Aviation Safety Investigation Report 199003069

Bellanca 8-KCAB

19 May 1990

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NOTE: All air safety occurrences reported to the ATSB are categorised and recorded. For a detailed explanation on Category definitions please refer to the ATSB website at www.atsb.gov.au.

Occurrence Number: 199003069 Occurrence Type: Accident

Location: Toogoolawah QLD

Date: 19 May 1990 **Time:** 1500

Highest Injury Level: Fatal

Injuries:

	Fatal	Serious	Minor	None
Crew	1	0	0	0
Ground	0	0	0	-
Passenger	0	0	0	0
Total	1	0	0	0

Aircraft Details: Bellanca 8-KCAB

Registration: VH-BIE
Serial Number: 489-79
Operation Type: Private
Damage Level: Destroyed

Departure Point: Toogoolawah QLD

Departure Time: N/A

Destination: Archerfield QLD

Approved for Release: 5th April 1991

Circumstances:

Witnesses reported seeing the aircraft take off toward the south-west and climb to a height of between 100 and 150 feet above the ground. It then turned right and flew past the witnesses with the wheels about one metre above ground level. As the aircraft crossed the strip, it entered a 15 degree climb to a height of about 150 feet before rolling inverted and diving through trees into the ground. On-site examination showed that the aircraft passed through the tree tops at an angle of 80 degrees nose down. The right wing then struck another tree and was torn off. The aircraft attitude at ground impact was about 40 degrees nose down. No evidence was found of any pre-existing defects in the aircraft. Each aircraft seat was fitted with two seat belt systems - an aerobatic harness and a lap/sash type harness. The pilot was wearing the aerobatic harness at impact but the his lap/sash harness was not secured. The rear seat aerobatic harness was firmly fastened on the seat cushion but the lap sash belt was not secured. This harness consisted of a short lap belt and a one-piece lap/shoulder strap. Tests showed that, if the lap/shoulder strap had been looped over the rear control column, it could have caused a control restriction at about 3/4 right and 3/4 forward control column travel. However, there was no evidence that the strap had fouled the control column in this instance. On a number of occasions during the past few years, the pilot had complained of heart disturbances. He underwent tests but the results were normal. In the week prior to the accident the pilot had reported feeling faint and almost blacking out during flight. He was reported to have planned to consult a medical practitioner on this matter on the Tuesday following the accident. The post mortem examination on the pilot found evidence of a chronic inflammatory disorder of the heart muscle known as myocarditis. This condition can cause disturbances of heart rhythm. However, specialist assessment of the available medical and post mortem information concluded that physical incapacitation of the pilot was a most unlikely factor in the accident. The cause of the accident was not positively determined.

Significant Factors:

The following factor was considered relevant to the development of the accident The pilot was conducting an aerobatic manoeuvre at an unnecessarily low height.