

Sheriffdom of Tayside Central and Fife at Perth

Under the Fatal Accident and Sudden Deaths Inquiry (Scotland) Act 1976

Determination

Issued by Sheriff Michael John Fletcher, Sheriff of Tayside Central and Fife at Perth

in the cause

Fatal Accident Inquiry into the death of Neil Elder Abercrombie date of birth 28th April 1940

Perth, 14th October 2011.

The sheriff, having resumed consideration of the cause, determines as follows:-

1. In terms of section 6(1)(a) of the Fatal Accidents and Sudden Deaths Inquiry (Scotland) Act 1976 that Neil Elder Abercromby born 28th April 1940 formerly residing at Flat A 73 Viewmount Road Forfar died as a result of an accident which took place on 5th July 2010 in the field adjacent to Pitlowie House, Glendoick while driving a John Deere 7530 Premium tractor and carrying out a drilling and seeding operation in the field. He was pronounced dead at 17:55 hours that day.
2. In terms of section 6(1)(b) of the Act the cause of death was (a) multiple injuries; (b) Blunt Force Trauma; (c) Tractor incident (At work).
3. In terms of section 6(1)(c) of the Act a reasonable precaution which might have been taken whereby the death might have been avoided would have been for the deceased to have worn the seatbelt fitted to the vehicle and for his employer to have insisted on its employees wearing a seatbelt while driving a tractor.

4. In terms of section 6(1)(d) of the Act a defect in the system of working which contributed to the death was the failure of Mr Abercromby to wear a seat belt and the failure of his employer to insist on his use of a seatbelt while driving the tractor in a field particularly in a field where steep slopes exist.

NOTE

[1] The evidence in this case demonstrated that Mr Abercromby was an experienced tractor driver having driven tractors for something in excess of 50 years. Although he was retired he kept his hand in as it were by working at various jobs but particularly driving a tractor to carry out seed drilling work over a short period in the appropriate season. Prior to retiring however he was a full-time tractorman and was extremely highly regarded as an experienced employee in his line. There was no doubt that he was a person who could be trusted to make decisions about how any tractor involved task should be carried out safely and was the sort of person who would have been able to assess the risk involved. It would have been expected that if the conditions were not right either agriculturally or from a safety aspect Mr Abercromby would not have undertaken the task. The tractor which he was driving had been purchased by his employers in 2007 and he had driven it for a period of at least 200 hours in all. The tractor was used only for certain tasks such as drilling, using the implement which was being used at the time of the accident, square bailing and ploughing.

[2] On the day in question he intended to complete a task of drilling and seeding the field in question which was the field adjacent to Pitlowie House, Glendoick. The whole operation included first of all killing the grass and weeds growing in the field with a systemic weed killer which would kill off the vegetation in the field but allow reseeding immediately. The field had been sprayed with the weedkiller during the previous week by another employee of the farm so that the grass and other vegetation was beginning to die. The crop which was being sown was a crop of brassicas which would be used for feeding stock. The disk operation involved a machine which was self powered which had a series of discs set in a position so as to cut into the turf so as to create a shallow drill into which brassica seed was introduced at the same time. The vegetation sprayed with weedkiller died down while the new brassica seed would begin to grow.

[3] As I have already said, Mr Abercromby was actually retired but one of the tasks which he regularly returned to carry out since his retirement, was the drilling operation

concerned. In the case of this operation he was left to make the decision as to when it was appropriate to carry out the drilling part of the operation. The field concerned contained a long fairly steep slope. It was relatively flat for a short distance at the top end and there was also an area at the bottom end of the slope where the field levelled out so as to be relatively flat. There was contained within the field a large copse of trees although I do not think that fact had any relevance in relation to the accident.

[4] The tractor and the implement being used were brought to the field and connected so as to operate properly. The evidence showed that Mr Abercromby had driven for a short distance at the top of the field on the relatively flat area and then had begun to travel directly down the slope using the drilling machine. No one witnessed the accident but it appears from the evidence left by the wheels of the tractor that after a short distance the wheels began to lose their grip on the surface of the turf because the wheels began to cut into the turf first of all on the right-hand side and then subsequently on the left-hand side in a way which demonstrated that grip had been lost. Evidence about this came from Richard Wilson of the Health and Safety Executive, Brian Rees, safety consultant, Harry Bottesh, also of the Health and Safety Executive and Constable William Johnson. All these witnesses were of the view that the tractor had been sliding and that the driver had been attempting to stop it by braking and then releasing the brakes until it reached a point on the slope where the vehicle had turned to its right slightly and then turned sharply left across the slope and had overturned. The conclusion was that the tractor driver lost control of the vehicle because its wheels had lost their grip on the surface of the field. The tractor and its equipment were in good working order.

[5] A number of matters were canvassed in order to try to explain the accident because Mr Abercromby was an experienced driver. The first matter related to the slope the depth of which varied from 14.7° to about 21.1° at the point of overturn. The evidence showed that the slope was within normal limits and in ordinary conditions would not have been out with the capabilities of the vehicle and implement to allow it to be used safely, but it was near the limit for safe use by this vehicle. The evidence showed that in normal conditions where the surface was dry and firm the vehicle and its implement should not have had difficulty.

[6] However the condition of the surface was critical. In wet conditions it was to be expected that there would be a much greater likelihood of loss of control. In addition the evidence showed that the fact that the vegetation had been sprayed so as to kill it would cause a likelihood that the turf would be susceptible to being broken which would cause the tyres to lose their grip because the surface would be weak. Indeed Constable Johnson described the surface as being similar to ice in relation to gripping ability. There was some doubt about how wet the surface was. Evidence was given that on the day preceding the accident there had been a very heavy shower of rain at least at Scone. The photographs showed damage to the surface of the ground and the resulting earth which had been exposed was dark rather than having a dry appearance but there was no sign of lying water or saturation by water. Gavin Brown, also an extremely experienced tractor driver, was working driving a tractor in a nearby field on the same day as the accident and described the weather as dry and sunny and indicated he had no difficulty with the conditions. There was also some evidence that some of the surface material was dry on the day after the accident.

[7] Nonetheless it was clear from the evidence that the tractor had lost its grip and those experienced in the driving of tractors were agreed that the combination of the tractor and its implement should have been able to cope with the surface in normal conditions. On the evidence it seems to me on a balance of probabilities that the reason why the tractor and its implement went out of control of the driver was because the vegetation on the slope had been treated with weedkiller and thus the gripping surface had been compromised. No doubt the fact that the soil was not dry contributed to the loss of adhesion but it seems likely that the real cause was the killing of the vegetation.

[8] The question then arose as to whether there ought to have been a risk assessment in relation to the particular job about to be carried out by the deceased. Mr Smith for the family argued that there should have been a risk assessment in relation to the job and there should have been toolbox talks in relation to safety. He suggested that if there had been a risk assessment carried out by the employer in relation to this job the risks caused by the wet weather and by the fact that the grass had been killed would have been taken into account and the different decisions made as to whether it was appropriate to begin the job that afternoon. There was a risk assessment which had been carried out generally in relation to jobs on the farm but the evidence clearly showed that the decision as to whether to carry out the job that afternoon a lot was left entirely to Mr Abercromby. He was amply qualified to assess the

risk, having been a tractor driver for a very long period. The evidence demonstrated that there was no obvious sign of damage to the grass nor were there obvious signs of saturated ground or even particularly wet ground. Gavin Brown considered the conditions to be not unusual in the field he was working in. On a balance of probabilities I do not think that the holding of a special risk assessment for that field and that task would have caused those carrying it out to suggest that the operation should be postponed to another day and I have not included the lack of a risk assessment as a defect in the system of work which would have affected the accident or the death. There was nothing in the evidence which suggested that others were any more experienced or wise in the field of tractor operation than was Mr Abercromby. He himself had considered the conditions because he had made up his mind not to carry out the work until later in the afternoon of the day of the accident in order to maximise the conditions. As I have said this was not the case of an inexperienced employee having insufficient knowledge to make an informed decision.

[9] Mr Rees suggested a risk assessment should have been carried out although he was not suggesting that a risk assessment for each individual job should have been carried out but rather that a general risk assessment involving all employees should have been done in order to encourage all employees to think about the dangers and that should have been backed up by toolbox talks. Such a risk assessment would on the evidence which I heard have been unlikely to have produced information to enable Mr Abercromby to make any better a decision than he did.

[10] There were also a number of other puzzling features which were difficult to resolve. The hand throttle was very near its maximum and the number of engine revs were very high when the accident happened. The gear lever was in neutral and none of these things made sense to those who knew about controlling a tractor in these conditions. However the tractor had been subject to severe forces and had overturned probably more than once and it seemed to me that it was likely that these enigmas would be explained by the forces existing during the accident. I did not think that any of them were relevant to the cause of the accident.

[12] Another factor which had to be taken into account was the type of foot brake fitted to the vehicle. In common with most modern tractors the foot brake splits into separate parts with a device which allows the separate parts to be joined so as to act as one. When the

brakes are separated it is possible to use one side of the braking mechanism pedal to brake the wheels on one side of the vehicle and the other side of the brake mechanism pedal to brake the other wheels individually. This can be used to assist in turning the machine when it is in confined spaces or using certain types of machinery. There were some divergences in the evidence as to in what circumstances one would use the tractor while the brakes were separated in that way. Sometimes it was used particularly on slopes to try to keep the tractor in a straight line, for instance when ploughing, but it would not have been necessary normally to do so during the operation being carried out by Mr Abercromby. Mr Rees was particularly clear that he would not have wanted to have the brake separated while moving down the slope where the accident happened. He would have been anxious to have the brakes fixed to make sure that he had maximum braking power. However there was other evidence that it was not uncommon to separate the brakes when one was working in a field. I took the view that it was safer not to have the brake separated in the circumstances in which Mr Abercromby found himself because there was a danger that in the heat of the moment only one side of the brakes would be operated when that was not appropriate. There was a sharp turn to the left which might have been explained by such a mistake but I did not think there was sufficient evidence for me to make any recommendation in relation to that.

[13] There was clear evidence from the witnesses from the Health and Safety Executive that the most likely cause of death when someone is in an accident when a tractor overturns is that the person is thrown from the vehicle and it then rolls over the person. Many years ago regulations came in insisting on tractors having a rigid cab in an effort to protect the driver from serious injury if the vehicle overturned. Modern tractors are also all fitted now with seat belts which fasten around the lap of the driver. The vehicle driven by Mr Abercromby was fitted with a seatbelt. There had been placed on the seat of the tractor a seat cover designed I think to help keep the seat clean and dry when work was being carried out in inclement weather and dirty conditions. There was evidence that this cover interfered with the fixing mechanism for the seatbelt although it was clear that it was not difficult to move aside or remove it to enable the seatbelt to be fixed. The existence of the cover however made it perfectly clear that the seatbelt was not normally used. All the evidence in the case confirmed that and no one who had experience of tractors said that they used a seatbelt except Mr Rees and he said it was used only during training exercises. No one gave evidence that they knew of others using seat belts.

[14] The evidence of the witnesses from the Health and Safety Executive indicated that in nearly all fatal accidents involving tractors working under normal conditions and fields, the fatality was caused by the driver of the vehicle being thrown out. The wearing of a lap seatbelt of the kind fitted to this tractor would have prevented Mr Abercromby from being thrown out. The cab was badly damaged in that most of its glass was broken but the rigid cab remained. It was conceded that serious injury might still result when a tractor violently overturned because the driver was secured in the middle, as it were, and his head or other parts of his body would be "waggled" about and could suffer injury in that way but there was sufficient information in my opinion for me to hold that the wearing of a seatbelt might well have prevented the death although not necessarily all the injuries. The industry, according to the evidence which I heard, has not been encouraging drivers of modern tractors to take advantage of the seat belts fitted and it is easy to see that a tractor driver used to moving slowly through a field might find it difficult to see the need for a seatbelt. It was suggested that the use of a seatbelt caused difficulty and inconvenience to the driver because of the need to be able to turn to watch machinery which was being towed by the tractor and perhaps also because it is often necessary to get in and out of the vehicle during operations. Unfortunately however, accidents happen when one is least expecting them and the stakes are often extremely high so that the only safe course is to make sure that all drivers of tractors fitted with seat belts, wear them. Failure to do so may well mean that there is no second chance. In my opinion all employers of persons who drive tractors should make every effort to ensure their employees use the seatbelt if provided. The relatively small amount of inconvenience which might be caused by the belt pales into insignificance when an accident like the one which happened to Mr Abercromby occurs.