

SHERIFFDOM of TAYSIDE CENTRAL and FIFE at PERTH

DETERMINATION

by

LINDSAY DAVID ROBERTSON FOULIS, Esquire, Sheriff of the Sheriffdom of Tayside Central and Fife at Perth following an INQUIRY held at Perth on 3rd November and 21st December 2010 into the death of ANDREW RAESIDE

PERTH, 25th March 2011.

The Sheriff, having considered all the evidence adduced, Determines:-

1. In terms of Section 6(1)(a) of the Fatal Accidents and Sudden Deaths Inquiry (Scotland) Act 1976, that the said Andrew Raeside died at 00.20am on 3rd February 2010 within the cab of the Mercedes tractor unit registration number GY 59 LGF on the impact of the said cab with the foreshore of Loch Faskally, twenty metres below the Coronation Bridge on A9 trunk road following the said cab breaching the parapet barriers on said bridge, detaching from the trailer unit, and falling to said foreshore.
2. In terms of Section 6(1)(a) of the said Act, that the accident which resulted in the death of the said Andrew Raeside occurred at 00.20am on 3rd February 2010 on the said Coronation Bridge on A9 trunk road 460 metres south of its junction with B8019 road.
3. In terms of Section 6(1)(b) of the said Act, that the cause of death of the said Andrew Raeside was multiple cardiothoracic injuries caused by blunt force trauma resulting from the deceleration force caused by the said cab's impact with the ground.
4. In terms of Section 6(1)(b) of the said Act, that the cause of the said accident which resulted in the death of the said Andrew Raeside was driver error on his part.

5. In terms of Section 6(1)(c) of the said Act, that the said accident might have been avoided by the said Andrew Raeside driving within the speed limit applicable at the *locus* and at a speed appropriate for the road conditions at the time of the said accident.

NOTE

Evidence in this Fatal Accident Inquiry was led on 3rd November and 21st December 2010. The Crown were represented by Mr Brown, Procurator Fiscal depute, Perth. Members of Mr Raeside's family were present but were not represented and intimated that they did not wish to take part formally in the Inquiry. As a result of my wish to hear evidence regarding the bridge structure, on 21st December 2010 when Mr Valentine from Transport (Scotland) gave evidence, that concern was represented by Mrs Nicolson.

The Crown led evidence from Messrs Duncan Ross, Alan Raeside, Andrew Grant, James Whitelaw, Ramsay Lawson, John McNulty, William Valentine, Alick Williams, M/s Celine Hutton, Police Constables Neil Cooper, Alan Band, Ian McDonald, Brian Duncan, David Pettigrew, Bruce Hope, Steven Whittet, and Michael Cargill. In addition, affidavit evidence was laid before the Inquiry from Mr Kevin Lennon, Mrs Janet Raeside and Mrs Catriona Brown, and Doctors Helen Brownlow and Michael Fyall.

For the Crown, Mr Brown submitted that the matters I required to determine in terms of section 6(1)(a) and (b) of the Fatal Accidents and Sudden Deaths Inquiry (Scotland) Act 1976 were not contentious. Turning to section 6(1)(c) he indicated that in the event that Mr Raeside was not wearing a seatbelt this was unlikely to have contributed to his death. There might be an issue regarding the speed of the vehicle just prior to the accident and he referred to the evidence from Mr Lawson. There were no defects apparent in any system. Finally it would have been unreasonable to have constructed the bridge barriers to any higher standard.

Mrs Nicolson adopted the submissions from Mr Brown. Dealing specifically with the bridge barriers, if the bridge had been constructed in the present day, the same standards of construction would have applied to the barriers.

Many of the issues which require to be addressed in terms of section 6 of the 1976 Act were not contentious. Mr Raeside was working as an HGV driver with Brogan Fuels. He was described as an excellent driver, responsible and a meticulous record keeper. There was no question as to his

physical fitness to drive. At the time of the accident he was returning from Muir of Ord, having earlier delivered a tanker load of kerosene. He had left Grangemouth for his destination at 4.30pm on 3rd February 2010. Mr Raeside would have reached his destination between 8.30pm and 9pm and then required to take a forty five minute break before commencing the return journey. The vehicle he was driving was well maintained and was relatively new, the registration number being GY 59 LGE. No defects were discovered other than those directly attributable to the accident. It was an articulated vehicle with a maximum permissible weight of 44,000 kgs. It was fitted with a speed limiter thus it could not travel much above fifty six miles per hour. If the vehicle was travelling downhill, this speed might be exceeded by two or three miles per hour. At the time of the accident, the weather and road conditions were not ideal. There were flurries of snow. This resulted in snow lying on the road surface, which was slippery as a result. The snow flurries also reduced visibility. Mr Raeside was driving south towards the *locus*. Mr Lawson was also driving south and was overtaken by the articulated lorry driven by Mr Raeside relatively close to the *locus*. He described the road surface as slushy requiring a driver to take care. Another driver, Mr James Whitelaw, indicated that he would not have wanted to apply his brakes quickly as a result of the road conditions. At the *locus* the A9 consists of a single carriageway in each direction. The speed limit for a vehicle such as that driven by Mr Raeside was 40 miles per hour whilst on a single carriageway, 50 miles per hour on a dual carriageway. At the time of the accident, Mr Raeside was not wearing his seat belt but this did not contribute in any way to his tragic death. Likewise, the fact that the cab was not fitted with an airbag had no significance. The cause of his death was set out in the post mortem report which was supplemented by the affidavit from Doctor Brownlow. Her evidence was that death was instantaneous and all evidence pointed to the time of death being around 00.20am on 3rd February 2010, which was also the time of the accident which resulted in Mr Raeside's death.

In light of that I have no difficulty in concluding that the place and time of the death of Mr Raeside and the accident causing his death are as set out in the determination. I also have no difficulty in concluding the cause of his death is as set out in that determination.

Turning to the possible cause or causes of the accident, it is clear that Mr Raeside lost control of his articulated lorry, the lorry collided with the barrier bounding the northbound carriageway of the Coronation Bridge and the cab breached that barrier. Thereafter the cab disconnected from the trailer. It fell and impacted with the ground below the bridge. I am satisfied that the lorry jackknifed for the reasons set out in the crash investigation report, Crown production number 8, prepared by Police Constables Whittet and Cargill.

Clearly the road conditions were a possible contributory factor to the accident. Was there anything in Mr Raeside's driving which might have played a part? Mr Lawson, who was overtaken by the deceased, described his speed at the time as between 40 and 45 miles per hour. Mr Raeside's speed was said to be not much more than that. Mr Whitelaw, who had been approaching the *locus* from the south, said that he was travelling at around forty five miles per hour. From the examination of the tachograph in the deceased's vehicle, although the last sixty to seventy seconds of the journey have not been recorded, the speed of the vehicle immediately prior to that was between fifty and fifty six miles per hour over a sixty second period.

The crash investigation report described the approach to the *locus* from the north. This was the direction from which Mr Raeside approached at the material time. The A9 changes from a single to dual carriageway 2.6 miles to the north of the *locus*. It returns to a single carriageway 1.2 miles to the north of the *locus*. Approximately five hundred yards to the north of the *locus* the road becomes a dual carriageway once again before returning once again to a single carriageway just prior to the bridge. Throughout this whole stretch of road the gradient constitutes a gentle descent to the *locus*. Correlating the tachograph readings of speed with this description of the approach to the *locus*, the deceased is likely to have reached the point 2.6 miles to the north of the *locus* approximately three minutes prior to the accident. He reached the point where the dual carriageway returns to a single carriageway approximately ninety seconds prior to the collision. By the time the road became a dual carriageway again, five hundred yards to the north of the *locus*, the tachograph had ceased to operate. The readings of speed from the tachograph for the sixty seconds prior to its ceasing to operate would indicate that the deceased was exceeding the speed limit by between ten and twenty per cent during that stage. The speed readings are fairly consistent and I am satisfied that it is likely the deceased was travelling at a speed in excess of the speed limit applicable for the vehicle he was driving at the time of the accident.

In the crash investigation report, the authors indicated that there were three possible causes of the jackknife. Alternatively the jackknife was caused by a combination of these three factors. Whilst I am satisfied that the deceased was travelling at excessive speed for the road and the conditions, in light of the evidence, I cannot come to any determinative conclusion that that played any part in the accident. Whilst I cannot conclude that excessive speed of the part of the deceased caused the accident, it is a factor which could have done so. In terms of section 6(1)(c) of the 1976 Act I am required to consider any factor which might have caused the accident. It accordingly seems to me appropriate that I make a determination to that end. Further, in light of the conclusions

reached by the accident investigators to the effect that all the causes of the accident are to some extent attributable to error on the part of the driver, I consider that I can make that general determination.

The final matter to consider is whether there was anything relating to the bridge barriers which might be worthy of inclusion in the determination in light of this accident. The authors of the crash investigation report were of the opinion that if the barriers on the bridge had not given way, it was unlikely that Mr Raeside would have been killed, notwithstanding the fact that he was not wearing a seatbelt. It was the breaching of the barriers and the resultant fall of the cab which resulted in his death. The Crown had not initially arranged for anyone to speak to this aspect. Accordingly arrangements were made for Mr William Valentine to attend the inquiry to give evidence. This witness was a chartered civil engineer with Transport (Scotland) and had been the chief bridge engineer with that concern since 2004. He advised that the standards applicable to bridge parapets in the United Kingdom were similar to those applicable in Europe and the USA. The applicable standard was determined by what was beneath the bridge. A higher standard was required for parapets on bridges which crossed above buildings, railways, or high volume roadways. This higher standard had a containment design which required the parapet to withstand a glancing blow from a thirty tonne HGV travelling at 40 miles per hour. The lower standard was required for bridges such as the one sited at the *locus*. The containment design in respect of that lower standard was that the parapet had to withstand a glancing blow from a one and a half tonne vehicle travelling at 70 miles per hour. This weight corresponded with that of a larger family saloon. In both instances a glancing blow consisted of an impact at an angle of twenty degrees or below. The road alignment on the approach to the bridge might be taken into account depending on the hazard situated below the bridge. The lower standard was applicable to the bridge at the *locus* when it was built in 1981. This would have remained the position in the event of the bridge having been built after the introduction of the higher standard in 1982.

Mr Valentine advised that since 1981 there had been no instance of the integrity of the parapet being broken at the *locus*. There had been a total of eight accidents involving injury of any type at the *locus* since that year. One of these accidents had been fatal. This had been in September 1986. In his time as chief bridge engineer there had been three instances of vehicles breaching the integrity of bridge parapets in roads for which Transport (Scotland) were responsible. One accident occurred on the M80, one on the A9, with the final accident being the present one. Transport (Scotland) was responsible for all motorways and trunk roads in Scotland. Existing parapets would be looked at if there had been three accidents causing injury at a *locus* in a three

year period. The cost of upgrade of the bridge at the *locus* would be around £1,800,000. He further advised that as there were proportionately a higher number of motor cars on the road, such vehicles were more likely to collide with a parapet. If a car struck a parapet which had been constructed to the higher standard, there was less give in that parapet. This would result in the car being more likely to rebound into the carriageway giving rise to the potential of a collision with another vehicle. Further, even a parapet designed to the higher standard was unlikely to have contained the HGV unit driven by the deceased at the material time.

In light of the evidence from Mr Valentine, I do not consider that I can make any determination regarding the bridge design. Even if the bridge parapet had been designed to the higher standard, it was unlikely that it would have contained the tractor unit. In any event, in all the circumstances, I do not consider any upgrade of the bridge parapet could be considered reasonable in all the circumstances. Similarly, in light of his evidence, I do not consider that there is any determination relevant to section 6(1)(e) which I could make.

I would simply conclude by offering my sincere condolences to the family of Mr Raeside.