QUEENSLAND COURTS

OFFICE OF THE STATE CORONER

Non-inquest findings of the investigation into the death of a motor racing participant

CITATION:	**Investigation into the death of a motor racing participant**
TITLE OF COURT:	Coroners Court
JURISDICTION:	Brisbane
FILE NO(s):	2013/722
DELIVERED ON:	1 May 2014
DELIVERED AT:	Brisbane
FINDINGS OF:	John Lock, Deputy State Coroner
CATCHWORDS:	Coroners: Motor racing competition, recommendations for mandatory use of Forward Head Restraints.

Introduction

C was a male person aged 66.

On 25 February 2013, C was competing in an amateur motor vehicle race at Lakeside Raceway. He was involved in a traffic crash when his vehicle collided with the tyre barrier. It has been estimated he was travelling at approximately 72 to 96 km/h when he hit the barrier.

As a result he sustained numerous injuries. CPR was performed on site and he regained consciousness with spontaneous circulation. He was transported to the Royal Brisbane and Women's Hospital. However, on 26 February 2013 a decision was made that his injuries were unsurvivable. His family consented to organ donation which was approved by the coroner.

Autopsy results

An autopsy examination concluded the cause of death was due to multiple injuries. An external examination with CT scans and a medical chart review noted the major injuries were subarachnoid haemorrhage, pneumothorax associated with multiple rib fractures and sternal fractures, as well as a major upper cervical injury at C2.

Forensic Crash Unit (FCU) investigation

The FCU noted that C was a very competent race car driver. He starting racing from the age of 16 and had competed in many racing events from that age.

The motor vehicle in question was an Alfa Romeo vehicle that he had owned for one year. He had not carried out any major modifications other than tuning and a possible suspension setup.

Lakeside Raceway has held motor racing events since 1961. The track is safety audited prior to each race meet for any defects that may be a safety issue. On this day the audit was carried out by officials and no issues were found. The FCU noted that the weather was fine and the track surface was dry, in good condition and free of any damage or debris that was likely to have contributed to the crash.

At the time of the crash C was in the last race of the day and was in lap five.

He had completed a left-hand corner (Hungry Corner) and was setting the car up for a right hand corner when the car's accelerator pedal has jammed down on the accelerator stop. This caused the carburettors to lock fully open making the engine over rev.

He then applied the brakes in an effort to apply resistance through the tyres, differential and gearbox to the track surface in an effort to stall the engine. The decision to apply brakes and not the kill switch or ignition switch to stop the engine may have been a contributing factor in the crash.

This action was not successful and the vehicle has continued to the edge of the sealed road and vaulted onto the grass run-off area and became airborne.

The clutch may have been applied or the gear has been jolted out of gear when the car landed on the grass area.

C was then flung forward violently on impact and his head and neck have continued in a whip like action after the slack in the race harness was taken up. He suffered critical injuries including neck and head injuries.

The FCU considered that the neck and head injuries suffered by C may have been prevented if he had been wearing a head and neck restraint device.

Recommendations by FCU

Since the crash in February 2013, the operators of Lakeside Raceway have inserted another tyre barrier 60 m in length and 4 m out from the earth/tyre barrier as a way of arresting race cars and overrun the track prior to hitting the earth/tyre barrier.

The FCU stated research shows that since head and neck restraints were made mandatory in some racing competitions in America it has helped prevent lower head and neck injuries and fatalities caused by these injuries.

Research has shown head and neck restraints in Australia are mandatory at some national and international competitions and at other race categories they are recommended or highly recommended.

The FCU has requested the coroner consider a recommendation that head and neck restraint devices be mandatory for any driver and passenger involved in a timed speed event which has a mass grid start.

It was further recommended that the mandatory use of head and neck restraints be phased in over a suggested period of time of not more than three years to enable participants to acquire these devices and to fit them.

Response of CAMS

The Deputy State Coroner approached the Confederation of Australian Motorsport Limited (CAMS) regarding the recommendation for mandatory use of head and neck restraints.

On 12 March 2014, the CAMS Board resolved to introduce regulations which mandate the use of forward head restraints in accordance with F1A Standard 8858-2010, where helmets are required by regulation, as follows:

- From 1 July 2014 all international and national circuit races, road events and off road events, except where specifically exempted due to the type of vehicle.

- From 1 January 2015 all circuit races, road events and off road events, except where specifically exempted due to the type of vehicle.

- CAMS will conduct an assessment to monitor this introduction and to determine its application to other disciplines and lower-level competition.

In the meantime competitors are reminded that the use of these restraints remains highly recommended.

Conclusions and Comments

The Confederation of Australian Motor Sport's decision to carefully consider and resolve to introduce regulations, which mandate the use of forward head restraints, is welcomed.

The circumstances of how C died have been investigated and are known. Recommendations have been suggested by the FCU, which have been adopted by CAMS. No other recommendations other than those that are currently being implemented are likely to be made. In those circumstances the holding of an inquest is considered to be unnecessary.

As the acceptance and implementation of these recommendations is considered to be in the public interest these findings will be published pursuant to section 46 A of the Coroners Act.

John Lock
Deputy State Coroner
Brisbane
1 May 2014