NO 94-123

TRAIN 402

COLLISION WITH TRUCK

NEAR MORRINSVILLE

7 SEPTEMBER 1994

ABSTRACT

At 1455 hours on 7 September 1994, Train 402, the Rotorua to Auckland "Geyserland Express" collided with a truck on a private farm access crossing, resulting in the death of the truck driver. No specific safety issues were identified.

TRANSPORT ACCIDENT INVESTIGATION COMMISSION

RAIL ACCIDENT REPORT NO 94-123

Train Type and Number:	Passenger, 402
Railcar:	RM 30
Date and Time:	7 September 1994, 1455 hours
Location:	East Coast Main Trunk, 24.8 km, near Morrinsville
Type of Occurrence:	Collision with truck
Persons on Board:	Crew: 4 Passengers: 39
Injuries:	Crew: Nil Passengers: Nil Other[#]: 1 Fatal
Information Sources:	Transport Accident Investigation Commission field investigation
Investigator in Charge:	Mr A J Buckingham

[#] Truck Driver

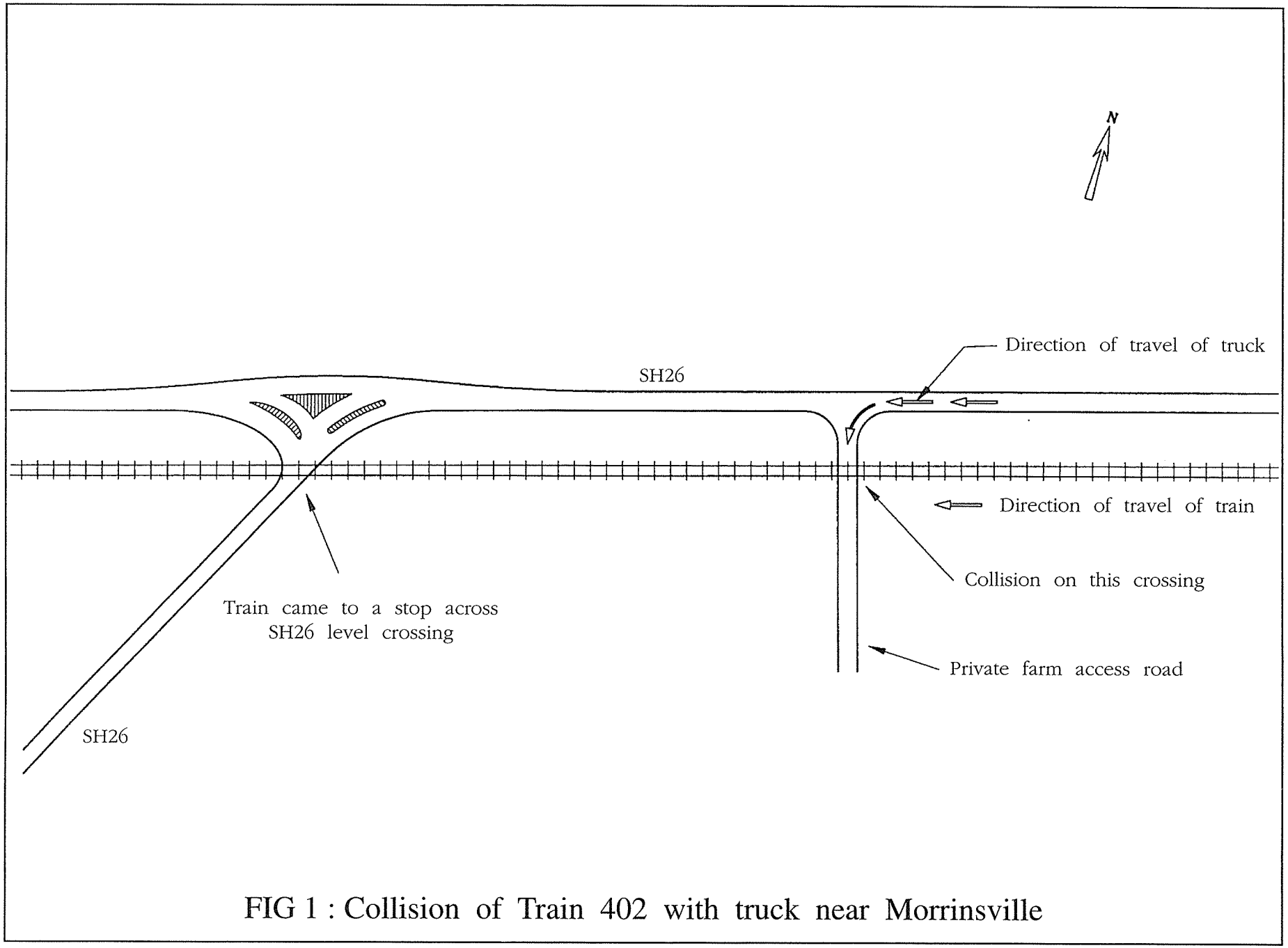

FIG 1 : Collision of Train 402 with truck near Morrinsville

1. NARRATIVE

1.1 Train 402 was the Rotorua to Auckland "Geyserland Express", operated on 7 September 1994 by "Silver Fern" railcar RM 30. At 1455 hours, the railcar collided with a truck on a farm access crossing, some 5 km to the west of Morrinsville. The truck driver was fatally injured in the collision.

1.2 Both the railcar and the truck had been travelling westwards in an area where State Highway 26 and the railway line ran parallel and close together for approximately one kilometre. The truck was to the Locomotive Engineer's right, and some distance ahead. The railcar was travelling with the number 2 end leading, i.e. engine compartment to the rear.

1.3 The Locomotive Engineer was accompanied in his driving cab by a colleague, who normally crewed freight trains, and was "learning the road". Both noticed the truck indicate a left turn as it approached a farm access crossing some 200 m ahead of the train, and it became apparent that the truck was not going to stop before crossing the railway line.

1.4 The railcar's horn was sounded at least three times, and when a collision appeared imminent, the Locomotive Engineer applied emergency braking and sounded the horn continuously. There was insufficient distance remaining in which to stop the railcar, which was travelling at 94 km/h at the time of brake application.

1.5 The railcar struck the truck in the vicinity of the cab, throwing its driver clear and tearing the cab bodily from the chassis. The cab was carried 220 m along the line by the railcar, which came to rest on the State Highway 26 level crossing. Containers of chemicals (mainly a dairy equipment cleansing agent) carried on the truck were ruptured in the collision and their contents splashed over the body and undercarriage of the railcar.

1.6 After the railcar stopped, the second Locomotive Engineer and one of the two Train Attendants went back along the line and found the truck driver apparently dead. This was confirmed by an Ambulance Officer who arrived a few minutes later.

1.7 Damage to the railcar consisted of dislocated drawgear, a bent cowcatcher, damage to the airbrake piping and a shattered driving compartment centre window. The leading wheelset on the front bogie was derailed at the point of collision, but further derailment was prevented by the bogie restraint chains. Additionally, some damage was inflicted on the stainless steel cladding, including a tear in the side of the front passenger compartment. The fuel tank was penetrated and leaked a small quantity of diesel fuel. The fuel and chemical spills were attended to by the New Zealand Fire Service.

1.8 At the time of the collision, there was heavy rain falling, but the visibility was not significantly impaired. The railcar's dual headlight was illuminated in accordance with normal practice, and the "ditch lights" would have been flashing from the time the Locomotive Engineer first sounded the horn. (The "ditch lights" are a pair of low-set auxiliary headlights which flash alternately for approximately 20 seconds from the time the horn is activated. If the horn is sounded again within the 20 seconds, the timer in the light circuit resets, and the lights will flash for a further 20 seconds).

1.9 The edge of the highway was only 14 m from the safe crossing point prior to the railway crossing, and the railcar would have been in a "blind spot" to the truck driver's left rear, making sighting of the railcar difficult. This may have been exacerbated by rain on the side windows and rear view mirrors of the truck, with possible fogging up of the inside surfaces of the windows.

1.10 The truck driver was a commercial operator making a delivery to the farm, and as far as was known to the farmer, this was his first visit to the property.

1.11 There were no signs on State Highway 26 warning of the presence of the railway crossing on the farm access road, but the standard signs were in place for the level crossing 220 m to the west, where State Highway 26 veered left and crossed the railway line. At the farm access road, there was an unobstructed view of the railway line in both directions, and for the entire distance that the road and railway line ran side by side, the railway line was clearly visible from the road. The nature of the crossing did not require the provision of signage by either New Zealand Rail Ltd or Transit New Zealand. Nonetheless, it was the responsibility of the truck driver to ensure that there was no approaching rail traffic before crossing the railway line.

1.12 This type of configuration of road and rail has featured in several accidents investigated by the Commission since 1 April 1993. One common factor has been the lack of "recovery time" for the driver to recognise the presence of the level crossing, check for rail traffic, and stop if necessary. In this case there was 14 m in which to stop clear of the railway line, and had the truck driver sighted the train only after making his turn into the farm access road, he would have had little time available to react to the sighting and take appropriate action.

2. FINDINGS

2.1 The railcar was being operated normally prior to the collision.

2.2 The truck driver was responsible for ensuring that there was no approaching rail traffic before entering the crossing.

2.3 The truck driver did not sight the railcar in time to stop clear of the railway line.

2.4 Heavy rain may have contributed to the truck driver's failure to see the railcar.

2.5 The proximity of the State Highway to the railway line allowed very little "recovery time" for traffic turning into the farm access road.

2.6 It was not possible to stop the railcar in time to avert the collision.

2.7 No specific safety issues were identified.

7 December 1994

M F Dunphy
Chief Commissioner