



IN THE CORONERS COURT
OF VICTORIA
AT MELBOURNE

Court Reference: COR 2017 4821

FINDING INTO DEATH WITHOUT INQUEST

Form 38 Rule 60(2)

Section 67 of the Coroners Act 2008

Findings of:	Paresa Antoniadis Spanos, Coroner
Deceased:	GW*
Date of birth:	25 January 1948
Date of death:	21 September 2017
Cause of death:	Chest and head injuries sustained in a quad bike incident (driver)
Place of death:	260 Straws Lane, Heskett, Victoria 3442

*At the family's request, in this published version of the finding, the deceased has been de-identified.

I, PARESA ANTONIADIS SPANOS, Coroner,
having investigated the death of GW without holding an inquest:
find that the identity of the deceased was GW
born on 25 January 1948
and that the death occurred on or about 21 September 2017
at 260 Straws Lane, Heskett, Victoria 3442

from:

I (a) CHEST AND HEAD INJURIES SUSTAINED IN A QUAD BIKE INCIDENT (DRIVER)

Pursuant to section 67(1) of the **Coroners Act 2008**, I make findings with respect to **the following circumstances:**

Background and personal circumstances

1. GW was a 69-year-old man who lived alone in Heskett at the time of his death. He lived on a thirty-acre property where he grew hydroponic tomatoes, daffodils and Christmas trees, and ran sheep and cattle in a joint venture with his neighbour Martin Nolan. He also worked as a maintenance man for Kilchurn Winery on a part time basis.
2. GW was widowed and is survived by his son Dylan and daughter Judith. At the time of his death, GW was in a relationship with Suzanne Ogden. He had a medical history of hypertension, mild cognitive impairment, alcohol use disorder, bilateral testicular hydroceles and a left epidymal cyst.

Circumstances immediately proximate to death

3. On 21 September 2017, GW worked with Mr Nolan at another property marking sheep. At about 3.00pm, they returned to GW's property and GW put the sheep in the driveway to clean up the grass. According to Mr Nolan, GW did this on a regular basis.
4. At about 3.30pm, Mr Nolan left GW's property. He returned to GW's property at about 5.30pm to pick up a couple of trestles that he had borrowed from GW. At that time, the sheep were still in the driveway. GW assisted Mr Nolan with loading the trestles onto his trailer and Mr Nolan left the property at about 5.40pm.
5. Ms Ogden spoke to GW on the telephone about ten minutes later at 5.50pm. He told her that he was going to put the sheep away and Ms Ogden could hear them in the background of the telephone call.
6. The following morning, 22 September 2017, Ms Ogden became concerned when GW did not call her, as was his custom. At about 9.45am, Ms Ogden telephoned GW's neighbour Sue Nolan and asked her to check on him.

7. Ms Nolan drove to GW's property shortly after the telephone call. She observed a quad bike tipped over on its side on the driveway of the property and found GW lying face down on the ground of the neighbouring paddock (at 260 Straws Lane), a short distance from the quad bike. It was apparent GW had been deceased for some time.
8. Ms Nolan immediately telephone emergency services and her husband. Mr Nolan attended and put the sheep back into the paddock before the arrival of emergency services.
9. Ambulance Victoria paramedics arrived shortly afterwards and confirmed GW was deceased.

Medical cause of death

10. Forensic pathologist, Dr Melanie Archer of the Victorian Institute of Forensic Medicine (VIFM), reviewed the circumstances of the death as reported by police to the coroner, post-mortem computer assisted tomography scans of the whole body (PMCT), the VIFM contact log, scene photographs and medical records of Campaspe Family Practice and performed an autopsy on GW's body.
11. Anatomical findings included head trauma, chest and abdomen injuries, severe coronary artery atherosclerosis, focal prostate adenocarcinoma, cavernous haemangioma of the liver and possible pituitary microadenoma, as well as ischaemic heart disease (but no evidence of myocardial infarction).
12. Dr Archer noted the chest trauma would have resulted in significant respiratory compromise and blood loss. Her findings indicated GW's death was not instantaneous and were consistent with GW having moved a short distance from the bike prior to his death. However, there was no evidence of inflammation associated with his chest or head injuries, indicating that GW had not survived for a significant period after sustaining his injuries.
13. Routine toxicological analysis of post mortem specimens identified ethanol (alcohol) at a blood concentration of 0.11 g/100mL (0.12 g/100mL in vitreous). Dr Archer commented that this degree of alcohol intoxication would likely have impaired GW's ability to operate a quad bike safely.
14. Based on the autopsy findings and the circumstances of GW's death, Dr Archer advised it was reasonable to attribute his death to *chest and head injuries sustained in a quad bike incident (driver)*.

Coronial investigation

15. Upon attending the site of the incident, Victoria Police noted there was a straight section of the main gravel driveway on the property. The quad bike was on its side in the driveway, and GW's body was found inside an adjacent paddock, approximately 11 metres from the upturned quad bike. Police inspected the area around the incident and identified tyre marks in the gravel which indicated the quad bike had been travelling south when it rolled over. Police ascertained that GW had not been wearing a helmet at the time of the incident and the quad bike was not fitted with roll over protection.
16. Police observed GW had injuries on his head and torso consistent with a quad bike accident. They located a piece of flannelette cloth from GW's shirt caught in the barbed wire fence between his body and the quad bike and a lower denture next to the fence, in close proximity to the flannelette cloth.
17. Detective Leading Senior Constable (DSC) Wade Andrews who attended the collision scene was the nominated Coroner's investigator. At my direction, DSC Andrews investigated the circumstances surrounding GW's death, including the preparation of the coronial brief. This finding draws on the totality of the material the product of the coronial investigation of GW's death.
18. DSC Andrews concluded that it appeared GW had attempted to walk to his neighbour's house to seek assistance, heading in a westerly direction and climbing over a barbed wire fence before he collapsed a short distance from the upturned quad bike.

Worksafe investigation

19. WorkSafe investigators also attended and conducted a thorough examination of the incident scene. Inspector Ross Clayton observed that a Honda TRX300 quad bike was located on its side along the driveway of GW's property. The keys were in the ignition and there were skid marks present on the gravel driveway leading up to the quad bike. He observed there were small tools scattered along the roadway leading up to the quad bike and soil embedded in the rim of the front right-hand tyre on the quad bike. There were marks and indentations in the soil on the edge of the gravel driveway consistent with the shape of the right-hand front wheel of the quad bike and observed fresh sheep manure scattered around the general area.
20. Inspector Clayton conducted a functionality assessment of the steering and braking system of the quad bike. He established the front and rear brakes, as well as the steering, of the quad bike were in working condition. According to Inspector Clayton, the quad bike was an older model and appeared to be '*a bit rough*' but functioned as intended. He noted the quad bike

was not fitted with a roll over protective device and he did not locate a safety helmet at the incident scene.

21. Mr Nolan told investigators that he owned the Honda TRX300 quad bike, but that the quad bike was mostly used at GW's property. He said that GW loved to ride the quad bike and would use it when rounding up stock. He stated that '*G was always careful when he rode the quad bike*' and that neither of them would use the quad bike on ground that was too hilly.
22. Investigator Clayton obtained an expert report from Principal Forensic Engineer, Dr Shane Richardson of Delta-V Experts. Dr Richardson attended the incident scene, surveyed the area and developed and evaluated a computer model of the incident circumstances. Based on his examination of the scene and computer models of the incident circumstances, Dr Richardson concluded that the quadbike rolled at 37 km/hr to 42 km/hr when it was steered to the right and GW lost directional control of the quadbike. He found that GW was ejected from the quad bike and the quadbike had rolled over him.
23. Dr Richardson concluded that if the quad bike had been fitted with a crush protection device, it most likely would not have rolled over GW because the crush protection device would have changed the rolling path of the quad bike. He also considered that if GW had also worn a helmet, he would have most likely survived the rollover.
24. WorkSafe informed me that they did not commence a prosecution against any party in relation to their investigation due to insufficient evidence.

Findings and conclusion

25. The weight of the evidence indicates that GW was working alone, using a quad bike to round up sheep on the driveway of his property, when for an unknown reason, he lost control of the quad bike. This resulted in the quad bike rolling over a number of times and causing fatal injuries to GW's head and chest.
26. The quad bike was not fitted with a crush protection device, and GW was not wearing a safety helmet at the time of the incident. It appears that following the roll over, GW attempted to walk to his neighbour's house to seek assistance but collapsed a short distance from the upturned quad bike, where he died a short time later.
27. Given the timing of Ms Ogden's telephone conversation with GW about his intention to put the sheep away, and the findings of Dr Archer in her examination of GW's body, I conclude that it is likely GW died on 21 September 2017.

28. I find that GW died on 21 September 2017 at 260 Straws Lane, Heskett and that the cause of his death was chest and head injuries sustained in a quad bike incident in which he was the driver.

Comments

Pursuant to section 67(3) of the *Coroners Act 2008*, I make the following comments on matters connected with GW's death, including matters relating to public health and safety or the administration of justice:

29. Quad bike related deaths, particularly in the agricultural industry, have long been a concern to coroners throughout Australia.
30. In Victoria, Coroner John Olle completed a cluster inquest finding into seven quad bike deaths in April 2009.¹ Coroner Olle made recommendations that WorkSafe Authorities in Victoria and Tasmania work with the Consumer Affairs Authorities to ensure that quad bikes are not sold to or operated by persons who have not completed a certified training program, and recommended that the WorkSafe Authorities investigate and develop, in conjunction with quad bike distributors and FarmSafe, a Certified Training Program for quad bike use.
31. Quad bike related deaths have continued to be investigated by coroners in Victoria, with the Coroners Prevention Unit² (CPU) identifying 37 quad bike deaths in Victoria in the period between January 2000 and March 2015.
32. In the past four years, there have been three major inquests into deaths arising from quad bike or side by side (SSV) vehicles in other jurisdictions in Australia.³ The recommendations arising from these inquests have included:
- a. Development of an Australian standard relating to the design, manufacture, importation and supply of quad bikes;
 - b. Mandatory certification or licensing for quad bike use, with subsidised training packages;

¹ Joint inquest in Victoria conducted by Coroner John Olle, findings delivered 17 April 2009 re death of Patricia Murray Simson Case No 3679/02 and others.

² The Coroners Prevention Unit (CPU) was established in 2008 to strengthen the prevention role of the coroner. The unit assists the Coroner with research in matters related to public health and safety and in relation to the formulation of prevention recommendations.

³ Inquest into the deaths of Donald Eveleigh, Angela Stackman, FW, ML, Anthony Waldron, Colin Reid, Bradley Jackson, Robert Beamish and LE, State Coroner's Court of New South Wales, 2009/467571; 2011/387257, 2012/137664, 2012/216240, 2013/119793, 2013/293977, 2014/193403, 2014/236747, 2015/18733; Inquest into nine deaths caused by quad bike accidents, 2015 0803, Coroners Court of Queensland; Inquest into the quad bike related deaths of Heather Dawn Richardson, Jan Severin Jensen, Kendall Russell Bonney, Vicki Mavis Percy, Jay Randall Forsyth, Jacob Graham Green and Roger Maxwell Lerner, 2017 329, 330, 331, 332, 333, 334 and 335, Tasmania Magistrates Court (Coronial Division).

- c. Endorsing the use of helmets at all times when a quad bike is in use;
 - d. Implementation of a safety rating system for quad bikes in line with the University of New South Wales Transport and Road Safety Quad Bike Performance Program;
 - e. Prohibiting children under the age of 16 from operating adult sized quad bikes; and
 - f. Implementing a public media campaign and awareness campaign about the risks of using quad bikes in rural activities.
33. Victorian authorities have already introduced a range of measures designed to improve quad bike safety and prevent fatalities.
34. WorkSafe Victoria have developed a quad bike safety application to assist users in identifying hazards and controlling risks related to quad bike use in the workplace, with helpful information on pre-start checks, hazard identification and training, the risk of rollover, inspection and maintenance, helmets, loads and tyres, contractors and the quad bike safety rebate. The application was designed so that the material could be viewed offline in areas where there is limited line speed.⁴
35. In October 2016, WorkSafe Victoria introduced a quad bike safety rebate scheme. Under the scheme, farmers can apply for a rebate for the purchase of an alternative vehicle or operator protective device (OPD) for existing quad bikes. OPDs (also referred to as crush protection devices) are an engineered device that may be fitted to a quad bike to minimise the risk of a person being trapped beneath a quad bike in the event of a rollover. In conjunction with the safety scheme, the WorkSafe Victoria launched a communication campaign across regional Victoria attending regional field days to engage directly with farming communities and using television, print and social media to raise awareness of the rebate scheme.⁵
36. WorkSafe Victoria also published a handbook for workplaces in March 2018, ‘Quad bikes on farms’ which provides information on occupational health and safety requirements, risk factors, vehicle selections, farm safety systems, using a quad bike, quad bike maintenance and a quad bike operation checklist.⁶
37. At the same time, WorkSafe Victoria published an information sheet ‘Quad bikes – Operators wearing helmets’ which sets out the risk of head injuries for quad bike operators without a

⁴ WorkSafe Victoria, ‘Quad bike safety app’ (<https://www.worksafe.vic.gov.au/quad-bike-safety-app>, accessed 11 June 2019).

⁵ WorkSafe Victoria, ‘Quad bike safety rebate questions answered’ (23 August 2016)

(<https://www.worksafe.vic.gov.au/news/2016-08/quad-bike-safety-rebate-questions-answered>, accessed 11 June 2019).

⁶ WorkSafe Victoria, *A handbook for workplaces: Quadbikes on farms*, Edition 3 (March 2018)

(<https://content.api.worksafe.vic.gov.au/sites/default/files/2018-06/ISBN-quad-bikes-on-farms-handbook-edition-3-rev201804-2018-03.PDF>, accessed 11 June 2019).

helmet if there is a collision or rollover or if they are ejected from the vehicle. The information sheet provides information on the approved helmets for use on quad bikes, helmet fit and maintenance and quad bike safety.⁷

38. Five members of the Federal Chamber of Automotive Industries, BRP, Honda, Kawasaki, Suzuki and Yamaha have developed a website atvsafety.com.au to assist all-terrain vehicle (ATV) users (including quad bike users) to make informed decisions about the use of, and modifications and additions to their vehicles. The website provides safety information, including ‘5 Star ATV Safety’ videos covering the right gear to ride, controls, maintenance and posture, the basis of safe riding, advanced riding techniques, carrying loads and towing, loading and transporting ATVs and taking responsibility for safety.⁸
39. At a federal level, Safe Work Australia published a ‘General Guide for Managing the Risks of Machinery in Rural Workplaces’ in November 2017, which includes an information sheet on ‘Quad Bikes in Rural Workplaces’ to provide education and awareness of the risks of quad bikes, safer alternatives, and advice on conducting a risk assessment, isolating quad bike related hazards and installing crush protection devices. Safe Work Australia provide advice to users to always wear an appropriate and properly fitted helmet regardless of the operating environment.⁹
40. Similar information resources have been published by Farmsafe Australia¹⁰ and Product Safety Australia, a website run by the Australian Competition and Consumer Commission¹¹.
41. In 2017, the ACCC commenced an investigation into quad bike safety (the ‘Quad Bikes Taskforce’) which included consideration of the merits of implementing a safety standard for quad bikes under the Australian Consumer law.¹² The ACCC undertook extensive consultation with technical experts, farmers, the recreational and tourism sector, consumer groups, health and medical experts, and industry and government bodies.
42. The ACCC identified that quad bikes had been responsible for 114 deaths in Australia from 2011 to October 2017, with 25 deaths in Victoria between 1 January 2011 and 16 October

⁷ WorkSafe Victoria, *A health and safety solution: Quad bikes – Operators wearing helmets*, Edition 2 (March 2018) (<https://content.api.worksafe.vic.gov.au/sites/default/files/2018-06/ISBN-Quad-bikes-operators-wearing-helmets-factsheet-v3-2018-03.pdf>, accessed 11 June 2019).

⁸ ATV Safety, (<http://www.atvsafety.com.au>, accessed 2 July 2019).

⁹ Safe Work Australia, *General Guide for Managing the Risks of Machinery in Rural Workplaces* (November 2017).

¹⁰ FarmSafe Australia, Quad and Vehicle Safety (<https://www.farmsafe.org.au/Quad-and-Vehicle-Safety>, accessed 11 June 2019).

¹¹ Product Safety Australia, Quad bikes (<https://www.productsafety.gov.au/products/transport/quad-bikes>, accessed 2 July 2019).

¹² Australian Competition & Consumer Commission, ‘*Quad Bike Safety Issues Paper*’ (13 November 2017).

2017.¹³ Almost half of the deaths occurred in the context of employment or work (47%).¹⁴ The 54 workers who died were almost exclusively employed in agriculture or rural based businesses and mostly occurred on a rural property. More than half of the deaths associated with quad bikes were the result of a rollover (the overturning of the vehicle) and about 90% of rollover deaths occurred on farms.¹⁵

43. In February 2019, the ACCC provided their Final Recommendation to the Minister together with a recommended Australian Consumer Goods (Quad Bikes) Safety Standard to the Assistant Treasurer.¹⁶ The ACCC noted that the majority of stakeholders supported a new mandatory safety standard and recommended that:
- a. all quad bikes supplied in Australia should meet the United States or European Standards, affix a rollover warning label to the vehicle, include rollover safety information in the owner's manual and provide consumers with vehicle stability information at the point of sale;
 - b. general-use model quad bikes should have operator protection devices integrated into the design or fitted to the vehicles; and
 - c. general-use model quad bikes should meet minimum stability requirements before being supplied in Australia.¹⁷
44. The ACCC also recommended a holistic approach to mitigate the safety risks of quad bikes at a state and territory level, including measures to increase the use of helmets and other personal protection equipment, education campaigns to encourage seatbelt use on SSVs, prohibiting children from riding adult quad bikes, prohibiting passengers on single seat quad bikes, a continuation of current quad bike safety rebates and education initiatives and improvements to quad bike incident data collection. The ACCC also supported the use of tests to improve quad bike dynamic handling, a five-star safety rating system and options to protect children from the risks posed by youth and adult quad bikes.¹⁸
45. On 6 April 2019, the Australian Government confirmed it was committed to increasing quad bike safety and invited stakeholders to review and comment on the ACCC's recommended

¹³ Ibid, 8, 12.

¹⁴ Ibid, 13.

¹⁵ Ibid, 14.

¹⁶ Australian Competition and Consumer Commission, 'Quad bike safety; Final Recommendation to the Minister' (February 2019); Exposure Draft, *Consumer Goods (Quad Bikes) Safety Standard 2019* (https://consultation.accc.gov.au/product-safety/quad-bike-safety-standard-exposure-draft/supporting_documents/Exposure%20Draft.pdf, accessed 2 July 2019).

¹⁷ Australian Competition and Consumer Commission, 'Quad bike safety; Final Recommendation to the Minister' (February 2019), 5, 43.

¹⁸ Ibid, 6.

safety standard by 10 June 2019.¹⁹ Stakeholders were also invited to provide comment on the role State Governments should play, including in the enforcing of the wearing of helmets and safety gear and prohibition on children riding adult quad bikes. According to the ACCC, submissions are to be used to inform a recommendation and advice to the Minister on implementing a mandatory safety standard for quad bikes.²⁰

46. I commend the efforts taken by industry bodies and state and federal authorities to implement a range of measures designed to raise awareness of the dangers of quad bikes, improve quad bike safety and prevent fatalities.
47. The ACCC's comprehensive report highlights how such safety measures can significantly reduce the frequency and severity of injuries, particularly from rollover incidents, as occurred in GW's case. I support the proposed recommendations as set out in the ACCC's Final Recommendation to the Minister.
48. In view of the comprehensive safety recommendations made by the ACCC, I do not propose to make any other recommendations, but will distribute this finding to relevant authorities to highlight the continuing danger of quad bikes.

Publication

Pursuant to section 73(1A) of the Act, I order that this finding and comments be published on the Internet in accordance with the rules.

Distribution of finding

I direct that a copy of this finding be provided to the following:

The family of GW

Ms Suzanne Ogden

Safe Work Australia

WorkSafe Victoria

FarmSafe Australia

Australian Competition and Consumer Commission

¹⁹ Australian Government, The Treasury, 'Release of Quad Bike safety recommendation' Media Release dated 6 April 2019.

²⁰ Australian Competition and Consumer Commission, 'Quad bike safety standard exposure draft' Consultation Hub, (<https://consultation.accc.gov.au/product-safety/quad-bike-safety-standard-exposure-draft/>, accessed 2 July 2019).

The Hon Michael Sukkar MP, Assistant Treasurer

Detective Leading Senior Constable Wade Andrews, Coronial Investigator

Signature:

A handwritten signature in black ink, appearing to read 'P. Spanos', with a long horizontal flourish extending to the right.

PARESA ANTONIADIS SPANOS
CORONER

Date: 30 July 2019

CC: Manager, Coroners Prevention Unit