SHERIFFDOM OF LOTHIAN AND BORDERS AT HADDINGTON

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

DETERMINATION

By

SHERIFF PETER JOHN BRAID, ESQUIRE

in

Inquiry held at Haddington on

23 and 24 August 2011

into the circumstances of the death of

GEORGE BIGGAR THOMPSON

Haddington, 5 September 2011

The Sheriff, having considered the evidence adduced, Determines in terms of Section 6(1) of the Act:-

1. That in respect of subsection (a), Mr George Biggar Thompson (d.o.b.31/3/52) ("Mr Thompson") died at 11.29 hours on 6 November 2009 at Greendykes Farm, Macmerry, East Lothian.
2. That in respect of subsection (b), the cause of death was multiple injuries to the trunk including fractured ribs and injuries to the vertebrae and pelvic bone which caused haemorrhaging. The injuries were caused when Mr Thompson was struck by a telescopic materials handler SN58 FLG ("the telehandler") being driven by David Bisset ("Mr Bisset"), who was an employee of Robert Steven, the owner of Greendykes Farm.
3. That in respect of subsection (c), the following are reasonable precautions whereby the death of Mr Thompson and the accident resulting in his death might have been avoided:

a. a precaution on the part of Mr Bisset that, having lost sight of Mr Thompson, he did not reverse the telehandler until he had established his whereabouts;
b. a precaution on the part of Mr Thompson that he did not pick up stones in the area being flattened, while the telehandler was engaged in reversing manoeuvres in carrying out that operation;
c. the installation of CCTV comprising a camera or cameras on top of the vehicle, pointing towards its rear, along with a monitor in the cab;
d. the provision by Mr Steven to his employees including Mr Bisset of training in the safe operation of the telehandler.

4. That in respect of subsection (d), the following defects in a system of working contributed to the death:

a. the failure of Mr Thompson and Mr Bisset to agree, prior to the work being carried out, what the precise movements of the telehandler would be, and the lack of any procedure prohibiting persons from working behind the telehandler whilst it was reversing;
b. the failure of Mr Seven to train his employees in the safe operation of the telehandler.

5. That in respect of subsection (e), the following facts are relevant to the circumstances of the death:

a. No risk assessment was carried out in relation to the operation of the telehandler.
b. If one had been carried out, one or more of the above precautions might have been taken, and systemic defects addressed.

NOTE

REPRESENTATION

[1] The Crown was represented at the Inquiry by Mr O'Reilly, Procurator Fiscal Depute. Mr Thompson's family ("the family") was represented by Mr Conway, solicitor. Mr Robert Steven, the owner of Greendykes Farm, was represented by Ms Bonomy, solicitor.

[2] The following witnesses were led on behalf of the Crown:

1) Dr Ralph BouHaider, Consultant Forensic Pathologist, University of Edinburgh, who was present at the post-mortem, albeit he was not the lead doctor;
2) the said Mr Robert Steven;
3) the said Mr David Bisset;
4) PC Jack McBirnie, a road traffic police offer who attended at the scene.

An affidavit of Peter Dodd, of the Health and Safety Executive was also read out to the Inquiry.

The following witness was led on behalf of the family:
1) Mr John Stewart, Stewart Safety Services, Kilsyth.

The following witness was led on behalf of Mr Steven:
1) Mr Alan Bathgate, Consulting Engineer, T & T Technical Services, Consulting Engineers and Accident Claim Assessors, Edinburgh.

Two Joint Minutes were also lodged in which certain formal evidence was agreed.

LEGAL FRAMEWORK

[3] Section 1(1)(a) of the Act provides for the holding of a public inquiry into the circumstances of death where it appears that the death has resulted from an accident occurring in Scotland while the person who has died, being an employee, was in the course of his employment or being a self-employed person was engaged in his occupation as such. Mr Thompson's death occurred whilst he was engaged in levelling ground in preparation for the laying mono-blocking at Greendykes farm. His precise employment status, as a matter of law, is unclear but he was indisputably either in the course of employment by Mr Steven when the accident occurred, or he was engaged in his occupation as a self-employed person.

[4] In terms of section 6 of the Act, as soon as possible after the conclusion of the evidence and any submissions thereon, the sheriff must make a determination setting out the following circumstances of the death so far as they have been established to his satisfaction-

(a) where and when the death and any accident resulting in the death took place;
(b) the cause or causes of such death and any accident resulting in the death;

(c) the reasonable precautions, if any, whereby the death and any accident resulting in the death might have been avoided;

(d) the defects, if any, in any system of working which contributed to the death or any accident resulting in the death;

(e) any other facts which are relevant to the circumstances of the death.

[5] The Court proceeds on the evidence before it and the Sheriff's powers do not go beyond making a determination in relation to the circumstances established to his satisfaction by evidence. In the next part of this Note, I set out the relevant factual background as established by the evidence. I then consider the expert evidence, insofar as it pertained to the issues raised by the inquiry. I thereafter summarise the parties' submissions. Finally, I discuss my findings, and the reasons for my determination.

THE EVIDENCE/FACTUAL BACKGROUND

[6] I do not propose to set out all the evidence at length. Most of the facts were not in dispute, and the issues which arose were well focussed during the Inquiry. Those issues were, in short, whether Mr Thompson was, or could have been, seen by Mr Bisset before he started to reverse the telehandler immediately prior to the accident, and, if not, what precautions might have prevented the accident. In this section, I set out the factual basis upon which my findings proceed. First, a word of explanation is appropriate as to how I have arrived at that factual basis.

[7] No issues at all arose in relation to the medical evidence, the cause of death (multiple injuries) being uncontroversial, and there being no evidence to suggest that Mr Thompson had collapsed prior to the accident so as to account for his presence behind the telehandler. Similarly, there was no disagreement among the experts – PC McBirnie, Mr Stewart and Mr Bathgate – as to the specification or features of the telehandler, including that there is a significant blind spot to its rear offside. They also agreed that it was maintained in good condition. I also accepted PC McBirnie's account of the manner in which the mirrors were adjusted, and of the views each gave. Mr Steven came across as an honourable and honest employer (whether or not Mr Thompson was, in law, his employee) who runs a generally well-maintained farm and who was shocked by the accident, subsequently co-operating with the Health and Safety Executive Investigation and willingly complying with all that he was asked to do. He did not witness the accident but I fully accepted his account of how it came to his attention and of the steps he took to revive Mr Thompson. He also gave evidence about the job being done at the time of the accident. The only part of

his evidence to which I am unable to attach any weight was his spontaneous contribution at the conclusion of his evidence to the effect that Mr Thompson had seemed quiet for some weeks. That was not an issue on which there was any other evidence, nor one which the parties explored, and it would be wholly speculative, and unwarranted to pursue that line or to attach any significance to it. As for the accident itself, Mr Bisset was the only witness who was able to give direct evidence about it, being the only other person, apart from Mr Thompson, who was present when it occurred. For the most part his evidence was uncontroversial and consistent with such evidence as Mr Steven was able to give (eg, in relation to the job being done). However, in relation to the crucial question of what steps he took to verify Mr Thompson's whereabouts, Mr Bisset was the sole witness. Notwithstanding that he clearly had an interest in deflecting any criticism of his own actions, I did find that he was credible and reliable in relation to that part of his evidence also. It was suggested that I should not accept his evidence in full, particularly in relation to the key issue as to whether he looked round prior to reversing, principally on the basis that if he had done so he would have seen Mr Thompson. It was also suggested that he had given incredible evidence in relation to a previous incident when his dog had died whilst he was reversing a similar vehicle, the suggestion being that he had run it over, something which he denied. Dealing with that latter point first, other than a brief reference to such an incident by Mr Steven, there was, quite rightly, no detailed exploration of that incident in the evidence and I consider that it would be unfair to Mr Bisset to hold on the basis of second-hand evidence by Mr Steven either that he had been at fault on a previous occasion or that he was being untruthful about it in his evidence to the Inquiry. As for the former point, there was no direct evidence as to where precisely Mr Thompson was standing immediately prior to the commencement of the reversing manoeuvre but there was evidence that, having regard to the general area where he was, he might well have been invisible to Mr Bisset even had the latter turned round. There is accordingly no logical reason for rejecting Mr Bisset's evidence on that point, although as I point out elsewhere, there was no exploration of the thoroughness of his look round, or of which shoulder he looked over. I therefore accept that Mr Bisset gave an honest account of the accident. That said, he did demonstrate a complete lack of awareness of safety issues and appeared unable to comprehend that, even though he looked round, there might still have been other steps which he ought to have taken before he reversed. I do not criticise him for that since it is up to others to ensure that he is properly trained, and does appreciate safety issues.

[8] The expert evidence also requires comment. Although I do not cast doubt on the skill and experience of any of the expert witnesses in their field of expertise, the fact remains that neither PC McBirnie nor Mr Bathgate was qualified to give expert opinions on health and safety issues as opposed to evidence about

the condition or capabilities of vehicles, or pertaining to the investigation of road traffic collisions. Mr Stewart, on the other hand, has had a long career in health and safety, having been a factory inspector for some 23 years with HM Inspector of Factories and subsequently the Health and Safety Executive, before forming his own health and safety consultancy in 1986. He is a Chartered Member of the Institute of Occupational Safety and Health, a Member of the International Institute of Risk and Safety Management and a Chartered Safety Practitioner. He requires to undertake Continuing Professional Development in order to maintain the first of these qualifications. By contrast, Mr Bathgate is essentially an automotive engineer with considerable expertise in motor vehicles and accidents, but not specifically in health and safety issues. Although he, too, is a member of a number of professional bodies, all are to do with automotive issues in some shape or form. Similarly, PC McBirnie is a road traffic policeman, with considerable experience in collision investigation but (as he readily accepted) not in health and safety. It follows that while I accept the evidence of Mr Bathgate and PC McBirnie with regard to the specification and capabilities of the telehandler, and for that matter the mechanics of the accident, I cannot attach any weight to their views on health and safety issues since they are not qualified to express any such views. I do however accept that Mr Stewart is eminently qualified to express such a view.

[9] Having given the above explanation, then, the relevant facts surrounding the death are as follows.

Introduction/background

[10] Mr Thompson was born on 31 March 1952. He ran a business known as East Lothian Land Services which carried out landscaping and other services.

[11] Mr Thompson often carried out work at Greendykes Farm, on the instructions of Mr Steven. He was generally a hard-working and highly regarded contractor, and over the years he performed a wide variety of tasks, to Mr Steven's satisfaction.

[12] In particular, Mr Thompson was engaged in carrying out long-term mono-blocking works at the farm. By November 2009, the work had been continuing, on and off, for some two years. It was being performed under the direction of Mr Thompson, who over-saw, and gave instructions to, two of Mr Steven's employees in the carrying out of the work, namely, Mr Bisset and John Bertram. Mr Thompson ordered materials, which were paid for by Mr Steven. In respect of his labour, he charged, and was paid, by the hour. The area being monoblocked is shown in photographs 8, 9 and 10 of Crown Production No

1, with photograph No 4 of Crown Production No 7 giving a view from a different angle, showing more clearly some of the monoblocking which had previously been carried out directly adjacent to the area which was still to be monoblocked.

[13] On 6 November 2009, the task to be performed was the digging of a trench along the front of a barn door, and the levelling of the spoil from the trench. Photograph No 9 of Crown Production 1 is a view of the trench and the area over which the spoil was to be levelled, taken from within the barn. Photograph No 8 of that production shows the trench and the said area from outside the barn. Thereafter, kerb stones were to be laid in the trench. Mr Steven met Mr Thompson, Mr Bisset and Mr Bertram on the morning when that work was agreed. Mr Steven was not party to any more detailed discussion about the method of working. As the photographs show and as Mr Steven said, the area being worked on was not large.

[14] Mr Thompson gave instructions to Mr Bisset and Mr Bertram as to how the work was to be done. He would dig the trench, using a digger which he owned (the yellow digger which is shown most clearly in photograph 1 of Crown Production 7). Thereafter, Mr Bisset was to spread the spoil from the trench using the telehandler SN58 FLG, which was owned by Mr Steven. This process was known as backblading, or back-scraping, and was performed by lowering the shovel attached to the front of the telehandler's boom so that it was just above the ground, and reversing, using the back of the shovel to spread the soil. The exterior of the telehandler is shown in photographs 9 and 10 of Crown Production 1, and in all the photographs which constitute Crown Production 7. Photographs 1 to 7 of Crown Production all show views from within the telehandler.

The telehandler

[15] The telehandler had been purchased new by Mr Steven in about 2008. It was well maintained, and the windows were clean. It is a type of 4-wheel drive forklift truck which is fitted with a boom that is pivoted at the rear of the machine. The boom is raised and lowered hydraulically. A range of attachments may be fitted to the boom.

[16] When sitting in the cabin a rear view is afforded by a right-hand (offside) front mirror, mounted above the centre of the right hand front wheel and along the left-hand (near) side by a mirror fitted to the exterior of the left hand cabin frame. There is also an interior mirror mounted to the right-hand side of the windscreen inside the cabin. Photographs 1 and 2 of Crown Production No 1 show the view which the

driver has of the two external mirrors. Photographs 3 and 5 show the interior mirror.

[17] Visibility around the front and to the sides of the cabin is generally good, but visibility to the right hand rear is restricted due to the height of the rear frame in the centre of the rear wheels, which obscures the area behind the right-hand rear wheel. Photograph 5 of Crown Production No 1 shows the view in the rear mirror of a person of normal stature standing directly behind the rear wheel. Only the top half of his body is visible. Photographs 4 and 6 illustrate the driver's view if he turns round in his seat.

[18] At the time of the accident, the nearside and interior mirrors were properly adjusted so as to give adequate views of the side and rear. The offside mirror was adjusted so that most of the mirror reflected the offside bodywork of the vehicle although there remained some view of the rear. The mirror was partially hidden from the driver by the telescopic boom. When the boom is raised (which it was not at the time of the accident) the mirror is obscured to a still greater extent.

[19] The design of the vehicle is such that there is a significant blind spot to the rear of the vehicle. In general, the closer a person is to the vehicle, the less visible he will be. To the centre rear, a person standing within a distance of up to four metres is not visible in any of the mirrors (although can be seen if the driver turns round). If an adult of normal stature is standing behind the rear offside wheel, only the upper half of his body is likely to be visible. However, the driver is unable to see, by turning round or by using the mirrors, a person crouching or lying behind the rear offside wheel. The precise distance at which such a person would first be seen depends on the precise angle. A person 10m away could probably be seen, what ever position he was in, by the driver turning round, although not necessarily in his mirror, depending on the precise position and posture of the person.

[20] The vehicle is fitted with an external reversing alarm, which is activated as soon as reverse gear is engaged and is audible above the sound of the engine. When reversing the vehicle is unable to travel at more than walking speed, that is, 3 to 5mph.

[21] The blind spot referred to above can be significantly reduced, although not entirely eliminated, by the installation of CCTV, comprising a camera (or cameras) on the roof of the vehicle, conveying an image to a screen mounted in the cab.

The accident

[22] Mr Thompson duly dug the trench, and piled the spoil in a heap just outside the door of the barn.

[23] Mr Thompson then instructed Mr Bisset to use the telehandler to backscrape the spoil over the yard, using it to level the ground in preparation for monoblocking to be laid. The two men agreed that Mr Bisset would make three passes, that is, that he would make three reversing movements in the telehandler, using the back edge of the shovel to scrape the soil across the yard. Mr Thompson told Mr Bisset to watch out for his van, which was parked behind the telehandler a short distance away (being the blue van shown in photograph No 10 of Crown Production1), but there was no other instruction given, nor discussion between the men, of the precise route to be taken by the telehandler on each of its three reversing manoeuvres.

[24] Mr Bisset made the first two passes without incident. He drove forward towards the barn doors and reversed for a distance of up to metres . He then repeated the manoeuvre. On this second pass, as he reversed back he noticed Mr Thompson to his right, picking up stones from the ground. He noticed him again, still there, as he drove forward.

[25] After Mr Bisset had completed the second pass and driven forward with a view to carrying out the third pass, he looked in both his interior and wing mirrors, but could not see Mr Thompson. He turned round, but could not see Mr Thompson.

[26] Mr Bisset assumed that Mr Thompson had returned to his van. Without taking any steps to verify whether that assumption was correct he commenced his third reversing manoeuvre. He was driving at no more than 3 to 5 mph.

[27] Mr Bisset's assumption was incorrect. Mr Thompson was approximately ten metres from the barn door, in line with the rear offside wheel, still picking up stones.

[28] After Mr Bisset had reversed a distance of several metres, he felt a bump. He drove forward to ascertain what it was. He alighted from his cab and discovered that he had driven over Mr Thompson. The photographs of the telehandler among Crown Productions 1 and 7 accurately show where it came to rest after Mr Bisset had driven forward. The position of Mr Thompson's body in those photographs is

approximately where he was standing when the telehandler struck him although he may have been moved during attempts to revive him.

[29] Mr Bisset tried unsuccessfully to revive Mr Thompson. In a state of shock, he went to the farm house and an ambulance was summoned. Mr Steven went to Mr Thompson's aid and tried to resuscitate him while being given instruction over the phone by the ambulance service. He was still engaged in that task when paramedics arrived. They took over but were unable to save Mr Thompson who was pronounced dead a short time later. The position of Mr Thompson's body after said resuscitation attempts is shown in photographs 8, 9 and 10 of Crown Production 1, and photographs 2 to 6 of Crown Production 7.

The post-accident investigations

[30] PC McBirnie attended at the scene. He carried out a road traffic investigation, and took the photographs lodged as Crown Production No 1. The Health and Safety Executive also attended. Crown Production 7 is a set of photographs taken by Lindsay Stein of the HSE on that date. All said photographs contain accurate depictions of the *locus* as it was immediately after the accident. Ms Stein recommended that there should not be a prosecution in respect of Mr Thompson's death. Ms Stein was unable to give evidence at the Inquiry due to maternity leave but formal evidence of her recommendation was given by Mr Dodd in his affidavit.

The expert evidence

[31] I have already made some comment on the expert evidence. To those comments I would now add that insofar as the circumstances of the accident were concerned, the experts were in broad agreement. None of them was prepared to draw any conclusions as to the precise movement of the telehandler as it carried out its three passes, simply by looking at the marks in the photographs, although all, as I understood it, conceded that the marks were at least consistent with the description given by Mr Bisset. All were in agreement about the significant blind spot to the rear of the vehicle. All agreed that the vehicle was well maintained, and that no criticism could be levelled at Mr Steven in that regard.

[32] Where the experts differed was in relation to the precautions which might have been taken. PC McBirnie did not think it reasonable for the driver to have descended from his cab. Mr Bathgate did not favour the installation of CCTV for two reasons, namely, that the screen might freeze and the driver might

become complacent. I have already commented on their lack of sufficient expertise in health and safety issues such as to qualify them to express such opinions. Mr Stewart, did advocate CCTV. He also lamented the absence of a risk assessment and the lack of training given to Mr Bisset in the operation of the handler, under reference to the Health and Safety Executive publications: *Health and Safety Executive Workplace Transport Safety: An Employee's guide, 2nd Edition, 2005* and *Safety in Working With Trucks, 3rd Edition, 2000*. A risk assessment ought to have identified the risks, and the measures necessary to reduce or eliminate those risks. The main risk in relation to the telehandler was the difficulty in visibility to its rear. In the event of the driver working with other, he should tell them to keep clear and if he lost sight of them, should stop until he had ascertained where they were. Training would have addressed the driver's behaviour towards other people within the vicinity. If Mr Bisset had not been made aware of the risks of reversing during the course of his training (as he claimed), then that was a remarkable omission.

SUBMISSIONS

[33] Against the background of the foregoing evidence, parties made submissions as to what findings if any should be made, having regard to the function of the inquiry, as set out above. They were substantially agreed as to the formal determinations to be made in respect of (a) and (b), and I have made the requisite formal determinations.

Submissions on behalf of the Crown

[34] Insofar as the other potential determinations were concerned, Mr O'Reilly for the Crown submitted that there was no evidence that Mr Thompson had collapsed immediately prior to the collision, albeit that could not be ruled out. Two other possibilities were that Mr Thompson had not realised how close the vehicle was or that he tripped and did not have time to get out of the way. He would not knowingly have remained in its path. Although he knew the area well, and had instructed Mr Bisset in general terms as to the route to be taken, there was no written plan or marking laid out and it was possible that the men were at cross purposes as to the exact extent of the area to be reversed over. It followed that Mr Thompson would have been aware that the telehandler was in the area and of the general route that it was taking. Photograph No 6 of Crown Production no 7 showed that Mr Thompson appeared to be holding a stone which might be indicative of his bending over to pick it up or of his beginning to lift himself off the ground. In that position he would not have been visible to Mr Bisset. The evidence clearly showed that there was a blind spot to the rear of the vehicle on its offside. Mr Bisset had stated in evidence that he did not see Mr Thompson before he started to reverse. Against that factual background, given that Mr

Thompson was known to be in the vicinity, Mr Bisset should have alighted his vehicle to establish Mr Thompson's whereabouts. Had he done so, he would have seen Mr Thompson and the accident would not have occurred. That was a reasonable precaution which might have avoided the accident and subsequent death. The Crown had no submission to make regarding the fitting of CCTV. The problem was not that there was a blind spot, nor that Mr Thompson somehow made his way into it, but that the driver did not establish where Mr Thompson was. That problem could still arise even where CCTV was fitted. Training was perhaps an issue but the Crown had no submissions to make in that regard. Likewise the Crown had no submissions to make regarding defects in any system of working, and it did not contend that there any other facts relevant to the circumstances of the death.

Submissions on behalf of the family

[35] For the family, Mr Conway began by reminding me of the purpose of a fatal accident inquiry, which was not a fault-finding expedition. It was appropriate to use the wisdom of hindsight, and to make recommendations in the public interest, in the light of developing knowledge. Although it was not a damages action, the court should take cognisance of the nature of the legal relationships between the parties, and the existing framework of duties, without requiring to find whether any duties had been breached or not. Mr Conway accepted the Crown's submissions regarding the formal findings to be made under sections 6(1)(a) and 6(1)(b). He went on to argue, under reference to the test in *Lane v The Shire Roofing Company (Oxford) Ltd* [1995] P.I.Q.R 417 that Mr Thompson was employed by Mr Steven. However, on any view, Mr Steven should have carried out a risk assessment, since Mr Thompson was either an employee or a person liable to be affected by Mr Steven's activities. As regards the circumstances of the accident itself, Mr Bisset had made three passes. It could be taken from Mr Bisset's evidence that the first reverse direction of travel was perpendicular to the barn door. He then made a second pass by reversing from an area near the right hand edge of the barn opening (looking out from the barn, as shown in photograph 10 of Crown Production No 1. As he did so, he noticed Mr Thompson picking up stones. The third pass commenced from an area nearer still to the right hand side of the barn. He did not reverse straight back but in a direction towards the centre of the area being levelled. The distance from the barn opening to where Mr Thompson's body was (as shown in the photographs, although it was accepted that that was not necessarily the exact point where he was standing when he was struck) was generally estimated by the witnesses to be about 10 metres. Accepting that the driver was situated about 2.5 metres from the front of the telehandler, that meant that Mr Thompson was about 7 or

7.5 metres from Mr Bisset. If Mr Bisset had looked round as he claimed, he would have seen Mr Thompson. He could not have looked round. There was no evidence that Mr Thompson had been standing closer to the machine when Mr Bisset began reversing, and that he moved away during the manoeuvre. It was legitimate to infer that Mr Thompson had not expected Mr Bisset to turn the vehicle and travel towards him, and that he was dealing with stones in the same area he had been standing when the second pass was being executed. By the time he realised the vehicle was coming towards him, he would have a very short period of time to react.

[36] Against that background, while Mr Conway agreed with the Crown submission that a reasonable precaution was for Mr Bisset to have established Mr Thompson's whereabouts before reversing, he went further. He made reference to the HSE publication *Workplace Transport* (Family Production No 6) and to the statistics therein showing the number of transport related deaths which occurred in the workplace, and to the number of those which were caused by vehicles which were reversing. He submitted in the first place that a risk assessment ought to have been carried out. That would have identified the risks attached to use of the telehandler and in particular to the limitations of visibility (as highlighted in the HSE document, *Workplace Transport Safety, An Employers' Guide, 2nd Edition* (Family Production No 1), paragraphs 666 and 667. It would also have identified as a matter of critical importance that only trained personnel be allowed to drive the telehandler. As such, the need for training of Mr Bisset would have been identified. Proper training should address the known causes of accidents and should advise drivers of the need for awareness of work colleagues in the vicinity. A driver should not commence a reversing manoeuvre if he does not know the position of a colleague, and should stop immediately if he loses sight of a colleague. Had Mr Bisset been trained he would have known that, and would not have continued to reverse. A further precaution which would have been considered had a risk assessment been carried out was the retro-fitting of the telehandler with CCTV. That would not have been expensive. Consideration should be given to making a recommendation, although Mr Conway conceded that the HSE guide did not go so far as to make such a recommendation and that CCTV was merely one of a number of measures which might be taken. Nonetheless, if it had been fitted, Mr Thompson would in fact have been visible to Mr Bisset as he reversed and the accident would not have occurred.

[37] Mr Conway further submitted that events post-accident also gave cause for concern. Mr Bisset claimed to have been trained in 15 minutes, which was on any view inadequate, given that proper training in all aspects of telehandler use, including safety awareness, should last five days. In his evidence he

betrayed a woeful ignorance of the basic requirements, and although it was somewhat blunt to say so, the fact was that he was as dangerous now as he was on the day of Mr Thompson's death. The role of the Health and Safety Executive should also be scrutinised. They had treated the accident as a road traffic collision rather than as a work place death, and their investigation had been lamentable and perfunctory. They had not, apparently, checked the thoroughness of the training given to Mr Bisset. A prohibition notice ought to be served, preventing the use of the telehandler by Mr Bisset until he had been properly trained by a reputable training provider.

Submissions on behalf of Mr Steven

[38] Insofar as section 6(1)(c) was concerned, Ms Bonomy, for Mr Steven, proposed a finding that the death of Mr Thompson might have been avoided if he had taken the reasonable precautions of keeping out of the way of the reversing telehandler and by not putting himself in a vulnerable position behind the telehandler whilst it was reversing. The evidence established that Mr Thompson was a careful, competent and experienced farm worker who was safety conscious and who took care going about his work. He was held in high regard by Mr Bisset and was safety conscious and meticulous. Further, Mr Thompson was in charge of organising the task of using the telehandler to flatten the ground at the farm in preparation for mono-blocking. That task involved only Mr Thompson and Mr Bisset at the time of the accident. The task was to be carried out in a particular way, involving three passes of the telehandler. The evidence established that Mr Bisset carried out all necessary checks such as looking in his mirror and over his shoulder prior to reversing the vehicle for the third time. Under no circumstances did he expect that Mr Thompson would have put himself into danger. There was no more which Mr Bisset could have reasonably done in the circumstances. On the contrary it ought to have been obvious to the deceased that standing, walking, crouching or bending behind a reversing heavy piece of plant was dangerous. It was sufficient for Mr Bisset to have turned round, as he did.

DISCUSSION/DETERMINATION

Function of Inquiry

[39] In considering the submissions, and the approach to be taken in considering what findings to make, it is necessary to bear in mind the function of this Inquiry. As has often been said, it is not the function of an inquiry under the Fatal Accidents and Sudden Deaths Inquiry (Scotland) Act 1976 to consider fault or to attribute blame (and so, for example, an accident can be analysed with the benefit of hindsight). Equally, it is not the function of the Inquiry to determine, *per se*, whether any regulations incumbent upon

an employer were breached, or other issues which may be more germane to proceedings in another forum, such as whether the deceased or any other person had employed or self-employed status. Rather, the sole purpose of a Fatal Accident Inquiry is for the Sheriff to make one or more determination on those circumstances of the death which are set out in section 6(1) of the Act, referred to above.

Analysis of the facts

[40] It is not possible to state with certainty where exactly Mr Thompson was standing at the time the telehandler began reversing, nor where the telehandler began reversing from. However, it is legitimate, and indeed necessary, to draw inferences, provided they are based on facts which are established and provided they are logical. Adopting that approach, we know from the undisputed evidence of Mr Bisset that he and Mr Thompson agreed that the telehandler would make three passes, and that he was in the process of completing the third pass when the accident occurred. Although the experts were reluctant to draw any conclusions from the markings on the ground shown on the photographs, they conceded that the markings were consistent with, and therefore capable of corroborating, Mr Bisset's evidence. Similarly, although the markings themselves do not point towards any particular line of travel of the telehandler, Mr Bisset stated in evidence that he started towards the left of the barn opening (as viewed in photograph 9 of Crown Production 1) and that the second pass was further to the right, and that the third pass commenced still further to the right. That is both consistent with the task being performed – which was spreading the spoil over the area which ran along the whole of he barn door – and with the marks shown in the photograph. Even if the marks are equally consistent with other lines of travel, that does not mean that they cannot be used to corroborate Mr Bisset's version of events. I therefore do find, as submitted by Mr Conway, that Mr Bisset was working his way along the barn door, from left to right (as shown in the photo, albeit it would be right to left as Mr Thompson was looking at it) and that the third reversing manoeuvre was commenced from a position somewhere close to the right hand side of the barn opening. Having regard to the position in which the vehicle came to rest after the collision, we further know that it is likely that it had reversed in a curve towards the position where Mr Thompson was at the time of the collision. Again, the curve marks in the spoil are consistent with that.

[41] The next relevant known fact, again from Mr Bisset's evidence, is that Mr Thompson was picking up stones whilst he, Bisset, was performing his backscraping operation. He saw Mr Thompson to his right as he reversed for the second time and drove forward again. Indeed, he said that he had not only seen Mr Thompson, he had driven past him. That Mr Thompson was picking up stones is confirmed by

the fact that the photographs show that there were stones in the area, which would have had to have been removed by some means, and for what it is worth, that photograph 6 of Crown Production 7 shows Mr Thompson lying with his hand over a stone. PC McBirnie did not think that this meant that he was holding a stone at the time he was hit, since he thought that the collision would have made him drop it, but he is not an expert in that field, and the matter was not pursued with Dr BouHaider. Be that as it may, I do not attach any great weight to the photograph, beyond the fact that it confirms that there were stones in the vicinity of Mr Thompson. However, since we do know that Mr Thompson was picking up stones, it can be inferred that he was bending over, or crouching, in order to do so.

[42] Next, we know, again from Mr Bisset, that the entire backscraping operation was carried out as one, in other words, that there were no breaks between the passes. He drove back, then immediately forward, then back, then immediately forward, then back for the third and fatal time. The distance to be covered on each forward and backward journey was approximately 10 metres. Mr Bisset stated that he was not travelling fast, which I again accept, firstly because I generally believed Mr Bisset; secondly because there was no evidence of excessive speed; and thirdly because all the experts agreed that the telehandler could not travel at more than 3-5 mph in any event, which was generally accepted to be walking pace. Mr Bathgate agreed that it equated to an approximate speed of six feet per second.

[43] It follows that the time between Mr Bisset seeing Mr Thompson as he drove forward in order to carry out the third reverse, and the commencement of that reverse, can have been no more than a matter of seconds – certainly, seconds, rather than minutes.

[44] Next, there was a preponderance of evidence, and parties did not dispute, that there is a significant blind spot behind the telehandler, particularly in the area immediately to the rear of the offside (right hand) rear wheel. The closer to the vehicle a person is standing, the less visible he will be. As illustrated by photographs 4, 5 and 6 of Crown Production No 1, even when a person standing there can be seen, it is only the top half of his body which can be seen. A person who is bending or crouching (as Mr Thompson was doing, whilst picking up stones) will not be seen, either in the vehicle's mirrors, or even by the driver turning round in his seat. There was no evidence which would entitle me to find the maximum distance at which someone will be completely invisible, since the investigations carried out after the accident were of a somewhat rough and ready nature. However, Mr Stewart found that he could not see a colleague standing up to 4 metres away (other than by turning round). It is possible that someone crouching who

was a greater distance away could not be seen, but it is not possible for me, on the evidence I heard, to make any conclusion about the precise distance where a person crouching would cease to be invisible. I am also mindful of PC McBirnie's evidence that the offside rear mirror was adjusted so as to give a view mainly along the side of the vehicle. A differently-adjusted mirror would of necessity give a different view of the rear, and might affect the distance at which someone could be seen. However this issue was not explored in the evidence and I stress that PC McBirnie, as I understood his evidence, was not critical of the angle of the off-side mirror.

Reasonable precautions whereby the death and accident might have been avoided

Mr Bisset

[45] In considering the question of reasonable precautions, it is important to bear in mind that I need not conclude that any reasonable precaution would probably have prevented the accident, in order to make it the subject of a determination under section 6(1)(c) of the Act. It is sufficient that there is a real and lively possibility, as it has previously been put, that the accident might have been avoided. As will be seen, I consider that threshold to be easily met in the present case in relation to the precautions under consideration.

[46] Having regard to the above factual analysis, it is evident that the assumption that Mr Bisset made, that Mr Thompson had gone to his van, was not an assumption he was entitled to make. He had seen Mr Thompson, seconds before, picking up stones. Mr Thompson was therefore a person whom Mr Bisset knew to be in the immediate vicinity, behind the telehandler. He knew or ought to have known that to pick up stones, Mr Thompson would require to bend over. He also knew or ought to have known that there was a significant blind spot in the very area where Mr Thompson was likely to be. In these circumstances, on no view was it safe for Mr Bisset to begin reversing for a third time before he had established Mr Thompson's precise whereabouts, particularly as they were working within a small area.

[47] At this stage I will deal with Mr Conway's submission that I should not believe Mr Bisset when he said that he turned round. As I have already stated, I do believe that he turned round although possibly in only a perfunctory manner, and it was not established whether he had looked over his right or his left shoulder. Picking up stones, as Mr Thompson was doing, by its very nature would involve some movement and it cannot be assumed that he was in the same position he was in as he was seconds later, when he was hit. The distance between Mr Thompson and Mr Bisset may well have been such that Mr

Thompson was not visible to Mr Bisset when the latter turned round, and I have made reference in paragraph 44 to my inability to make any finding about the maximum distance at which a person who was crouching would be completely invisible. However, in a sense, it makes no difference whether Mr Bisset turned round or not, since whatever steps Mr Bisset took, he did not see Mr Thompson and the critical factor is that he ought not to have reversed until either he could see him or he had established with certainty where he was. Having failed to see Mr Thompson in his mirrors, Mr Bisset was required to take further steps to try to find out where he was. Turning round was the obvious first step to take, and he took that step. What is certain is that when Mr Bisset turned round, he did not see Mr Thompson. Had he done so, I accept that he would not have reversed.

[48] Having still not seen Mr Thompson, Mr Bisset should have been alive to the danger which existed and should have taken further steps to find out where he was. As Mr Stewart pointed out, it would have been a simple matter to have wound down his window and shouted on Mr Thompson. Alternatively, he should have alighted from his cab and, if necessary, told Mr Thompson to stand in a position where he could see him. Had Mr Thompson not been there, then, and only then, would it have been permissible to have assumed that he had gone to his van. PC McBirnie did not think that it was reasonable to expect a driver to alight from his cab every time he intended to reverse, because "nothing would ever get done" but that is over-simplistic. Admittedly it would take several seconds to switch off the engine, get out of the cab, ascertain where Mr Thompson was, return to the cab, switch on the engine, re-engage reverse and begin the manoeuvre by which time the position behind may well have changed but in the context of this Inquiry, in the particular circumstances of this case, had Mr Bisset established that Mr Thompson had gone to his van, it would then (and only then) have been legitimate for him to have assumed that upon Mr Thompson's return he would not have walked behind a machine he could see was reversing. This was not a situation where, for example, a child might suddenly appear and run behind the telehandler. To put it another way, Mr Thompson was not a person who *might* have been to the rear of the telehandler. He was *known* to be there. As such, when Mr Bisset could not see him, it was in my view incumbent upon him to have descended from his cab to find out where he was if that was it took to find out if he was still there. At the very least he ought not to have reversed until he could see where Mr Thompson was, and that he was clear of the vehicle. As it happens, we know that if Mr Bisset had stopped the vehicle, and if necessary alighted from it, he would have established that Mr Thompson had not gone to his van and was still there, and, not only can it be said that the accident might have been avoided, there is an overwhelming probability that it would not then have occurred.

[49] Some support for the advisability of such a precaution is to be found at paragraph 694 of the HSE publication, *Workplace Transport Safety*, which states that if drivers lose sight of a banksman they should know to stop immediately. Mr Thompson was not acting as a banksman, since he was not giving signals to the driver of the vehicle, but he was similar to a banksman inasmuch as he was a person known to be behind the vehicle, of whom Mr Bisset had lost sight. There is no logical reason why the same reasoning should not apply to other persons known to be behind the vehicle as to banksmen, since all are equally at risk. It could be said, of course, that not being a banksman, Mr Thompson had no need to remain in the vicinity and could have gone to his van, as Mr Bisset assumed – something which presumably a banksman would not do. On the other hand, a banksman could be assumed, more so than a person working on some other task in the vicinity, to have his attention focussed on the vehicle. On any view, a driver should not take less care towards someone who is not a banksman than someone who is. Accordingly, it must be appropriate to have regard to the HSE advice in these circumstances. Having lost sight of Mr Thompson, Mr Bisset should have known to stop immediately.

[50] It follows that I have reached the view that a reasonable precaution whereby the accident and death might have been avoided was for Mr Bisset, having lost sight of Mr Thompson, not to have reversed the telehandler until he had established his whereabouts. I have made a determination to that effect.

Mr Thompson

[51] Having said all of that, the scene must also be viewed from the perspective of Mr Thompson, who was after all in charge of the monoblocking operation. He knew that Mr Bisset was to make three passes, and must be taken to have known that a third reversing manoeuvre was to be made. As I have found that the vehicle was working its way from right to left along the front of the barn (as Mr Thompson would have been looking at it) it would have been natural for him to have assumed that the third pass would be further away from him than the second pass had been. It is all too easy to see why he would have taken his eye off the ball, so to speak, and, while he would have been aware of the audible warning signal as soon as the vehicle engaged reverse, that in itself would not have told him anything he did not already know, namely, that a reversing manoeuvre was about to be carried out. Critically, what it would not have told him was the direction of travel and it would appear (since I accept the Crown submission that he would not knowingly have positioned himself in the path of a reversing vehicle) that he did not anticipate that the telehandler would be coming back in the direction which it in fact took. It should also be borne in

mind that, as the photographs illustrate, the men were working in a relatively confined area. There were two dangers implicit in his picking up stones while the reversing was being undertaking. First, any task, even the routine one of picking up stones, would of necessity take his mind off consideration of where exactly the telehandler was. Second, the picking up of stones also necessarily involved bending over. While Mr Thompson drove the telehandler only occasionally and may not have been expected to have as extensive a knowledge of the blind spots as Mr Bisset, he can, I think, be taken to have known that the driver was not necessarily able to see him, particularly if he was bending down. So, whereas Mr Bisset made an unfounded assumption that Mr Thompson went to his van, Mr Thompson for his part can be taken to have made an unfounded assumption that Mr Bisset would be able to see him and would not drive towards him. Again, had he not made that assumption, the accident probably would not have occurred.

[52] I have also made a determination, therefore, that another reasonable precaution whereby the accident might have been avoided was for Mr Thompson not to have picked up stones in the area being flattened, while the telehandler was engaged in reversing manoeuvres in carrying out that operation.

CCTV

[53] The next question which arises is whether another reasonable precaution by means of which the accident might have been avoided was the retro-fitting (that is, by Mr Stevens, after acquisition of the telehandler) of a CCTV camera. Mr Steven conceded that he hadn't thought of doing this but that it seemed a reasonable step to take. Although the precise practicality of fitting it, and the cost, were not explored with him, I proceed on the basis of his stated position that CCTV is and was an expense which he could afford (there was evidence from Mr Stewart that the cost would be several hundred pounds). I have no difficulty in finding that the fitting of CCTV would have been a reasonable step to have taken, and the real question is whether it was a precaution which might have prevented the accident. If I find that it was, I will then have to consider whether to make a recommendation that CCTV should be fitted to all telehandlers (or indeed, to all forklift trucks).

[54] The starting point in considering this is, I think, Production No 1 lodged by the family, being the HSE publication: *Workplace Transport Safety, an employers' guide (2nd edition)*. It is important to appreciate that this is a generic guide, that is, covering all types of transport in all types of workplace. It has a chapter entitled "*Operational Guidance Reversing*", commencing at paragraph 666. In that

paragraph, it points out that nearly a quarter of all deaths involving vehicles at work happen during reversing. To put that fraction into perspective, the family's production No 6, which is an extract from the HSE website document "*Workplace Transport*", reveals that in the period 200506 to 2009/10, there were 27 fatalities in the workplace where a person was hit by a reversing vehicle. A further 883 persons suffered major non-fatal injuries. As Mr Conway submitted, the risk of death or serious injury caused by vehicles reversing in the workplace is therefore well known and such events seem to be a common occurrence. Reverting to the document *Workplace Transport Safety*, in paragraph 667 it states that (as one might expect) visibility is the main problem. Paragraph 668 states that there are a number of steps which can be taken to reduce the risk of reversing accidents, and that the guidance which follows merely consists of examples, and that it is unlikely that any single measure will be sufficient to protect people's safety. Paragraph 669 points out that the most effective way of dealing with the risks caused by reversing is to remove the need for reversing. Paragraph 676 refers to the fitting of fixed mirrors or other visibility aids to improve visibility around vehicles. Paragraph 681 refers to the fact that vehicles may have blind spots, and cross-refers to paragraphs 550-557 in the section of the guide entitled *Visibility from vehicles and reversing aids*. That section in turn discusses various forms of reversing aid, including mirrors, radar and, pertinent to this discussion, CCTV. Paragraph 559 states that CCTV can cover most blind spots, that the cost can vary but that costs have fallen and that companies who have fitted CCTV have found that that it can reduce the number of reversing accidents, and in this way the systems usually pay for themselves in a few years (although one might think that if it resulted in even one saved life, a cost of several hundred pounds was justified). Paragraph 563 sets out the limitations of CCTV systems, being that lighting conditions can mean that they do not work instantly as a vehicle leaves a darker area going to a more strongly lit area; that a dirty lens makes the camera less effective; and that it can be difficult for drivers to judge heights and distances.

[55] Leaving the HSE guide for a moment, evidence was also given on the CCTV issue by Mr Stewart and Mr Bathgate. Mr Stewart advocated its use. He did not contend that it was a panacea which obviated all the risks, and essentially he endorsed the HSE advice. CCTV greatly reduced, rather than eliminated, blind spots. It did have certain limitations, although he did not agree that one of these was the possibility that the screen might freeze. It was a better measure to take than the use of certain specialist lenses. Mr Bathgate took a different view. While he said that it would eliminate blind spots (which ironically was a more positive, if unrealistic, appraisal of its advantages than that of the HSE and of Mr Stewart) he saw two disadvantages, namely, that it was not unknown for the screen to freeze and that it could encourage

drivers to be lazier by relying on the CCTV screen rather than looking around and using their mirrors.

[56] Returning to the HSE guide, the section headed *Safe Drivers* contains several items of guidance. In paragraph 682, it states that people should stay well clear of reversing areas. The use of banksmen (or signallers) is discussed and in that context paragraph 694 provides the advice referred to above that if drivers lose sight of a banksman they should know to stop immediately. Finally, paragraph 696 states that if drivers are not able to see clearly behind the vehicle for any reason they should apply the brakes and stop the engine, leave the cab and check behind the vehicle before reversing. The guide then points out that this may not be enough in a busy place because people can move behind the vehicle after the driver has returned to the cab and that segregating pedestrians and vehicles and improving the ability of the driver to see around the vehicle from the driving position are more effective ways of improving pedestrian safety.

[57] What I take from the foregoing is that CCTV is simply one of a number of measures which may be taken to improve the safety of a vehicle reversing. The guidance is far from saying that CCTV should be fitted to all vehicles which may have to reverse within the workplace. However, I have already made the point that the guidance applies to all types of vehicles in all kinds of workplace, and the onus is therefore on an employer to consider whether it should be fitted to their particular vehicles, having regard to the precise type of vehicle, the use to which the vehicles will be put and the type of terrain, surroundings and circumstances in which they are likely to be operating. In that regard, when considering whether it is reasonable to fit CCTV to a telehandler, regard should be had to the extent of the blind spot. I also consider it relevant to have regard to what I regard as the primary piece of advice in paragraph 669, which is to remove the need for reversing if possible. It is likely to be safer for an employer to have a system of work whereby there is no, or only a limited, need for his vehicles to reverse, than to install CCTV. Many, if not most, reversing manoeuvres are likely to be carried out to enable the vehicle simply to manoeuvre into a different position. However, in the case of the telehandler on Greendykes Farm, not only was there a need for such reversing but the telehandler was used for a task – backscraping – which necessarily entailed it reversing over an open area of ground over a distance of 10 metres, considerably further than would have been necessary simply to enable the vehicle to turn. While a factor against the need for the provision of CCTV was undoubtedly that the farm was not a busy pedestrianised area, a factor which points against the need for CCTV, that is merely one factor to take into account in considering whether it was a reasonable precaution to have taken. What must also be considered is the considerable reduction in

the blind spot – not quantified by the HSE guide but estimated by Mr Stewart to be a reduction of 95%: even though that precise percentage was not backed up by statistical data I accept the principle that the blind spot would be greatly reduced, which Mr Bathgate's evidence (at the very least) confirmed. On any view, therefore, as the HSE guide states, the provision of CCTV was a measure which would have increased the ability of a driver to see behind the vehicle, the corollary of which was that it would have reduced the possibility of a person behind the vehicle being hit because he could not be seen. I do not attach any significance to either of Mr Bathgate's objections to the use of CCTV. As I have already pointed out, his expertise lies elsewhere. In any event, the fact that the equipment may malfunction seems a rather "glass half empty" approach to take to the use of technology designed to give a driver an improved view of that which he could not otherwise see. As Mr Conway put to Mr Bathgate in cross-examination, it ought to be obvious to the driver that the image has frozen, if that is indeed the case. Second, the HSE guidance makes clear that CCTV is one only of a number of tools. It may well be an essential part of training that it should not encourage a driver to become lazy by not using his mirrors or looking around him but, again, that is not a reason against its use and if Mr Bathgate is suggesting that the risk of complacency means that CCTV should never be installed, then that flies in the face of both the HSE guidance and Mr Stewart, and I reject his evidence on that point.

[58] Given that the fitting of CCTV was a reasonable precaution to take, might it have prevented the accident and therefore the death of Mr Thompson? In considering this, it is reasonable to assume that had it been fitted, Mr Bisset would have made use of it. Since we do not know precisely where Mr Thompson was when the vehicle started to reverse, we cannot say with certainty that even with CCTV he would have been outwith the blind spot of Mr Bisset as he started to reverse. However, on the basis of Mr Stewart's evidence that the blind spot would be reduced by about 95%, and the general tenor of the HSE advice, it can be concluded that he might have been seen. Even if he had not been seen at the outset of the manoeuvre it is likely that he would have been noticed by Mr Bisset as the vehicle drove towards him.

[59] In short, in all the circumstances, taking into account the incidence of reversing-related fatalities within the workplace, the knowledge that this telehandler, with its known blind spots would from time to time be involved in carrying out tasks which necessarily involved reversing and also having regard to the relatively low cost of CCTV, I conclude that it can be said in this particular case that the installation of CCTV within the cab was a reasonable precaution whereby the accident and death might have been avoided, and I have so determined.

[60] However, I do not consider that it would be appropriate for me to make any recommendation as to the widespread use of CCTV, having regard to HSE advice which does not recommend the universal use of CCTV. For the reasons already given, I consider that CCTV is merely one of a number of measures which any user of forklift trucks or similar vehicles should consider, in order to avoid the risk of injury or death whilst reversing, and that its installation or otherwise should be considered on a case by case basis.

Training

[61] Regulation 9 of the Provision and Use of Work Equipment Regulations 1998 requires that:

> "(1) Every employer shall ensure that all person who use work equipment have received adequate training for purposes of health and safety, including training in the methods which may be adopted when using the work equipment, any risks which such use may entail and precautions to be taken."

[62] The Health and Safety Executive has issued a publication entitled: *Rider-Operated lift trucks: Operator Training: Approved Code of Practice and Guidance*, 2nd Edition, 1999 which, as its name suggests, contains the regulations, guidance and Approved Code of Practice as they relate to the basic training of rider-operated lift trucks. This document was lodged as item 2 of the family's inventory of productions.

[63] It is evident from paragraph 2 of that publication, read in conjunction with paragraph 11 of another document, *Safety in Working with Lift Trucks*, 3rd Edition, 2000 (item 3 lodged by the family), and it was not in dispute at the Inquiry, that the Code of Practice covers vehicles such as the telehandler.

[64] Paragraph 5 of *Rider-Operated lift trucks: Operator Training: Approved Code of Practice and Guidance*, which is part of the Approved Code of Practice, states that employers should not allow anyone to operate, even on a very occasional basis, lift trucks within the scope of the Code of Practice who have not satisfactorily completed basic training and testing as described in the Code of Practice.

[65] The guidance includes, in paragraphs 33 to 35, that basic training must cover fully the skills and knowledge required for the safe operation of the vehicle, including the risks arising from the vehicle's operation. Length of training may vary depending on the objectives covered. Operators with experience may need less training but the value of experience should not be over-estimated. Appendix 2 lists, as one

of the objectives to be considered for inclusion in a training course, that the trainee should be able to state the reasons for the training, the risks associated with lift-truck operations and the causes of lift-truck accidents.

[66] Mr Stewart elaborated upon the need for training. He confirmed that there was a requirement for operators to be trained. Training should normally take from three to five days. It could be provided by any one of a number of accredited providers. It would not be possible for adequate training to be given in the fifteen minutes estimated by Mr Bisset as being the length of his training. He did not accept that long years of experience was any substitute for training, and in this he was at one with the HSE guidance referred to above, although as he put it slightly more vividly: thirty five years of experience is thirty five years of bad habits.

[67] Mr Steven, to give him his due, did not dispute that the Health and Safety Executive had informed him since the accident that his employees ought to have been trained. He had arranged for training which he, Mr Bisset and Mr Bertram had undergone. It had taken a day. He acknowledged that some training was given in relation of the dangers of reversing and that visibility was the main problem. He has obtained a certificate from the training provider (Production No 4 of the items lodged on his behalf) which describes the course as a "One Day Basic Training & Safety Awareness Telescopic Forklift Truck 3500KGS". Mr Bisset for his part, who seemingly attended the same course, estimated the training as having taken fifteen minutes. Although he did volunteer that the trainer had told him of the vehicle's blind spot, which he hadn't known previously, he had no recollection of having been trained in the dangers of reversing, or the possible need to stop the vehicle and establish a person's whereabouts before proceeding further.

[68] There is no doubt that training ought to have been, but was not, provided to, among others, Mr Bisset well in advance of the accident. If such training had been provided it ought to have included training in the dangers inherent in the operation of telehandlers such as this, which would have included advice and training on the dangers of reversing. While there is no certainty that it would have caused Mr Bisset to act differently on the day in question, it is legitimate to assume that good training, effectively delivered, would have made him more alive to the risks than he was. It is possible to conclude therefore, and I have made a further determination, that the provision of training was a reasonable precaution which might have prevented the accident and the death.

[69] I have also considered whether I should make any finding in relation to Mr Bisset's subsequent training, or make any recommendation regarding his future use of the vehicle. While his evidence would tend to suggest that there may, at the very least, be a need for more training, I do not consider that this issue was explored in sufficient depth such as to entitle me to make any formal finding. Further, post-accident training is not strictly speaking a circumstance relevant to Mr Thompson's death.

Risk assessment

[70] Regulation 3 of the Management of Health and Safety at Work Regulations 1999 provides that:

> "Every employer shall make a suitable and sufficient assessment of
> (a) the risks to the health and safety of his employees to which they are exposed whilst they are at work: and
> (b) the risks to the health and safety of persons not in his employment arising out of or in connection with the conduct by him of his undertaking
> for the purpose of identifying the measures he needs to take to comply with the requirements and prohibitions imposed upon him…"

[71] Regulation 4 provides that any preventive and protective measures shall be implemented on the basis of the principles specified in Schedule 1 to the Regulations. The principles in that schedule include:

(a) avoiding risks;
(b) evaluating the risks which cannot be avoided;
…
(f) replacing the dangerous by the non-dangerous or the less dangerous.

[72] I do not find it necessary to decide whether Mr Thompson was an employee of Mr Stevens or was acting as a self-employed contractor. Although certain evidence was led which is relevant to that issue, that was not the focus of the Inquiry and any opinion which I expressed on the matter would be of no consequence in relation to any future proceedings which there might be. That said, if he was not an employee he was a person whose health and safety was exposed to risks in the conduct of the operation of the farm, and it is clear that a risk assessment ought to have been carried out which took in the operation of the telehandler. While Mr Steven said that he had carried out a risk assessment which he had not written down – which there was no requirement on him to do, employing, as he did, fewer than five employees – he conceded that he had not thought about a separate risk assessment regarding the use of the telehandler.

[73] While I consider that the risks of using the telehandler ought to have been included in the risk

assessment, and to that extent Mr Stevens did not comply with the duty imposed on him by the regulations, I do not consider that it is appropriate to find that the carrying out of a risk assessment was, *per se*, a reasonable precaution which might have prevented the death and the accident. Rather, a risk assessment may have identified one or more of the precautions which might have prevented the accident. For that matter, it might have addressed the defects in the system of working, discussed below. However, having made determinations in relation to those specific precautions and defects, in my view it is not appropriate also to hold either that a risk assessment was a precaution which might have prevented the accident, or that the failure to carry one out was a defect in a system of working. That said, I do consider that the failure to carry out a risk assessment was a fact relevant to the circumstance of the death and I have made a determination in this regard in terms of section 6(1)(e) of the Act.

Defects in any system of working which contributed to the accident and death

[74] I next turn to section 6(1)(d) of the Act, and consider whether there were any defects in any system of working which contributed to the death. It should be noted that whereas the focus in section 6(1)(c) is whether there were reasonable precautions which *might have* prevented the death, there must be established a definite causal link between any defect and the death before a determination can be made under section 6(1)(d). The defect need not be the sole cause of the death but must have contributed to it.

[75] For the reasons given above, I have inferred that each of Mr Thompson and Mr Bisset made an unwarranted assumption about the other. The former must have assumed that the telehandler would not drive towards him; the latter did assume that Mr Thompson had gone to his van. Whereas I have found above that each could have taken a reasonable precaution which might have prevented the accident, I consider that it is possible to go further than that. It was the combination of their assumptions, and their failure to take precautions, which caused the accident. If Mr Bisset had not reversed when he could not see Mr Thompson, the accident almost certainly would not have occurred. Similarly, if Mr Thompson had not been picking up stones, the accident almost certainly would not have occurred. What enabled the men to make their assumptions, and to act on the basis of them, was the absence of a laid down procedure whereby they had to agree in advance, what the precise movements of the telehandler would be. For that matter, given the dangers inherent in reversing, there ought to have been a prohibition on working behind the telehandler whilst it was reversing. If such procedures had been in place, then the accident would probably not have occurred. Accordingly, I consider that it can be said that there was a defect in a system of working which contributed to the accident.

[76] Further, it is plain that the lack of any training was what led to Mr Bisset's ignorance of the vehicle's blind spot and to the dangers in reversing. As discussed above, if he had been properly trained, he probably would not have reversed when he lost sight of Mr Thompson. Mr Steven ought not to have allowed persons who had not been trained to operate the telehandler and the lack of training is also, in my view, a defect in a system of working which contributed to the accident and hence to the death.

Other facts relevant to the circumstances of the death

[77] Apart from the failure to carry out a risk assessment, and its consequences, to which I have already referred, and in respect of which I have made a determination, there are no other facts relevant to the circumstances of the death.

Recommendations

[78] I am unable to make any other determinations or recommendations. Mr Conway was critical of the HSE investigation, but I do not find any basis for criticising the depth of their investigation, or their decision not to prosecute Mr Steven, which is a matter for them, not for this Inquiry. In any event, the adequacy of the investigation is not a fact relevant to the circumstances of the death. Similarly, it is beyond the scope of this Inquiry to make any recommendation or otherwise regarding the service of a prohibition notice, as Mr Conway invited me to do.

CONCLUSION

[79] Finally, I wish to thank parties' legal representatives for the manner in which the Inquiry was conducted and for their helpful submissions. I also again extend my condolences to the family of Mr Thompson for whom it cannot have been easy to listen to the tragic circumstances in which Mr Thompson was killed.