

SHERIFFDOM OF SOUTH STRATHCLYDE DUMFRIES & GALLOWAY AT
LANARK

DETERMINATION

by

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Advocate, Sheriff

In Inquiry into the circumstances of the death of

JAMES HOPE TELFER

In terms of section 6 of the Fatal Accidents and Sudden

Deaths Inquiry (Scotland) Act 1976

LANARK, 19

February 2009

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

1. In terms of section 6(1) (a) of the Act that James Hope Telfer, who was born on 10 May 1944, died at or about 15.00 on 29 December 2007 within Carlinside Farm, Nemphlar, Lanark as a result of having sustained injuries in an accident which occurred there whilst he was carrying out maintenance upon a JCB 3CX excavator registration number L706YSJ.

2. In terms of section 6(1) (b) of the Act, that the cause of death was a severe crushing head injury sustained as a result of an accident involving a mechanical digger which ran over the deceased. The cause of the accident was a failure to ensure that the parking brake on the JCB in question was and remained engaged throughout the maintenance operation and that the drive selection lever was in the neutral position. Neither precaution was taken, the engine was allowed to run whilst maintenance was carried out, a forward gear was engaged and as a result the vehicle overcame its restraint and moved forward, trapping Mr Telfer under the rear offside wheel and crushing him.
3. In terms of Section 6(1) (c) of the Act, that the accident and the death resulting therefrom might have been avoided had Mr Telfer taken steps to ensure that the parking brake of the JCB vehicle was engaged and remained engaged and that the shuttle selection lever was placed in neutral prior to positioning himself in the path of the rear offside wheel and undertaking repairs to the vehicle whilst the engine was running .

NOTE

James Hope Telfer (hereinafter referred to as “the deceased”) died on 29 December 2007 having sustained an accident in the course of his employment with Telfer Plant, 13 Hall Road, Nemphlar, Lanark as a plant operator.

On 29 December 2007 he attended at the farmyard at Carlingside Farm, Nemphlar, Lanark, where the JCB belonging to Telfer Plant and operated and maintained by him

was stored. It was his intention to carry out some routine maintenance work to the machine. The vehicle was a JCB 3CX excavator, registration number L706YSJ. It was the main capital asset of Telfer Plant and the deceased was the only employee of the firm and sole operator of the machine. He maintained the vehicle personally and had always done so. He was solely responsible for the system of working in respect thereof.

At or about 1.30 pm on said date, James Currie Jnr., who farms at Carlingside Farm, rounded the corner of a shed into the farmyard, smelled burning rubber and saw the JCB machine in the middle of the yard, some 30 feet from where it was normally parked. The engine was running but the machine was stationary, its front bucket having dug into the ground bringing it to a halt. The rear wheels were still spinning against the ground causing the smell of burning rubber. The deceased was lying on the ground some 15 feet behind the machine. He appeared to be dead and no pulse could be found.

Ambulance crew and police casualty surgeon arrived within 45 minutes and established and confirmed that he was dead. Time of death is formally recorded at 15.00 hours.

At post mortem he was found to have sustained the following injuries: multiple and extensive fractures to the skull, to the 1st to 7th left ribs in the mid calvicular line and adjacent to the sternum in respect of the 2nd, 3rd, 4th and 5th left ribs, to the 1st to 4th right ribs in the mid calvicular line and to the left clavicle; a severe deformity of the skull with fattening of the left parietal region from eyebrow to ear, associated with

disruption of the skin from which brain matter was exuding; a deep laceration extending through the left and right frontal lobes of the brain with extensive fragmentation of surrounding brain tissue and extensive subarachnoid haemorrhaging; multiple bruising, abrasions and parchmented skin extending from the left hand, up the left upper arm, the neck, left ear, left cheek bone, left side of the forehead across the right eyebrow, right forehead, right eyelid, both shoulders and chest, right elbow, and on left calf and left thigh. His injuries were entirely consistent with his head and chest having been crushed as the JCB ran over him. They were consistent with the circumstances in which he was found as described by witnesses. Post mortem also revealed narrowing of the left coronary artery at various point by up to 60% but no evidence that he had suffered a heart attack.

The deceased's head was crushed as a result of the JCB vehicle unexpectedly moving forward, trapping him its rear offside wheel and running over him. The JCB moved because the parking brake had not been engaged, the engine was running, 1,300 rpm had been selected by the manual throttle and the shuttle direction selection lever had been placed in a forward gear. The tractive effort from the torque converter had overcome the resistance offered from the front and back buckets being in contact with the ground allowing the JCB to motor forward.

The deceased had been engaged in maintenance work within the cab of the JCB. The access cover to the hydraulic control valves is situated in the floor of the cab and had been removed. The deceased is likely to have been engaged in work involving these valves. The presence of appropriate tools and hydraulic fluid and grease in the vicinity support this. To gain access to them, he would have required to work from

the offside of the cab, at a height above ground level. The steps providing access to the cab at that side were damaged and an alternative working platform would have been required. An empty plastic bucket was found next to his body which had also been crushed by the wheel of the JCB. The position of and damage to that bucket makes it probably that the deceased had been standing on it whilst working on the hydraulic control valves.

The hand throttle had been set to provide around 1,300rpm. The normal tick-over rate for this engine is approximately 700rpm. The deceased probably increased the number of revs manually in order to bleed the hydraulic system. This increase would have resulted in more power and torque being applied. Had the deceased applied the parking brake, the vehicle could not have moved. He did not. The JCB is provided with a safety feature which requires that the parking brake be applied before the ignition can start the engine. If left on, no drive is possible, regardless of the position of the shuttle direction lever. Moreover, the safety device provides for the sounding of an alarm buzzer when a gear other than neutral is selected, warning the operator to the fact that should he release the parking brake, drive has been selected and would produce tractive effort. In this vehicle that safety device had failed or been overcome so that the engine could be started without the parking brake being engaged and selection of a forward or reverse gear whilst the parking brake was on would not result in an alarm. A forward gear had been selected, despite there being no advantage accruing thereby to the task being carried out to the deceased, and, in the absence of an engaged parking brake, the only restraint on forward motion was the resistance offered from the front and rear buckets being in contact with the ground. That resistance could be easily overcome by the increased torque resulting from the

high setting of the hand throttle. As a result the machine would move forward. It did so, its rear offside large diameter tractor wheel coming into contact with and crushing the bucket placed in its path, and the deceased who had been standing thereon. It is unclear whether the ischaemic heart disease revealed at post mortem played any part in Mr Telfer's inability to avoid being run over. It played no part in the sequence of events resulting in the forward motion of the JCB.

This accident would not have occurred had the parking brake been engaged and the direction selection lever or the gearlever placed in neutral whilst the deceased was engaged in maintenance work within the cab of the vehicle as the engine was running. It is not clear from the evidence why neither precaution was taken by the deceased. It is good practice when leaving the cab to ensure that the parking brake is applied and that the drive selection lever is in the neutral position. Safety features in this machine which would have inhibited the starting of the JCB unless the parking brake had been applied, and if left on, would have inhibited the selection of a drive gear, were not operative. The deceased was solely responsible for the operating and maintenance of this machine and would therefore be familiar with the existence of this electrical fault. He chose to work on the machine with the engine running whilst the parking brake was disengaged. Even if the safety device had been in operation, it would not have functioned in these circumstances to alert the deceased that a drive gear had been engaged.