



GOVERNMENT OF AUSTRALIA

DEPARTMENT OF TRANSPORT

Reference No.

AIRCRAFT ACCIDENT INVESTIGATION SUMMARY REPORT

AS/752/1058

Publication of this report is authorised by the Secretary under the provisions of Air Navigation Regulations 283 (1)

1. LOCATION OF OCCURRENCE

10 kilometres north-east of Wagga Wagga, New South Wales	Height a.m.s.l. 700 feet	Date 22.11.75	Time (Local) 1345 hours	Zone ESuT
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2. THE AIRCRAFT

Make and Model Hot Air Balloon	Registration -	Certificate of Airworthiness -
Certificate of Registration issued to	Operator T. P. McCormack, 5 Malton Road, Beecroft, New South Wales.	Degree of damage to aircraft Destroyed
		Other property damaged Nil
Defects discovered		

3. THE FLIGHT

Last or intended departure point Bruceedale, 10 kilometres north of Wagga Wagga	Time of departure 1220 hours	Next point of intended landing As required	Purpose of flight Altitude control practice	Class of operation Private
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4. THE CREW

Name	Status	Age	Class of licence	Hours on type	Total hours	Degree of injury
Anthony Herbert HAYES	Pilot	30	-	20	20	Fatal
Terence Patrick McCORMACK	Co-Pilot	36	-	45	80	Fatal

5. OTHER PERSONS (All passengers and persons injured on ground)

Name	Status	Degree of injury	Name	Status	Degree of injury

6. RELEVANT EVENTS

The basic design of the balloon, the 'James Cook', was conventional. When inflated, the envelope was some 21 metres high and its greatest diameter was approximately 15 metres. A chimney of about four metres diameter was located at the top of the balloon and this enabled rapid deflation to be made on landing. To close the chimney before flight, the upper edge of the chimney skirt was gathered and a loop of rope was threaded through 'D' rings attached to the periphery of the skirt. A pin through an eye in the end of the rope loop kept the chimney closed. When rapid deflation was required the pin, which was retained by a 13.6 kg. breaking strain thread, was withdrawn control line extending down to within easy reach of the occupants of the basket. The chimney could be opened but not closed in flight.

Earlier in the day, the balloon had successfully completed a cross-country flight at altitudes up to 9000 feet. After landing, the four propane gas cylinders carried in the basket were recharged and a second flight was planned in which Mr. Hayes replaced a previous crew member. This flight was to enable Mr. Hayes to practice altitude control at lower levels. The weather was fine and hot and there was a light north-westerly wind. After becoming airborne the balloon drifted slowly with its height varying between about 500 feet and near ground level. It had been airborne for about 80 minutes when, in response to a question from an onlooker on the ground, the crew advised that the height of the balloon was 400 feet. A few minutes later the balloon commenced to spin with the basket swinging out at an angle of about 45 degrees. The chimney at the top of the balloon was seen to be open as the envelope started to collapse and the balloon plummeted towards the ground. At a height of about 150 feet Mr. Hayes left the basket and activated his parachute but there was insufficient time for it to deploy before he struck the ground. The propane gas burner was operating during the descent and when the balloon struck the ground it burst into flames. At the time of the accident a strong 'willy willy' was reported to have passed through the area.

OPINION AS TO CAUSE

The cause of the accident was an in-flight activation of the rapid deflation system. A possible explanation is that the activation occurred when, following an encounter with a 'willy willy', spinning of the envelope and basket resulted in the chimney control line entangling with the twisting basket and burner suspension lines.

Approved for
publication

(I. M. Leslie)
Delegate of the Secretary

Date
26.1.1977