying beside the railway line about 24 m from the point of collision.
- 1.5 The van driver was seriously injured, and despite the efforts of emergency services personnel, died about two hours later. The passenger received abrasions and a cut foot.
- 1.6 The passenger had no recollection of events preceding the collision, and his first awareness of the accident was when he found himself standing beside the railway line, not far from the driver.
- 1.7 Later analysis of the relative positions and speeds of the van and train as they approached the level crossing indicated that the van driver may not have sighted the train before the collision, it being in a blind spot to the left rear of the van until the van was within perhaps 20 m of the crossing. There were no side windows in the rear of the van. Marks on the roadway indicated that the van was on the right-hand side of the roadway when it was struck, which may indicate that the driver was attempting last-minute avoiding action. There were no signs of braking on the road.
- 1.8 The approach to the crossing was clearly marked by two “St Andrews cross” warning signs, one on each side of the road, and a PW13 warning sign (yellow diamond shape with stylised depiction of the layout of the road and rail). Additionally, the crossing was protected by flashing lights and bells, with three pairs of flashing lights facing southbound traffic. One set was so positioned as to be clearly visible several hundred metres from the crossing. The LE noted that the lights were flashing as the train approached the crossing, and the lights functioned normally when tested after the accident.
- 1.9 Given that the crossing alarms were operating, the alternative to the possibility that the van driver did not sight the train was that he had sighted it and attempted to cross ahead of it. There was insufficient evidence to favour either alternative.

- 1.10 Both occupants had been drinking in Te Kuiti until about midnight, after which they set off on their journey home to Mangakino. Both were considered to be familiar with the road and the presence of the level crossing. Post-mortem toxicology testing showed that the driver's blood alcohol content was 125 mg per 100 ml, which is sufficient to cause impaired judgment and driving ability. However, the urine alcohol level was 186 mg per 100 ml, which is more indicative of the blood alcohol level at the time of the collision. Additionally, it was established that the driver had indulged in cannabis smoking earlier that night.

2. FINDINGS

- 2.1 The train was being operated normally prior to the collision.
- 2.2 The level crossing alarms were operating and were clearly visible.
- 2.3 It could not be established whether the van driver had attempted to race the train or simply had not sighted it.
- 2.4 The van driver's driving ability and judgment were probably affected by alcohol and cannabis.

17 October 1995

M F Dunphy
Chief Commissioner