

SHERIFFDOM OF GRAMPIAN HIGHLAND AND ISLANDS AT KIRKWALL

Case Ref. No. B26/11

DETERMINATION

By

GRAEME NAPIER,

Sheriff of

Grampian Highland and Islands

Following an Inquiry into the circumstances of

the death of

JAMES ALEXANDER FRASER

KIRKWALL, 10 June 2011

The Sheriff, having resumed consideration of the Inquiry, DETERMINES as follows:

Place and time of death and accident resulting in death

- 1) James Alexander Fraser, who was born on 20 August 1964 and lived at Westshore, Rendall, Orkney died between 15.30 hours and 17.00 hours on 3 January 2011 at Gorn Farm, Rendall, Orkney whilst engaged in his employment as a self-employed farmer then carrying out maintenance work and cleaning of a Krone KR 130B Round baler, due to an accident occurring between those times when the raised tailgate closed, trapping him.

Cause of death

- 2) The cause of his death was traumatic asphyxia as a result of his chest being compressed by the closing tailgate of the baler.

Cause of the accident resulting in death

- 3) The immediate cause of the accident was the unintended disengagement of the isolation valve for the hydraulic rams which operated the opening and closing of the tailgate. This allowed a flow of hydraulic fluid out of the rams under the

weight of the tailgate, allowing the tailgate to move rapidly from an open to a closed position trapping the deceased.

The reasonable precautions by which the death and any accident resulting in the death might have been avoided

- 4) Had one of the hinged mechanical supports, known as ‘scotches’, with which the baler was equipped been used the accident would not have occurred.

The defect if any in the system of working which contributed to the death or any accident resulting in the death

- 5) The primary defect in the system of work adopted by the deceased was a failure to carry out a risk assessment for the planned maintenance operation which should have identified the possibility of the hydraulic isolator either failing or being accidentally disengaged and accordingly putting in place secondary safety measures such as outlined at 4) above.

Any other facts which are relevant to the circumstances of the death

- 6)
 - a) The deceased was carrying out this maintenance and cleaning work in relatively cramped conditions. There was not much space on either side of the baler which was not utilised by other equipment increasing the potential for the deceased or a piece of equipment to come into contact with the lever which operated the hydraulic isolation valve.
 - b) The Health and Safety Executive have issued guidance and have a number of publications that are relevant to the type of work in which the deceased was involved at the time of his death and these are available free of charge..

Sheriff

NOTE/

NOTE:

[1] In this inquiry evidence was led by the Procurator Fiscal. The family of the deceased was not represented. Although she did not give evidence the deceased's widow was present, together with the deceased's mother and their daughter, throughout the Inquiry with the exception of the time when the deceased's son gave evidence. Mrs Fraser was given the opportunity after each witness, for whose evidence she was present, to ask questions but with the exception of one point of clarification was content that the Procurator Fiscal covered all relevant points.

[2] I took the opportunity of Mrs Fraser's attendance at court to express my condolences to her and the rest of the family.

[3] Evidence was given by the deceased's 19 year old son, Gavin, who had been alerted to his father's accident by his mother; Keith Williamson one of the paramedics who arrived shortly after the son; Sergeant Deans, who with a colleague arrived at the locus of the accident shortly after the paramedic; and Ms. Ann Poyner, the Health and Safety Inspector who, along with colleagues carried out an inquiry into the accident. I was also provided with affidavits of Doctor Natasha Inglis the pathologist who carried out a post mortem examination and dissection of the deceased and of Richard James Wilson, HM Principal Inspector of Health and Safety who was the specialist who assisted Ms Poyner to examine the equipment involved in this case.

Background

[4] The deceased worked as a self employed farmer in the Rendall area on mainland Orkney. He was in partnership with his mother and between them they ran two farms, one of which was his home (Westshore) which he shared with his wife, and sons Gavin (aged 19) and Declan (aged 13). His older daughter Louise lives in Kirkwall.

[5] The deceased was a fit person and was involved in running, cycling and had recently returned to climbing, which he had enjoyed when he was younger. He had also taken part in his first Kirkwall New Year Ba' playing for the successful side.

- [6] The farms concentrated on sheep and beef. Crops were mainly for feed. Normally the deceased worked by himself. His mother provided some assistance as did his son Gavin who worked with a local firm of agricultural engineers as an apprentice mechanic.
- [7] The deceased appeared to be a conscientious and hard working family man. It was normal practice for the deceased to maintain the equipment used on the 2 farms. Included in the inventory of equipment was a Krone KR 130B baler which was manufactured in Germany in 1993. According to the deceased's son this had been acquired second hand around 15 years ago. The baler is about 3.7 metres long 2.29 metres wide and 2.09 metres high. It is designed to be towed behind a tractor. A pick up roller with tines at the front of the baler picks up cut material (straw or hay). An internal chain driven conveyor of metal slats forces that material to form a round bale which can then be tied or wrapped to hold it together before being ejected from the rear and falling on to the ground. This is achieved by raising the tailgate of the baler. The Health and Safety inspectors discovered that this tailgate weighed in the order of 390kg.
- [8] Another piece of machinery used on the farm was a Ford 4600 tractor Registered Mark RSO 902 R which would have been manufactured between August 1976 and July 1977. The deceased's son thought that it would have been acquired second hand about 25 years ago. This was not used with the baler when it was baling as although it was equipped with a normal power take off, it was not equipped with the 3 hydraulic supplies that would have been necessary to fully operate the baler in the field.
- [9] Despite the ages of these two machines the evidence available to me indicated quite clearly that they were well maintained. No defects were found that could have contributed to the accident leading to the death of James Fraser.
- [10] One of the regular maintenance jobs was to clean and oil the baler. This was usually done at the end of the season, in preparation for the next growing season. However it had not been done immediately after the end of the previous season and Gavin was aware that his father proposed to take advantage of the need to

move the baler to another shed to carry out the maintenance on the day of the accident.

[11] The maintenance, which Gavin had assisted with or carried out in the past, involved cleaning out the inside of the baler and lubricating the working parts inside (the conveyor slats and the drive chains) with oil. To access the interior of the baler where the parts requiring lubrication are necessitates the raising of the tailgate. The procedure Gavin expected that his father would follow would be to open the tailgate using the hydraulic control in the tractor cab, 'lock' the tailgate in that position using a hydraulic lock-off (or isolation) lever, return to the cab, retard the hydraulic control for the rams, then using a compressor spray oil on to the interior of the baler with the conveyor mechanism running. This would necessitate his father leaning into the baler from the rear with the power take off shaft of the tractor turning and supplying mechanical power to the conveyor slat drive chains. Having the mechanism running speeds up the job of lubrication.

[12] The tailgate is operated by 2 "single acting hydraulic rams", one on either side at the rear of the baler. Hydraulic fluid is pumped under pressure through an entry port at the bottom of the chamber of the ram which contains a piston. This pushes the piston up towards the top of the chamber, extending the piston rod which is attached to the tailgate which in turn rises opening the tail of the baler through which a bale is ejected or access can be obtained to clean and maintain the interior workings.

[13] Once hydraulic pressure is released hydraulic fluid flows back out of the entry port to a reservoir tank and the piston rod moves down, and with it the tailgate, under gravity. In normal operation these operations are controlled from within the tractor unit to which the baler is connected.

[14] The baler is equipped with 2 separate safety devices to prevent the tailgate dropping down unintentionally for example if there is a leak of hydraulic pressure in the system leading to a drop in the hydraulic pressure in the chamber supporting the piston. Firstly there is an isolation valve at the base of the left hand (looking from the rear) or nearside hydraulic cylinder. It is a simple lever which moves

downwards from the horizontal closed position to the vertical open position. In the former position hydraulic fluid is effectively trapped in the chamber of the ram and cannot flow back to the fluid reservoir, thus maintaining hydraulic pressure. This isolation valve does not prevent the fluid in the right hand ram dropping in pressure.

- [15] A further safety device is a hinged 'scotch' or support which when swung into place covers the top section of the piston rod and acts as a physical barrier preventing the piston rod from moving completely back in to the piston chamber. It acts in the same way as an axle stand would work with a car which has been raised off the ground with a hydraulic jack. There is one scotch for each ram although on the baler involved in this accident the right hand side (offside) one had been wired in position so that to engage it, it had to first be unwired rather than simply folded down into position.

The accident

- [16] This was a tragic and avoidable accident in an industry (the farming industry) which I heard has a high rate of casualty and fatal accidents.
- [17] The deceased's son Gavin last saw his father the day before his death at a family dinner at the deceased's mother's home. The son had not stayed at home that night but had seen his father's tractor (not the one later involved in the accident) on Westshore land near to a neighbour's farm. Although Gavin did not see his father his dogs were in the vicinity and it is reasonable to conclude that the deceased was also. The deceased appeared to be involved in general tidying up. This was about 15.30 hours on the 3rd January 2011. This is the last time that there was evidence of him being alive.
- [18] Shortly before 17.00 hours that day Gavin received a telephone call from his mother. She was distressed and explained that the deceased was trapped in what was referred to in court as a trailer at the farm at Gorn. Gavin immediately made his way there and discovered the Ford tractor unit projecting out of a shed. The baler was connected to the rear of the tractor and completely contained within the shed.

[19] Gavin saw his father trapped in the rear of the baler below the tailgate. He was towards the left hand side at the rear of the baler with his left arm back and legs visible. Mrs Fraser junior was on the phone to the emergency services. I heard evidence that the call was timed at 17.03 hours.

[20] Gavin was aware that the tractor was still running, entered the cab and operated the hydraulic controls to raise the tailgate of the baler. He then turned the tractor off and also checked that the hydraulic isolation lever was in position so that the tailgate would remain raised. When he gave evidence he could not be sure whether he had to move the lever into that position or whether it already was but from the other evidence available I conclude that he must have moved the lever into that position.

[21] When asked what position the lever which operated the rams was he said that it was in about the normal position. He explained that the procedure he and his father followed was to raise the lever up to extend the rams to the desired height; to then lock off the arms using the isolation lever; and then to retard the hydraulic lever until the hydraulic pump was no longer making as much noise, that is until it was no longer applying unnecessary pressure, which I was told was consistent with good practice.

[22] No scotches or other mechanical support was in place under the tailgate.

[23] Gavin returned to the rear of the baler and checked for a pulse or any other signs of life from his father but could find none. From the evidence available it is clear that Mr Fraser was already dead and there was nothing his wife or son could do for him.

[24] Gavin then went to the roadway to direct the emergency services to the correct shed when they arrived. Paramedics arrived first at 17.19 hours. By this time the deceased was on the floor of the shed on his back. There was an obvious traumatic injury across his neck. The deceased's extremities were cold to the touch with typical blue colour on the lips and extremities indicating a lack of oxygen for

some time. Given the lack of vital signs over the preceding 20 minutes it was agreed that resuscitation was not indicated.

[25] Police officers then arrived as did Doctor Mundell who pronounced life extinct at 17.34 hours.

The investigation of accident

[26] Following this accident investigations were carried out by Sergeant Deans of Northern Constabulary and the Health and Safety Executive. The results of these taken together with the evidence available from the deceased's son allowed the circumstances leading to the accident to be reconstructed.

[27] Sergeant Deans arranged for a colleague to carry out an examination of the scene, taking photographs and video footage. A selection of the photographs and video footage (some of which was shown) was available to the enquiry. These provided a very clear picture of the scene at the time of the Mr Fraser's death. In particular the video footage gave a very clear impression of the available space and light (provided by 2 bare light bulbs and a fluorescent strip light over a workbench close to the side of the baler).

[28] Sergeant Deans described the shed as tidy but with little room to get past the tractor and baler on the right hand side as he entered the shed (the left hand side of the baler looked at from the rear). As he passed down this side he passed the work-bench then, 2-3 feet beyond that, a compressor with a hose from the compressor extending 5 or 6 feet and crossing his path to the rear wheel of the baler (towards where the deceased had been trapped).

[29] The police officer found the deceased being attended to. He recovered a cap and head torch lying in the rear of the trailer together with what was described as an oil can. This was all consistent with the deceased having been engaged in oiling the moving parts on the inside of the baler at the time of his death. The 'oil can' would have been connected to the hose from the compressor, allowing the oil to be sprayed onto the surface to be lubricated. The can had then become detached from the hose at some point during the accident, either with the hose being caught

on something like the hydraulic isolation lever or (Ms Poyner thought) more likely as the tailgate fell.

[30] I was satisfied from all the evidence of the level of light available and his usual practice that the deceased had been wearing the cap and head-torch at the time of his death and it had fallen off as his body was released. He would have needed the torch to illuminate the area he was working on inside the baler. As Ms Poyner pointed out although this would have provided good illumination of the area towards which the head torch was pointed it would have had the effect of reducing peripheral visibility.

[31] Sergeant Deans arranged for the tractor to be moved into a barn and it and the baler were secured for the Health and Safety Executive inspection.

[32] Ann Poyner is one of Her Majesty's Inspectors of Health and Safety based in Inverness. She has 25 years experience with the Health and Safety Executive primarily in the Agricultural sector. She holds an Honours level degree in Agricultural Science and post graduate Diploma in Health and Safety. She also has practical experience in the industry having worked on farms between 1983 and 1986 before joining HSE.

[33] She became aware of Mr Fraser's death from her Principal Inspector and attended with him on Orkney on 7 January 2011 to commence the inspection. They met Sergeant Deans who took them to Gorn Farm where they met the deceased's wife and mother. They were able to examine the locus and the tractor and baler which had remained where left by the police on the day of the accident. Ms Poyner was able to speak to Gavin who explained how he and his father operated the tractor and bailer. She arranged for a specialist inspector to attend to examine the tractor and baler to confirm whether any defects could have contributed to the accident. The equipment was moved to a large shed on another farm to facilitate this and Ms Poyner arranged to return on 12 January 2011 to be present with the specialist during his examination. Unfortunately the specialist was delayed because of transport difficulties so that when Ms Poyner was back in Orkney the specialist was not initially available. However assisted by an

agricultural engineer Allan Taylor she carried out a more thorough examination of the equipment. The specialist (Mr Wilson) then arrived the following day and carried out his examination of the equipment. Ms Poyner and the agricultural specialist also attended. The specialist subsequently continued enquiries with the manufacturers of the baler and prepared a report recording his findings and opinion as to how the accident was likely to have occurred. This was a comprehensive report which confirmed that there were no mechanical defects implicated in this accident.

[34] Although I heard a comprehensive description of the controls on the tractor and the baler, only those directly connected with the hydraulic system controlling the baler tailgate rams and the power take off (PTO) shaft appear to me to be in any way directly relevant to the accident, and even then the PTO is only relevant because it is clear that the way the deceased chose to lubricate the moving parts of the baler was to have the PTO in operation and driving the internal chain driven conveyor on the baler, generating a significant amount of noise which with the noise of the compressor used for the spraying of the oil would have masked any sound of the tailgate closing unintentionally (had there been any). As Mr Wilson put it in his report “I noted that the combination of [the] tractor engine running and the baler conveyor operating created a considerable noise in a confined space. As Gavin pointed out there would in addition have been noise created by the compressor.

[35] Ms Poyner gave evidence about various tests which were carried out on the tractor and baler. These are also recorded in Mr Wilson’s report. The conclusion was that the isolation valve was in working order.

[36] Firstly the tailgate was raised, the isolation valve closed and then the tractor hydraulic controls were pushed down so that no hydraulic pressure was being applied from there to the rams. The nearside ram with the isolation valve stayed in place (although the offside one with no isolation valve sank slightly as the hydraulic fluid was not contained within the ram). The tailgate was raised and the isolation valve was closed. The hydraulic levers were again pushed down but this

time the isolation valve was opened. The tailgate closed in approximately 4 seconds.

[37] Next with the power take off not operating the tailgate was fully raised using the tractor control levers. The isolation valve was closed. The piston on the nearside ram (the one with the isolation valve) was seen to move down only one inch in 25 minutes.

[38] With the power take-off running the tailgate was fully raised using the tractor control levers. The isolation valve was closed. The piston moved only one inch in 1 minute 45 seconds but did not move any further. When this was repeated the only difference was that it took 3 minutes for the piston to move 1 inch.

[39] The isolation valve was then tested to see how far it could be opened, that is how far down from the horizontal it had to move, before the tailgate started to lower. At 12degrees below horizontal there started to be some movement. This accelerated between 12 and 30 degrees and beyond 30 to 34 degrees the movement was unrestricted.

[40] Accordingly with the lever knocked out of place by a third of the distance from closed to open the un-propped tailgate was free to move down without restriction and from the test results have done so rapidly. I heard from both Ms Poyner and the deceased's son that the lever could move quite easily and it was entirely possible that it could be caught or snagged when working in the vicinity.

Notices and Instruction Manual.

[41] I was told about the various markings, warning and instruction notices on the baler. I was able to see these for myself in the photographs and Mr Wilson's report. A copy of the instruction manual was provided for the enquiry. This was obtained from the manufacturer as the deceased's manual had apparently been lent to a neighbour some time before. I am satisfied that nothing turned on the instructions and warnings contained in the manual or on the notices ('decals') affixed to the baler as the deceased was clearly aware of the function of the scotches. I was told that he used them (or at least one of them) if his younger son

was working on the equipment even though he did not use them if he was on his own. Nor did his son Gavin use them (although he would now). On each of the hydraulic rams there were 2 decals. The lower of these was a diagrammatic warning not to work under the raised tailgate unless the isolation lever had been closed or locked (that is raised to the horizontal). The upper decal consisted of a red outlined warning triangle surrounding an exclamation mark all on a yellow background with the following wording – “ATTENTION INSALL HYD. – RAMSTOP”. Being the specialist Mr Wilson appears to have had no difficulty in understanding that this last warning was intended to indicate that the mechanical supports or scotches should be used in addition to the hydraulic shut-off. Ms Poyner opined that was not clear and only when that was explained to her by Mr Wilson did she see that was a possible interpretation.

[42] Mr Wilson’s report draws attention to sections of the operating instructions that are relevant to the operation that Mr Fraser was involved in. As he put it “The operating manual contained several safety warnings including:

- Prop the implement with appropriate supports before carrying out maintenance on the lifted machine (Page 6, Maintenance, item 3)
 - Prior to carrying out cleaning, repair or maintenance work in the area of the opened rear gate disengage the drive mechanism and stop the tractor engine. Remove the ignition key. To secure hand rear gate cylinder (see fig. 32) (Page 20C. Basic setting and operation)
- Figure 32 showed the operation of the isolation valve”

[43] There were, however, no explicit references to the use of scotches in the manual. The manufacturers consider that they are referred to on page 43 but this is simply an indication that there are the 2 warning decals previously referred to consisting of an exclamation mark in a red triangle and the words “ATTENTION INSALL HYD. – RAMSTOP”.

[44] As I have already noted the deceased was aware of the existence and proper use of the scotches and the existence of further information about these in the manual or on warning decals would not in my judgement have altered the

outcome. As indicated there is a clear cautionary note about not working in the area of the raised rear gate without disengaging the drive mechanism stopping the tractor engine and removing the ignition key.

[45] I was provided with information about the relevant regulations and safety standards (ISO requirements) for this equipment. It is unnecessary to set these out in detail. Suffice it to say that the baler met the safety requirements at the time of its manufacture. I was also told by Ms Poyner that in her view, although the safety regime in place at the time of manufacture of this baler was different the baler would meet current safety requirements, which do not require a secondary support system in the form of scotches. Indeed the fact that the isolation lever is located so close to the hydraulic ram means that the possibilities for defects down the hydraulic line from the ram affecting its operation are reduced. In fairness Ms Poyner did indicate that although modern balers might rely on a hydraulic isolation switch as their primary safety system, the possibilities of inadvertent operation of the lever have been reduced with the need for positive disengagement to move the lever from its “locked” position.

Post Mortem Examination

[46] The deceased’s body was removed to Raigmore Hospital Inverness where on 7 January 2011 Doctor Natasha Inglis FRCPath, Consultant Pathologist carried out a post mortem examination. There were only two significant external injuries noted namely a parchmented abrasion (17 x 8.5 cm) over the upper sternum / lower midline of the front of the neck which extended to the right upper chest area; and a second similar type abrasion (28.5 x 4 cm) extending diagonally across the upper back from the left shoulder to the right lower scapula border. In Dr Inglis’ opinion that the injuries were noted on both sides of the body supports explanation that he was caught between 2 surfaces.

[47] Internally the left sternocleidomastoid (neck) muscle was lacerated with a significant amount of haemorrhage around it. This is consistent with the deceased being trapped by the baler tailgate with a significant amount of force. This injury is not, however, enough to cause death.

[48] Congestion and oedema were noted in the lungs indicating asphyxia consistent with the findings of the paramedics called to attend to the deceased on the day of his death. This would have arisen if the deceased was unable to move his chest due to the load applied to it from the tailgate leading to an inability to breathe and thus a reduced amount or no oxygen circulating in the body. In Dr Inglis' opinion death would have occurred rapidly and resuscitation would only have been effective if commenced immediately the incident occurred.

[49] Samples were sent for toxicology examination but did not detect alcohol.

The Cause of death

[50] In Dr Inglis' opinion, which I accept, the cause of death was traumatic asphyxia as a result of his chest being compressed in an agricultural accident.

The cause of the accident

[51] I am satisfied on the balance of probabilities that the accident which led to Mr Fraser's death occurred with the tailgate raised to allow him access to the rear of the baler to spray oil using a compressor with a coiled hose and oil can attached. The control lever on the tractor had been in the down position sufficiently far to stop the hydraulic pump from pumping against hydraulic pressure. The isolation lever was inadvertently moved from the closed (horizontal position) allowing the tailgate to drop unexpectedly when the deceased would have been unaware what was happening because of the dim lighting and the noise of the tractor engine, power take off, conveyor mechanism and the compressor. The isolation valve lever could have been snagged on the compressed air hose or a piece of the deceased's clothing.

[52] It is quite clear from the circumstances of the accident that the way in which the deceased chose to carry out this work had not been fully thought out or planned and crucially risks identified and assessed. It is no comfort to those who have lost a father, husband, son and friend in Mr Fraser's death that I recognise that the benefit of hindsight makes it quite clear that Mr Fraser should have used the scotch or scotches with which the baler was provided. Had he recognised that if the hydraulic stop failed there was no secondary safety system in place, as he

did when he was responsible for the safety of his younger son, then the accident would not have happened. Ms Poyner recognised that particularly in the agricultural industry where so many are self employed and used to working on their own there is a tendency to take risks with one's own health and safety that one would not take with another's (whether employee or relative). Mr Fraser would have carried out the same operation in the same way numerous times before without the lever being snagged and therefore without the risk having been highlighted. As Ms Poyner eloquently put it the fact that nothing adverse had happened in the past acted as positive reinforcement of bad practice, by which I understood that having done the job this way in the past he would not have thought about the risks before starting it this day.

Lessons.

[53] The immediate lesson from this accident is of course that had the scotches provided on the baler been used by Mr Fraser in the way that he would have used them for his younger son then the accident and resulting death would have been avoided. It may well be that had he been working in a less confined space, that is had there been more space around the baler the isolation lever might not have been moved inadvertently but no one criticised the method of work as inherently dangerous and it seems to me that the accident could have occurred even with more space around the baler. I am not satisfied that the deceased having taken the precaution of not running the conveyor mechanism would have avoided the accident. With the reduction in noise he may have heard something as the tailgate started to fall, although Ms Poyner's evidence that very little noise at most was produced tends to negate that. If he had been working in a better lit area and not relying on a head-torch then it is possible that he may have noticed the tailgate moving. Whether if he had heard or seen such evidence of movement he would have been able to do anything to avoid being trapped is speculation but all the evidence points to this having happened quickly. It may be some limited comfort to the family that I have concluded that he did not know what was happening.

[54] The wider lessons from this accident seem to me those that are already highlighted in Health and Safety Executive guidance. Ms Poyner gave evidence about 2 freely available publications. The first is Agricultural Information Sheet

No. 4 titled “Safe use of big round balers”. Although Ms Poyner was unsure of the publication date the leaflet says that it was reprinted and redesigned in 2007. It refers to HSE having investigated 36 accidents involving balers in the previous 10 years, including 5 fatal accidents. In the ‘to do list’ farmers are advised to “use the tailgate ram prop when working under the rear door”. The second leaflet is a farm machinery safety step-by-step guide titled “No Second Chances”. The guidance is said to be based on an analysis of 1000 agricultural accidents involving maintenance and blockage clearing. I was told that a video accompanies it. On the pre maintenance advice “Before you start”, securing anything which could move is highlighted with advice to “use appropriate props, chocks, etc (eg prop a raised trailer body”. Both publications suggest, as does the baler instruction manual, not to have equipment running whilst working on it.

[55] These publications are available in printed form free of charge and are also available on the HSE website. However Ms Poyner accepted that because of the small size and geographical spread of agricultural enterprises it is difficult for HSE to reach all who might benefit from the guidance, although they do engage with the National Farmers Union in Scotland and Agricultural Colleges. I was told that there had been a practice up to 2007 of carrying out random inspections of farms to look at practices before an accident, but that now inspections are only carried out if there is a specific need identified. It was also previously the practice to have a presence at Agricultural shows, but I understand that has reduced.

[56] It may be some comfort to Mr Fraser’s family that arising out of his death and any publicity given to this Inquiry, even if just locally, that another farmer who has in the past been lucky and nothing has gone wrong with the primary hydraulic system thinks twice about working under a raised tailgate without using a mechanical prop or other secondary safety device.

Determination

[57] The Procurator Fiscal invited me to make determinations as to the cause of death and the accident leading to the death in the form I have adopted. She invited

me to find that the use of scotches would have been a reasonable precaution to avoid the accident which I have done. I accepted her submission that although it would have been good practice to do so, in this case the fact that the engine of the tractor, the power take-off and the baler conveyor were not halted when Mr Fraser was working on the baler had no material impact on this accident and could not be said to be a defect in the system of working that would. Given that there was evidence that not using scotches was normal practice, Ms Foard invited me to find that this was a defect in the system of work which contributed to the accident. I did not do so in those precise terms but took the view that the real issue was the failure to assess and identify that risk. It was suggested that I might find that working in such limited visibility might be seen as a defect in the system of work, but for the reasons outlined I was not persuaded that this contributed to the accident and did not make any finding as suggested.