

SHERIFFDOM OF SOUTH STRATHCLYDE, DUMFRIES AND GALLOWAY AT
LANARK

**INQUIRY UNDER THE FATAL ACCIDENT AND INQUIRIES (SCOTLAND)
ACT 1976**

DETERMINATION

by

SHERIFF NIKOLA C STEWART

in Fatal Accident Inquiry in terms of the Fatal

Accidents and Sudden Deaths Inquiry

(Scotland)

Act 1976

into the circumstances of the death of

NATASHA JADE PATON

APPEARANCES:

For the Crown: Ms MACFARLANE, Procurator Fiscal Depute.

For the Paton family: Mr Wilson, Solicitor, Digby Brown Solicitors.

For South Lanarkshire Council: Mr Graham, Solicitor, Simpson & Marwick WS.

For Photoflash Coaches: Mr Gray, QC, Ms Watt, Solicitor, Brechin Tindell Oatts

For Raymond Munro: Mr Smith, Advocate, Ms Jamieson, Solicitor, Paul and
Williamson.

LANARK, 20 May 2013

The sheriff, having resumed consideration of the evidence adduced, FINDS AND DETERMINES in terms of section 6(1) of the Fatal Accidents and Sudden Deaths Inquiry (Scotland) Act 1976:

1. In terms of section 6(1)(a):-

That the accident resulting in the death of Natasha Jade Paton, date of birth 6 April 1992, took place at or about 05.45 hours on 31 March 2010 and her death occurred within minutes of this accident. Both accident and death occurred at Castledyke Bridge, Wiston, A73 near Biggar.

2. In terms of section 6(1)(b) the cause of death was:-

1a: Drowning due to

1b: Road traffic accident (passenger)

The accident resulting in the death occurred when the coach in which Natasha was a passenger collided with the parapet of Castledyke Bridge, bursting through it and coming to rest in the Garf Water below. The cause of the accident was the coach driver's loss of control of the coach in circumstances which combined excessive speed and adverse weather conditions which had resulted in a slippery road surface.

3. In terms of section 6(1)(c) of the Act it would have been a reasonable precaution whereby her death may have been prevented had the coach driver, Raymond Munro, travelled at a lower speed on the approach to and turn onto Castledyke Bridge and refrained from applying the brakes whilst negotiating that turn. The accident occurred when the driver lost control of the vehicle on a slippery road surface as he attempted to negotiate the sharp bend onto the bridge, at a point in the road where collision with the bridge was inevitable. Had he refrained from attempting to negotiate the turn onto the bridge at a speed of 23 mph or more, adopted a slower speed, or brought the coach to a halt in preparation to crawling around the corner, the effects of any sudden loss of control could have been ameliorated or mitigated.

(b) had Natasha and those passengers seated in proximity to her worn the seatbelts provided throughout the journey.

Introduction

1. This is an Inquiry instituted by the Lord Advocate under the discretionary provisions of the Fatal Accidents and Sudden Deaths Inquiries (Scotland) Act 1976. It was considered expedient in the public interest that such an Inquiry should be held into the circumstances of the death of Natasha Jade Paton, aged 17, which occurred when a coach in which she was a passenger crashed on 31 March 2010.

2. The Inquiry took place at Lanark Sheriff Court and evidence was heard over 9 non-consecutive days between 2 November 2012 and 18 December 2012. A locus inspection of the crash site and points along the coach's final journey took place on 20 November 2012. Written submissions were prepared and lodged, and on 25 March 2013 parties were given the opportunity to make additional oral submissions. The delay between the last witness and submissions resulted from attempts to explore the fitness of a potential witness to give evidence to the Inquiry. The thorough nature of these inquiries and the issues they raised reflect on the importance placed by all parties to the Inquiry on ensuring the fullest possible exploration of all available evidence.

3. The Paton family became a party to the Inquiry and were represented.

4. Evidence was led from the following witnesses.

- 1) Peter Colquhoun, Lanark Grammar School
- 2) Allison Murray, Lanark Grammar School
- 3) Ross Allan
- 4) Laura Taylor or Kyle
- 5) Scott Mitchell
- 6) Nigel Abbot
- 7) John McCool
- 8) PC Mark Grant, Strathclyde Police
- 9) PC Russell Davidson, Strathclyde Police
- 10) PC James Sheen, Strathclyde Police

- 11) PC Alasdair Marshall, Strathclyde Police
- 12) Craig Whitefield, Strathclyde Fire and Rescue Service
- 13) John Kirkwood, Watch Commander, Strathclyde Fire and Rescue Service
- 14) Thomas Robertson, Paramedic
- 15) James Meikle, South Lanarkshire Council
- 16) James Marshall, Strathclyde Fire and Rescue Service
- 17) George Ross, South Strathclyde Council
- 18) Mark Sherry, Lanark Grammar School
- 19) Carole Mason, South Strathclyde Council
- 20) Sgt. Stewart Bell, Strathclyde Police
- 21) Barry Seward, Accident Analysis Limited.

Findings in Fact

I found the following facts admitted or proved

1. Natasha Jade Paton lived with her family at 24 Cockbridge Road, Shoddshill Mill, Lanark, Cleghorn. She was a 6th Year pupil at Lanark Grammar School. She was one of 39 pupils who participated in a school trip to Alton Towers in Staffordshire on 31 March 2010.
2. The trip was organised and led by Peter Colquhoun, a teacher at Lanark Grammar, who had acquired the necessary experience to do so and was appropriately supported and supervised. The timing of the trip, at the end of the Spring term, took into account all relevant factors, including likely weather

conditions, and was appropriate and reasonable. The preparations for the trip, including the identity, qualifications and number of staff and adult helpers, the chartering of a suitable coach, the communication of plans with pupil participants and their parents or guardians and the obtaining of consents for the trip, complied with school and local authority requirements and were appropriately carried out. The choice of coach and driver provider, Photoflash Coaches was made from a list of approved providers.

3. A forecast of further inclement weather prompted Mr Colquhoun to make enquiries of both Photoflash and Alton Towers on 30 March 2010 as to whether adverse weather would cause concern or cancellation on their part. He was assured by both that it would not.
4. Snow fell during the evening of 30 March and into the early hours of 31 March 2010 in the Lanark area. It was initially localised and sporadic. Although it caused severe traffic disruption in the early hours of 31 March 2010 on the A702 around Biggar, its impact at that time was less dramatic on the A73 which continued to be regularly patrolled and treated by a South Lanarkshire Council gritting lorry in the hours prior to the accident. Teachers and adult supervisors travelling to Lanark Grammar School to participate in the Alton Towers trip were aware of light snow and moderate winds, encountered no difficulty in negotiating the roads as a result and were not concerned that the prevailing weather conditions would adversely impact upon the planned trip. Further information was relayed to them prior to departure which confirmed that road

reports were satisfactory. No parent or guardian engaged in delivering their children to meet the coach at Lanark Grammar School expressed any concern to teachers or supervising adults about undertaking the trip in the prevailing weather conditions or withdrew their child from the trip as a result of such concerns.

5. The vehicle provided by Photoflash Coaches was Volvo coach B12M PCV, registered number K17 PHO. Its plated gross weight was 18,000 kilograms. It was fitted with a diesel engine and a manual gearbox, had a power assisted steering box type system, full air breaking system and was fitted with six road wheels. No defects were subsequently noted in any of the tyres, nor were there any pre-collision defects that could have led to a loss of control of the vehicle or increased the severity of the collision. It was fitted with a tachograph. It was driven by Raymond Munro, then aged 60, a part-time driver with 40 years' experience as a coach driver. He was the holder of a valid Full Category D (PCV) licence which entitled him to drive this coach. He had declared on his licence application that he had Hypertension and Diabetes, controlled by Metformin oral medication.
6. The coach arrived at Lanark Grammar School just after 5am. Pupils and staff immediately alighted and took their seats. When all 43 passengers were on board, the coach commenced its journey at or about 5.22 hours. The driver expressed no concern about undertaking the trip in the prevailing weather conditions.

7. The adults, as was customary, arranged themselves in the front passenger seats.

Natasha Paton was seated at the offside window seat, 4 rows from the front of the coach.

8. All 49 passenger seats of the coach were fitted with lap seat belts. They were all in working condition. Prior to departure pupils were instructed by teacher Ross Allan to put on their seat belts and a check was carried out to ensure they were complying. A further reminder and check was performed once the journey was underway. Despite these reasonable precautions not all passengers were wearing their seatbelts at the point of impact. At least eight pupils in addition to Natasha Paton were not wearing a seat belt at the time of impact. Four of them were sitting in the vicinity of Natasha.

9. The route chosen from Lanark to join the M74 involved meeting up with the A73 southbound after Hyndford Bridge. The A73 roadway is approximately 37 miles long and connects the A80 at Cumbernauld to the M74 near Abington. It is a two way undivided carriageway with one lane running in each direction generally north to south. An alternative route to the M74 involving a left hand turn after Hyndford Bridge along the A73, is equidistant but no less challenging in terms of road conditions than that taken by the driver. No dispute took place regarding the choice of route. The choice of route was that of the driver and was unremarkable and reasonable. The A73 southbound is the main arterial route linking Lanark and the M74 motorway. It is routinely used by commercial and

private traffic, has a road surface of standard tarmacadam which is regularly inspected and maintained and is subject to a maximum speed of 60 mph. It was in a good state of repair at the time. It is bordered along most of its length by soft grass verges leading to arable fields. It would have been carrying only occasional vehicular traffic at that time of the morning.

10. Driving conditions began to deteriorate along the route as light snow intensified and began to lie at points on the road. Mr Munro responded by adjusting the speed of the coach. At no time did he exceed 40 mph. As a public service vehicle, its maximum permitted speed on the A73 is 50mph.

11. The final kilometre of the 17 kilometre journey to Castledyke Bridge from Hyndford Road involves the negotiation of a series of sweeping left and right hand bends followed by a descent of moderate gradient which extends approximately 140 metres towards an almost 90 degree turn onto Castledyke Bridge. From a point 90 metres north of the bridge the southbound lane of the A73 was dressed with a grip enhancing surface. This "shell grip" surface extends to cover the northbound lane prior to the bend leading to the bridge and continues on both lanes across to the south side of the bridge. The presence of the bridge is indicated by road signage and furniture. The lanes of travel are separated by hazard warning lines which warn drivers of an unspecified hazard ahead. Extending parallel to the north and south sides of the carriageway are solid white "edge" lines that define the extent of road available for use. Located periodically on the grass verges which bordered both sides of the carriageway

are hazard warning posts which warn of a soft verge or steep embankment on the driver's offside verge. Drivers exiting the final moderate right hand bend are warned of the road narrowing on both sides and of a left hand bend with a minor junction on its outer circumference ahead, by 2 large warning signs sited on the south verge. While driving downhill towards the bridge on the straight, there are two large bold "SLOW's" painted on the eastbound lane. The "shell grip" surface commences immediately thereafter. Its purpose is to assist drivers in reducing the speed of their vehicle through braking on the approach to the hazard. Immediately after the second "SLOW" the roadway alters to a left hand bend incorporating a super elevated camber which assists drivers to negotiate the bend. The bend is initially slight but then tightens sharply to traverse the bridge. It is just prior to the bend tightening that the shell grip surface extends to cover both lanes of the A73.

12. The bend is met on its west side by Millrigg Road which extends west away from the A73 towards the village of Wiston. The south side of Millrigg Road has running parallel to it a narrow grass verge located within which were 2 black and white east facing chevron boards which were positioned to warn westbound drivers of a sharp deviation to the left.
13. Castledyke Bridge is a single span masonry arch bridge constructed *circa* the 19th Century. It spans the Garf Water some 6.1 metres below. At the time, the bridge was sided to the east and west by stone built bridge parapet walls approximately 1.15 metres in height. Drivers approaching it southbound travel west before

negotiating a near 90 degree left turn to then travel south over the narrow bridge.

It was subject to routine bridge inspections, the last inspection taking place on 1 December 2008 when no significant defects were noted.

14. Albeit the deterioration in the weather intensified as the coach neared the bridge, with snow continuing to fall, temperatures remaining low and wind causing drifting of snow in places, the road remained negotiable with care.

15. Mr Munro drove the final kilometre of the journey at speeds falling from 36 mph to 27 mph and rising again to 32 mph before falling over the final 300 metres to the last recorded speed of 25 mph. These speeds are accurate to plus or minus 2 mph. Albeit the speeds maintained up until the final kilometre represent reasonable speeds for the prevailing road and weather conditions, 23 mph was an excessive speed at which to negotiate the hazards offered by Castledyke Bridge in these conditions.

16. In an attempt to lower his speed, and reduce gear in order to negotiate the sharp left hand turn onto the bridge Mr Munro applied the brakes and commenced the turn. The steering failed to respond to increasingly dramatic attempts by Mr Munro to steer left, consistent with a loss of grip between the front tyres and the road surface. He had lost control of the coach which continued straight ahead, colliding with the bridge parapet and continuing through it. It fell approximately 6 metres to the Garf Water below, turning onto its right, offside as it fell. It landed with the front, offside corner of the bus partially submerged in the burn.

17. The driver and many passengers were injured as a result of collision with the bridge and the impact with the river and bank below. Those in the front right hand seats were submerged in water. Some who were unrestrained fell free of their seats, colliding with others as they did so. All of the windows along the right side of the bus were shattered as a result of the collision and fall.
18. The scene on the bus in the immediate aftermath of the incident was one of panic and chaos. Staff members and helpers responded quickly and appropriately to the situation. By removing part of the broken front windscreen they provided an escape route, through which the driver and some of the pupils were evacuated. Pupils to the rear of the bus evacuated via a skylight. Despite being injured themselves, Peter Colquhoun and Scott Mitchell re-entered the evacuated coach and conducted a search for any remaining casualties, including those parts submerged in water, finding no-one remaining. They then, with the help of the other staff members, assisted pupils up the bank to the roadway and attempted to provide shelter and care for them.
19. The crash occurred at approximately 5.45 hours. It was still dark. Snow was falling with increasing severity and was lying on the ground. All involved in the crash were extremely shaken and cold. Many were injured. Some required immediate medical attention. Many were wet from their contact with the river. Motorists who stopped to give assistance and a nearby householder provided much-needed shelter for those involved. This dispersal of passengers frustrated

the attempts of supervising adults and emergency services to carry out an efficient headcount in the immediate aftermath of the crash.

20. The emergency services were immediately notified of the crash. A paramedic was first on the scene at approximately 06.12 hours with police and fire and rescue service personnel arriving thereafter. The weather deteriorated markedly over this period. A full search of the bus by police and fire and rescue service officers confirmed that no-one was still on board. That search was expanded to surrounding fields and downstream. At or about 06.25 hours an searching under the bridge spotted Natasha's foot protruding from a loose tyre which was lying under the chassis. Once the tyre was removed, the body of Natasha Paton was recovered from the water at the front offside corner of the coach. Prolonged attempts to revive her were unsuccessful and she was pronounced dead at the scene by a police casualty surgeon at 08:22 hours.

21. Post mortem examination showed that Natasha died as a result of drowning. She was also found to have sustained a fracture of her left upper arm, together with a number of relatively minor injuries down the right side of her body: bruising of the scalp, grazes on the cheek and above the right hip and grazes and lacerations on the right hand.

22. It seems likely that Natasha was ejected from her seat and thrown out of the adjacent window as the bus fell sideways through the descent from the bridge. She was not wearing a seatbelt and nor were some of the passengers seated

nearby who were therefore unrestrained from falling against her. The window glass had shattered due to the forces at work in the collision and fall, offering no resistance to her passage. Had she been wearing a seatbelt she is likely to have been restrained within her seat. No other injury sustained by her was life-threatening.

23. The mechanical condition of the vehicle was not a contributory factor in the collision. There were no pre-collision defects noted on subsequent inspection that could have led to a loss of control of the vehicle or increased the severity of the collision.

24. Whilst the poor and deteriorating weather conditions undoubtedly played a role in the accident and the difficulties associated with its immediate aftermath, no criticism was or should be levelled at any of those responsible for organising and supervising the trip that morning in respect of any failure to adequately prepare for or respond to weather conditions.

25. Snow continued to fall and to lie on the roadway as the coach neared Castledyke Bridge. Raymond Munro was aware of the adverse weather conditions and of the need to adjust his driving accordingly. As an experienced, professional driver he would have been aware that there was the potential for patches of snow, sleet, ice or water on the road surface to limit the traction of his vehicle on the road and of the need to limit his speed and thus any requirement to brake suddenly. He was familiar with the route taken and of the approach of Castledyke Bridge and the hazard it presented.

26. The crash and the resultant death of Natasha might have been avoided had the approach to and turn onto Castledyke Bridge been taken at a slower speed by the coach driver. The speed at which the bend onto the bridge was approached and taken was excessive given the prevailing weather conditions and increased the risk of loss of control of the vehicle and reduced the opportunities available to the driver to take steps to avoid or successfully respond to any skidding which arose by reason of the slippery road surface. Had the driver taken steps to reduce his speed to an appropriate level prior to negotiating the sharp turn onto the bridge, the loss of control which occurred could have been avoided or ameliorated.

NOTE

1. Much of the evidence produced by the Crown has been agreed by the parties to this Inquiry. This cooperative approach greatly reduced the volume of oral evidence which was required, and also resulted in the narrowing down of the areas of enquiry to those which directly impacted upon the circumstances leading up to and surrounding the catastrophic end to a celebratory school outing.
2. Tachograph records for 31 March 2010 were recovered from the coach and analysed by experts. They raise some potential issues about practice which did

not contribute to the accident and were therefore not explored further in this Inquiry. They provide clear evidence as to the speed of the coach throughout its journey that morning and of timings of events. The final 1 km of the journey as recorded was subject to microscopic analysis which findings were agreed and are the figures used as a basis for discussion in evidence of speed and distance and timing.

3. The final submissions of the parties all agree that no criticism can be made in respect of those systems of work directed at the arrangements for and organisation and supervision of the school trip or to the gritting of the road in question. Likewise, no criticism was made in respect of the actions of the members of staff and adult helpers who were on board the bus that day, and of those who organised and prepared for the trip. It is clear from the evidence that staff and pupils, and adult helpers all met the challenges which faced them that morning with admirable fortitude and clarity of purpose, helping others despite having themselves sustained often debilitating injuries.
4. None of the adults on board recollect any conversation taking place with the driver in which he suggested postponing the trip or otherwise expressed concern about driving in the prevailing weather conditions. Only one, Scott Mitchell, recalls him asking whether they should take the Motherwell route to the M74, but without strongly expressing a view that they should go that way and he is clear in his recollection that there was no discussion about going *via* Garrion Bridge because of the worsening weather, as Mr Munro reports in his police

statement. The rest recall no conversation about the route at all. In any event, the route taken that morning did not become the focus of critical attention during the Inquiry and played no part in the submissions. There was evidence that all routes to the M74 supplied their own hazards and also that the wintery conditions had become widespread throughout the area by departure time.

5. There is agreement between all eye witnesses that the journey from Hyndford Road, Lanark to the coach's emergence from the series of 'S' bends 1 kilometre from the crash site was unremarkable as far as Mr Munro's driving was concerned and gave rise to no concerns, albeit his pattern of braking into, as opposed in anticipation of, bends was noted. Likewise, there was no concern expressed about the weather, nor about the conditions underfoot. That changes in the immediate approach to the bend onto Castledyke Bridge. All witnesses were alerted to the imminent danger just before the collision occurred. Those on board spoke of the driver attempting to turn the steering wheel anti-clockwise, without response from the wheels. Ross Allan spoke to approaching the left hand bend "too quickly", "he applied the brakes with a significant amount of force, too late and too hard, certainly not as gently as would have been required. He did not start slowing down until he was immediately in front of the bend and applied the brakes and tried to turn." He heard the release of gas associated with braking in heavy vehicles. He heard a friction with the road which suggested they were sliding and he could see the impact of turning the steering wheel was having no effect. Ross Allan also felt, approximately 50 yards from the corner, that "we were carrying too much speed to do the corner, or at least that the

driver would have to apply the brakes to make the corner.” He also spoke to the driver applying the brakes “which caused them to lock up”.

6. The coach is seen to move to the right, probably straddling the white line, taking up an appropriate position at which to commence the turn onto the bridge. At a point approximately adjacent to the start of the near-side parapet of the bridge, the coach commences its left turn onto the bridge but control is lost before it can negotiate the most acute phase of that turn. The wheels do not respond to the driver’s frantic attempts to steer hard left to avoid the collision.
7. The coach struck the kerb, its front offside corner colliding with the end part of the bridge parapet near the junction with Millrigg Road. It crashed through it and plummeted to the river below, turning clockwise as it did so and landing on its right, offside, coming to a halt with its front, right corner submerged in water.
8. Peter Colquhoun, sitting in the second row, offside window seat, 2 seats in front of Natasha, was totally immersed. Alison Murray estimates the water as being shin-deep from her position in the first row, offside aisle seat. Ross Allan, who had not been wearing a seatbelt, had been thrown forward into the right hand corner of the driver’s position. The coach lights had gone out during the collision and fall. Pupils were screaming and pushing, trying to get out. Peter Colquhoun and Scott Mitchell pushed out the remaining bits of the broken windscreen and assisted pupils to escape through the front of the bus, before rescuing the driver who was trapped in his seat. Some pupils were assisted by the adults to clamber up the banking towards Millrigg Road and negotiate the barbed wire fence at the

top. Many were injured, all were cold. The remaining pupils managed to open the skylight in the roof of the coach and help each-other out. Adults, including passing motorists, tried to assist the passengers by taking them into the relative warmth of vehicles, and giving them tea. The pupils became dispersed amongst the vehicles which had stopped to offer assistance.

9. PCs Russell Davidson and James Sheen arrived at the scene at approximately 6.15 - 6.30, joining ambulance, fire and other police services which were already in attendance. The area was covered in deep, impacted snow at that time and was quite slippery. At a time they estimate at 6.30 they were alerted by retained fire-fighter James Marshall to a right leg and foot protruding from under the front offside of the coach. A tyre, from the spare wheel contained within the underside of the coach, was preventing the body from being easily extracted. They assisted in the retrieval of the body of Natasha Paton from the water whereupon extensive attempts to revive her were commenced but were unsuccessful. It was evident from her positioning clear of the coach window but under the bus that she had been thrown from the coach during its fall into the river. All signs point to her death occurring at that time.
10. Whilst there had been a delay in ascertaining that one pupil had not been accounted for, no blame for that delay attaches to those at the scene and there is no suggestion that swifter action would have saved Natasha. Staff and adult helpers took immediate steps to try to take a register, but were hampered by the chaotic scene. It became difficult for teachers and for the emergency service

personnel, who started arriving within 30 minutes, to identify where each pupil was in order to successfully complete a headcount, although they continued to attempt to do so. Pupils moved between cars and houses, further confusing the attempts. Albeit a register of pupils had been taken on the trip, it remained on the coach, submerged in the water. None of the teachers or supervisors was personally acquainted with all of the youngsters, albeit many were familiar to them. It seems that none of them knew Natasha. Repeated searches of the bus were carried out to ensure no-one had been left on board.

11. Natasha was not wearing a seat belt at the time of the accident. Investigation also reveals that those sitting behind and adjacent to her were not wearing their belts in addition to some others on the bus. As the bus fell forward turning onto its right side, anyone unrestrained by a belt, is likely to have been thrown from their seat in a similar trajectory. It is not known if any other person collided or came into contact with Natasha, but it is possible that they did. In any event, it is clear that Natasha was propelled forward from her seat by the impact and, as the bus fell to the right, was catapulted through the broken windows, landing in the water where she drowned. Apart from a broken arm and some minor cuts and grazes, she was not seriously injured. There is no sign of any struggle. It is a matter of agreement that she would have died within a few minutes of the collision.

12. There was a lot of discussion about the existence or absence of black ice at the locus. Whilst its existence could not be completely ruled out given the weather

conditions, the only eye-witness evidence that there was black ice on the road surface at the approach to the bend, and that it was this which caused the loss of control by the driver, comes from Raymond Munro himself in his police statement. No other witness sees any black ice.

13. Whilst most of the adults on the bus had paid little attention to the weather and road conditions during the journey, Scott Mitchell had sight of the road ahead through the front windscreen and describes snow and slush on the road. This conforms to the descriptions given by motorists John McCool and Nigel Abbot who were following the coach. Neither speaks to the existence of black ice on the road. The more extreme conditions described by those in the emergency services seem to post-date the accident. Paramedic Thomas Robertson and PC Mark Grant were first to arrive, at approximately 6.10 am. By that time, road conditions at the scene were slippery, with snow lying to varying depths. There was also slush in evidence. None of those attending speak of finding ice at the locus, although many found it slippery underfoot. Crew Commander John Kirkwood confirms the presence of grit on the bridge.

14. James Meike, Roads Operator with South Lanarkshire Council, was responsible for gritting the A73 that night. His patrol took him over the locus on 5 occasions that night at a maximum speed of 20 mph when gritting. He first encountered snow in that area at the start of his shift between 5.30 and 6.00 pm the previous evening and ploughed to take slush off the road, leaving it 'black' underneath. He then turned and gritted the area with rock salt at or about 6.30pm. He last

treated the southbound carriageway of the A73 prior to the incident at about 3.30am but was treating the northbound carriageway when he came upon the accident scene. He kept an eye out for frost and ice but at no time saw any. He is very familiar with the locus and regards it as an area requiring extra caution, by reason of the tight, almost 90 degree bend at Castledyke Bridge and because it gets snow when other parts of his route do not. It is not however an area which becomes icy in his experience. He cannot recall ever finding ice there, although it is part of his job to check. He concentrated his efforts on the A73 stretch of his route that night because of the weather conditions, gritting it with the maximum amount of 40 grammes per square metre. The road was running black at 3.30 am. There was no ice. Temperatures were between 1 and 3 degrees. He regularly checks the gauge in his cab. At approximately 5.45 am he approached the A73 from the B7055 at Wiston Mains, 1.3 km south of the bridge, alighting at the bridge at about 6.15 am. The road at that time was slushy, with road markings still visible. The temperature was probably 1 degree C.

15. Mr Meikle rejects the suggestion that there was any ice as does Mr Abbot and Mr McCool. There was however an abundance of snow and slush and all present at the locus at or around the time of the accident agree that road conditions could be or were slippery as a result. There is little difference between ice and compacted snow/slush as agents for reducing traction. All can cause a loss of control. The one significant difference is that black ice can be difficult to spot and therefore can catch a motorist unaware. However, it was not difficult to spot the 2 cm or more of snow and slush which covered much of the road surface that

morning. The slippery conditions were obvious as was the potential risk of black ice, whether or not there was black ice lurking underneath. Any driver obeying the Highway Code, and taking on board the obvious cues to restrict speed and sudden braking and manoeuvring, in line with the visible conditions, would also have been guarding against unseen ice in so doing. No motorist travelling the A73 at 5.45 on that morning would have been unaware of the presence of snow or its melt on the road and accordingly of the need to adapt their driving to it.

16. Mr Munro was not able to give evidence at this enquiry by reason of his health.

His input was necessarily restricted therefore to statements made by him to police, together with the instructions he was able to give to his counsel. The weight to be given to his recorded police statement is limited. Albeit he had the benefit of legal advice and his solicitor was in attendance, no caution had been administered, he was not subject to questioning or clarification by his solicitor and, most importantly, he was not giving evidence as a witness to this Inquiry. There are clear inconsistencies between some aspects of the accounts given by him and the other evidence in this case. Some are more significant than others. There is no suggestion from anyone other than him that any discussion took place about changing the date of the excursion, or any concern about the proposed route to the M74. I have already dealt with his position on the issue of black ice. He also maintains in his statement that he applied his brakes coming down the straight, just before the shell grip commences, and lost control at that point. Both road traffic experts are clear that his recollection is faulty in this respect. Had control been lost at that point, some 90 metres from the bridge, the

bus would not have travelled onwards to the bridge, but would have been forced by the camber onto the left-hand verge. Mr Munro's recollection is that he braked at this point because he became aware of an approaching HGV and was concerned that the bridge was too small to accommodate both vehicles. No-one else saw an approaching vehicle, including the Gritter driver, Mr Meikle, who was the first to arrive on the northbound carriageway. In fact, it seems clear that Mr Munro had commenced his turn across the bridge at the point of losing control and being unable to complete it. Mr Seward, his own accident analysis and reconstruction expert, is in no doubt, based on the location of the impact with the bridge, that the coach did indeed start to turn into the bend just prior to the loss of control.

17. Mr Munro equates touching the brake with the realisation that he had lost control. If correct, it suggests that he followed his earlier pattern of driving and applied his brakes going into the corner, rather than using them gently to lower speed in anticipation of the corner. The eyewitnesses speak to this. The tachograph readings also support an absence of early braking. Mr Munro also speaks to being in a higher gear than would be expected to deal comfortably with a tight turn and there is no evidence available to contradict this. Other aspects of his statement have also not been challenged, reflect matters of a non-controversial nature, and are of issues which he might be expected to be capable of being relied upon such as his experience of the route and his awareness of the weather and road conditions.

18. Mr Seward carried out a theoretical calculation of the upper range of speed at which the bend could generally be negotiated under normal conditions and assessed that speed at between 28 and 34 mph. Others place a lower figure on such a fair-weather assessment. Exceeding such a theoretic maximum speed would cause the back wheel to rotate counter-clockwise and overtake the front wheels. It is therefore the speed beyond which the vehicle will go out of control. This was not tested, did not take into account variables such as tyres, the state of the road and the specific handling characteristics of the coach. No reconstruction took place. In any event, all are agreed that conditions were very far from normal on the morning in question. Mr Seward was unable to provide a maximum speed for vehicles negotiating the bridge in the prevailing conditions that day. He opined that the fact that Mr Munro had successfully started the turn before control was lost suggested that his speed was one at which the turn could have been safely negotiated had all remained equal. That of course ignores the fact that all did not remain equal. The bend itself became more acute and the coach would require to turn more dramatically to meet that. That part of the turn carried out did not involve full lock, otherwise why would Mr Munro still be able to turn the wheel "frantically" albeit to no effect? Mr Seward described the contact between coach and bridge as "definitely not a glancing blow" – it didn't almost make it. The turn had only just commenced, the road was covered in snow and slush, probably to differing depths and consistencies, making it impossible to say that all remained equal throughout.

19. In any event, Mr Seward himself conceded that a lower speed might have avoided the accident or ameliorated its consequences. Presumably that concession would have had to be expressed in stronger terms depending on how low the speed of approach and commencement of turn chosen. As Mr Seward stated, "There is obviously a safe speed to negotiate the bend in whatever the circumstances there are".

20. Sgt. Bell was reluctant to be prescriptive about an appropriate speed for the bend. He takes the view that the loss of control leads him to conclude the speed was too high in the circumstances. He attributes that loss of control to too high a speed in the prevailing road conditions. Likewise, he is influenced by the fact that the coach's speed was sufficient to cause it to demolish the bridge parapet. If the collision occurred at a slower speed he feels the bridge would have stopped the vehicle. Mr Smith, on behalf of the driver, criticised this view as lacking any evidential support and I agree with him. There was no technical evidence produced which would allow a calculation to be undertaken whereby demolition of the bridge could be demonstrably related to the speed of the vehicle or to support a view that the bridge would have been able to withstand a collision at some specific lower speed. The bridge engineer who gave evidence could not assist in that respect.

21. That is not to say, however, that the circumstances of the collision with the bridge are not susceptible to criticism. Other experienced professional drivers offered their views as to a maximum speed at which they would negotiate that corner on that morning. None would have considered tackling it at more than 15 mph and

some put forward a lower figure. Ross Allan, who had experience of regularly driving a Tesco lorry at the locus, suggested that he would try to bring the vehicle to almost a halt before negotiating the corner because of the risk of skidding and because of the narrowness of the corner. I note that tachograph records show that Mr Munro took the 90 degree turn at Hyndford Bridge at 12 mph.

22. In any event, Sgt Bell's assessment is that Mr Munro also approached the bend at too high a speed. "He should have braked more on the approach, reduced speed and steered smoothly round the bend." It is the combination of speed and loss of control that influence his view. "If he had made it round the bend, I would not be critical of his driving simply because of his speed". "He has failed to appreciate the road and weather conditions, driven at a speed inappropriate for them, put himself in the position where a loss of control occurred which he was unable to recover from". Sgt Bell agrees with the conclusion of Peter Scott, Automobile Consulting Engineer that,
- "it was as a direct result of Mr Munro's failure to make the correct dynamic assessment at the start of the initial descent, to take into account the weather conditions and so ensure he was travelling at the correct speed and, just as importantly, he was in the correct gear in order to negotiate safely the hazards that he knew were ahead, that ultimately resulted in the failure of the vehicle to stop or negotiate the bridge safely."

23. Mr Seward agrees that, “wintry conditions would have a bearing on the driving if snow and slush is on the road. A reasonable driver would consider that when making a dynamic assessment”.
24. PC Davidson, who attended the locus, has spent 9 years of his 23 years police service as a member of the Road Policing Department. He is an advanced driver and holds a number of vocational qualifications. He confirmed that any driver faced with the conditions existing that morning would be aware of the risk of skidding and he would expect them to slow down in advance of any bend to avoid braking on the bend which is the worst possible thing to do. If a vehicle attempts to brake on snow or slush, where there is no tyre adhesion to the surface of the road, the tyre does not grip and it will slide, the driver will be unable to steer and will suffer a loss of control due to the lack of tyre adhesion.
25. Rather than reducing speed after meeting the first road signs warning of the approaching hazard, Mr Munro increased speed from 28 mph to 32mph as he clears the ‘S’ bend. In the next (final) 300 metres he reduces speed to 25mph. Forensic Scientists Trott and Hague are confident that the speed had not fallen to below 23 mph at the time of the collision. Given the room for error, it could have been as high as 27mph. He does not take steps over the last 90 metres to gently lose further speed and test the ground underneath, by touching the brakes, but rather leaves it till he has commenced his turn to apply the brakes. Mr. Abbot, the HGV driver following the coach to the bridge saw the distance between the two vehicles increase, the coach slightly pulling away from him before he saw it

lose control at the corner and go off the bridge, suggesting that his descent to the bridge was taken at a slower speed than that of the coach.

26. Mr Seward contests the claim by Scott Mitchell that Mr Munro applied his brakes stiffly as opposed to gently. He suggest that the fact that the coach initially began to negotiate the bend successfully, control being lost during, not at the start of, the turn, indicates in his view that Mr Munro did not apply harsh braking at the beginning of the turn. Likewise, whilst accepting that loss of control could point to taking the bend at too high a speed, he qualifies that by pointing out that the coach had started to turn so was under control at that point. Something changed and what caused that change had logically, in his view, to be something on the road. Of course, Mr Munro in his police statement indicates that it was when he applied the brakes that he realised he had lost control of the coach.

27. The road signage is such that even someone unfamiliar with the hazard presented by the bridge had sufficient warning of its approach to take preparatory action. Mr Munro was in fact familiar with the road. He was aware of the hazardous nature of the conditions he was driving in. The Highway Code provides guidance for driving in adverse weather conditions. Paragraphs 228 and 229 list pre-drive precautions. Paragraph 230 deals with driving in icy or snowy weather. Paragraph 231 provides as follows:

“Drive extremely carefully when the roads are icy. Avoid sudden actions as these could cause loss of control. You should

- drive at a slow speed in as high a gear as possible; accelerate and brake very gently.
- drive particularly slowly on bends where loss of control is more likely. Brake progressively on the straight before you reach a bend. Having slowed down, steer smoothly round the bend, avoiding sudden actions.
- check your grip on the road surface when there is snow or ice by choosing a safe place to brake gently. If the steering feels unresponsive this may indicate ice and your vehicle losing its grip on the road. When travelling on ice, tyres make virtually no noise.”

Had Mr Munro taken the precautions set out in paragraph 230, the accident may have been avoided.

28. That is not to say that the task facing Mr Munro that morning was a simple one.

There is no evidence that he failed to comply with paragraphs 228 – 230 of the Highway Code. Within 20 minutes of setting out he was faced with increasingly hostile weather conditions together with the negotiation of a narrow bridge, via an almost 90 degree turn, with a large coach. The successful traversing of that bridge in these conditions would have tested any driver. However, the hazards were obvious. The road was snowy, slushy and could have been icy. There was drifting in places. The approaching bridge and the challenges it presented were not a surprise. I do not accept Mr Smith’s submission that it was not until Mr Munro became aware of the loss of grip that his perception of risk changed. A professional driver should not have to wait until an obvious potential risk in fact

materialises before he factors it into “his on-going dynamic of the road conditions as he perceives them”. The experts agree – by that time it was too late to do anything to avoid the accident.

29. Snowy, slushy roads are slippery and may well cause a lack of traction which could have catastrophic consequences depending upon the circumstances in which it occurs. The evidence points to loss of grip. Skidding on slippery roads is not inevitable and does not happen in a vacuum, however. It occurred at a time when Mr Munro applied his brakes in order to control his speed which by inference he judged to be too high for the manoeuvre he was undertaking. Mr Seward explained that the danger of braking stiffly is that in so doing you can lock the wheels and cause the vehicle to slide. The coach had been engaged in a slight downward trajectory for approximately 1 km prior to the bridge. His speed during that 1 km reduced from 36mph to 27mph before rising to 31.8mph approximately 300m from the bridge and falling to a last recorded speed of 25mph (minimum 23pmh) at the point of disruption of the chart. These speeds indicate that he did not attempt to adjust his speed sufficiently in anticipation of the approaching bridge by means of gradual, gentle braking which would have obviated the need for the application of the brakes immediately prior to or during taking the bend. It would have been a reasonable precaution, in the circumstances to refrain from applying his brakes as he went into a tight bend. It would have been a reasonable precaution, in the circumstances, to refrain from attempting to negotiate that bend at a minimum speed of 23mph. Even if Mr Seward is right that speed may not by itself have caused a loss of control on the

bend, it is surely unwise for a driver to approach any hazard on the basis that he may manage to negotiate it successfully, particularly when he has the means of increasing the probability of so doing within his own control – drive more slowly.

30. Mr Seward agrees that the bend becomes more acute as it is negotiated, requiring a further reduction in speed to meet it. Mr Munro had to lower his speed and did so by applying his brakes in the manner he had displayed throughout his driving, by braking on the bend, rather than in anticipation of it.

31. Central to Mr Seward's thesis, that it was loss of traction caused by the conditions underfoot and not loss of control due solely to excessive speed, is the fact that the front wheels, not the back, slid. Had control of the back wheels been lost due to speed, they would have rotated counter-clockwise, he says. Likewise, if loss of control arose out of the brakes locking due to hard braking, then the back wheels would attempt to overtake the front wheel, altering the point of impact. Had Mr Munro applied harsh braking at the start of the turn, the coach would not have started to turn as it did, it would have gone straight on. If already taking a curved path when harsh braking caused wheel lock, it would continue in that curved path. That is not to say, he explains, that the brakes could not have locked in the last split second before impact. Of course, from the point where Seward says the loss of control occurred to the collision would take less than a second at 23 mph, reducing yet more at 27 mph, so this scenario cannot be ruled out.

32. The difficulty lies, of course, in trying to reach conclusions on causation based on observations and points of impact, without external evidence such as tyre marks etc., in respect of events that happened unexpectedly, within the shortest timeframe, which may well have resulted from a combination of factors, simultaneously or progressively. In my view, for the purposes of this Inquiry, such an approach is unhelpful and unnecessary. The cause of the accident was the loss of grip between coach tyres and road resulting in a loss of control of steering. That loss of grip could have been avoided had the approach to the bridge been taken at a lower speed, gentle braking being applied during the 140 metre descent towards the locus to lower it significantly. However slippery the road may have become on the corner leading to the bridge, it was not so slippery as to prevent all of the other vehicles which followed the coach easily coming to a safe halt on that descent. Mr Munro did not brake at that earlier point. As a result, the speed at which the coach entered the bend was felt by all, including the driver, to be too fast to comfortably take the corner and Mr Munro responded to that calculation by braking on the bend. The road was potentially slippery by dint of its coverage. Whether that braking was harsh or gentle, it coincided with the loss of control and it would have been a reasonable precaution which may have prevented the accident and thereby Natasha's death, had the need to brake at that point been obviated. It would have been a reasonable precaution which may have prevented the accident and thereby Natasha's death, had the speed at which Mr Munro attempted to negotiate the corner been less than that at which it was in fact taken. He then would not have had to brake at that point. He then

would have had options in relation to selecting an appropriate speed which he denied himself. He then would not have risked losing control of the back tyres by reason of excess speed, or braking, whether or not that in fact took place. Any skid which took place regardless of such precautions, by reason solely of the road surface, could have been ameliorated or mitigated had these precautions been taken.

33. The wearing of a seatbelt by herself and by others seated near to her may have prevented Natasha's death for the reasons set out above. The Crown also seek a finding in terms of Section 6(1) (e) that Transport Scotland give consideration to the use of three-point belts on public transport together with whether or not a feasibility study into the installation of seat belt sensors and that teachers and adult supervisors on school trips should spread out through the bus in order to better observe whether or not pupils are complying with instructions to wear seatbelts. The Paton Family associate themselves with that submission. Approximately 12 of the passengers were not wearing their seatbelts at the time of the incident. No criticism can be made of the attempts made by teachers to ensure the wearing of seatbelts. The children, all mature 6th years, were well aware of the risks of not wearing a belt and had just been reminded of the need to belt up. Teacher Ross Allan took responsibility for instructing pupils to put on the lap seat belts provided. He did so prior to the coach leaving, and again reminded the pupils approximately 10 minutes into the journey, walking up the bus and specifically telling pupils to get their belt on. Some chose not to do so. It may be that the near presence of an adult might reinforce the verbal message. No

evidence was led from any of the non-complying pupils which might cast light on whether it would have influenced their behaviour that morning. Of course it is in the interests of passengers that all use the seatbelts provided throughout any journey. That is the rationale behind the existing legislation. I note that South Lanarkshire Council have confirmed that they will give consideration to the placement of staff throughout a coach when arrangements for school trips are being risk-assessed. I do not doubt that all Local Authorities charged with responsibility in connection with school trips will wish to consider whether further measures such as that proposed are viable and should become part of the risk assessment process, but the evidence is not before me to allow me to determine that they should embark upon such a process. Likewise, witnesses were asked about the feasibility of introducing sensors to display the failure to secure seat belts in coaches. The only evidence in relation to the technicalities of such a system came from Sergeant Bell who indicated that the technology is available, that a dashboard display indicates the non-wearing of a belt by means of a visual signal or audible ping but that as far as he was aware no coaches currently utilise it. He had contacted a number of coachbuilders who indicated that the issue was the cost. There are ways for reluctant passengers to fool the system and the question arose of who would monitor any alarm. It would have to be the responsibility of someone other than the driver. Head teacher Mark Sherry thought that some form of sensor system, showing when belts not being worn, was worthy of further consideration, albeit the subject seemed to have been first broached with him during his evidence. Such systems, their attractions and potential difficulties were not the subject of further evidential scrutiny nor

were the substitution of lap belts with three-point belts. In the absence of any detailed evidence directed to the exploration and resolution of the feasibility, viability and effectiveness of such measures, I simply do not have necessary evidential basis to permit the making of findings in respect of these issues. I narrate the terms of such discussion as did take place in order that it may spark further discussion and exploration.

34. The Paton Family also raised the possibility of establishing a policy within South Lanarkshire Council by which the daily meteorological information and weather warnings obtained by the Council for the Roads Department could also be shared with the Education Department. Confirmation that such a policy and practice already exists was obtained from South Lanarkshire Council.

35. Never far from the thoughts of those involved in the conduct of this Inquiry was the tragic death of Natasha. In submissions all representatives expressed their sincere condolences to the Paton Family, who showed such fortitude and dedication to her memory throughout this long and difficult process. I take this opportunity to add mine.