SHERIFFDOM OF LOTHIAN AND BORDERS AT EDINBURGH

2020 FAI 25

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DETERMINATION

ΒY

SHERIFF CHRISTOPHER DICKSON

UNDER THE INQUIRIES INTO FATAL ACCIDENTS AND SUDDEN DEATHS ETC (SCOTLAND) ACT 2016

into the death of

IAN ROBERT JOHN WHELLANS

Edinburgh, 2 June 2020

Determination

The sheriff, having considered the information presented at the inquiry, determines in

terms of section 26 of the Inquiries into Fatal Accidents and Sudden Deaths etc.

(Scotland) Act 2016 (hereinafter referred to as "the 2016 Act"):

1. In terms of section 26(2)(a) of the 2016 Act (when and where the death occurred):

That the late Ian Robert John Whellans, born 27 October 1992, died between 08.45 hours and 09.45 hours on 11 November 2018 at the burn flowing through the field known as "The Brae" at Leggars Farm, near Hume, Kelso.

2. In terms of section 26(2)(b) of the 2016 Act (when and where any accident resulting in death occurred):

That the accident resulting in death took place between 08.45 hours and 09.45 hours on 11 November 2018 at a short steep 37 degree incline approximately 8 metres away from the burn in the field known as "The Brae" at Leggars Farm, near Hume, Kelso.

3. In terms of section 26(2)(c) of the 2016 Act (the cause or causes of death):

That the cause of death was drowning as a consequence of being trapped beneath a quad bike.

4. In terms of section 26(2)(d) of the 2016 Act (the cause or causes of any accident resulting in death):

That the cause of the accident resulting in death was as follows:

- Mr Whellans driving a quad bike towing a box trailer, in the field known as
 "The Brae", diagonally up a short steep 37 degree incline, at an angle of
 approximately 45 degrees across the face of the incline; and
- (ii) the quad bike and box trailer, due to the severity of the short steep 37 degree incline and the angle driven across and up that incline, becoming unstable resulting in the quad bike overturning, rolling down the 37 degree incline into a nearby burn and resting upturned with Mr Whellans trapped beneath the quad bike.

5. In terms of section 26(2)(e) of the 2016 Act (any precautions which (i) could reasonably have been taken, and (ii) had they been taken, might realistically have resulted in death, or any accident resulting in death, being avoided):
There are no precautions which could reasonably have been taken that might

realistically have resulted in the death, or accident resulting in death, being avoided.

6. In terms of section 26(2)(f) of the 2016 Act (any defects in any system of working which contributed to the death or the accident resulting in death):

There were no defects in any system of working which contributed to the death or the accident resulting in death.

7. In terms of section 26(2)(g) of the 2016 Act (any other facts which are relevant to the circumstances of the death):

There are no other facts relevant to the circumstances of the death.

Recommendations

 In terms of section 26(1)(b) of the 2016 Act (recommendations (if any) as to (a) the taking of reasonable precautions, (b) the making of improvements to any system of working, (c) the introduction of a system of working, (d) the taking of any other steps, which might realistically prevent other deaths in similar circumstances):

There are no recommendations made.

NOTE

Introduction

[1] This inquiry was held into the death of Ian Robert John Whellans. Mr Whellans sadly passed away on 11 November 2018 in the field known as "The Bræ" at Leggars Farm, near Hume, Kelso, as a result of a quad bike accident. Mr Whellans was driving a quad bike towing a box trailer when he attempted to drive up and over a short steep 37 degree incline at an angle of approximately 45 degrees. Unfortunately, the quad bike became unstable, overturned and rolled down the 37 degree incline into a nearby burn. The quad bike came to rest upturned and sadly Mr Whellans was trapped underneath the quad bike, unable to escape, with his face submerged under the water in the burn. The death of Mr Whellans was reported to the Procurator Fiscal (hereinafter referred to as "the Crown") on 12 November 2018.

[2] A preliminary hearing was held on 11 March 2020. At that time the employer of Mr Whellans, JB Renwick & Son, were represented, however, they subsequently advised that whilst they would provide every assistance to the inquiry, they did not consider that they required to be represented at any future hearings. As a result, the only party to the inquiry was the Crown and there was not any evidence in dispute. A case management hearing took place by way of telephone conference call on 1 May 2020. By that time the country was in lockdown as a result of the Covid-19 pandemic. Given that the inquiry required to be progressed expeditiously, the fact that there was not any evidence, it was agreed,

at the case management hearing, that the inquiry would take place by telephone conference call on 21 May 2020 (this was subject to the full agreement of Mr Whellans' family). Mr Whellans' family subsequently supported that course of the action and the inquiry took place over a single day on 21 May 2020. Ms Swansey, Procurator Fiscal Depute, represented the Crown. Members of the public and the press were able to dial into the inquiry if they wished to do so.

[3] The Crown had prepared a substantial Notice to Admit which contained evidence that I was satisfied was uncontroversial. There were no objections to the Notice to Admit and I accepted the facts set out in the Notice to Admit. Also before the inquiry was the following information:

- Post mortem report by Dr SallyAnn Collis, Consultant Forensic Pathologist, dated 18 January 2019 (hereinafter referred to as "the pathologist's report");
- Toxicology report by Claire Parks, Forensic Toxicologist, dated 19 December 2018;
- Report by David Gostick, HM Inspector of Health and Safety specialising in mechanical engineering, as regards his examination of the quad bike and box trailer on 13 November 2018 (hereinafter referred to as "the Gostick report");
- Photographs of the location of the accident taken by the Police Service of Scotland (hereinafter referred to as "the police photographs");
- Report by Kerry Cringan, HM Inspector of Health and Safety, as regards her investigation of the circumstances of the accident (hereinafter referred to as "the HSE report");

- 6. Various plans / maps of Leggars Farm;
- 7. Photographs of the location of the accident and the quad bike taken by the Health and Safety Executive (the Health and Safety Executive are hereinafter referred to as "the HSE"); and
- 8. Witness statements of: (i) Robert Thomson McEwan, Paramedic; (ii) Cornel Marius Alexandru, Farm Worker; (iii) Bruce Jonathan Renwick, Partner of JB Renwick & Son; (iv) Pc 12611 Sarah Henderson, Police Constable; (v) Ross Stephen Wild, Tractorman; (vi) Richard Shannon Kane, Assistant Dairy Manager; (vii) Rikki James McLean, Farmhand; (viii) Garry Miller, HM Inspector of Health and Safety; and (ix) Kerry Ann Cringan, HM Inspector of Health and Safety.

[4] Findings in fact 1, 10 and 11 are based on the Notice to Admit. Finding in fact 2 is based on the HSE report. Finding in fact 3 and 4 is based on the Notice to Admit as read with a marked-up plan of the farm. Findings in fact 5 and 6 are based on the Notice to Admit and the HSE report. Findings in fact 7 and 14 are based on the Notice to Admit and the Gostick report. Findings in fact 8, 9 and 13 are based on the Notice to Admit, the HSE report, the police photographs and inference I drew therefrom. Finding in fact 12 is based on the Notice to Admit, the HSE report, the pathologist's report and the inferences I drew therefrom. Finding in fact 15 is based on the pathologist's report. Finding in fact 16 is based on the Notice to Admit and the pathologist's report. photographs and inferences I drew therefrom. Finally, finding in fact 18 is based on the pathologists report and the HSE report.

The legal framework

[5] This inquiry was held in terms of section 1 of the 2016 Act. Mr Whellans died in the course of his employment or occupation, and, therefore, the inquiry was a mandatory inquiry held in terms of section 2(3) of the 2016 Act. The inquiry was governed by the Act of Sederunt (Fatal Accident Inquiry Rules) 2017 (hereinafter "the 2017 Rules") and was an inquisitorial process. The Crown represented the public interest.

[6] The purpose of the inquiry was, in terms of section 1(3) of the 2016 Act, to establish the circumstances of the death of Mr Whellans and to consider what steps (if any) might be taken to prevent other deaths in similar circumstances. It was not the purpose of the inquiry to establish civil or criminal liability (see section 1(4) of the 2016 Act). The manner in which evidence is presented to an inquiry is not restricted. Information may be presented to an inquiry in any manner and the court is entitled to reach conclusions based on that information (see Rule 4.1 of the 2017 Rules).

[7] Section 26 of the 2016 Act sets out what must be determined by the inquiry.Section 26 of the 2016 Act is in the following terms:

"26 The sheriff's determination

(1) As soon as possible after the conclusion of the evidence and submissions in an inquiry, the sheriff must make a determination setting out —

(a) in relation to the death to which the inquiry relates, the sheriff's findings as to the circumstances mentioned in subsection (2), and

(b) such recommendations (if any) as to any of the matters mentioned in subsection (4) as the sheriff considers appropriate.

(2) The circumstances referred to in subsection (1)(a) are -

(a) when and where the death occurred,

(b) when and where any accident resulting in the death occurred,

(c) the cause or causes of the death,

(d) the cause or causes of any accident resulting in the death,

(e) any precautions which —

(i) could reasonably have been taken, and

(ii) had they been taken, might realistically have resulted in the death, or any accident resulting in the death, being avoided,

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

(g) any other facts which are relevant to the circumstances of the death.(3) For the purposes of subsection (2)(e) and (f), it does not matter whether it was foreseeable before the death or accident that the death or accident might occur—

(a) if the precautions were not taken, or

(b) as the case may be, as a result of the defects.

(4) The matters referred to in subsection (1)(b) are –

(a) the taking of reasonable precautions,

(b) the making of improvements to any system of working,

(c) the introduction of a system of working,

(d) the taking of any other steps,

which might realistically prevent other deaths in similar circumstances.

(5) A recommendation under subsection (1)(b) may (but need n ot) be addressed to -

(a) a participant in the inquiry,

(b) a body or office-holder appearing to the sheriff to have an interest in the prevention of deaths in similar circumstances.

(6) A determination is not admissible in evidence, and may not be founded on, in any judicial proceedings of any nature."

[8] In this Note I will, first, set out the summary of the facts that I have found

proved, second, set out a brief summary of the submissions made by the Crown and,

third, consider the circumstances identified in section 26(2)(a) to (g) of the 2016 Act and

explain, with reference to the information before the inquiry, the conclusions I have

reached.

Summary

- [9] I found the following facts admitted or proved:
 - That Ian Robert John Whellans was born on 27 October 1992 and resided near Kelso.
 - 2. That JB Renwick & Son is a family run partnership which operates a 700 acre dairy farm at Leggars Farm, near Hume, Kelso (hereinafter referred to as "the farm"). The partners of JB Renwick & Son are John Renwick, Janet Elizabeth Renwick and Bruce Jonathan Renwick. At the time of the accident on 11 November 2018: (i) JB Renwick & Son had six full-time employees who were all stockmen, one self-employed labourer and one agency worker; (ii) Mr Whellans was one of the six full-time stockmen and had a particular expertise in caring for young stock; and (iii) Bruce Renwick had responsibility for the daily running of the farm.
 - 3. That the steading of the farm is located next to the B6364 road. At the time of the accident on 11 November 2018, there were four northerly fields of the farm which were located: (i) to the west of the B6364; and (ii) to the south of Hume Castle. The four northerly fields could be entered from the B6364. A first gate from the B6364 led into a field holding pedigree sheep (hereinafter referred to as "the sheep field"). A second gate led from the sheep field to a field known as "The Marsh" (hereinafter referred to as "The Marsh field was used for holding cattle and contained a feeding trough for the cattle to feed from. A third gate led from The Marsh field to a grazing

field (hereinafter referred to as "the grazing field"). A fourth gate led from the grazing field to a field known as "The Brae" (hereinafter referred as "The Brae field"). Lambden Burn ran through both the grazing field and The Brae field and flowed from west to east. The sheep field, The Marsh field and the grazing field were in line with each other. The Brae field ran parallel to The Marsh field.

- 4. The Brae field was a sloping field which was fenced along the top of the slope. The slope faced The Marsh field. Lambden Burn (hereinafter referred to as "the burn") flowed through The Brae field and ran along the bottom of the slope, approximately parallel to the fence that ran along the top of the slope. A steep sided gully was positioned in the centre of The Brae field and ran down the slope towards the burn.
- 5. As part of his employment with JB Renwick & Son, Mr Whellans had cause to use an All-Terrain Vehicle (hereinafter referred to as an "ATV"). On 3 November 2017 Mr Whellans completed a two day LANTRA qualification in respect of sit astride ATVs. The training included: (i) all terrain use; (ii) loads and trailed equipment; (iii) ascending and traversing hills and the use of 'body active' riding techniques to maintain bike stability; and (iv) instruction to wear head protection while using an ATV. Bruce Renwick also repeatedly told his employees to wear a helmet when riding an ATV and provided two helmets for that purpose. Mr Whellans was due for ATV

refresher training after 5 years had elapsed from the date of the LANTRA course.

- 6. About 04.00 hours on 11 November 2018 Mr Whellans commenced work at the farm and carried out a number of duties. At 08.45 hours, on the same day, Mr Whellans was in the young stock area of the farm steading and spoke to Richard Kane, Assistant Diary Manager. Mr Whellans explained to Mr Kane that his intention was to finish preparing the beds for the young stock, feed the calves that were outside and then, as it was Remembrance Sunday, attend an Armistice Service. About 09.00 hours, on the same day, Rikki McLean, Farmhand, received a snapchat message from Mr Whellans showing a photograph of the cows feeding at the trough in The Marsh field. The photograph was taken from the top of the slope in The Brae field.
- 7. At some point between 08.45 hours and 09.30 hours on 11 November 2018 Mr Whellans got on an ATV (hereinafter referred to as the "quad bike"). The quad bike was a 4 wheeled Honda Fourtrax 4x4 manufactured in 2017 or 2018. The quad bike was 2,103 mm in length, 1,205mm in width and 1,174 mm in height. A small two wheeled box trailer was hitched to the rear of the quad bike. The box trailer was 1,600mm in length, 990mm in width and 900mm in height.
- 8. Mr Whellans placed bags of hard cattle feed in the box trailer and drove the quad bike and the box trailer to the northerly fields. He was not wearing any head protection. Mr Whellans made his way from the B6364, through the

sheep field to The Marsh field and placed the hard feed in the trough. Mr Whellans then, for unknown reasons, drove through the grazing field to The Brae field. The box trailer was still hitched to the quad bike and contained empty cattle feed bags. At some point whilst in The Brae field Mr Whellans drove a first loop of The Brae field. On the first loop Mr Whellans followed the west side of the steep sided gulley down the slope towards the burn (the burn ran at right angles to the steep sided gulley). At the foot of the slope and approximately 2.5 metres from burn Mr Whellans turned left onto a level section of The Brae field. The level section ran parallel to the burn and was approximately 2 metres in width. Mr Whellans drove west on this level section, parallel to the burn, for a few metres. Mr Whellans then turned left again and headed diagonally (away from the burn and back towards top of the slope), at an angle of approximately 45 degrees, up and over a short steep incline. The short steep incline ran the length of the level section, was approximately parallel to the level section and had a width of about 2.5 metres. The short steep incline varied between 12 and 37 degrees in angle and, at this point, had an angle of between 15 and 20 degrees. Mr Whellans managed to climb over the short steep 15 to 20 degree incline and back onto the main slope where he concluded the first loop by returning back to approximately the same position he had started the first loop.

9. Mr Whellans then commenced a second loop of The Brae field following the same route he had used in the first loop. Mr Whellans started the second

loop by again following the west side of the steep sided gulley down the slope towards to the burn. At the foot of the slope and approximately 2.5 metres from the burn Mr Whellans again turned left onto the level section of The Brae field which ran parallel to the burn. Mr Whellans again drove west on this level section, parallel to the burn, but travelled a few metres further along the level section than he had done on the first loop. Mr Whellans then, again, turned left, heading diagonally (away from the burn and back towards top of the slope) up the short steep incline at an angle of approximately 45 degrees. The short steep incline was, at this point, approximately 37 degrees. At this time the quad bike was in two wheel drive (with the rear wheels driving). As Mr Whellans reached the top of the short steep 37 degree incline the wheels on the quad bike began to lose traction and the rear wheels began to spin. At this location the quad bike became unstable, overturned and rolled approximately 8 metres down the short steep 37 degree incline into the burn. The burn at this point was between 680mm and 930mm in width and had a depth of between 100mm and 152mm. The quad bike came to rest upturned in the burn with its wheels facing the sky. The box trailer came to rest in an upright position on the bank immediately before the burn. Mr Whellans was trapped underneath the quad bike with the quad bike pressing on his chest. Mr Whellans' face was submerged underwater and he was unable to escape due to the weight of the quad bike.

- 10. At 09.30 hours on 11 November 2018 Bruce Renwick noted that the quad bike and box trailer were not parked in their normal place beside Mr Whellans' car and attempted to contact Mr Whellans by text. Having received no response, Bruce Renwick then called Mr Whellans' mobile telephone a number of times but received no answer. Bruce Renwick then enlisted the help of another farm worker, Cornel Marius Alexandru, to locate Mr Whellans.
- 11. About 09.45 hours on 11 November 2018 Bruce Renwick drove down to The Marsh field. Both the first gate by the B6364 and the second gate into The Marsh field were open. Bruce Renwick continued to the feeding trough and saw the quad bike upside down in the burn in The Brae field and the box trailer on the bank of the burn. Mr Whellans was underneath the quad bike and his face was submerged in the water. Mr Whellans was lifted onto the bank of the burn but showed no signs of life.
- 12. Mr Whellans, prior to being found by Bruce Renwick, passed away by drowning due to being trapped underneath the quad bike with his face submerged under the water of the burn. Emergency services were contacted at approximately 10.19 hours on 11 November 2018 and arrived on site at 10.32 hours. Mr Whellans was examined by paramedic Robert McEwan who pronounced life extinct at 10.38 hours.
- 13. Following the accident a number of visible tyre tracks were located in The Brae field. These tyre marks: (i) appeared to be of the same age;

(ii) were consistent with those that would be made by the quad bike and trailer; and (iii) were consistent with Mr Whellans undertaking the first loop described in finding in fact 8 and attempting the second loop described in finding in fact 9. In particular, there were tyre marks at an approximate 45 degree angle across and up the face of the short steep 37 degree incline. These tyre marks stopped at two tyre skid marks near to the top of the short steep 37 degree incline. These skid marks were made by the rear wheels of the quad bike and were in line with the location where the quad bike was found in the burn. The tyre marks did not continue over the top of the short steep 37 degree incline.

14. On 13 November 2018 the quad bike and box trailer were examined by David Gostick, HM Inspector of Health and Safety specialising in mechanical engineering. The quad bike had been lifted from the farm and was in the same condition as it had been found. The quad bike had no mechanical defects and was found to be in 3rd gear and in 2-wheel drive mode. The quad bike tyres were in good condition and appeared to be evenly inflated. The pressure in the tyres of the quad bike were as follows: (i) nearside rear, 4 psi; (ii) offside rear, 3.8 psi; (iii) offside front, greater than 5 psi (5 psi was the maximum range of the pressure gauge used); and (iv) nearside front, greater than 5 psi. The operator's manual of the quad bike stated that the specification tyre pressure was 4.4 psi. All four of the quad bike tyres were heavily caked in mud. The tow hitch of the quad bike was marked showing

that the maximum ball weight was 14 kg and that the maximum towing

weight was 385 kg. The trailer tyres were in good condition with the tyre

pressures being 8 psi on the offside and 10 psi on the nearside. The nose

weight of the trailer was 16 kg. Mr Gostick's opinion was a follows:

"4.1 Quadbikes are dangerous machines in that, if they are used incorrectly, they can very rapidly become unstable. Further guidance on the use of All Terrain Vehicles (ATVs) including quadbikes can be found in HSE guidance AIS33.

4.2 I identified no mechanical faults with the quadbike which contributed to the incident.

4.3 In my opinion, the slightly excessive front tyre pressures and trailer nose weight would have acted to reduce the grip of the front tyres of the ATV. This combined with the heavy coating of mud found on the tyres may have affected Mr Whellans' ability to steer the machine."

15. On 15 November 2018 Dr SallyAnn Collis, Consultant Forensic Pathologist,

conducted a post mortem examination of Mr Whellans at the Edinburgh City

Mortuary and prepared a report. The conclusion of Dr Collis, following said

examination, was as follows:

"Samples sent for toxicological analysis were negative for alcohol and drugs.

The circumstances would indicate that Ian Whellans became trapped underneath an overturned quad bike whilst a work. The quad bike was positioned on his chest and his face was noted to have been submerged underwater. The post mortem examination identified minor external injuries and features that would support a diagnosis of drowning, especially in the absence of any underlying natural disease or toxicological cause for the death. It is also possible that as well as the position of the quad bike preventing Ian Whellans from extricating himself from the water, it may have caused external compression of the chest (or even a sudden impact to the chest) potentially impairing respiratory and cardiac function. The possibility of a concussion (impact to the head) cannot be pathologically excluded. Therefore taking all of the findings into consideration it is my opinion that Ian Whellans death was due to drowning with entrapment beneath a quad bike."

16. The medical certificate of cause of death was completed as follows:

"1a. Drowning with entrapment beneath a quad bike"

- 17. The cause of the accident resulting in death was: (i) Mr Whellans driving the quad bike and box trailer diagonally up the short steep 37 degree incline, at an angle of approximately 45 degrees across the face of the incline; and (ii) the quad bike and box trailer, due to the severity of the short steep 37 degree incline and the angle driven up and across that incline, becoming unstable resulting in the quad bike overturning, rolling down the 37 degree incline into the nearby burn and resting upturned with Mr Whellans trapped beneath the quad bike. The slightly excessive tyre pressures of the front tyres of the quad bike, taken with the trailer nose weight would have acted to reduce the grip of the front tyres of the quad bike. The heavy coating of mud on the tyres of quad bike may have affected Mr Whellans' ability to steer the quad bike.
- 18. Mr Wheelans did not sustain any significant head injury as a result of the quad bike overturning. The wearing of head protection by Mr Whellans would not have prevented his death.

Submissions

[10] The Crown sought formal findings in respect of section 26(2)(a) to (c) of the 2016 Act. The findings sought were based on the uncontroversial evidence and my findings mirror those sought by the Crown.

[11] As regards section 26(2)(d) of the 2016 Act, the Crown noted that Mr Whellans had attended the two day LANTRA course and appeared to be competent in the use of the quad bike. The Crown submitted that the cause of the accident was as explained by Mr Miller, HM Inspector of Health and Safety, in his witness statement (the relevant part of Mr Miller's witness statement is set out at para 14 below). As regards section 26(2)(e) of the 2016 Act, the Crown contended, under reference to the pathologist's report, that whilst the pathologist could not exclude the possibility of a concussion, Mr Whellans did not suffer any head injury and it therefore could not be said with any certainty that the wearing of head protection would realistically have resulted in death being avoided. As regards section 26(2)(f) of the 2016 Act, the Crown noted that there was no business need for Mr Whellans to be driving over the short steep 37 degree incline in The Brae field and that the reasons why he did so were not known. The Crown submitted that there were not any defects in any system of working and contended that the accident occurred as a result of human error.

[12] The Crown did not seek any findings in relation to section 26(2)(g) of the 2016 Act and did not invite the inquiry to make any recommendations.

Discussion and conclusions

Section 26(2)(a) of the 2016 Act (when and where the death occurred)

[13] In this inquiry there was no dispute as regards when and where the death occurred. Mr Whellans was last seen in the young stock area of the farm steading on 11 November 2018 at about 08.45 hours by Richard Kane, Assistant Dairy Manager. About 09.00 hours, on the same day, Rikki McLean, Farmhand, received a snapchat message from Mr Whellans showing a photograph of the cows feeding at the trough in The Marsh field. That photograph was taken from the top of the slope in The Brae field and was likely to have been taken after Mr Whellans had deposited the hard feed in the trough in The Marsh field earlier that morning (although it was not clear whether there had been any delay in Mr Whellans sending the message and Mr McLean receiving the message). About 09.30 hours, on the same day, Bruce Renwick, texted and made numerous telephone calls to Mr Whellans mobile phone but received no response at all. Bruce Renwick then, with the assistance of Mr Alexandru, made a search for Mr Whellans and found him, at about 09.45 hours, trapped underneath the quad bike in the burn at The Brae field with his face submerged in the water of the burn. When Mr Whellans was lifted onto the bank of the burn he, unfortunately, showed no signs of life. In the circumstances I determine that Mr Whellans died between 08.45 hours and 09.45 hours on 11 November 2018 at the burn flowing through The Brae field.

Section 26(2)(b) of the 2016 Act (when and where any accident resulting in death occurred)

There was no dispute as regards when and where the accident resulting in death [14] occurred. For the reason set out in para 13 above, I consider that the accident resulting in death occurred between 08.45 hours and 09.45 hours on 11 November 2018. There were no eye witnesses to the accident but there was a considerable amount of evidence, which was carefully set out in the HSE report, which enabled me to infer how the accident had occurred. The tyre marks found in The Brae field were consistent with Mr Whellans driving a first loop of that field, following the route described in finding in fact 8, and then attempting a second loop, following the same approximate route as the first loop. The tyre marks from the second loop showed that Mr Whellans, after driving along the level section, parallel to the burn, turned left, at an approximate 45 degree angle and drove at that angle diagonally up the short steep 37 degree incline. The tyre marks then came to an end at tyre skid marks found near to the top of the short steep 37 degree incline. No tyre marks were found over the short steep 37 degree incline, which clearly suggested that the quad bike did not make it over the short steep 37 degree incline. When the quad bike was later examined it was found to be in 2-wheel drive and I accept the analysis of Gary Miller, HM Inspector of Health and Safety, that the skid marks were likely to have been caused by the rear wheels of the quad bike spinning. The quad bike was found in the burn about 8 metres away and in line with the said skid marks. The HSE had obtained the width and height of quad bike from the manufacturer and calculated that a full rotation of the quad bike would have taken

approximately 5 metres and then an additional half rotation would have taken another 2.5 metres. The HSE considered that the total distance of 7.5 metres to complete one and half rotations of the quad bike was consistent with the resting position of the quad bike being upturned and 8 metres away from the skid marks. Mr Miller considered the stability of the quad bike on the short steep 37 degree incline relative to the approximate 45 degree angle of ascent and gave the following opinion in his witness statement:

"...At this point the slope was measured at approximately 37 degrees. Just short of the top of the slope the tyre marks stopped at what appeared to be two tyre skid marks indicating that the quad bike wheels had been spinning at this point. These skid marks were directly opposite each other, on each of the tyre marks, indicating that they were made by tyres on the same driven axle of the bike. As the bike was found in 2-wheel drive this is consistent with the marks being been made by the wheels on the back axle. The position of these skid marks were directly up the slope from where Mr Whellans was found trapped under the overturned quad bike.

There were no marks on the ground to show what happened after the bike began to spin its wheels. The marks did not continue over the top of the bank onto the main slope so the bike either overturned at this point or very soon after Mr Whellans attempted to reverse back down the slope. A 37 degree slope being crossed at approximately 45 degrees would make the quad bike extremely unstable and liable to overturn down the slope. If the operator was able to keep their weight as far forward and uphill as possible they may manage to keep the centre of balance sufficiently uphill to prevent an overturn but if they sat square on the seat, or turned and caused their weight to move downhill, the bike would almost certainly overturn while standing still or moving. This situation would not be helped by the presence of the trailer being towed at the time. The position of Mr Whellans, the quad bike and the trailer after the accident, and the measured distance from the skid marks to where the bike was found upside down, are consistent with the bike having overturned at the top of the steep bank and rolled 1.5 times."

[15] In my view the HSE conducted a thorough investigation. The HSE identified the

following factors: (i) the tyre marks going up the short steep 37 degree incline at an

approximate angle of 45 degrees; (ii) the skid marks at the top of the short steep

37 degree incline; (iii) the fact that there were no tyre marks over the short steep 37 degree incline; and (iv) the distance between the skid marks and the resting position of the upturned quad bike being consistent with the quad bike having overturned and rotated one and half times. Mr Miller has then clearly explained, in passages from his statement set out above, how these factors led him to the opinion he has reached as regards the mechanics of the accident. In my opinion Mr Miller's analysis is logical and accords with common sense. In the circumstances I accept Mr Miller's analysis and consider that as Mr Whellans reached the top of the short steep 37 degree incline the wheels on the quad bike began to lose traction and the rear wheels began to spin. Thereafter, at that location, Mr Whellans may have: (i) attempted to carry on driving over the short steep 37 degree incline; or (ii) stopped the quad bike; or (ii) attempted to start reversing down the short steep 37 degree incline; but, unfortunately, the quad bike has, as a result of the severity of the short steep 37 degree incline and the approximate 45 degree angle it had been driven up and across that incline, become unstable and overturned. The quad bike then rolled down the 37 degree incline and, after rotating a likely one and half times, came to rest upturned in the burn with its wheels facing the sky. The photographs of the locus on the day of the accident show the box trailer detached from the quad bike in an upright position on the bank immediately before the burn next to the quad bike. The tow bar of the box trailer was facing the burn. It was not, however, clear whether the box trailer became detached when the quad bike was rotating or when Bruce Renwick and Mr Alexandru were in the process of freeing Mr Whellans and lifting him onto the bank.

[16] In all the circumstances I determine that the accident resulting in death took place between 08.45 hours and 09.45 hours on 11 November 2018 at the short steep 37 degree incline approximately 8 metres away from the burn in The Brae field.

Section 26(2)(c) of the 2016 Act (the cause or causes of death)

[17] There was no dispute as regards the cause or causes of death. Bruce Renwick found Mr Whellans trapped underneath the upturned quad bike in the burn. The quad bike was positioned on his chest and his face was unfortunately submerged under the burn (which was measured to be between 680mm and 930mm in width and only between 100 and 152 mm in depth at the location of the accident). The conclusion of Dr SallyAnn Collis, Consultant Forensic Pathologist, has been set out at finding in fact 15 above. Dr Collis carried out a post mortem examination of Mr Whellans on 15 November 2018. Dr Collis noted that the weight of the quad bike may have caused external compression of the chest (or even a sudden impact to the chest) which had the potential to impair respiratory and cardiac function. She also noted that the possibility of a concussion (impact to the head) could not be pathologically excluded. However, her opinion was that Mr Whellans' death was due to drowning with entrapment beneath a quad bike. The medical certificate of cause of death was therefore completed as follows:

"1a. Drowning with entrapment beneath a quad bike"

[18] In the circumstances I determined that the cause of death was as recorded in the medical certificate.

Section 26(2)(d) of the 2016 Act (the cause or causes of any accident resulting in death)

[19] I have set out, at para 14 and 15 above, how the information before the inquiry has led to the conclusion I have reached as regards the cause of the accident. I therefore determine that the cause of the accident resulting in death was a follows:

- (i) Mr Whellans driving a quad bike towing a box trailer, in The Brae field,
 diagonally up a short steep 37 degree incline, at an angle of approximately
 45 degrees across the face of the incline; and
- (ii) the quad bike and box trailer, due to the severity of the short steep 37 degree incline and the angle driven across and up that incline, becoming unstable resulting in the quad bike overturning, rolling down the 37 degree incline into the nearby burn and resting upturned with Mr Whellans trapped beneath the quad bike.

As was pointed out in the opinion reached by David Gostick, HM Inspector of Health and Safety (see finding in fact 14), the slightly excessive front tyre pressures of the quad bike and the trailer nose weight would have acted to reduce the grip of the front tyres of the quad bike. This reduction in grip, taken together with the heavy coating of mud on the tyres of the quad bike, may have affected Mr Whellans' ability to steer the quad bike. [20] There was nothing to suggest that Mr Whellans was not competent to drive a quad bike in the northerly fields in order to complete his duties. The short steep incline that ran parallel with both the burn and the level section of The Brae field was undoubtedly difficult terrain and it seems that Mr Whellans has, unfortunately, simply misjudged how to safely negotiate ascending that short steep incline at a location where it was at its most severe angle of approximately 37 degrees.

Section 26(2)(e) of the 2016 Act (any precautions which (i) could reasonably have been taken, and (ii) had they been taken, might realistically have resulted in death, or any accident resulting in death, being avoided)

[21] Section 6(1)(c) of the Fatal Accident and Sudden Deaths Inquiry (Scotland) Act 1976 (hereinafter referred to as "the 1976 Act)" was the predecessor to section 26(2)(e) of the 2016 Act and required the court to consider "the reasonable precautions, if any, whereby the death and any accident resulting in death might have been avoided". In Carmichael, *Sudden Deaths and Fatal Accident Inquiries*, 3rd Edition, at para 5-75, the author set out what I considered to be the correct approach to

section 6(1)(c) of the 1976 Act:

"... If the cause of an accident is known, then it may well be possible, even with what is now said to be the "wisdom of hindsight" to point to something which, if done, might have avoided or even prevented the death or accident resulting in death. ...The precise wording of section 6(1)(c) must be kept in mind. What is required is not a finding as to reasonable precautions whereby the death or accident resulting in death "would" have been avoided, but whereby the death or accident resulting in death "might" have been avoided ... Certainty that the accident or death would have been avoided by the reasonable precaution is not what is required. What is envisaged is not a "probability" but a real or lively possibility that the death might have been avoided by the reasonable precaution."

[22] The explanatory notes to the 2016 Act clearly envisaged a similar approach being taken to section 26(2)(e) of the 2016 Act. The explanatory notes state at para 72:

"72. Subsection (2)(e) requires the determination to set out any precautions which were not taken before the death which is the subject of the FAI, but that could reasonably have been taken and might realistically have prevented the death. The precautions that the sheriff identifies at this point relate to the death which is the subject of the FAI and might not be the same as those recommended to prevent other deaths in the future under subsection (4)(a). In subsection (2)(e)(i), "reasonably" relates to the reasonableness of taking the precautions rather than the foreseeability of the death or accident. A precaution might realistically have prevented a death if there is a real or likely possibility, rather than a remote chance, that it might have so done."

In my view the task of this inquiry is to consider, with the wisdom of hindsight, whether

there were any precautions which could reasonably have been taken which might

realistically have resulted in death, or any accident resulting in death, being avoided. I

consider that a precaution might realistically have resulted in the death, or any accident

resulting in death, being avoided, if there was a real or lively possibility that it might

have done so.

[23] In the present case Mr Whellans was not wearing any form head protection

when the accident occurred. Regulation 9 and 10 of the Personal Protective Equipment

at Work Regulations 1992 (hereinafter referred to as "the 1992 Regulations") provide:

"9. - Information, instruction and training

(1) Where an employer is required to ensure that personal protective equipment is provided to an employee, the employer shall also ensure that the employee is provided with such information, instruction and training as is adequate and appropriate to enable the employee to know —

(a) the risk or risks which the personal protective equipment will avoid or limit;

(b) the purpose for which and the manner in which personal protective equipment is to be used; and

(c) any action to be taken by the employee to ensure that the personal protective equipment remains in an efficient state, in efficient working order and in good repair as required by regulation 7(1) and shall ensure that such information is kept available to employees.

10. — Use of personal protective equipment
(1) Every employer shall take all reasonable steps to ensure that any personal protective equipment provided to his employees by virtue of regulation 4(1) is properly used.
(2) Every employee shall use any personal protective equipment provided to him by virtue of these Regulations in accordance both with any training in the use of the personal protective equipment concerned which has been received by

use of the personal protective equipment concerned which has been received by him and the instructions respecting that use which have been provided to him by virtue of regulation 9.

[...]″

Mr Whellans had attended the two day LANTRA training course in respect of sit astride ATVs in November 2017. That course made clear the importance of wearing head protection. JB Renwick & Son provided suitable head protection (in the form of helmets) for employees using the quad bike and all employees interviewed by the HSE knew where the helmets were stored and the importance of wearing head protection. Indeed Bruce Renwick repeatedly told his employees to wear head protection when riding a quad bike. However, the HSE investigation found that the employees, despite knowing the importance of wearing head protection, often chose, like many workers in the agricultural industry, not to do so. JB Renwick & Son did not have any disciplinary process for dealing with employees who failed to wear head protection and the HSE considered that this would have been a reasonable step to ensure that head protection was worn.

[24] JB Renwick & Son had not conducted a formal risk assessment as regards the risks to employees in using the quad bike (this was subsequently completed and identified that operatives of the quad bike should hold certificates of competence and wear head protection), but, in my opinion, they had put in place almost all appropriate

control measures by: (i) providing Mr Whellans with a modern quad bike that was free from mechanical defects; (ii) providing suitable head protection; (iii) arranging appropriate training courses in respect of the use of the quad bike; and (iv) giving clear instructions as regards the wearing of head protection when using a quad bike. I do, however, agree with the HSE that, in the circumstances described in paragraph 23 above, the introduction of a disciplinary process for the failure to wear head protection whilst using a quad bike would have been an appropriate step to take. However, the question for the inquiry, at this stage, is whether the wearing of head protection was a precaution which could reasonably have been taken that might realistically have resulted in Mr Whellans' death being avoided? Suitable head protection was available at the farm and therefore the wearing of head precaution was a precaution that could reasonably have been taken. However, in my view, it was not a precaution that might have realistically resulted in Mr Whellans' death being avoided. Whilst Dr Collis could not rule out the possibility of Mr Whellans suffering some sort of concussion, he did not sustain any significant head injury and Dr Collis concluded that Mr Whellans passed away from drowning as a result of being trapped under the quad bike with his face submerged in the water of the burn. In the circumstances and in absence of an eye witness to the accident, I do not consider that I could hold that there was lively possibility that the wearing of head protection would have resulted in Mr Whellans' death being avoided.

[25] In all the circumstances the inquiry did not identify any precaution which could reasonably have been taken which might realistically have resulted in the death, or the accident resulting in death, being avoided.

Section 26(2)(f) of the 2016 Act (any defects in any system of working which contributed to the death or the accident resulting in death)

[26] Section 6(1)(d) of the 1976 Act was the predecessor to section 26(2)(f) of the 2016 Act and required the court to consider "the defects, if any, in any system of working which contributed to the death or any accident resulting in death".
Sheriff Kearney in his determination in the death of Mildred Allan (an extract of which is set out in Carmichael at para 8-99) set out what I consider to be the correct approach to section 6(1)(d) of 1976 Act and also now section 26(2)(f) of the 2016 Act:

"In deciding whether to make any determination (under s6(1)(d)) as to defects, if any, in any system of working which contributed to death or any accident resulting in the death the court must, as a precondition to making such a recommendation, be satisfied that the defect in question did in fact cause or contribute to the death."

[27] In the present case Mr Whellans would not normally have required to enter The Brae field to complete his duties. It was not clear why Mr Whellans had entered The Brae field on 11 November 2018 but it seems that whilst in that field he took a photograph of the cows feeding from the trough in The Marsh field and sent it to Mr McLean via a snapchat message. It was not clear why Mr Whellans chose to drive up the short steep 37 degree incline in The Brae field and Bruce Renwick was unable to identify any business need for him to do so. It is possible that Mr Whellans was trying to chase a stray cow towards The Marsh field but the most likely explanation appears to be that Mr Whellans, having completed his duties, drove the loops in The Brae field for his own enjoyment. In my opinion the only possible defects in the system of working were: (i) the failure of employees, despite clear instruction, to wear head protection whilst using a quad bike; and (ii) the lack of a disciplinary process to address the failure to wear head protection whilst using a quad bike. I have considered the question of head protection at paragraphs 23 and 24 above and for the reasons given in those paragraphs I do not consider that the above possible defects in the system of working caused or contributed to the death or the accident resulting in death.

Section 26(2)(g) of the 2016 Act (any other facts which are relevant to the circumstances of the death)

[28] The inquiry did not identify any other factors which were relevant to the circumstances of the death.

Recommendations

Section 26(1)(b) of the 2016 Act (recommendations (if any) as to (a) the taking of reasonable precautions, (b) the making of improvements to any system of working, (c) the introduction of a system of working, (d) the taking of any other steps, which might realistically prevent other deaths in similar circumstances)

[29] The inquiry did not identify any matter which necessitated the making of a recommendation.

Postscript

[30] I am grateful to Ms Swansey for her careful preparation and presentation of the information to the inquiry. I am also grateful to Mr Whellans' family for agreeing that the inquiry may proceed by way of telephone conference call due to the current public health emergency.

[31] At the outset of the inquiry I extended my condolences to the family and friends of Mr Whellans. I was joined in those condolences by Ms Swansey. I wish to formally repeat my condolences to Mr Whellans' family and friends in this determination.