



FINDING OF INQUEST

An Inquest taken on behalf of our Sovereign Lady the Queen at Adelaide in the State of South Australia, on the 6th and 7th days of April 2005, 27th and 28th days of February 2006, 15th day of March 2006 and the 10th day of May 2006, by the Coroner's Court of the said State, constituted initially of Wayne Cromwell Chivell, State Coroner and subsequently of Mark Frederick Johns, State Coroner for the said State, into the death of Adam Edward John Sloan.

The said Court finds that Adam Edward John Sloan aged 15 years, late of 8 Alice Crescent, Burton, South Australia died at the Royal Adelaide Hospital, North Terrace, Adelaide, South Australia on the 23rd day of February 2002 as a result of right haemothorax due to lacerations of right lung. The said Court finds that the circumstances of his death were as follows:

1. Introduction

- 1.1. This Inquest was commenced by the court constituted of his Honour Wayne Cromwell Chivell who presided at the hearings of the Inquest in 2005. The remainder of the Inquest was heard by the court constituted of the present State Coroner.
- 1.2. Accordingly, clause 25 of the schedule to the Coroner's Act 2003 is relevant. Subclause 25 (2) provides as follows:

'If an inquest held under the repealed Act had not been completed before the commencement of this Act, the proceedings will continue under this Act as if the coroner holding the inquest were the Coroner's Court.'

The Coroner's Act 2003 came into operation on 1 July 2005. Accordingly, the 2005 proceedings in this Inquest were held under the repealed Act but were not completed

before the commencement of the Coroners' Act 2003. The proceedings therefore continued under the Coroner's Act 2003 as an inquest being held by the Coroner's Court as established under section 10 of the Coroner's Act 2003.

1.3. Section 14 (3) of the Coroner's Act 2003 provides as follows:

'If the Coroner constituting the court for the purposes of any proceedings dies or is for any other reason unable to continue with the proceedings, the Court constituted of another Coroner may complete the proceedings.'

Mr Chivell was appointed a judge of the District Court of South Australia on 1 July 2005. He was therefore unable to continue with the proceedings in this Inquest, and accordingly Section 14 (3) of the Act was enlivened, and it is pursuant to that section that the present State Coroner completed the hearing of the Inquest.

1.4. Adam Edward John Sloan who was born on 6 December 1986 died on 23 February 2002 at the Royal Adelaide Hospital. He was therefore 15 years old when he died.

1.5. Adam died of the injuries that he sustained while he was a passenger in the front seat of a motor vehicle involved in an accident on the evening of 22 February 2002.

1.6. A post mortem examination was conducted by Dr John Gilbert. Dr Gilbert attributed the cause of Adam's death to "*right haemothorax due to lacerations of the right lung*". Dr Gilbert described in his report that the lacerations were to the lower and middle lobes of the right lung resulting in haemorrhage. The lacerations and haemorrhage were due to blunt chest trauma which was associated with right posterior rib fractures.

2. Circumstances of accident

2.1. On 22 February 2002 Adam Sloan was one of a large number of young people who were present at the house of Jeffrey Ross Williams at 200 Whites Road, Paralowie. Most of the young people there appear to have been aged between 13 and 15 years. The only adult present was Mr Williams, who was then aged 42 years.

2.2. The evidence showed that parties of young people, mainly young males who were friendly with the young sons of Mr Williams (also in their early teenage years) would attend at Mr Williams house. The evidence showed that Mr Williams's backyard had been converted into a kind of BMX track at which the boys would ride bicycles. On

Friday evenings it appeared to be customary for the young people to gather at the house and socialise. It appeared to be a regular feature of these gatherings that Mr Williams would obtain alcohol that would be provided for consumption by the young people present.

- 2.3. A summary of a typical Friday night at Mr William's house is contained in the statement of his son Robert Raymond Williams, then aged 15 years:

'On Friday the 15th of February, 2002 I went to dad's house at about 6:00pm and was going to stay there for the weekend. There was a party happening at the house that Friday night but for no specific occasion. It was just a meeting place for a small group of friends. We usually drank alcohol at the party and would get friends that we know to buy the alcohol for us. Dad had done it for us some times. He just wanted us to have some fun. Dad was all right most of the time with us drinking alcohol there. That night there would have been about 30 to 35 people there with the ages of everyone ranging between 14 and 17 years. There was alcohol there but not everyone was drinking.'

(Exhibit C19a, p2)

- 2.4. The events of the evening of 22 February 2002 culminated in the collision of a Mitsubishi Magna motor vehicle in which Adam Sloan was one of five occupants, with a large tree on the premises at 196 Whites Road Paralowie, a house just down the street from the scene of the party at 200 Whites Road Paralowie. It was this collision that resulted in Adam's death.

- 2.5. The driver of the vehicle was another young male, aged 15 years at that time, who was present at the party at Mr William's house. This young man was charged with causing the death of Adam Sloan by dangerous driving and with causing grievous bodily harm to another young man who was a passenger in the car by dangerous driving, and with a further charge of causing grievous bodily harm to Mr Jeffrey Williams, the owner of the house, by dangerous driving. These charges were heard in the youth court of South Australia by Senior Judge Moss. The driver was found guilty on all counts on Friday 19 March 2004. Section 63C of the Young Offenders Act 1993 provides as follows:

'A person must not publish by radio television newspaper or in any other way, a report of proceedings in which a child or youth is alleged to have committed an offence, if –

(b) the report –

- (i) identifies the child or youth or contains information tending to identify the child or youth; or

- (ii) reveals the name, address or school, or includes any particulars, picture or film that may lead to the identification, of any child or youth who is concerned in those proceedings either as a party or a witness.’

It does not seem to me that Section 63C of the Young Offenders Act 1993 was intended to apply to a publication by another court in different proceedings of the name of a youth alleged to have committed an offence, even if the decision of the other court could in some way be described as a report of the proceedings in the Youth Court. However, it seems to me that it would be inappropriate for the Coroner’s Court to publish a finding which included information of the kind intended by section 63C to be maintained as confidential. Therefore, in these findings I will not refer to the driver of the vehicle or any of the other juvenile witnesses to the events of the evening of 22 February 2002 by name. Furthermore, I will refrain from including any information that might lead to the identification of the driver or any of the other witnesses.

- 2.6. Mr Williams, the owner of the premises at 200 Whites Road, gave evidence before the Youth Court. He stated that he had no recollection of the accident or of the time within two months either side of the accident. He said that friends of his two sons, who were 13 and 16 years of age at the time of the accident, would often come to his house but to his knowledge none of them had ever driven his car. He did not drive his car as he himself had been disqualified from holding or obtaining a driver’s licence. He received terrible injuries in the accident. According to the reasons for decision of the Senior Judge, Mr Williams was in a coma for two months following the accident. His left arm was severed from his body, his face was badly injured and he had numerous operations during 2002. As at 2004 he still faced further operations upon his face and his back.
- 2.7. One of the young males in the Magna told the Youth Court that there had been a party at Mr William’s house that night. This witness went with Adam Sloan, the boy who drove the car in the accident, and another young male. He said there were about 10 other young people present, aged between 14 and 16. A number of the young people present contributed money for the purpose of buying alcohol and Mr Williams agreed to make the purchase for them. Mr Williams said that he could not drive but other people present offered to do so. The witness said that Mr Williams went outside and detached a trailer from the Magna vehicle and then he and four of the boys entered the

car. According to this witness, one boy started driving the car and then stopped, saying that he could not drive. Another boy then got into the driver's seat, reversed out of the drive way and then drove to a nearby bottle shop where Mr Williams purchased the alcohol. This witness was present in the Magna vehicle during this trip and the subsequent accident. At the bottle shop, Adam Sloan got into the front passenger seat and Mr Williams got into the back. Mr Williams was carrying a carton of liquor.

- 2.8. This witness could remember little of the journey or of the circumstances of the accident. He suffered a broken pelvis and a broken arm and lacerations to his head. He remembered that the vehicle had become "a bit air borne" before the collision with the tree.
- 2.9. Another boy gave a similar story, although he said that on the way back from the bottle shop the driver pulled over to allow Adam Sloan to drive the vehicle. He said Adam drove normally for a short time and then stopped the car and the first boy got back into the driver's seat and drove back towards Mr William's house. He could not remember the accident either. He remembered someone saying, "the brakes aren't working" before the accident.
- 2.10. Another witness, Wendy Newchurch, was driving her vehicle along Whites Road that evening in the course of her work as a pizza delivery driver. She was approaching the junction with Camelot drive when she saw the lights of another vehicle driving down Camelot Drive. She then saw a "black thing go flying past" which then crashed into a tree on the Eastern side of White's Road. She estimated the vehicle's speed at between 80 and 100 kilometres per hour. She alighted from her vehicle and ran to the Magna to assist the occupants. Another vehicle came along shortly afterwards and one of the occupants of that vehicle said:
- 'What the fuck are they driving the car with no fucking brakes for?'
(Exhibit C27a, p3)
- 2.11. Mrs Newchurch was accompanied by a 15-year-old girl who also witnessed the accident. This witness estimated the speed of the Magna at between 80 and 100 kilometres per hour.
- 2.12. Another witness, Kym Driesener, whose statement was tendered as Exhibit C29a was driving behind the Magna on Camelot Drive. He said he saw the Magna approach the

junction with Whites Road, move sharply to the right and then to the left as if the driver was trying to give himself room to take the corner then veer to the left mounting the curb on Camelot Drive and then shooting across Whites Road with two wheels off the ground. It then hit a gutter on the other side of the road and crashed into the tree. At no stage did he see the brake lights illuminated. Mr Driesener estimated the speed of the Magna at about 80 kilometres per hour.

- 2.13. Another witness, one of the young people at the party, saw the crash from Mr William's yard. She went over to the scene and overheard one of the bystanders asking the driver of the car why he did not use the brakes. She heard the driver reply:

'Why didn't you tell me the brakes didn't work, then I wouldn't have drove.'
(Exhibit C8a, p4)

- 2.14. Another witness was a young boy who had been at the party. In a statement to police that was received as Exhibit C13a, this boy described what happened after the trailer was removed from the car by Mr Williams. He stated:

'I saw Jeff get into the front passenger seat...There was no one sitting in the driver's seat so I went and got in. At that time the motor was not running. I started the car up and prepared to reverse down the driveway. Jeff did not say anything to me at all. He would have thought that I was the one that was going to drive to the shop.

I put my foot onto the brake and had to push it right down to the floor for it to get hard. The car was an automatic and I put it into reverse. When I put it in reverse the car didn't move initially until I released the brake and it started moving backward. Jeff did not ask me about my driver's licence at all. I don't think that I look old enough to have a driver's licence either. Jeff knows me a little bit but he doesn't know my age. He should have known by my looks that I wasn't old enough to drive but he let me drive anyway.

I only reversed the car about a car length and then put my foot back on the brake pedal. Again the pedal went down to the floor and the car began to slow but wasn't going to stop. I pushed the pedal down a couple of times before it did stop. I then put the car into Park and got out. Some people were laughing and I told them "The brakes didn't work." I didn't say it to Jeff, just to the people that were there in the front yard. I wasn't going to drive anyway.'

The witness went on to describe how the youth who was eventually convicted of the driving offences referred to above then assumed the position of driver and drove the car away. The witness stated that the next time he saw the car was some 40 minutes later as it was travelling along Camelot drive. He estimated its speed between 80 and 100 kilometres an hour. He stated that when the car was near the corner of Whites Road he knew that something was wrong. The car did not slow down at all. He identified the youth who was eventually charged with the driving offences as the

driver of the vehicle. He saw the left side of the car mount the curb on the left side of Camelot Drive just before the intersection and stated that it looked as if the driver was attempting to turn left onto Whites Road. The witness thought that the accelerator must have been stuck. He stated that the car went straight across Whites Road, mounted the foot path on the side of the road on which he and the other witnesses were standing and drove straight into some trees. He stated that he saw the driver's side of the car hit one of the trees and then the front passenger side of the car collided with another tree. When the car hit the trees, the rear of the car rose into the air a little bit.

- 2.15. The same witness stated that he went to the car and saw the driver climb out of the car through the driver's front window. The witness went around to the passenger side of the car and saw that Adam Sloan was sitting in the front passenger seat and another young person was sitting behind him in the back seat screaming. He said he saw Jeff sitting in the rear seat.
- 2.16. He stated that he was aware of the party at the house the previous week, which has already been referred to. He stated that he remembered that there was beer at the house on that occasion and that lots of people had helped themselves to it. Later he stated that he had never driven a car before that night at all but that he did not believe that the brakes felt faulty for that reason alone. He stated that the only reason that the pedal stopped when he pushed it down was that it was hard up against the floor.
- 2.17. A number of other people gave statements to police, which were tendered as exhibits at the Inquest. These statements contained very similar accounts of what happened. Many of the witnesses remarked upon the observations that the brakes did not appear to work on the vehicle.
- 2.18. One such person was the adult witness Tina Ann Green whose statement appears as Exhibit C25a. She stated that she had known Jeff Williams for some two and a half years. She would assist Jeff with driving him to various appointments because he was not allowed to drive.
- 2.19. She stated that Jeff would occasionally give her small sums of money for this assistance. When she first met Jeff he already owned the Mitsubishi Magna sedan that was eventually involved in the accident. She stated that most of the time when she would drive him somewhere she would use his car for that purpose and this

occurred on average two or three times a week. She stated that Jeff was an alcoholic. She stated that over the last month prior to the crash she had noticed that the brakes were starting to wear out and needed replacing. She stated that the car would still stop when the brakes were applied and that the pedal would go about three quarters of the way to the floor. She stated that she thinks that she told Jeff about three times that the brakes needed fixing. She stated that in the week prior to the crash she would have driven the car at least twice. She stated that during that period the brakes were getting worse but she did not think that the car was dangerous. "The brakes were still stopping the vehicle and the pedal never once went down to the floor while applying the brakes". She stated that she knew that the car went in for repairs on Wednesday 20 February 2002 and that Jeff's father told her that the brakes were going to be fixed. She stated that the car was brought back to Jeff's house by his father on 21 February 2002 and she was there. She said that Jeff's father, Brian Williams, told her that the front brakes had been fixed and that the rear brakes were going to be fixed the following week.

- 2.20. This witness stated that she drove the car that day to transport Jeff to a house at which he performed white ant treatment on the house. His work trailer and equipment were attached to the car at that time. On the trailer there was a pesticide tank and a pump. She stated that on the way to and from this house she found that the brakes were operating better but that they were still a little spongy. She stated that she did not have to apply as much pressure to the brake pedal to get a response from them as she did previously. She said that the brakes pulled the car to a stop even with the trailer attached. She stated that this was the last time she drove the car.
- 2.21. Mr Brian Williams made a statement, which was received as C30a. In that statement he confirmed that it was he who took the Magna to the mechanic for repair of the front brakes. He said that he was told that the back brakes should be repaired as well and he arranged to bring the car back the following Monday (that is, the Monday following the accident). He said that the brakes were operating much better when he collected the vehicle on the Thursday before the accident.
- 2.22. Mr Neil William Oxford provided a statement to police, which was received as Exhibit C31a. He stated that he was employed at Salisbury Auto Dismantlers at 178 Commercial Road, Salisbury as a general labourer and his duties included fixing cars. He had no formal qualifications as a motor mechanic but had about five or six

years experience at working on cars. He confirmed that he performed the repair of the front brakes of the Magna on Wednesday 20 February 2002. He stated that upon inspection both front brake pads were excessively worn almost down to their metal backing. He considered that they were completely unsafe in this condition and needed immediate replacement. He stated that he correctly fitted the new pads and pushed the pistons back with a "G clamp". Once the pads were fitted he took vehicle for a test drive and the brakes operated correctly and a good solid pedal was felt. He still felt that the brakes were not as good as they should be and so decided to check the rear brake pads also. When he inspected them he noted that they were worn down to the point where only approximately 15 percent braking material remained. He therefore decided that the rear brakes needed to be replaced also. When Brian Williams returned to collect the car Mr Oxford recommended to him that the rear pads should be replaced soon and in fact offered to replace them there and then. However Brian Williams said that the car was needed that day and that he would bring it in the following week to have the rear pads replaced.

- 2.23. A statement was also given by Elliot Cameron McDonald of the Major Crash Investigation Unit which was received as Exhibit C34a. In his statement he said that the brake system was hydraulic and the master cylinder reserves were correctly filled with fluid resembling brake fluid. He stated:

‘The left front flexible brake hose was broken off from the left front calliper however after clamping off the brake hose I was able to obtain a brake pedal pressure. The brake pedal when depressed travelled about 4cm before a good solid feeling pedal was obtained which held pressure on both heavy and light applications and applied the brakes. The left front calliper moved freely and the disc was shiny and I could find no evidence to suggest that the brakes were not working prior to the collision. After removing the wheels I was able to inspect the brakes. I noted disc brakes were fitted to all wheels. There were 10 mm of material to the front pads and 3 mm of material to the rear pads. I was able to operate the hand brake from inside the vehicle. The hand brake operated the rear wheels when applied.’

- 2.24. Sergeant Graham England gave evidence before the Youth Court and an account of that evidence is contained in the reasons for decision of Senior Judge Moss. He gave evidence based on measurements taken by him of the damage to the vehicle and examination of skid marks at the accident scene. Using calculations intended to determine the amount of energy used to result in the damage measured to the vehicle he was able to provide an opinion as to the speed of the vehicle prior to the collision.

He told Senior Judge Moss that the speed of the Magna immediately prior to the impact was in his opinion within the range of 76 to 92 kilometres per hour.

- 2.25. Senior Judge Moss' reasons for decision contain an account of evidence given by Mr William Potts. Mr Potts is an engineer with experience in fault finding within braking systems. He carried out an examination of the wreck of the Magna car. An account of the method used by the mechanic who repaired the brakes, Mr Oxford, in replacing the front disk pads was put to Mr Potts. Mr Potts stated that two aspects of Mr Oxford's methodology were of interest to him. He was surprised in the first instance that there was no bleeding of the brake system when the pistons were pushed back in order to make room for the new pads. The second concern was that the seal surrounding the pistons tends to wear together creating a complete seal. Once the piston is in a different position in the seal there will be a period when the seal is not complete because the piston and the seal have not yet worn together. In this circumstance, air can enter into the brake lines and the brakes may become spongy. This would be noticeable to the driver and the brakes could become progressively less efficient until such time as there was a complete brake failure. Mr Potts gave an opinion that the brakes may have seemed satisfactory immediately after the new brake pads had been fitted, but that with progressive driving and more air entering the braking system the brakes could become less efficient.
- 2.26. Mr Potts also gave evidence as to the likely speed of the vehicle immediately prior to crash. His opinion was that the crush depth would be greater in this instance because there were five people in the car and it was fully laden. This meant that the energy to be dissipated at the time of the collision was greater than if there had only been one driver in the vehicle. Mr Potts considered that a speed of approximately 60 kilometres was more likely to have been the speed of the vehicle at the time of the impact.
- 2.27. A statement was taken from the young male driver of the vehicle who was 15 years old at the time of the accident. The statement was made under caution. The driver stated that he went to the address where the Magna was that evening for a party. He was with three friends including Adam Sloan. At the party there were a number of people his age and only one adult, Jeff Williams, who was the owner of the car. At some stage Mr Williams wanted to go and get some alcohol. Mr Williams got into

the front passenger seat and another young male got into the driver's seat. Two other young people together with Adam Sloan got into the back seat.

- 2.28. The young person who was driving reversed the vehicle only about car length and then got out, as he did not really want to drive. The driver himself then got into the driver's seat, reversed the vehicle out of the driveway and stopped. When he went to stop the brake pedal went right to the floor but the car eventually stopped. The driver thought about getting out at that time because of the brakes but was convinced to continue by his friends in the back seat. He then drove slowly to a liquor shop near Bi Lo on Bolivar Road and there used a concrete barrier at the end of the parking bay to stop the car. Jeff Williams then got out of the car and bought a carton of Strongbow.
- 2.29. Jeff Williams returned to the car and got into the back seat in the centre and Adam got into the front passenger seat. The driver then started to drive back towards 200 Whites Road via side streets. He stopped about half way back because Adam Sloan wanted to have a drive. Adam drove only a short distance before stopping because the brakes were not working. The driver then continued to drive from there because he thought he knew the route and the car well enough to make it back to the house.
- 2.30. As he was travelling along Camelot Drive he was, according to his statement, doing about 60 kilometres per hour and when he was about 50 metres from Whites Road, he pushed the brake pedal hard to the floor. He stated the car continued to travel at speed only slowing to about 50 kilometres per hour before he reached the intersection. His right foot was still hard on the brake pedal. He tried to turn left but crossed the road and mounted the footpath. He took his foot off the brake, as he knew it wasn't doing anything and the front left of the car then collided head on into a tree.
- 2.31. The driver stated that he blacked out momentarily because his head had hit the windscreen. The seat belt was on but it had popped off during the crash. He got out via the driver's side window, ran inside a nearby house to wash his face of blood, and then went back to the car. He went to the front passenger side and saw Adam Sloan who was trapped in the car but was talking. He then heard that the police were on their way so he left because he thought he would be arrested.

- 2.32. The driver admitted that he knew that the faster the car went, the longer it would take to stop. He stated that he had never been to Jeff Williams' house before nor had he ever driven the vehicle before. His only driving experience to that date was in his father's car up and down the driveway.
- 2.33. The Senior Judge of the Youth Court heard the witnesses referred to above, and others as well. On the basis of all of the evidence he heard, the Senior Judge made the following findings of fact:
- '1. At the time of the accident on the 22nd of February, 2002 the driver of the vehicle was fifteen years old.
 2. The driver had no drivers licence and had never driven a car on a road prior to the date of the accident.
 3. The brakes on the Magna were faulty. It is not possible to say how greatly they had deteriorated, but I am completely satisfied that the brakes did not stop the vehicle within safe parameters.
 4. The driver of the vehicle knew that the brakes were faulty and he discovered this during the journey from Jeff Williams' house to the Bi-Lo supermarket.
 5. The driver continued to drive knowing that the brakes were faulty.
 6. The driver approached Whites Road down Camelot Drive knowing that he was approaching a busy intersection.
 7. The driver approached Whites Road at a speed of at least 60 kph.
 8. The driver attempted to apply the brakes but the vehicle did not slow down.
 9. The vehicle was travelling too fast for the driver to attempt to turn into Whites Road and the vehicle travelled directly across Whites Road and crashed into the tree.
 10. Adam Sloan was killed as a result of injuries which he received in the accident.
 11. Jeffery Williams and another young passenger in the vehicle each received grievous injuries as a result of the accident.
 12. The young driver was driving in a reckless and dangerous manner.
 13. If the driver believed that his driving was not dangerous, than that belief was unreasonable.'
- 2.34. The evidence put before the Coroner's Court about the collision is to the same effect as that before the learned Senior Judge, except that it was in documentary form. Having considered the documentary material admitted in evidence at the Inquest, I respectfully agree with the findings made by the Senior Judge.

3. **Emergency Response**

3.1. South Australian Metropolitan Fire Service (SAMFS)

The court heard evidence from Station Officer Stephen A'Court. Mr A'Court has twenty two years experience with the SAMFS and is fully qualified in all aspects of road crash rescue. His final qualification was received in October 2002 but his training had proceeded throughout the 1990s to that point. On 22 February 2002 he was well qualified to perform the duties required of him at the scene.

3.2. Mr A'Court and three other officers were the crew of fleet 329 which is a vehicle fully equipped with heavy rescue equipment. At T41 Mr A'Court said that his appliance received a call out at 9.05pm. At T45 Mr A'Court said that his appliance arrived at the scene at 9.10pm, a five minute travelling time from station to incident.

3.3. At T49 Mr A'Court said on arrival at the scene he noticed straight away that there was a vehicle that had been involved in a head on collision with an extremely large gum tree and that the impact seemed to be more on the passenger side of the vehicle even though it was a frontal collision. He said:

‘I can specifically remember saying to my crew that my first hopes were that there would be nobody in the passenger seat because that was where the main impact was’.

3.4. At T69 Mr A'Court described what he could see of Adam Sloan at this early point. He said he saw a teenager trapped in the front passenger seat and that he could only see his head and arm. He said that Adam was pinned between the dashboard and the seat with quite a bit of the engine compartment and dashboard area on top of him. At T78 Mr A'Court commented that Adam's state of entrapment was really bad - “it is probably as bad an entrapment you would want to have to deal with”.

3.5. At T79 Mr A'Court stated that the main impact damage was on the passenger side at the front of the vehicle and it had pushed the front left hand wheel up underneath the vehicle almost to where the passengers feet would be normally. He stated that part of the engine compartment had been pushed forward on top of Adam and that the dashboard was also on top of him.

3.6. Mr A'Court remarked upon the difficulties created by the large number of people gathered at the scene. Because the vehicle was not on the road but in the front yard of a house a large crowd had gathered who were much closer to the wrecked vehicle

than would have otherwise been the case. In some cases they were only 3 or 4 metres away from the vehicle. Mr A'Court described it as follows:

'It's – It was – It is probably one of the most difficult ones I have encountered. As I said, I am in my 24th year of service and it was borderline, a mini sort of like civil disturbance, because it just seemed to be so many people there and there seemed to be so many angry people yelling at one another or scuffling with one another in the background...'

And later:

'So it was a very difficult environment, it was probably as hard as I have ever worked in.' (T77)

- 3.7. Another aspect of the difficulties presented by this large crowd was that, at least initially, Mr A'Court found it difficult to direct his crew to carry out the required tasks “because picking them out the of the crowd and even though we're dressed, when there is people milling around, sometimes you've got to look two or three times to see where they are” (T60). Clearly it was difficult for Mr A'Court to be able to pick out his own crew amongst the crowd, which gathered very soon after the crash.
- 3.8. At T73 Mr A'Court described the procedure for providing access to passengers trapped in a vehicle so that emergency medical assistance can be provided. He explained the SAMFS designation of the various structural parts of the vehicle which support the roof. These are referred to as the A, B & C pillars of the car. At T73 Mr A'Court explained that the A pillars are those which run alongside the front windscreen, the B pillars are those in the middle of the vehicle which support the doors and the C pillars are the rear pillars which run each side of the rear window of the car. The procedure described by Mr A'Court was that the rescue team would make cuts in all six of those pillars and physically lift the roof off and take it away. At T36 Mr A'Court described how this is a stop start process, in which the rescue crews would stand by at the request of the medical attendants when necessary, and then would continue with the next stage of the process when the medical attendants indicated that it was appropriate to do so (T36 and T41). At T44 Mr A'Court guessed that the rescue process would have been stopped and started half a dozen times throughout the whole rescue in this staged manner.
- 3.9. At T44 Mr A'Court also explained why it was necessary for the rescue team to remove Mr Williams, who it will be recalled was trapped in the rear seat before steps could be taken to remove Adam Sloan. Mr A'Court said:

‘The concentration was to access and make sure that we could remove the one in the back, and before we could do the rescue in the front it would have been my assessment that he would have needed to be taken out anyway. We couldn’t have done the rescue of the one in the front with a casualty laying on the back seat, so we basically had to get him out and then get back onto the other point.’

Mr A’Court explained that to do what had to be done to get Adam Sloan out of the front of the vehicle it was necessary to have clear working space in the back of the vehicle:

‘To do a dash roll or a dash lift on a vehicle, we really don’t need to have anyone in the back, we need to be concentrating on having the vehicle and that area being clear and safe.’ (T45).

3.10. Mr A’Court then proceeded at T45 to describe what was meant by a dash roll:

‘The dash roll involves making the relief cuts, which I said, in the seal and the A columns.....The rescuers then place a ram at the base of the B pillar to some point on the A pillar. The relief cuts in the A pillar then allow the dash to be moved up very easily.’

Mr A’Court said that the vehicle folds open and when it rolls away it brings anything that is down on top of a person up and clear of them. He also described that it is necessary in this process to use blocks. The blocks are used periodically through the rolling process to be inserted into the places where the relief cuts are made. The reason for this is that if the metal is fatigued and lets go, or if the rams fail for any reason, they might roll straight back down. At T46 Mr A’Court described that “so we push, block it and chock it, check where his legs and feet are, and under these terms we had a lot of difficulty knowing where his legs and his feet were, and in doing a dash roll, if you don’t do it in a systematic, steady fashion, you can actually cause more damage to body parts that you can’t see.”

3.11. At T47 Mr A’Court explained that because of the position of the vehicle against the tree, it was ultimately not possible to perform a dash roll. He stated:

‘We attempted to push a dash roll, we realised fairly quickly that the dash roll was going to be a non dash winner. And we then reverted to doing what we would call a dash lift. Instead of trying to roll it away, we then attempted to push it up off him.’

3.12. At T47 Mr A’Court explained that the hydraulic spreaders were placed between the transmission tunnel of the vehicle and the dashboard and in this manner the dashboard was lifted away from Adam Sloan.

- 3.13. At T48 Mr A'Court said that he recalled the doctor becoming extremely concerned about Adam Sloan's condition and at that point asked him to get Adam out as quickly as possible. At T50 Mr A'Court described how when vehicles are badly crashed they can become more difficult to manipulate by cutting and lifting than they normally would be. He said that because the vehicles have already been crushed they become inherently stronger than they are normally. He explained that because the vehicles are already crushed, to move them any further is a considerable effort. He also explained at that point in his evidence the reason why the crew did not pull the vehicle away from the tree in order to facilitate the dash roll. He explained that the crew really did not know where Adam Sloan's legs were and were concerned that by pulling the vehicle away from the tree they may have caused more harm than good. In my opinion this was a sensible approach to take. At T52 Mr A'Court said that the SAMFS crew had finished at the scene at 10.49pm and at this time both of the passengers would have been removed from the vehicle.
- 3.14. At T54 Mr A'Court described this as a difficult rescue, and said that the time taken was by no means unusual in the circumstances. He said ideally, an extraction such as this can be performed in about one hour. But there were particular difficulties in this case, in particular the position of the tree, the fact that Mr Williams had to be extricated from the rear of the vehicle first, and the need to stop and wait while Adam received emergency treatment, and all of these impacted upon the time taken to extract Adam.
- 3.15. Both Mr Albury (SA Ambulance Service Officer) and Dr Hammerstein were most complimentary of the efforts of the SAMFS officers to extract Adam from the wreckage. Having regard to the particular difficulties they were facing with the large and unruly crowd which developed, I accept the evidence given that the rescue was performed with appropriate speed, and that no criticism of the rescue workers is justified in the circumstances.
- 3.16. Before leaving this aspect of the evidence, I make the comment that it is completely unacceptable that rescue services should have to carry out a stressful and difficult rescue in the face of an unruly and poorly behaved crowd of onlookers. At T64 Mr A'Court explained that the environment was such that his crew were concerned that their equipment would be stolen and in fact one of the police cars on that particular night was actually stolen. Apparently the vehicle of the police officer who

arrived there to render assistance at the earliest stage of the rescue left his vehicle unattended and it was stolen and found the next day at Salisbury North.

3.17. There was some inconsistency between the evidence of Dr Hammerstein and the evidence of Mr A'Court as to the time of the removal of the roof. Mr A'Court's initial recollection was that the roof was removed within the first 15 minutes of arrival at the accident scene. However, Dr Hammerstein's recollection was that the roof was being removed at the time that he was intubating Adam Sloan, which occurred later. At T68 Mr A'Court acknowledged that Dr Hammerstein's recollection may well have been correct.

3.18. South Australian Ambulance Service (SAAS)

The precise time of the collision cannot be established on the evidence. The records of SAAS disclose that the first call was received at 9:01 pm (Exhibit C37a). The first ambulance on the scene was designated Salisbury 12 and is recorded as arriving at 9:09 pm.

3.19. Mr Andrew Albury is an intensive care paramedic and a shift manager with SAAS. Mr Albury had worked from 7:00 am to 7:00 pm, had extended his shift to attend another incident and was on his way home at around 9:00 pm when he heard the ambulances being dispatched to Whites Road. He was aware that the night shift manager was engaged at the Flinders Medical Centre. When he heard the situation reported 9.11 pm, he called in and diverted to the scene. He arrived at 9:18 pm.

3.20. By the time Mr Albury arrived at 9:18 pm, there were three ambulances (Salisbury 12, Playford 181 and Salisbury 181), as well as Emergency Response vehicles from SAMFS, CFS and SA Police.

3.21. Mr Albury ascertained that there were still two people trapped in the vehicle, a young male person in the front seat and an adult male in the rear seat. At T125 Mr Albury stated that intensive care paramedic Claire Beard was inside the motor vehicle attending to the young male person in the front seat, who was Adam Sloan. He noted that she was administering oxygen. In his statement, (Exhibit C37) he also recalled that a cervical collar had been placed on Adam and Claire was attempting fluid resuscitation.

- 3.22. Mr Albury reached the conclusion that, having regard to the extent to which Adam was trapped in the vehicle, and that his medical condition was critical (he was pale, sweating, and was showing signs of shock), it was appropriate to call for a medical retrieval team (MRT). He called SAAS communications at 9:24 pm and made the request. SAAS records indicate that communications telephoned the Women's and Children's Hospital at 9:25 pm. At T128, Mr Albury also explained that because Adam was under the age of 17 he requested a retrieval to the Women's and Children's Hospital.
- 3.23. Mr Albury said that it was unusual that he received a call back from SAAS communications advising that the doctor who was to carry out the retrieval operation wished to speak to him. The tape recording of the radio transmission does indicate that Mr Albury expressed some frustration at the delay that this entailed. However, when he gave oral evidence, Mr Albury said that this was merely an indication of how busy he was at the scene, rather than any particular criticism of the doctor concerned.
- 3.24. At T133 Mr Albury said that it was about 10.10 pm that Mr Williams was extricated from the vehicle and at approximately the same time, the MRT, consisting of Dr Hammerstein and a nurse, arrived at the scene. The time of this arrival varied between 10.00 pm as recorded in the SAAS record, and 10.15 pm according to Mr Albury's estimate, although Mr Albury conceded that it may have been closer to 10.00 pm (T133). At T136 Mr Albury said that Adam Sloan was freed in the sense that the dashboard had been pushed away from him and the SAMFS had cut the seat on which Adam was sitting by removing the back rest of the seat – however Adam was not removed from the vehicle at this time, which Mr Albury placed at approximately 10.30 pm. The reason Adam was not immediately removed was because once the rear of the seat was removed and Adam was laid back he immediately suffered an episode of haemoptysis (coughing up blood), and that the retrieval doctor then intubated and sedated Adam using rapid sequence induction, while he was still in the vehicle
- 3.25. At T136 Mr Albury said that Adam was finally extricated from the vehicle altogether at about 10:55 pm. At T137 it was put to Mr Albury that according to Mr A'Court the time of extrication was 10:49 pm, and Mr Albury conceded that Mr A'Court's recollection may well have been the accurate one. Adam was then placed on an ambulance stretcher and loaded into the ambulance which then left. At T138

Mr Albury noted that it was necessary to remove Mr Williams from the rear of the car in order to get Adam out. Mr Albury noted that he did not believe there was any deficiency in the process of extraction which led to unnecessary delays but stated that the situation regarding Adam was complicated by having someone in the back seat who was also trapped and who also had significant major limb fractures which needed to be stabilised before he could be removed from the car and before efforts could then be made to push parts of the vehicle away from Adam's body. He also said that matters were made more complicated by the fact that Adam's legs were trapped underneath the seat upon which he was sitting so that they could not know whether his legs were injured or vulnerable to further injury if the car was moved (T140).

3.26. At T142 Mr Albury gave an explanation for the sequence in which the two seriously injured persons were removed from the car which corroborated the explanation provided by Mr A'Court namely that to get Adam out of the vehicle it would be necessary to do things that necessitated the removal of the male (Mr Williams) from the back seat of the car, for example creating a space so that the seat on which Adam was lying could be cut so that Adam could be laid backwards. Mr Albury stated, "We wouldn't have been able to do all that if the male was still in the back seat". It appears that the decision about the sequence of removal was dictated by necessity, but was, to the extent that it can be attributed to anyone, a joint decision of the SAMFS Retrieval Team and the paramedics themselves acting as a team.

3.27. Medical Retrieval Team (MRT)

The court heard evidence from Dr Lee Hammerstein who is now a consultant emergency physician. On 22 February 2002 Dr Hammerstein was a third year registrar, attached to the intensive care unit at the Women's and Children's Hospital.

3.28. Dr Hammerstein said the he was in the Emergency Department when he received the telephone call from SAAS. Because he was the most senior doctor on duty that evening, he could not commit himself to leaving the hospital on a retrieval without consultation with the on call consultant, Dr Slater, in order to provide coverage for the Intensive Care Unit and the Emergency Department at the Women's and Children's Hospital.

3.29. Dr Hammerstein was conveyed to the scene, arriving just after 10.00 pm. By the time he arrived Adam Sloan was the only person still trapped in the vehicle (T82).

Dr Hammerstein said that Adam was curled up in the foetal position with his chest facing the passenger side door and his right shoulder facing towards the engine of the car. He was trapped between the dashboard and the back of the seat (T84).

- 3.30. At T84-85 Dr Hammerstein said that although Adam had an airway and was spontaneously breathing at this time, he was obviously shocked in that he had clammy pale skin, a rapid pulse, low blood pressure. He had been receiving intravenous fluids administered by the ambulance officer; he was wearing a cervical collar and was receiving oxygen by mask (T85). Dr Hammerstein commented that the ambulance crew had done a very good job prior to his arrival. At T85 Dr Hammerstein recalled that at the time of his arrival the rescue crew were busy trying to determine how the front passenger seat could be dismantled to free Adam. Dr Hammerstein remembered crawling into the driver's side of the car to get onto the driver's seat to make an assessment of Adam however, not all of his treatment could be carried out from that position and at a point later on he had to get into the back seat of the car to treat Adam's airway. At T86 Dr Hammerstein said that Adam was complaining of back pain, and of pressure and wheeziness in his chest. At T88 Dr Hammerstein stated that his initial management plan was to stabilise Adam haemo-dynamically having regard to his low blood pressure and so he administered two units of packed blood cells. At T90 Dr Hammerstein stated that he was concerned, even at that early stage, that Adam had fractured ribs that might lead to a haemothorax or pneumothorax (blood and/or air in the thoracic cavity interfering with the ability to breathe).
- 3.31. When the seat back was removed, freeing Adam's chest, Dr Hammerstein observed that Adam "pretty much immediately lost consciousness and very soon after, seconds later, a large volume of blood poured from his mouth" (T90-91). At T92 Dr Hammerstein said that while unconscious, Adam would not be able to protect his lungs in the event that he vomited. At that point, Dr Hammerstein decided to perform a rapid sequence induction, which means carrying out sedation and analgesia to enable intubation. Dr Hammerstein then performed the intubation with some difficulty because it was necessary to remove Adam's hard collar in order to obtain a view of the larynx using a laryngoscope and Dr Hammerstein was only able to obtain a poor view of the larynx because of the situation with Adam being in the car and the doctor in the back seat. At T92 Dr Hammerstein stated that it was a very difficult intubation and not only because there was a lot of blood in the airway obstructing the

view. This brief summary of Dr Hammerstein's evidence does not reveal what must have been an extremely difficult process for him. Intubation is a difficult procedure in the best of situations, and it must have been extremely difficult to carry it out in the cramped and awkward circumstances that Dr Hammerstein faced. It is a credit to Dr Hammerstein that he was able to achieve intubation as rapidly as he did. At T93 Dr Hammerstein stated, in relation to the rescue team's extraction efforts at this time:

'I recall them, as soon as I had performed the rapid sequence induction, covering my head and the nurse who was also in the car with me assisting, with a blanket to protect us from the glass that was flying around as they removed the roof, so, the definitive removal of the roof was immediately after the rapid sequence induction.'

- 3.32. Once Dr Hammerstein had done what he could to stabilize Adam's condition, he was placed in the ambulance. Once in the ambulance, Dr Hammerstein performed a needle thoracocentesis (inserting a needle into the chest) in case Adam had a tension pneumothorax (T95). He did not find any air trapped in the thoracic cavity. A large quantity of blood was removed from the interior of Adam's right lung via the endotracheal tube, indicating to Dr Hammerstein that the problem was a large haemothorax rather than a pneumothorax. Dr Hammerstein concluded that it was inappropriate to insert an intercostal catheter at the scene for the suspected haemothorax because to do so might unduly delay Adam's evacuation, he did not have the right size catheter, and the conditions were generally unhygienic. (The intercostal catheter is a tube having an internal diameter of approximately 8mm. The needle which was in fact inserted by Dr Hammerstein is much finer: needle aspiration is an established immediate intervention in cases of tension pneumothorax.)
- 3.33. Dr Hammerstein said that Adam's condition remained essentially the same during the ambulance journey to the Royal Adelaide Hospital. He said that he was observing his condition closely, taking vital signs every five minutes, in case Adam developed tension pneumothorax which would have called for the insertion of an intercostal tube (T99).
- 3.34. The time of arrival at the Royal Adelaide Hospital was 11.15 pm approximately and this was confirmed by Dr Hammerstein at T99. Also at T99, Dr Hammerstein explained that a decision was made in the ambulance to take Adam to the Royal Adelaide Hospital rather than to the Women's and Children's Hospital because Dr Hammerstein was concerned that cardiothoracic intervention for a person who was, essentially, an adult size patient would be better done at the Royal Adelaide

Hospital rather than the Women's and Children's Hospital. The fact of the matter was that it was not until Adam had been removed from the car that the treating retrieval team were able to appreciate that he was a big boy for his age and that he was better treated in an adult hospital (T99). Dr Hammerstein had discussions while in the ambulance with the consultant at the Women's and Children's Hospital in relation to the decision to divert to the Royal Adelaide Hospital and that consultant agreed with Dr Hammerstein. Dr Hammerstein also contacted the Royal Adelaide Trauma consultant Dr Davey on route to the hospital who agreed to take Adam as a patient. (T100). At T100 Dr Hammerstein stated in relation to his contact with Dr Davey:

'I would have made him very aware of my concerns that Adam had dire chest injuries and I would have requested that a cardiothoracic surgeon be available in the emergency department on my arrival and it is my recollection that that did occur.'

- 3.35. At T102 Dr Hammerstein noted that potentially there had been problems in relation to the size of equipment that had been taken in the medical retrieval team vehicle to the scene in that Adam was a bigger person than the equipment would have normally been intended for. However he stated that these issues were easily surmountable given the other equipment that was readily available on the scene from the SAAS Ambulance vehicles (T102-103).
- 3.36. Dr Hammerstein was quite complimentary of the efforts of the police and SAMFS in managing the scene at Paralowie during his treatment of Adam. He said that there was a large crowd present but at least as far as he was concerned they were controlled effectively (T103).
- 3.37. It was Dr Hammerstein's view that there were no undue delays in the treatment and extrication of Adam in the vehicle. Indeed in retrospect he wondered whether he should have performed a thoracotomy (cutting an opening into the thoracic cavity) and taken extra care in relation to a possible spinal injury while Adam was actually still in the vehicle. Had he done these things, the extrication would have taken even longer than it eventually did (T104).

3.38. Treatment at Royal Adelaide Hospital

3.39. Dr Michael Davey

Dr Davey is an emergency medicine consultant at the Royal Adelaide Hospital. He held the same position at the Royal Adelaide Hospital in February 2002 and was the trauma and emergency consultant on duty in the Emergency Department on 22 February 2002. Dr Davey confirmed that he had been aware prior to Adam's arrival that he was coming to the Royal Adelaide Hospital that night.

3.40. Referring to the hospital notes, Dr Davey noted that on arrival, Adam was already intubated and ventilated. He assessed Adam as shocked, heart rate 156 and blood pressure of 108 systolic. He noted blood was coming up from the lungs and noted reduced air entry in the right side of the chest with a dull percussion note and suspected strongly that Adam had a tension haemothorax, which is a large amount of blood within one side of the chest compressing the heart and the lungs. On the basis of that, a chest drain was placed on the right hand side. The notes do not record a specific time for that.

3.41. On putting that chest drain in 1700 milligrams of blood was drained but Adam remained tachycardic with a heart rate of 150 and blood pressure of 90.

3.42. Dr Davey performed a fast scan – a limited ultra sound examination of the abdomen specifically to look to see if there was any free fluid in the abdominal cavity to indicate a ruptured spleen. He noted that there was no free fluid.

3.43. It was noted that there was ongoing heavy blood loss from the chest drain and an acute deterioration. A second chest x ray was requested and that indicated the presence of a tension pneumothorax and a second chest drain was placed. Other investigations included a pelvic x-ray, a cervical spine x-ray, echocardiogram and general resuscitation procedures (T176 and preceding).

3.44. Dr Davey stated that his notes were written at 1:30 am and assumed that everything in the Emergency Department had then stopped and that Adam must have left the Emergency Department by that time to be taken to theatre.

3.45. In Exhibit C44, a statement given by Dr Davey to Detective Senior Constable McLean, Dr Davey stated that there are certain procedures that have to be done as part of the resuscitation and the assessment of the patient in the Emergency Department

and these procedures were carried out by Dr Davey and his team. He stated that the major concern in a case like this is to ensure that the patient is not likely to die from something other than his chest. He stated that it is a critical component of trauma resuscitation not simply to jump in for what appears to be the most obvious symptom. He stated that it is necessary to go through a system to determine what the problems are and to treat the right things in the right priority. He gave as an example the possibility that Adam may have had an unstable fractured pelvis causing his instability, or the possibility of a ruptured liver or spleen. He stated that these things had to be excluded prior to admission for surgery for the chest trauma. He stated as follows:

‘I mean if you for example had this lad had an open book pelvic fracture and bleeding torrentially from there, if he’d gone to theatre to have a thoracotomy without any diagnosis of that or an active plan of management then he may have died from pelvic bleeding...’

- 3.46. Also in Exhibit 44, Dr Davey stated that there were certain inevitable aspects of resuscitation which had to be carried out in Adam’s case. However, some things were shortened. For example, his team did not do a full spinal series of x-rays and other things that would normally be done to get a patient into theatre.
- 3.47. At T184 Dr Davey stated that in the Emergency Department with a patient in Adam’s condition it is a matter of continually performing life saving measures as you move through an assessment process to determine what treatment the patient requires. He said the team may never complete their primary survey because they were always coming back to do more life saving measures. He stated this is reflected to a degree in Adam’s case because they put in a chest drain, relieved his tension haemothorax, and continued with resuscitation and the primary survey but then Adam deteriorated again, so the team had to go back, reassess him and determine that he had a tension pneumothorax requiring a second chest drain.
- 3.48. At T200 Dr Davey notes that unfortunately the notes did not specify the time spans or the actual times that the intercostal drains were placed, but he could say that they were both in place by 2345 having regard to the notes. He pointed out that although the thoracotomy would have relieved both of those tension pneumothoraces, the time span for achieving thoracotomy is drastically different from the insertion of a chest drain – the latter can be done within 10 – 15 minutes but getting a patient to theatre for a thoracotomy is far more prolonged (T201). At T201 Dr Davey expressed the

view which he believed to be the view of the hospital and the trauma department of the Royal Adelaide Hospital that to take a person to theatre, bypassing the Emergency Department in these sorts of circumstances, is not appropriate because of the high risk of missing other potentially life threatening conditions.

3.49. Although the notes from the Emergency Department are lacking in detail with regard to the timing of particular procedures, it does not appear to me that there was anything inappropriate in the treatment of Adam Sloan in the Emergency Department. Nor is it apparent to me that the treatment was unnecessarily prolonged. In my view it would not have been realistic to expect, considering Adam's deteriorating condition and the need for the insertion of the chest drains and the continuance of resuscitation attempts, any further truncation of the period that he spent in the Emergency Department.

3.50. Dr Stubberfield

Dr Stubberfield is a senior visiting cardiothoracic surgeon at the Royal Adelaide Hospital. In February 2002 he was the head of cardiothoracic surgery at the Royal Adelaide Hospital. He gave evidence at the Inquest. Dr Stubberfield had no independent recollection of his treatment of Adam Sloan and was reliant on the hospital notes to assist in giving his evidence. From the notes, he was able to determine that he received a telephone call from the cardiothoracic registrar at the Royal Adelaide Hospital, Dr Jeyaprassana at approximately midnight. He stated that it was clear from the hospital notes that Adam would need surgery, that he was still currently being assessed and resuscitated by the trauma team at the time of the telephone call to Dr Stubberfield, but that it seemed clear even at that stage that he would require surgery because of bleeding both outside of the lung into the cavity around the lung and in the lung itself. He noted that an echocardiogram was ordered and believed that he would have requested that to be done at the time of the telephone call (T232).

3.51. Dr Stubberfield confirmed the evidence of other witnesses that in cases such as Adam's involving multiple injuries that, as well as the chest injury, there may be head injury or abdominal injuries and these all need to be excluded before a decision is made to operate on the chest (T233). He explained that after the initial telephone call from the registrar that, the decision having been made to operate, a number of things would have to be done. The cardiothoracic surgical theatre staff had to be called in to

open up an operating room which takes an hour or more, and an anaesthetist would need to be called (T233).

- 3.52. Dr Stubberfield stated that when he arrived at the hospital he noted that Adam was being ventilated with the endotracheal tube which had been placed whilst he was still at the scene of the accident. Dr Stubberfield stated that in the operating room that endotracheal tube was changed for a double lumen tube, which is a tube by which one can ventilate the right and left lungs independently and that this is extremely important if one is trying to prevent, for example, bleeding spilling over from one lung into the other lung. He stated that he understood that the double lumen tube was placed by the anaesthetist in the operating room, and he then stated at T235-T236:

‘And then we were about to turn the patient over, he would be on the side with the right side up and the idea was to begin the operation at that point in time. The problem was, after the double lumen tube was placed, he started to rebleed - I mean he had bled before clearly, but he started to rebleed within the lung massively and, despite the fact he had a double lumen tube there, it was involving both lungs, and he could barely be ventilated, that was really the big issue. And that's why, in the end, he died because he just couldn't be ventilated adequately. And, indeed, when we - we were going to still go ahead, although it was really looking extremely hopeless because he just couldn't be ventilated. When we turned him over he had a cardiac arrest, as I recall, and we had to really abandon the idea of surgery immediately and try and resuscitate him from that situation.’

Dr Stubberfield explained that the surgery was never actually commenced because Adam could not be resuscitated.

- 3.53. Dr Stubberfield confirmed that his approval was required to institute the preparation of the operating room for surgery (T237). He was asked whether a case could be made for steps to be taken to prepare the theatre at an earlier point, perhaps even before the patient arrives. His answer was as follows:

‘Logically you'd say yes, but the reality is that something like 95% of people with chest trauma do not require surgery; it is actually quite rare that they require surgery. The second point is that - because we have been through this before - the information coming from the scene of the accident isn't always 100% reliable, it is very hard to make a decision based on that information, so we have done that occasionally but that's actually unusual.’

- 3.54. Finally, Dr Stubberfield was asked whether there was anything about Adam's treatment, either in the length of time it took to get him into theatre, or the treatment he received up until that point, that caused Dr Stubberfield concern. He replied at T240 that he considered that the management was quite appropriate. He stated that

Adam's was "a very rare injury". A life threatening bleed within the lung that may require a lung or a part of a lung resection is a very rare injury and in his 30 or more years as a cardiothoracic surgeon he could only recall two cases in which such an injury had resulted from blunt trauma (he was excluding penetrating injuries). He noted that in both of those two cases the patient died. Dr Stubberfield noted that the problem that occurred with Adam was that he "re-bled" in the operating room. Dr Stubberfield noted that this may have been triggered by the placement of the double lumen tube and while this cannot be established one way or another, the double lumen tube had to be placed before the operation could occur and, the operation being essential, the event would have inevitably occurred at some point.

- 3.55. At T241 Dr Stubberfield noted that the "re-bleeding" may have simply been coincidental, or it may have been the physical act of transporting Adam or it may have been the placement of the double lumen tube.

4. Expert overview – Dr Matthew Ryan

- 4.1. Counsel Assisting me obtained an overview of the treatment of Adam Sloan from Dr Matthew Ryan, Emergency Physician. Dr Ryan currently holds the positions, amongst others, of staff specialist in emergency medicine at the Geelong Hospital, forensic medical officer, Victoria Police, Honorary Emergency Physician Alfred Hospital, Melbourne.
- 4.2. Dr Ryan provided two reports, the first of which was dated 5 April 2005 and was admitted as Exhibit C45 in these proceedings, and the second of which was dated 20 September 2005 and was admitted as Exhibit C46 in these proceedings.
- 4.3. In C45 Dr Ryan comments that the decision to send Adam to the Royal Adelaide Hospital rather than the Women's and Children's Hospital was a critical one and in his opinion it was correct. He also stated that the decision not to send Adam for a CT scan was also correct in his opinion. Dr Ryan's view was that there was no deficiency in Adam's care during his time in the Emergency Department, and that his resuscitation appeared to have been excellent. Dr Ryan did raise some questions about the amount of time taken to get Adam to surgery. He noted that from soon after Adam's arrival at the Royal Adelaide Hospital it was clear that he needed to go to the operating theatre urgently. He noted that there was a period, according to his calculations, of 108 minutes in the Emergency Department prior to the transfer to the

operating theatre which he considered to be a delay. However, he made it plain that he was really not in a position to comment on whether the delay was reasonable or unreasonable and posed certain questions.

- 4.4. The second report, C46, was provided in response to further information provided by Counsel Assisting from statements obtained from various witnesses. Ultimately, Dr Ryan's position was this:

'The question of how long it should take to open theatre in a trauma center (sic) after hours is a separate one and one on which I am unable to comment. These matters are not within my field of expertise.'

- 4.5. Dr Ryan gave evidence at the Inquest. Dr Ryan was asked whether he could recall the times that he used to make a calculation of 108 minutes as the time spent in the Emergency Department prior to transfer to the operating theatre. At T212-T213 Dr Ryan notes that he misread the notes and that as a consequence his calculation of 108 minutes should in fact have been 98 minutes, as Adam was moved from the Emergency Department 10 minutes earlier than he had realised on his initial reading of the notes.

- 4.6. Dr Ryan gave evidence at T215 of his understanding of what needed to be done for Adam's resuscitation. Dr Ryan said that as with all trauma patients, Adam needed a primary survey to assess threats to his airway, breathing and circulation; Adam had threats to his breathing and circulation. Dr Ryan noted that his airway had been secured in the field but that this would have had to have been checked in the Emergency Department. He commented that it was clear that Adam had problems both with breathing and circulation which required intercostal catheter insertion and fluid resuscitation and blood products as well. In addition to dealing with those problems, the team also needed to assess other injuries which, in retrospect, we now know that Adam did not have. However, Dr Ryan, as other witnesses before him had done, stressed the need to exclude the existence of other injuries before admission to surgery for an operation on the chest. Dr Ryan stressed that there was certainly a need to have an assessment of the abdomen and pelvis to make sure that they were not sources of major haemorrhage as well before admission to theatre for a chest operation.

- 4.7. At T216 Dr Ryan confirmed that in the Emergency Department two intercostal tubes were inserted into Adam's chest. He noted that the first tube may not have been

working either because there was a blockage in that tube due to blood or that the tube may have been placed in a position that was not draining either air or gas. However, Dr Ryan acknowledged that Adam had deteriorated requiring the insertion of a second intercostal tube. Dr Ryan at T217 confirmed the appropriateness of this treatment stating that the drainage of a haemothorax or a tension pneumothorax is a life saving procedure that does not require the patient to be in theatre and is a relatively simple procedure which may be done quickly.

4.8. At T217 Dr Ryan confirmed the appropriateness of the performance of the echocardiogram stating that it was necessary to assess whether fluid was present in the pericardium (a pericardial tamponade). He stated that all of the features of Adam's presentation, apart from the blood coming out of the intercostal tube, could have been caused by a pericardial tamponade and it was therefore reasonable to exclude this as a possibility during his resuscitation.

4.9. At T219 Dr Ryan was asked whether a case could be made for taking steps to prepare theatre before a patient even arrives at the hospital in situations such as these. He stated that he would have thought that in some cases it would be reasonable to start to prepare cardiothoracic theatre before the arrival of a patient, describing it as a decision which needs to be made on a case by case basis. It will be noted that in this respect his evidence differs from that of Dr Stubberfield. In my view this difference of opinion is a matter of judgement and emphasis and is not surprising. As appears from my previous description of Dr Stubberfield's evidence, his experience has caused him to have a different point of view. When it was put to Dr Ryan at T220 that it would require very clear clinical information that surgery was warranted and that the theatre needed to be open he stated:

‘That's true, and in this case it wasn't universally clear that the patient required surgery.’

4.10. At T221 Dr Ryan was asked whether he agreed with the opinion of Dr Gilbert, pathologist, that the injuries to Adam's lung were “treatable”. Dr Ryan qualified his answer by saying that he is not a cardiothoracic surgeon but stated his understanding to be that lacerations of the lung can be treated either by closure of those lacerations or by resection of the whole or part of the lung. However, he noted that the steps that were taken to rule out life threatening injuries other than those to Adam's lung were reasonable steps to take and noted that one of the challenges of managing trauma patients is that they don't come in “with their injuries labelled” and that there were

many other potential causes for Adam's presenting symptoms. Dr Ryan stated that it is often the rule with trauma patients that they do have multiple injuries and may not only be bleeding from the chest but also the abdomen and the pelvis. He stated that to guess that a patient has only one source of bleeding is a potential error. He stated that for this reason "there did need to be at least a brief examination of the rest of him and it was brief, because he certainly didn't go to the CAT scanner, that there were no other life threats."

- 4.11. In summary, Dr Ryan was certainly not critical of the treatment provided to Adam at the Royal Adelaide Hospital. He described the decision not to proceed to a CAT scan as a wise one, he acknowledged the need for the echocardiogram, he acknowledged the need for assessment to exclude other life threatening injuries, and he acknowledged that trauma is a dynamic process requiring repetition of procedures every time a patient deteriorates which he considered was well illustrated in this case. The only potential area of caution as expressed by Dr Ryan is the amount of time taken to open the cardiothoracic theatre. However, his comments in this regard were muted, and I did not take him to be expressing a firm view on the matter. Having given the matter careful consideration, I find that the period taken to activate theatre staff, the anaesthetist, and Dr Stubberfield, at approximately one o'clock in the morning, was more than reasonable.

5. Conclusions

- 5.1. I find that the cause of Adam Sloan's death was "right haemothorax due to lacerations of right lung".
- 5.2. I find that there was no unreasonable delay in the attendance of the emergency services – SAMFS and SAAS – at the accident scene after the occurrence of the accident.
- 5.3. I find that there was no unreasonable delay in the attendance of the retrieval team from the Women's and Children's Hospital.
- 5.4. I find that there was no unreasonable delay in relation to the extraction of Adam Sloan from the vehicle bearing in mind the presence of Jeffrey Williams in the rear seat and the need to extract him first.

- 5.5. I find that the decision to extract Mr Williams before extracting Adam Sloan was a reasonable decision in the circumstances.
- 5.6. I find that the decision not to attempt to pull the vehicle away from the tree was reasonable and appropriate, bearing in mind the fact that it was not possible to exclude the risk that further injury might be occasioned to Adam by that method of extraction.
- 5.7. I find that there was no unreasonable delay in the transfer of Adam Sloan, once extracted from the vehicle, to the Royal Adelaide Hospital.
- 5.8. I find that the decision to transfer Adam Sloan to the Royal Adelaide Hospital rather than the Women's and Children's Hospital was entirely appropriate in the circumstances.
- 5.9. I find that the treatment of Adam Sloan in the Emergency Department at the Royal Adelaide Hospital was appropriate and reasonable and that there was no undue delay involved in that treatment.
- 5.10. I find that there was no undue delay in relation to the transfer of Adam Sloan to the cardiothoracic operating theatre.
- 5.11. Having regard to my findings I do not find it necessary to make any recommendations pursuant to Section 25(2) of the Coroners Act 2003.

Key Words: Chest Injury; Emergency Departments; Haemothorax; Hospital treatment; Injury; Motor vehicle accident

In witness whereof the said Coroner has hereunto set and subscribed his hand and

Seal the 10th day of May, 2006.

State Coroner