



CORONERS COURT

FINDINGS OF INVESTIGATION

CITATION: **Non-inquest findings into the death of Grant Allan Burrell**

TITLE OF COURT: Coroners Court

JURISDICTION: Brisbane

DATE: 16 February 2017

FILE NO(s): 2015/4392

FINDINGS OF: Christine Clements, Brisbane Coroner

CATCHWORDS: CORONERS: Investigation, mustering, Sport Copter single seater gyroplane, pilot inexperience

Grant Allan Burrell lived at 174 Parry Street, Charleville in Queensland. He died on 7 November 2015 at Tyrone Station, Adavale Road, Charleville in Queensland. Mr Burrell was flying a Sport Copter single seater gyroplane when he crashed, sustaining fatal injuries. He died due to massive head injury, pelvic and lower limb injuries sustained in the gyroplane crash. Grant Burrell was 35 years of age at the time of his death.

Grant Burrell was working for Graeme Hubbard on one of Mr Hubbard's properties at the time of his death. The circumstances were investigated by the Forensic Crash Unit by Sergeant Irvine.

The incident occurred at about 9.15am on Saturday morning, 7 November 2015. Grant Burrell was using his 2010 build G-246 model Sport Copter single seater gyroplane to muster cattle on Tyrone Station. The aircraft was travelling at low altitude and relatively low speed before it clipped a dead tree with its left wing whilst attempting to make a sweeping left hand turn. The aircraft fell to the ground nose first before flipping. Mr Burrell was propelled forward out of the aircraft and landed on his back. He was killed instantly due to major injuries to his head, neck and legs. His helmet was dislodged during impact.

An investigator from the Australian Sports Rotorcraft Association (ASRA) attended the scene together with police officers to inspect and investigate the circumstances of the fatality.

The underlying essential element leading to the fatality was considered to be pilot inexperience.

Witnesses

Corey Back was employed as a property manager for the preceding 30 months at Gleneden, Charleville. He has been working in the beef industry for some 15 years and over that period mustered cattle on countless occasions. He does not fly but has witnessed aircraft being used to help muster cattle.

On 7 November he was working at Tyrone Station where he had some of his cattle agisted. The station is approximately 70 kilometres west of Charleville.

His friend Sam Fromm also had some of his cattle agisted on the station.

They both intended mustering their cattle to remove weaners from cows.

They were aware Grant Burrell was helping muster the cattle using his gyrocopter. It was his job to spot the cattle and then relay information by two-way radio to inform ground crew of the location of the cattle.

It was the first occasion that Corey Back had been involved with a muster when Grant was flying. Grant was helping them out and was not getting paid on this occasion. It was thought that he had only two or three months experience having recently purchased the gyrocopter in Mackay.

Mr Back was aware he purchased the copter and then travelled to Wondai to obtain his licence.

He recalled Grant arrived at Tyrone Station just before 8 that morning having flown there in his gyrocopter from Etona Station. The flight would have taken one hour and 40 minutes.

The aircraft was then refilled with premium unleaded fuel. Sam Fromm had picked up the fuel that morning from the Gull Service Station in Charleville.

Mustering commenced in the triangle paddock for around 10-15 minutes, directing cattle into the laneway in between two fences heading the cattle towards the cattle yards.

They then moved on to the middle paddock for about half an hour to 40 minutes. The three men were in contact with each other via two-way radio. Corey recalled Grant was flying slightly behind his position in the middle of the paddock when he spoke over the two-way radio asking Grant if he had seen any cattle behind Corey's position. There was no response. Corey waited for about 30 seconds and then heard the sound of the aircraft crashing into timber. He then heard the gyrocopter's engine running continuously. There was no sound of backfire or any indication of mechanical failure prior to the sound of impact.

He then heard Sam Fromm on the two-way indicating that Grant Burrell was down. It took Corey Back approximately three or four minutes to locate Grant lying on the ground in front of the gyrocopter. Sam arrived very shortly after. They checked Grant's pulse but could not find one. They obtained lining from the gyrocopter seat to place over Grant's body but did not move him.

Sam returned to the house at Tyrone to call emergency services while Corey Back investigated access for vehicles to the crash site before returning to the crash site.

Corey Back's recollection was that Grant was flying fairly low, about 6-10 metres above the tops of the trees as an estimate. He thinks Grant would not have been flying above 500 feet. He had not noticed anything out of order with Grant's flying that morning.

Samuel Fromm first met Grant Burrell about three years earlier through church camps.

Grant had previously done some mustering for Sam Fromm at Tyrone but this was with dirt bikes.

Sam understood that Grant Burrell had previously owned a paraglider but only recently purchased the gyrocopter during the last year. Corey Back and Sam Fromm had made an arrangement that Grant Burrell would assist them spotting from the gyrocopter whilst they mustered the cattle.

Sam Fromm confirmed he purchased premium unleaded fuel for the gyrocopter from a service station and filled the main tank.

When Sam Fromm saw Grant Burrell fly over the top of them initially he estimated Grant was about three or four times the height of the trees. He therefore estimated he was 100-150 feet in the air.

He described the landscape as 'The paddock was full of mulga and you couldn't see very far.' Just prior to the crash, Sam Fromm observed Grant Burrell flying about the height of the ridge, which he estimated to be about 150 feet high. Sam Fromm observed the gyrocopter bank to turn back in a westerly direction. The turn seemed to be tighter than any he had seen previously. Sam also observed it appeared that the gyrocopter was moving more slowly than during previously executed turns.

Sam's recollection was that the gyrocopter did not sound revved up. It then seemed to plummet at a sharp angle before impact. He did not hear any coughing or sputtering from the gyrocopter prior to impact.

He immediately checked on Grant before returning to the homestead to get emergency services.

Investigation

Atmospheric conditions at Charleville at the time of this incident were as follows: the wind speed was about 19 kilometres per hour with gusts up to 26 kilometres per hour blowing from the south east to the south-south east. There was no cloud cover and visibility was high without the presence of either smoke or fog.

The air temperature was 12 degrees above the ideal flying temperature, which is 15 degrees Celsius according to the International Standard Atmosphere guidelines for flying.

Initial inspection confirmed that the aircraft had clipped a dead tree before colliding nose first into the ground and then overturning and breaking up.

A statement was obtained from Mr Burrell's employer, Graeme Hubbard who lived at Etona Station near Morven.

Mr Hubbard had known Grant Burrell's family for about 20 years. Grant had been working for Mr Hubbard at Etona over the preceding two years. He worked on a contract basis doing all types of property work required by Mr Hubbard, who had been involved in an accident and needed more assistance. Mr Hubbard described Grant Burrell as fastidious about everything he did.

Mr Hubbard was aware Grant Burrell was going to do some spotting at Tyrone on the day. Mr Hubbard was up at about 5:00am and prepared breakfast for Mr Burrell who was out checking his aircraft. He observed him fly out from Etona property at about 6:00am.

Mr Hubbard knew the gyrocopter had been purchased about three months earlier second-hand from someone in the north of the state. He described it as like brand-new. He also confirmed Grant Burrell had dismantled the aircraft and taken it to Wondai for a week to obtain his licence before returning to the property.

Mr Burrell was essentially living on Mr Hubbard's property. Mr Hubbard observed that every afternoon Grant would take the gyro up for about an hour, flying all over the property checking cattle and conditions before reporting back to Mr Hubbard. He also observed him do practise landings at least half a dozen times.

He was aware Grant had replaced the oil reservoir as it was weeping, and replaced the bendex that drives the rotor. He described Grant Burrell as a perfectionist who repeatedly read the manual on the gyro each night, studying it. He was also in contact with other owners of similar craft to gain knowledge.

Background of aircraft

Investigators confirmed that Kylan Dempsey who lived near Mackay previously owned the aircraft which had been built in 2010 and was originally owned by someone in Caboolture.

Mr Dempsey sold it to Mr Burrell for \$23,000 on or about 7 September 2015. By that time the aircraft had accumulated 230 flying hours.

The aircraft had been given a full service in February 2015 after 215 flying hours. The logbook then recorded standard maintenance.

In particular, it was recorded that Grant Burrell had documented 11 hours of dual flight time in his pilot's log. This was between 25 August and 7 September 2015.

Subsequently, 15.2 hours of solo flying were logged between 7 September and 16 October

2015. No entries were made from 16 October 2015 until the time of the crash on 7 November 2015.

According to the information supplied in the Australian Sports Rotorcraft Association Pilot Training Booklet, Grant Burrell had completed the required competencies to attain a pilot's certificate. He undertook the training at South East Queensland Flying Training Academy at Wondai.

The investigating police officer, assisted by the Australian Sports Rotorcraft Association officer, concluded the crash had occurred due to Grant Burrell flying too low and too slow, leading to the loss of altitude and crash. Essentially it was a matter of flying inexperience.

A secondary cause was also documented with respect to the air temperature which was higher than optimum.

Comments provided by the report writers indicate their view that the craft was designed to fly from point A to point B at an altitude of about 1,000 feet. It does not have sufficient power for low level flying at low speed.

It was likely that Grant Burrell did not appreciate the risk associated with the manner in which he was flying the aircraft immediately prior to the crash. He was inexperienced and does not appear to have realised that he had insufficient altitude and air speed to remain airborne. A final comment by the report writers noted the aircraft was not intended for the use of cattle mustering and the constant low altitude change of direction whilst flying.

It was suggested that more training be provided to prospective pilots and emphasize the risks of flying too low and too slow.

The history of aerial cattle mustering is well known to be one associated with high risk.

Christine Clements
Brisbane
Brisbane Coroner
16 February 2017